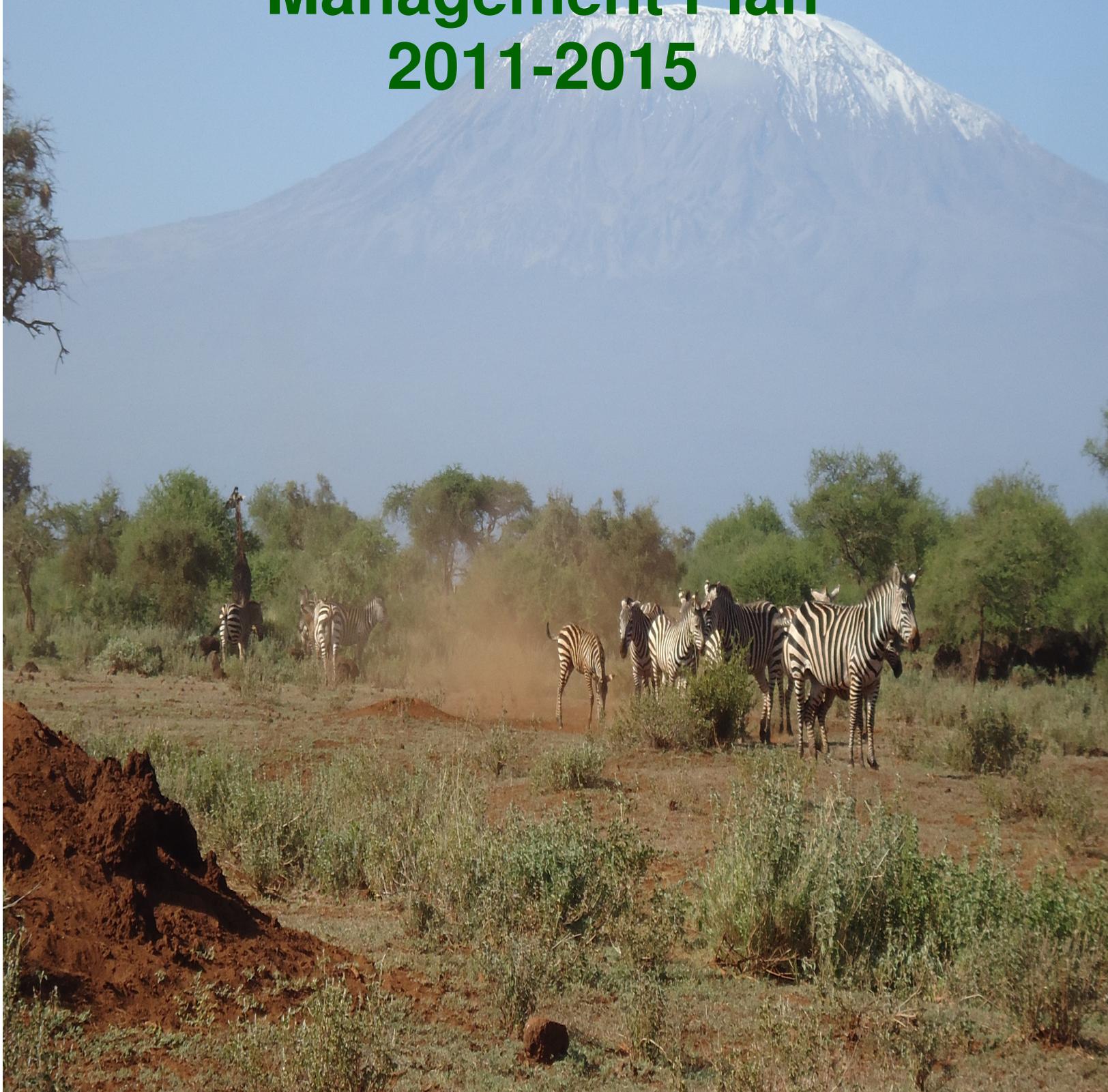
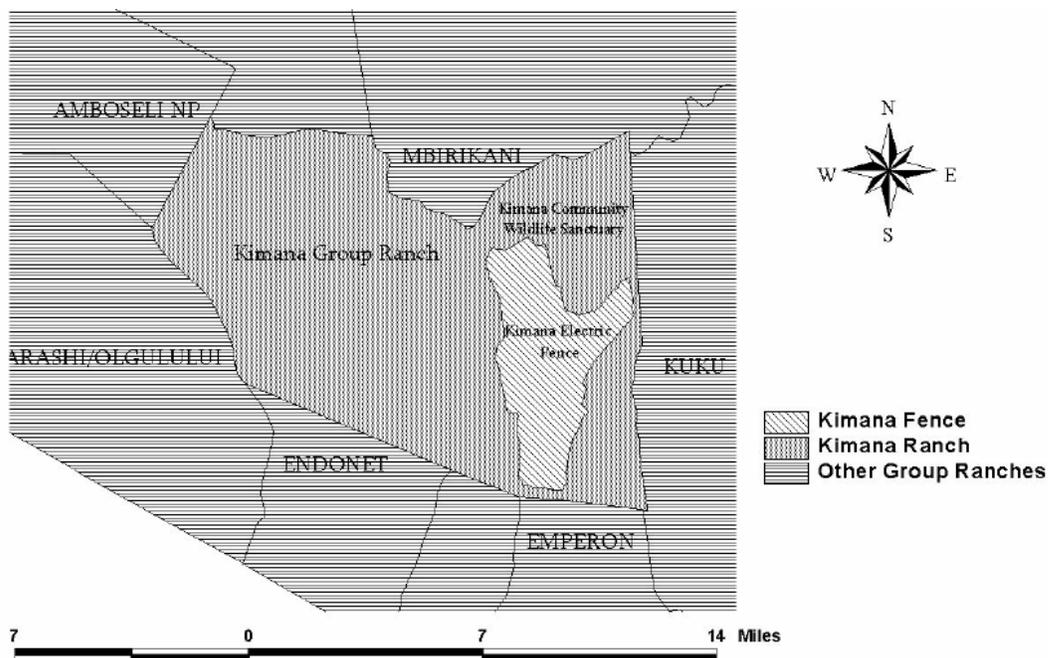


# **Osupuko, Nailepu and Kilitome Community Conservancy Management Plan 2011-2015**



# EXECUTIVE SUMMARY

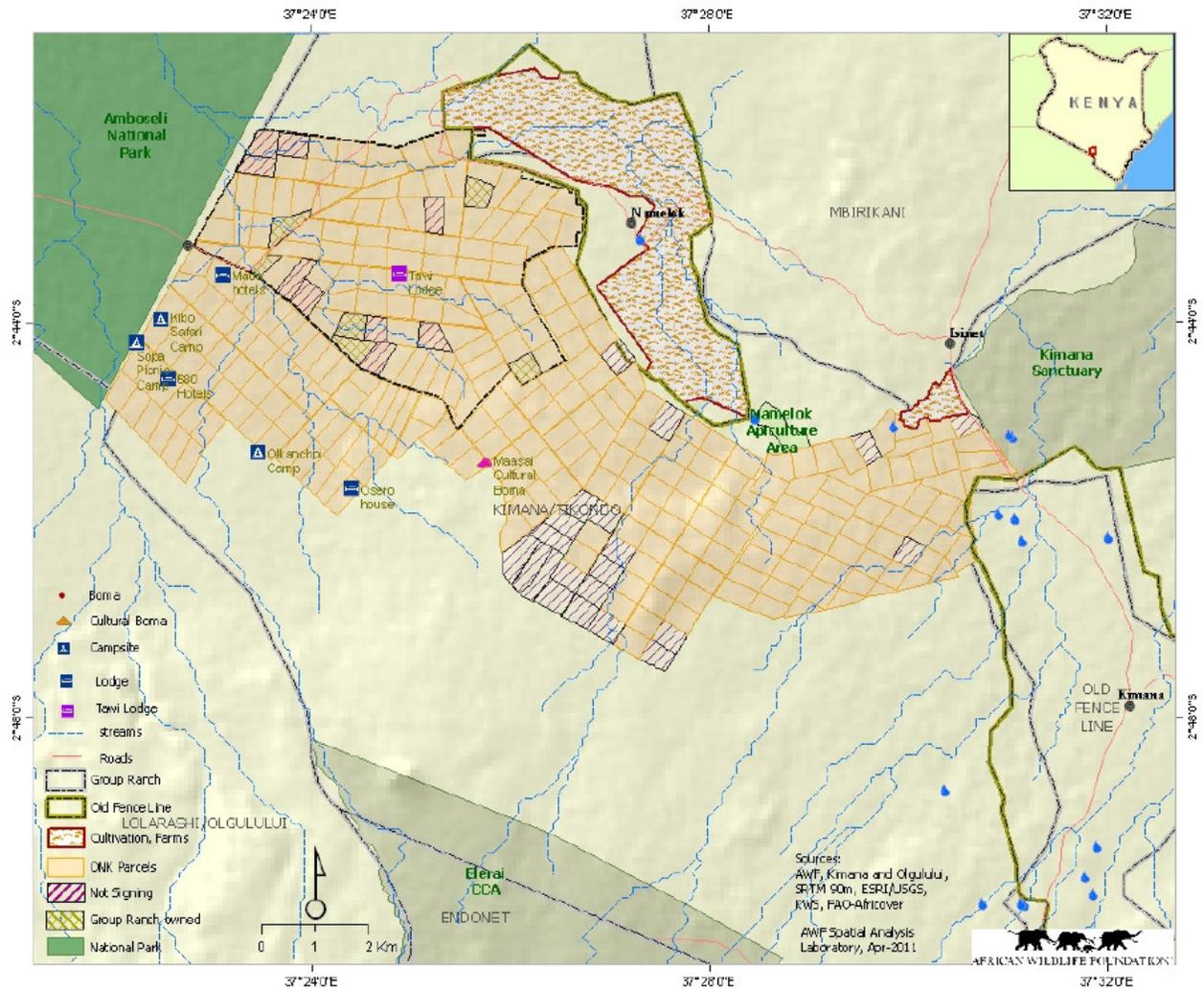
Osupuko, Nailepu and Kilitome Community Conservancy (ONKCC) is in the Kimana group ranch found in the District of Loitokitok of southern Kenya. It is an important dispersal area for Amboseli and Chyulu-Tsavo West wildlife. Kimana Group ranch is among the six group ranches in the district including Mbirikani, Olgulului, Kuku, Rombo and Eselenkei (Figure 1). The group ranch acts as a very important migration corridor for all wildlife, particularly in the wet season when animals traditionally leave Amboseli Park and travel to Tsavo or occupy areas around the park. It is also the only open area in the traditional elephant dispersal corridor between Tsavo and Amboseli. In recent years, however, this dispersal area has been shrinking, leaving less and less space for animals such as elephants. If this corridor is blocked, Amboseli will be ecologically choked.



**Figure 1: A map of Loitokitok District group ranches showing the location of Kimana Group Ranch where ONKCC is situated**

Although the Maasai people inhabiting the Kimana Group Ranch of the Amboseli-Tsavo dispersal area in southern Kenya have traditionally been nomadic pastoralists, large changes in land use and land tenure has occurred in the area. Migrants into the area as well as resident Maasai have been converting to agriculture, drawn by the profits brought by the farming of such crops as onions and tomatoes. Land has been divided into individual parcels and fences have been put up to protect farms from crop raiding wildlife, particularly in areas where there are natural springs that allow irrigated agriculture. In Kimana group ranch, the fencing of 60 Km<sup>2</sup> around Kimana shopping center with an electric fence to protect farming areas from wildlife depredation has resulted in corridor blockage and the channeling of all migratory wildlife through just a 1 Km long bottleneck corridor at Osupuko between the Kimana Secondary School and Isinet Township.

This critical Corridor that allows wildlife free flow and access to Kimana Sanctuary and the greater Chyulu-Tsavo-Amboseli ecosystem is subdivided and individual title deeds awarded to landowners (see Figure 2)



**Figure 2: Map of Osupuko, Nailepu and Kilitome Community Conservancy showing the subdivision of land into 60 acre individual holdings**

All the three conservancies have been subdivided into individual 60 acre holdings with each group ranch member having individual titles to their land and are free to practice any type of use they wish. Some are farming, some are selling, while others are leasing. These developments have created concern for conservationists as fragmentation and unsustainable land use activities exclude wildlife from group ranch land via corridor blockage, loss of habitat or other interventions.

Close to a hundred individual Kilitome land owners, have entered into a lease agreement with Tawi Lodge (Investor) where they will lease their land for the establishment of the Kilitome Conservancy. On the other hand, fifty Land Owners from Osupuko and 65 Land owners from Nailepu, each with a 60 acre parcel have entered into a lease agreement with African Wildlife Foundation where they will be compensated for allowing a sustainable form of land use within the area that will be compatible with wildlife conservation, allowing wildlife particularly elephants

access and providing a corridor through the land connecting Amboseli and Kimana Sanctuary, onward to Tsavo. In total therefore, 12,900 acres of land have been set aside to form the Osupuko, Nailepu and Kilitome Community Conservancy (Figure 2).

Osupuko area has access to water from Isinet springs that is important for the people, livestock and wildlife but is associated with agricultural expansion. These springs are a source of many ecosystem services and are used by wildlife migrating through the area especially in the dry season. However, they are also attractive to horticultural farmers who have reclaimed them for farmland and have channeled water to irrigate crop fields. The interaction between humans and wildlife at the corridor bottleneck creates a lot of conflict. Nailepu is served with water from the permanent Engumi spring that is utilized by both wildlife and livestock as well as by human. The spring is easily accessible with no blockage making Nailepu Conservancy unique since it forms permanent habitat for species like elephants, hyenas, cheetahs among others. In Nailepu the nature of the area and its terrain provides ideal habitat for wildlife conservation rather than human - based activities such as agriculture since it is very rocky with extensive rock outcrops and hills creating a natural buffer for itself.

This management plan will lay down the logical framework for the management of this land under the respective lease agreements. The plan document will provide guidelines on management, development and use of the land included in the lease. It outlines the role of each of the partners in the agreement and how they relate in the planning and management process. The plan has been developed based on scientific principles, with the overall goal of providing, ensuring and maintaining ecological integrity of the land for the benefit of wildlife and the landowners. The plan has a section on financial sustainability meant to facilitate in the operationalization of the management plan and guide the management towards financially sustainable in the long run.

## **BACKGROUND INFORMATION AND RESOURCE DYNAMICS**

Kimana GR is sparsely populated, but has human settlements alongside several rivers and swamps where water is easily available for cultivation. Rainfall in this area mainly occurs from March to May and October to December with mean annual rainfall generally below 500 mm. Most of Kimana is classified as semiarid to arid land that is suitable for ranching. Agriculture in a few areas is supported by Mt. Kilimanjaro's runoff (Katampoi et al., 1990). In recent years (e.g., 2000, 2002) however, there have been noticeable declines in rainfall and runoff, and drying of springs such as Makindu in Amboseli NP causing severe drought.

### **Threats to Biodiversity**

#### **(a) Land subdivision**

Human settlement is a potential threat to the biodiversity of the area. Osupuko, Nailepu and Kilitome areas acts as critical dispersal areas and corridor for wildlife migration between Amboseli and Tsavo through Kimana Community Wildlife Sanctuary. Land that was formerly communally owned group ranch has been subdivided into individual small holdings (see Figure 2). This fragmentation has the potential to effectively exclude wildlife should the landowners pursue individually diverse land management practices such as fencing. Already several individual landowners with parcels have been unwilling to lease their land for conservation and are opting to negotiate independently (Figure 2). This development is a threat to the viability of conservation in the conservancy.

#### (b) Changes in land use

The subdivision will allow individual land owners to sell their holdings. In Osupuko, for example, the areas near water sources are converting from livestock to irrigated crop farming (Figure 4). This trend is likely to increase and might affect Kilitome too. This will particularly be a potential problem if such parcels of land are within the proposed or are immediately neighbouring the conservancy. Crop production increases Human Wildlife Conflict reducing the level of human tolerance to wildlife. Currently, Nailepu has limited human activities with only few settlements neighboring Namelok near the apiaries. No farming is being practiced thus a good opportunity to implore the member's commitment to the lease and secure the area for conservation soonest. Though reports of development of a Bible School and sinking of a borehole have been rife, while some land owners holding approximately twelve parcels of sixty acres each have blatantly refused to enter into the agreement.

#### (c) Sealing off communal use of resources

Resources such as water points, particularly those that remain usable in the dry season for livestock and wildlife will need to be carefully managed to ensure sustainability and allow reasonable access to both wildlife and livestock. Water is a critical resource. Kilitome is dry and there are only about two water sources in the dry season. Osupuko has one wetland/spring, near Namelok. This wetland has been fenced off and encroached by farming activities and closing it off from wildlife access. Nailepu's permanent and key water source is Engumi spring that is used by wildlife and livestock mainly. The spring water has also been piped to be used in the settlements nearby in Namelok.

#### (d) Environmental degradation

This problem emanates from (i) The high density of increased livestock in the area (ii) proximity to Amboseli that makes the conservancies the most commonly used dispersal area and corridor by wildlife (iii) Fencing of and increased tourism development in the area to the south west of the Amboseli gate has channeled wildlife into Kilitome thereby increasing their density (iv) land vulnerability to soil degradation more so in Kilitome resulting from the presence of large open areas of bare soil covered by expanding clays in the area immediately neighbouring the saltbush floodplain near Amboseli. In Osupuko, although the problem of charcoal burning seems to have gone down after subdivision, there are still incidences of that activity. However, most destruction is for fencing material, house building and firewood collection, all involving women. Surprisingly, Kilitome does not seem to have a charcoal burning problem that is common in the neighbouring Osupuko. However, this threat is real once the landowners concede half of their land to wildlife. This problem, although considered acceptable by most local residents, has considerable impact on woody vegetation. Due to the low human habitation of Nailepu, environmental degradation that is human induced is minimal. With the establishment of the conservancy there was the cessation of cutting firewood with only collection of dry, dead biomass, being allowed, collection of stones is prohibited too.

#### (e) Overstocking and overgrazing

Current livestock densities are high for the conservancies. This combined with the high numbers of wildlife adversely affects the range condition. Large expanses of land remain bare during the dry season, particularly the black cotton soil habitats that are covered by annual grasses in the wet season. The woody vegetation habitats also experience heavy browsing and destruction by elephants. On the other hand, with increased sub-division, stocking density will invariably

increase as well as sedentarisation and nomadic options reduced. The livestock, particularly sheep will continue to have devastating effect on the range condition. Sheep, unlike goats that browse when grass is unavailable, tend to crop grass very low, trample the soil, opening up the surface and making land more vulnerable to wind and rain erosion.

(f) Wildlife Poaching

The incidences of poaching appear to be on the increase in some quarters of the conservancies. For instance, there are claims in Osupuko that cross-border transport in illegal game meat near Loitokitok is rife. Local community around Nailepu and Osupuko do not seem to consume much game meat at the problem of poaching is blamed on the outsiders. Creating and securing a corridor will increase wildlife numbers and create a bottleneck effect along the Emali-Loitokitok road. If this section is not well secured, poaching incidences might increase.

(g) Barriers to animal movement

There is a fast growing and mushrooming tourism development along the south western boundary of Amboseli Park. The land to the west of Kimana Gate is already fully blocked from wildlife by the Mada hotels new lodge, the numerous campsites and the electric fences. Across the road from Mada hotels and immediately south east of Kimana gate is also a fast growing informal settlement occupied by roadside traders serving tourists at the gates. The settlement also serves as residence for casual labourers from the new building sites. This development is a threat to region-wide animal movement but is also a blessing in disguise in that it channels wildlife through Kilitome thereby increasing tourism potential.

The entry into Kimana Community Sanctuary between Kimana Secondary School and Isinet is partially blocked by several man-made barriers including (i) Loitokitok-Emali road (ii) The Kimana electric fence, homesteads at Osupuko, Irrigated farmlands and other developments. Nailepu has not been encroached yet though it has been reported that a Bible school is being proposed and a borehole has already been surveyed for sinking. Currently there are no barriers to animal movement and the terrain has provided natural barriers to livestock grazing in the area since it is hilly and rocky making the area ideal for eco-tourism activities such as rock climbing, sunset and sundowners watching, bush breakfast and dinners, star-beds accommodation among others to increase the conservancy revenues.

**ONKCC Purpose statement**

***ONKCC aims at providing opportunities and incentives for community involvement in the conservation and sustained use of the critical wildlife dispersal area and corridor between Amboseli and Kimana Wildlife Sanctuary.***

**ZONATION SCHEME**

***Purpose and rationale for zoning***

Zonation is a powerful management tool that allows managers to achieve different management aims in different parts of the area, in particular through defining the specific activities and

developments that are permitted in the different zones. The respective zonation schemes for the conservancies represents mutually agreed upon views and ideas of the land owners, investor (for the case of Kilitome) and the leasee (AWF).

This plan therefore proposes a zonation and grazing control system based on two zone categories:

- Core Wildlife Zone/Conservation Zone
- Grazing zone/Grazing area (for grazing and conservation)

### **Core Wildlife Zone (CWZ)**

This zone is also referred to as the conservation zone (see Figure 7). This is the area designed to protect and conserve biologically significant habitats that have initially been over utilized and degraded so as to allow for rehabilitation and regeneration. This area will be strictly protected and preserved in its near pristine state and should only be used for wildlife conservation. This is where livestock grazing is restricted and may only be allowed during critical dry seasons. The Main activity will be wildlife conservation. In terms of tourism development, no major tourism development should be allowed here. There exists at present the Tawi Lodge in Kilitome conservancy. However, to add value to the conservancy geared towards ensuring financial sustainability, only eco-friendly tourism products and activities will be allowed (see the FSP). Nature friendly, low-impact tourism may be allowed in Nailepu and Osupuko such as walking safaris, rock climbing, sundowners, and bush dinner/breakfast. Nailepu hills, for example, have ideal sites for establishment of a high end starbed. Any type of development will only be allowed after agreement with the land owners and the leasee.

### **Grazing Zone**

The grazing zone is the area that has been set aside for specific uses where activities will be regulated to some extent. This zone will allow ongoing grazing activities collection of dry firewood and other activities provided that these activities are ecologically sustainable and consistent with the overall objectives of ONKCC. This zone will be utilized by all the land owners from the ONKCC for grazing purposes. As part of implementation of this management plan, a grazing committee will be formed that will be tasked to develop grazing by-laws in collaboration with the scouts. The grazing by-laws will ensure the success and enforcement of the prescriptions herein as well as to regulate pasture use in the conservation zone during the agreed upon periods. This zone includes the strip of land between the Core Wildlife Zone and the settled areas of Namelok (see figure 7).

## **MANAGEMENT PROGRAMMES**

### **Rationale for management/development programmes**

The management plan identifies the following purposes of management for ONKCC:

- Protection of species and genetic diversity
- Restoration and maintenance of ecological integrity
- Vegetation recovery
- Maintenance of environmental services
- Enhance coexistence of wildlife and livestock
- Benefits to local community and investor

This management plan sets out only three management programmes for the conservancy which is envisaged to cover broad aspects that needs to be addressed as the conservancy gets operationalized. The choice of these programmes is due to the fact that; (i) the landowners have much more limited management capacity and resources and (ii) such a plan cannot cover all possible programmes as the area is not strictly a conservancy *per se*. these programmes are:

1. Grazing and Ecological Programme
2. Community partnership and education Programme
3. ONKCC Operations Programme

### **1. Grazing and Ecological Management Programme**

This programme will be implemented in line with the proposed zonation scheme. The programme has been developed in recognition to the apparent global climate change and associated droughts that are experienced in the region as a result. Pastoral livelihoods are threatened by prolonged and unpredictable droughts which take a huge toll on both livestock and wildlife. Through this programme, this plan has addressed these challenges through a robust habitat improvement programme which prescribes measures that will see livestock pastures increasing in quality thereby increasing the livestock carrying capacity of the range. In addition, to mitigate against droughts brought by climate change, the plan has zoned the ONKCC into two major zones (Core Wildlife Zone and Grazing Zone) which are geared towards ensuring that overgrazing in the entire conservancy is reduced by disallowing grazing in the CWZ but only at critical dry spells.

### **2. Community partnership and education Programme**

The aim of this programme is to enlighten the ONKCC members on the importance of the venture they have mutually agreed to undertake and the importance of ensuring its sustainability. This is geared towards making certain that sustainable conservation of community lands becomes a reality and that the ONKCC becomes a showcase of a successful community conservancy. In particular this programme seeks to educate the community on how they can benefit from the conservancy as well as improve their livelihoods through other alternative sources o avert over dependence on livestock.

### **3. ONKCC Operations Programme**

The Operations programme has been designed to give the necessary support for the implementation and operationalization of this management plan. It is through this programme that issues of human capital, infrastructure, security and finances are addressed. Although the ONKCC is new with little to no established structures to guide the implementation of this management plan, the conservancy operations will need to be greatly strengthened in order to ensure that they are supporting the entirety of the plan's implementation, and providing a conducive and supportive working environment for the existing and proposed staff.

## **FINANCIAL SUSTAINABILITY PLAN (FSP) FOR ONKCC**

The plan has come up with a detailed financial sustainability plan aimed at assisting the new conservancy to endure and be self reliant. In order to promote sustainable land use and ensure biodiversity conservation, the community who lives and bears the burden of wildlife menace, must be empowered to manage and conserve natural resources within the social, cultural, and

economic context of their communities. The proposed sustainability plan proposed here therefore aims at ensuring the conservancy is managed and run to become self-sustainable in the long run. For the FSP to succeed, it is assumed that the land owners of Osupuko, Nailepu and Kilitome (ONK) have willingly agreed to lease their land and to practice conservation compatible land uses, and that they will work towards ensuring that it becomes a successful case study that will influence others who have not agreed to do so as well as those who may wish to do the same in other group ranches.

The proposed FSP for ONKCC consists of six fundamental elements that highlight the steps that require to be taken in order for conservancy to become financially sustainable. These are: Environmental Scanning, Partnership Establishment, Human Resource Planning, Finance Plan, Operationalizing the Plan and Monitoring Plan Framework. These are discussed in detail forming the basis towards ensuring financial sustainability of the ONKCC.

The FSP concludes with an Operational Plan which presents a summary of management activities that will be undertaken to operationalized the plan through plan implementation. This Operational Plan breaks down individual management objectives for each programme into actions which are further broken down into a series of tangible management activities. It also sets out the timeframe for their implementation, and allocates responsibility for their completion, at the same time setting time-bound implementation “*milestones*” that management aims to achieve for each action. The implementation of the plan is vested on the landowners as the main stakeholders while there will be four groups of human resources needed to ensure smooth operationalization of the plan from the time this management plan is approved. These includes; the Steering Committee, the Board of Management, the Interim Management and The Conservancy Management team.

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# INTRODUCTION

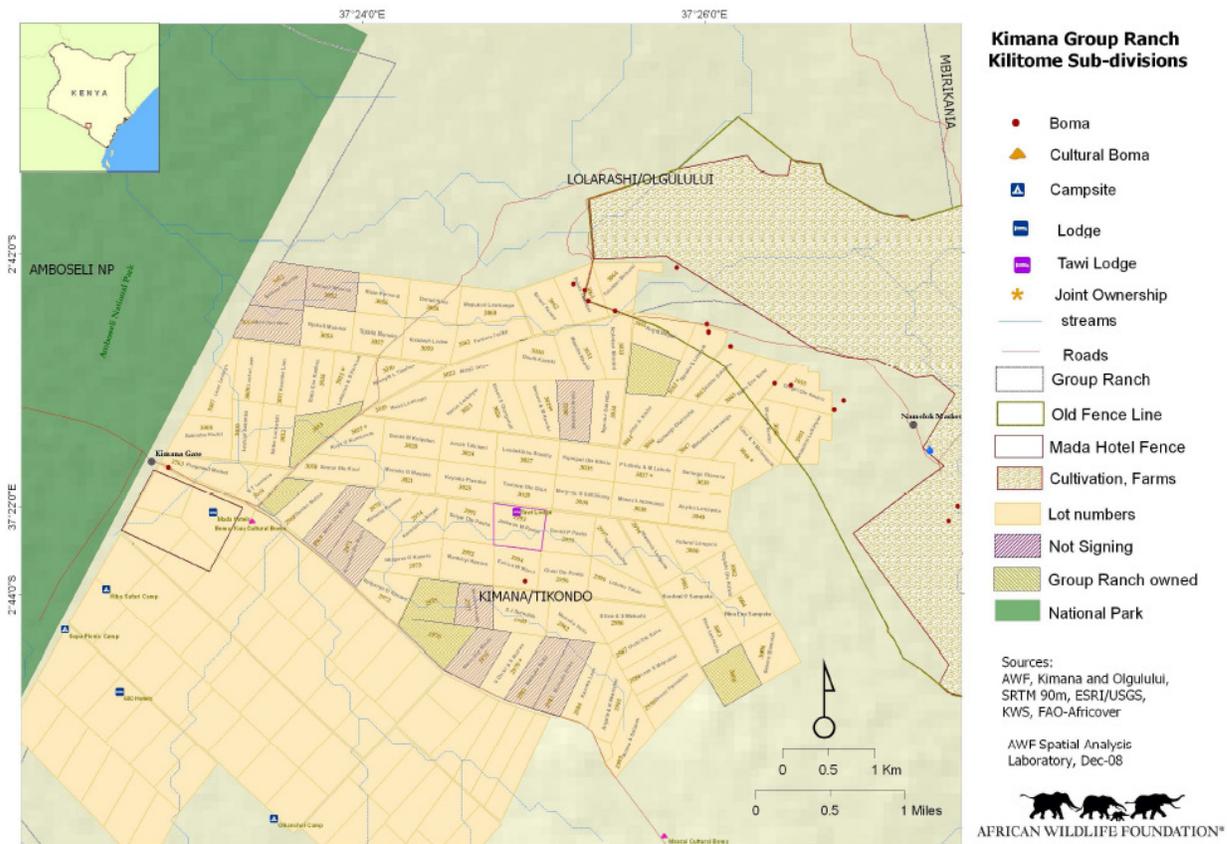
The three conservancies (Osupuko, Nailepu and Kilitome) are part of the greater Kimana Group Ranch, one of six in the region, along with Kuku, Mbirikani, Rombo, Olgulului, and Eselenkei Group Ranches. These ranches are all located within the wildlife dispersal area and migration corridor between Amboseli, Chyulu and Tsavo National Parks. The region is home to the pastoralist Maasai, many of whom still practice traditional, free-ranging herding with cattle, sheep and goats.

Kilitome Conservancy borders Amboseli National Park and forming the main entrance to the wildlife migration corridor and dispersal area between Amboseli and Tsavo (see Figure 3). Osupuko lies on the eastern end of this corridor that connects Amboseli and Kimana Sanctuary (Figure 4), while Nailepu lies in between Kilitome and Osupuko. The three conservancies form a critical migratory corridor and dispersal area allowing wildlife particularly elephants to access and connect Amboseli and Kimana Sanctuary, onward to Tsavo and Chyulu Hills National Park. This historic dispersal area is completely subdivided into individually owned 60 acre holdings. The subdivision is encouraging changes in land use and owners with individual title deeds cash in on land sales. Sedentarism is at the same time being encouraged and irrigation as well as rain-fed agriculture is now increasingly being practiced. Nomadic lifestyle compatible with conservation is slowly changing into tourism dominated economic base. Unfortunately, uncontrolled and unsustainable tourism development is threatening the very basis of the industry; wildlife and conservation. The areas around and within Kilitome are good indicators of these changes where tourism is fast becoming the mainstay of communities alongside pastoralism.

Continued constriction by settlements, fencing, farming and other human activities have narrowed the corridor entrance into Kimana Sanctuary resulting in increased interaction between wildlife and people and thereby heightened cases of Human Wildlife Conflict. This corridor is critical for Amboseli Park because it allows wildlife to disperse between Tsavo, Chyulu Hills and Amboseli and into communal areas thereby allowing Amboseli to theoretically maintain wildlife at above carrying capacity, especially elephants. If this corridor is blocked, Amboseli would be heavily impacted by habitat degradation as wildlife migration would be impeded leading to local overpopulation. With subdivision into individual holdings, some land owners are opting to do farming, some are selling land, and yet others are leasing for conservation purpose. This development has created concern for conservationists as fragmentation and unsustainable land use activities exclude wildlife from group ranch land via corridor blockage.

In order to benefit from wildlife on their land, reduce human wildlife conflict and realize a sustainable land use that accommodates wildlife and community livelihoods, 50 individual land owners in Osupuko have entered into an agreement With African Wildlife Foundation (AWF) to lease land and give room to wildlife conservation. The legal agreement enables landowners to

be paid a bi-annual fee for practicing a wildlife conservation compatible form of land use.



**Figure 3: Map of Kilitome Community Conservancy showing the location and the individual holdings constituting the conservancy.**

Through the lease, the landowners have agreed to not conduct certain activities such as charcoal production, fencing, resource extraction and additional settlement and building. The 50 land owners have formed the Osupuko Conservancy and elected a management committee. They have entered into a two year renewable lease with AWF, which has been renewed once. AWF aims to renew the lease for a longer period with availability of funds. Approximately 100 individual land owners from Kilitome entered into an agreement with an investor (Tawi lodge) and AWF to lease land and give room to Wildlife. The agreement enables landowners to be paid a fee for practicing a wildlife conservation compatible form of land use. They have entered into a fifteen year lease with Tawi and AWF who has leased land to create the Kilitome Conservancy. In Nailepu, between Osupuko and Kilitome, 65 landowners have entered into a five years lease agreement with AWF to use their land for wildlife conservation in return for payments done in two installments every six months. The agreement outlines modalities and zones of use.

This management plan is a management guide to assist Tawi, AWF and the communities achieve the objectives of the lease agreement and to improve their rangelands. The Plan is developed after an ecological and social assessment of the community and after careful deliberations made at several meetings between the community, their representatives, the individual land owners, the Investor and the African Wildlife Foundation.

# Background Information

Having recognized the threats posed to their livelihoods and their natural resources as a result of changes in land tenure and land use in this region, and in an effort to secure wildlife habitat while allowing the community to practice sustainable land use activities, the land owners of Osupuko, Nailepu and Kilitome have entered into a land lease agreement with African Wildlife Foundation (AWF) and Tawi to secure wildlife habitat. In total, 12,900 acres owned by approximately 215 land owners have been committed for wildlife conservation allowing for conservation compatible land uses. They have among other concessions agreed to allow the area to remain open as wildlife corridor and dispersal area. This land is situated in the wildlife corridor between Amboseli and Kimana Community Wildlife Sanctuary, onwards to Tsavo-Chulu National Parks. Current land use is mainly grazing but recently several agricultural holdings have been cropping up near Isinet thereby threatening the habitat.

The development of this management plan has been initiated by African Wildlife Foundation and supported by the community members. The information contained in this plan was collected mainly from the field at Osupuko, Nailepu and Kilitome and at meetings with the respective communities, interviews from local community, stakeholders and from literature review. The contribution and wishes of the community have been compiled and drafted into this plan. The plan proposes the establishment of the Grazing and Ecological Management Programme, Conservancy Operations Programme and the Community Outreach Programmes. It recommends that one overall Management Board be constituted for Osupuko, Nailepu and Kilitome Community Conservancy (ONKCC) where each conservancy will nominate representatives to this board to monitor and evaluate the implementation of this management plan. The Management Board will also have representatives of co-opted members such as AWF, the Investor and KWS. The board will be there for conflict resolution purposes and link the conservancy management to other stakeholders and solicit for funds for implementation of this management plan.

## Landscape, Natural Resources and Infrastructure

### 1. Landscape and geology

Osupuko, Nailepu and Kilitome with an area totaling 14,000 acres have few landscapes and geographical features. There are, however, distinct low hills, wet season drainage channels, flat plains, woodlands, a spring and several hundred square metres of Lava rock outcrop with unique vegetation in Osupuko and Nailepu. Kilitome, unlike Osupuko and Nailepu has no permanent springs but there are two sources of water in the dry season; a community constructed system of shallow wells in the floodplain near Amboseli and a low flow volume spring at the south western corner. Nailepu has a permanent water source at Engumi springs that is utilized by the wildlife, livestock and has been tapped for use in nearby settlements such as Namelok. Except for Isinet and Namelok springs, Osupuko does not have adequate water supply throughout the year. There are however several seasonally flowing and ephemeral watercourses that fragment the landscape. Osupuko is monotonously flat and except for rill

erosion, most areas do not seem to face the threat of serious soil erosion. The soils are of tertiary volcanic in origin, mainly infertile except in a few areas of black cotton soil on poorly drained low lying areas.

## **2. Drainage**

The area has no permanent rivers. Surface water is not available in the dry season and at least two drainage channels have flood water and collect run-off during rains. There is a low volume flowing springs to the south in Kilitome that can only supply enough water for goats and sheep but not cattle. The Engumi springs in Nailepu sustains a stream that flows towards Osupuko and Kimana areas.

## **3. Faunal resources**

The conservation lease area contains a diverse assemblage of wildlife species. The area constitutes an important migratory route for over 1500 elephants from Amboseli to Tsavo and Chyulu Hills through Kimana Wildlife Sanctuary. The area also contains many of other species such as African elephant (*Loxodonta africana*) Masai Giraffe (*Giraffa camelopardalis*), Buffalo (*Cyncerus caffer*), Warthog (*Phacochoerus aethiopicus*), Waterbuck (*Kobus ellipsiprymnus*), Grants gazelle (*Gazella granti*), Bushbuck (*Tragelaphus scriptus*), Eland (*Taurotragus oryx*), Kudu (*Tragelaphus strepsiceros*), Maasai Ostrich (*Struthio camelus*), Impala (*Aepyceros melampus*), and Burchell's zebra (*Equus burchelli*). Canivores include Lions (*Panthera leo*) leopards (*Panthera pardus*), cheetah (*Acinonyx jubatus*), spotted hyena (*Crocuta*) and jackals (*Canis* spp.) among others.

## **4. Land uses**

The main land use and economic activity is nomadic pastoralism. The community wholly depends on livestock for most of their economic and social welfare. They keep cattle, sheep, goats, and donkeys. In the current venture, some landowners in Kilitome are trying to benefit from tourism through land lease to Tawi Lodge while others have sold their parcels to developers who have set-up hotels, lodges and camps in the recent past. However, a few holdings near Isinet practice irrigated horticulture growing onions, maize and tomatoes with water pumped from Isinet spring and the nearby swamps. These few holdings have acted to narrow the already bottlenecked eastern end of the corridor from Amboseli into Kimana Sanctuary. In Nailepu there is limited human activities except for grazing, apiary and limited human settlements, there is no agricultural activities.

## **5. Roads**

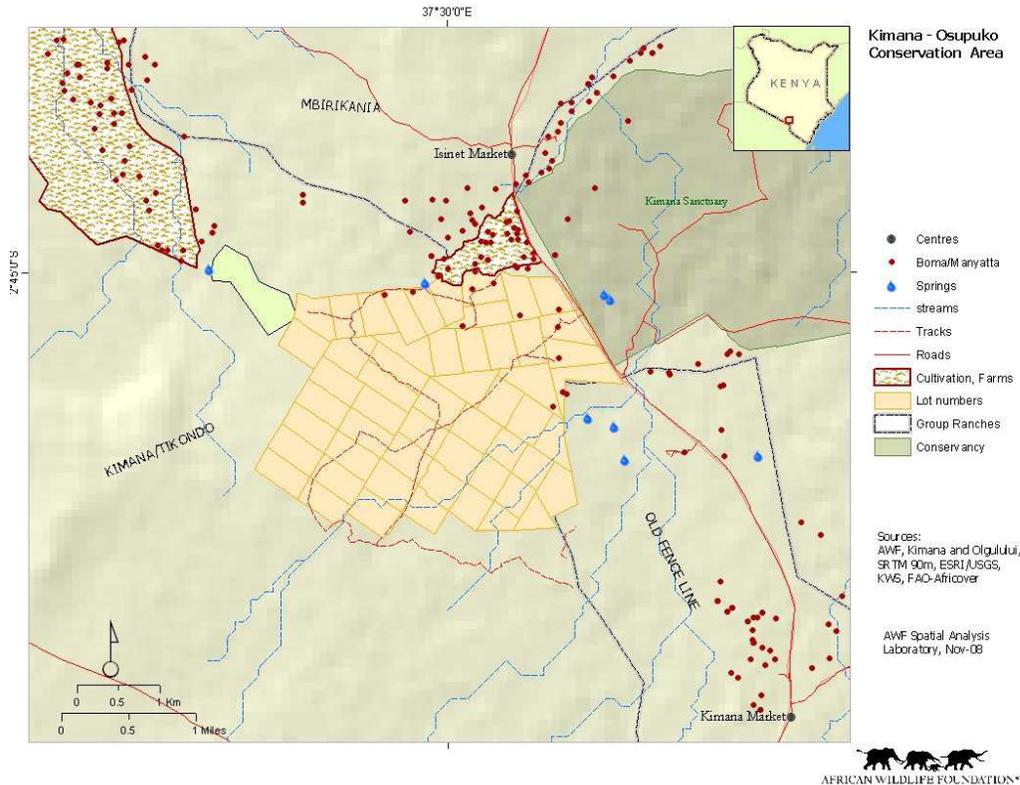
Kilitome has two significant roads; one from Amboseli's Kimana gate through to Namelok and another from Namelok through the new Tawi lodge site to the Tsavo-Amboseli road. Osupuko, on the other hand, is separated from Kimana Sanctuary by the Loitokitok-Emali main road that runs along it from Kimana secondary school to Isinet River. There is also a road from Isinet town through Mbirikani and Osupuko and onto Namelok. A third dry weather road connects Kimana town to Namelok and passes through Osupuko onwards through Kilitome to Amboseli Kimana

gate. This is the only road that directly passes through the conservation area. There are several other unplanned tracks that are used by vehicles or foot travelers that crisscross the landscape. Nailepu community conservancy has no designated road as the area terrain is rough and rocky for vehicle movement thus it has been proposed charting for a road to be done to enable easy access to the area and connection to other conservancies.

## **6. Tourism facilities**

There is only one tourism facility (Tawi Lodge) in ONKCC which is located in the center of the Kilitome conservancy (see figure 2 above). There are no tourist facilities situated at Osupuko and Nailepu. The nearest tourist accommodation is the three African Safari Club facilities at the Kimana Sanctuary and Sopa Lodge on the Amboseli-Tsavo Road. There are several other tourism facilities that have mushroomed at Amboseli Kimana gate over the past. These include; Kilima Safari Camp, Kibo Safari Lodge, 680 Amboseli Lodge, Ol Kanjaro Tented Camp, Osero Lodge and Elerai Satao Lodge. These are far too many facilities crowded in one area, and it is expected that more could come up in the near future more so in areas where landowners refused sign the lease agreement.

Given the size of the three conservancies and the need to improve and maintain the range condition, limited to no tourism facilities will be permitted in the Osupuko, Nailepu and Kilitome conservancies. The Financial Sustainability Plan (FSP) proposes the possibility of enhancing revenue generation through charging of conservation fees to all visitors to the conservancy. Currently only visitors to Tawi Lodge pay while others are not due to lack of mechanisms to collect the revenue. To encourage visitation to the conservancies however, all visitors will be expected to use already designated game drive roads.



**Figure 4: Map of Osupuko Community Conservancy showing the location and the individual holdings constituting the conservancy**

## Policy issues

### Relevant policies and laws

Kenya recognizes that conservation of biodiversity contributes to a range of international, national and local objectives. Kenya is a signatory to several international conventions, treaties and agreements on conservation including Convention on Biological Diversity (CBD) which indicates the country's commitment to international and regional cooperation on environmental management. Kenya's National Water Policy, 2000 (A framework for sustainable water resources management), and Forest Policy, 2007 (Sustainable Forest management), as well as National Biodiversity Strategy and Action Plan (2000) all have international, regional, national and local commitments to protecting the environment. Several natural resource policies are relevant to the activities of the conservancies The Kenya National Water Policy for example deals with issues to do with water extraction, irrigation, damming and other issues related to use. This will be a good guiding policy at Osupuko because current water regulations governing use of springs and swamps are highly violated, such that wildlife has no access to water and important wetland areas have been reclaimed in Kimana.

#### 1. Wildlife Policy and Act (Cap. 376)

The Sessional Paper No. 3 of 1975, Statement on Future Wildlife Management Policy in Kenya stipulates that it is important to protect important habitats and secure migratory routes of animals outside protected areas. The Wildlife Conservation and Management Act is a critical Act as it provides the regulations needed for the management of wildlife and its habitat within and without protected areas. The Policy paper seeks to integrate wildlife conservation and management based on local participation in order to ensure benefits and responsibilities from conservation are shared with communities coexisting with wildlife. The policy supports the development that is taking place here as it involves communities developing from conservation. However, there are important implications whereby allowing wildlife to thrive in this area comes with general commitments and duty of care, and rules and regulations governing protected areas, even when this is private or communal land. The communities must be aware of the consequences and the obligations associated with their choice.

## **2. Tourism Policy and Act (Cap. 381)**

An important policy area is on tourism development. Since tourism is a fast growing industry in Kenya, the tourism policy is encouraging development towards new tourism products from the traditional wildlife-based enterprises to investment in cultural, village, agricultural and sports tourism. This law is relevant for the conservancies as there is potential for tourism development. However, any such prospects are guided by the binding contract between the land owners, the investor and AWF.

## **3. Water Policy and Water Act (2002)**

This Act seeks to make better provision for the conservation, control, apportionment and use of water resources in Kenya. This Act is relevant as the envisaged conservation area contains springs that are critical water sources for all in the dry season. There is also continued threat to these water resources with increase in human population as well as development.

## **4. The Land Planning Policy and Act (Cap. 303)**

This is the policy and law that makes provision for the planning and use of land in Kenya. Under its provisions, the three conservancies are obliged to enhance controlled utilization pursuant to the Land Planning Act. This Act also promotes public participation in the preparation of plans and requires that in preparation of plans, proper consideration be given to the potential for economic and social development. Since these are some of the salient goals of the conservancies, this act is therefore relevant.

## **5. Land Control Act (Cap. 406)**

This law provides for the control of transactions and dealings in agricultural land, through the machinery of Land Control Boards. If a certain proposed land use is adjudged to be detrimental to the environment, the Boards may object to such a transaction. Again this law supports good land use practices, and will therefore guide development at Osupuko.

## **6. Environmental Management and Coordination Act (EMCA, 1999)**

The law is based upon the premise that each person is entitled to a healthy and clean environment. Section 42 is quite pertinent to the implementation of this plan as it deals with water catchments' conservation. This Act is a critical one in the implementation of the plan in so far as dealing with issues of conflicting mandates between different agencies. It will also play a vital role during the establishment of projects that may need Environmental Impact Assessments (EIA). Part ix – Environmental restoration orders, environmental conservation orders and environmental easements further promotes environmental easement or an environmental conservation order whose key objectives is to further the principles of environmental management set out in this Act by facilitating the conservation and enhancement of the environment.

## Vegetation of ONK Community Conservancy

The Osupuko, Nailepu and Kilitome conservancies have diverse yet much diffused vegetation types whose differentiation is influenced by soil type and availability of water. Differential grazing pressure has resulted in spatial variation in range condition. The vegetation can be classified into seven fine scale (i) *Sueida-Azima* seasonally flooded plains vegetation (ii) open grasslands/bare soil (iii) *Acacia tortilis* dominated woodland (iv) *Acacia xanthophloea* dominated woodland (v) *Acacia mellifera* dominated bushland (vi) *Balanites* dominated open woodland and (vii) Hilltop vegetation.



Plate 1: *Sansiviera spp.* in some of the open habitats characterizing poor range condition in Nailepu

Most of the categories are not clearly defined in location but the open woodlands and grasslands are generally found in the north and east while the bushlands are to the south and west. The open habitats are characterized by presence of black cotton soils and are bare in the dry season and grassland in the wet season. The open habitats are characterized by low ground cover and have poor range condition with sheet and rill erosion and large expanses of increasers including *Sansiviera spp.* (plate 1). These open areas are also near the human settlements and are intensively grazed particularly by sheep and goats.

### 1. Sueida-Azima seasonally flooded vegetation

This vegetation type, dominated by *Sueida monoica*, *Azima tetracantha* bushes with mixed clumps containing *Salvadora persica*, with a grass layer dominated by salt tolerant species such as *sporobolus spp*. It lies in a seasonally flooded plain all along the border between Amboseli and Kilitome.

The bushes occur in dense clumps separated by bare ground and sparse *sporobolus* cover on higher ground. This area is heavily utilized by wildlife, mostly elephants (Plate 2), kudu and bushbuck. The area is also an important source of water for wildlife and livestock as the water table is high. This is a place where the community has dug shallow wells that hold water for livestock in the dry season.



Plate 2: An elephant feeding in *Sueda-Azima* habitat at Kilitome near Amboseli park boundary.

The habitat type is therefore critical for both wildlife and community and resource access here needs careful planning.

## 2. Open grassland on seasonally flooded plain/Bare soil

This habitat stretches from the southwest corner of Kilitome near Amboseli's Kimana gate and extends as a narrow band all the way north east to meet the *Acacia xanthophloea* dominated woodland near the Kimana-Mbirikani border. To the north and south, the habitat is sandwiched between the expansive *Acacia tortilis* woodland and a small pocket of *Balanites glabra* dominated open woodland. This area contains expanding clays that are dominated by elephant grass in the dry season in higher and better drained areas.

Soils in this habitat are waterlogged in the wet season and support an array of annual grasses before the soil dries up in the dry season and lays bare. The major threat to this habitat is trampling by livestock and wildlife that result in sheet erosion as well as development of a large network of roads and tracks.



Plate 3: Open grassland within the *A. mellifera* bushland with good grass cover in the dry season in Osupuko

There is no defined grassland in Nailepu and Osupuko but most grasses are found under thick bushes in the dry season under the protection of the thorns and shade. Cattle are commonly encountered grazing among some open spaces covered by between 15 cm and 50 cm mixture of grass and herbs such as *Leucas spp* and *Sericocomopsis spp* (Plate 3) that provide critical forage in the dry season.

Otherwise most open areas in the woodland vegetation during the dry season are devoid of any grass. The ecological assessment was carried out in the dry season and it was therefore difficult to identify most of the grasses. However, the following grasses are found in the bushland vegetation; *Aristida spp*, *Cenchrus spp*, *Chloris spp*, *Cynodon spp*, *Cyperus spp*, *Eragrostis spp*, *Setaria verticillata*, *Anthephora pubescence* and *Themeda triandra*.

### **3. *Acacia tortilis* dominated open woodland**

*Acacia tortilis* woodlands cover the largest part of Osupuko, Nailepu and Kilitome Conservancies. They dominate the northern triangle bound by Mbirikani and Amboseli and the central areas around Tawi lodge. The habitat also covers a large area along the Namelok fence to the north east as well as south west along the Tsavo-Amboseli Road. The most dominant vegetation is *Acacia tortilis*. In Osupuko, it occupies most land to the north and east of the Kimana-Namelok Road. In Nailepu it is predominantly found near Engumi springs and at the foot base of the rocky hills such as “mlima wa fisi”. The canopy is open but the *A. tortilis* are tall (average over 15 m). It is characterized by poor range condition and soil erosion on mainly open and bare ground whose range deteriorates steadily towards the Kimana Sanctuary.

The dominant species in the open woodland is *A. tortilis* (Figure 5) with mix of *Balanites spp*; *Boscia spp*; *Maerua spp*. *Albizzia antihelminctica* is found on more rocky areas. The under storey consists on *Croton spp*; *Azima tetracantha* with large expanses of *Sansiviera spp*. in the rocky and the more overgrazed areas. This vegetation type is close to human settlements in Osupuko and is characterized by overgrazing mainly by goats and sheep (plate 4). The only signs of wildlife here are from nocturnal activity as animal cross the narrow gap into Kimana Sanctuary. Wild animals are rarely found here during the day.



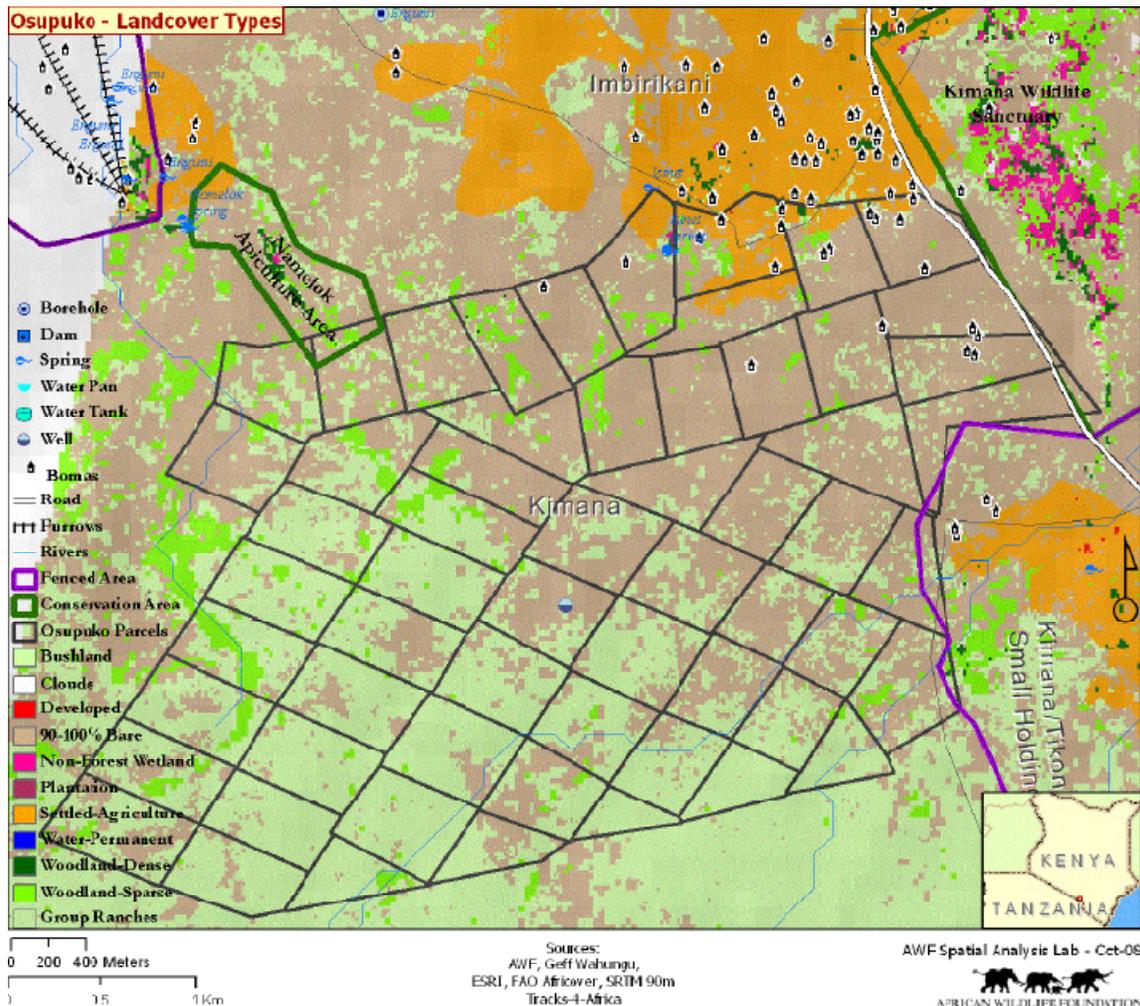
Plate 4: Degraded *A. tortilis* woodland near Namelok as a result of overgrazing

#### **4. *Acacia mellifera* bushland**

This vegetation type, dominated by *Acacia mellifera* is found to the western end of Osupuko. It runs to the west of a rocky outcrop that runs northsouth along the eastern side of the conservancy, along which feature also runs the Kimana-Namelok road. This rocky terrain is colonized by *Acacia tomassi* and *Boscia coriaceae* and separates the good condition range to the west and south (*A. mellifera* dominated) and the bad condition range to the North and East (*A. tortilis*, *Maerua spp.* and *Balanites Spp*). To the east of the rocky area and the road is *Acacia tortilis* dominated open woodlands along the border with Mbirikani group ranch (Figure 5).

The vegetation community is also characterized by the presence of the following tree species in various proportions based on the mixture: *Acacia xanthophloea*, *Acacia ancistroclada*; *Acacia robusta*, *Acacia tomasii*, *Grewia tembensis*, *Grewia bicolor*, *Grewia villosa*, *Albizzia*

*antihelminthica*, *Commifora Africana*; *Maerua* spp., *Balanites glabra*, *Balanites aegyptica*, *Boscia coriacea*, *Salvadora persica*, *Lycium europaeum*, and *Azima tretracantha*, *Cordia* spp..



**Figure 5: The broad vegetation classification of Osupuko showing the two major vegetation types *Acacia mellifera* bushland (on legend) and *Acacia tortilis* open woodland (90-100% bare on legend)**

The range condition in these vegetation communities ranged from fair to good. The more closed areas are favoured by elephants and are full of signs of elephant occupation including vegetation breaking, debarking, uprooting, dung, and trails. This area is very favourable for other wildlife and has the highest population of ungulates.

### 5. Hilltop vegetation

The hilltop vegetation occurs in the rocky hills to the south of Kilitome onwards to Nailepu. The hills run from the southwest tip of Kilitome near Tsavo- Amboseli road and generally from the southern boundary of the reserve. On these rocky areas are found a unique assemblage of *Acacia* including *Acacia tomasii* that tends to be the most conspicuous though not the dominant

type (Plate 5), *Acacia ancistroclada*, *Acacia maerua* spp., *Balanites glabra*, *Balanites aegyptica*, *Albizzia antihelminctica*, *Boscia coriacea* and *Delonyx* spp.



Plate 5: Hilltop vegetation showing *A. tomasii* and *Boscia* spp. at the south western corner of Kilitome

The hilltops contain an assemblage of tough herbaceous plant species and very little or no grass. Most vegetation is growing in the spaces between large boulders that cover most of the hilltops.

#### **6. *Acacia xanthophloea* Woodland**

In Osupuko, this vegetation covers the north-eastern tip of the conservancy from the Isinet spring through the farms to the Loitokitok-Emali main road. The vegetation consists of tall fever trees on the spring and stream flow peripheries. Most of this vegetation type has been cleared to give way to farms. The vegetation covers the wet areas and its undergrowth in uncleared areas is dominated by *cyperus* spp. In Kilitome, *Acacia xanthophloea* trees are scattered in the poorly drained and wetter low-lying areas on Kilitome. However, the north eastern corner of the conservancy where the Namelok fence meets the border of Mbirikani is dominated by *A. xanthophloea*. This yellow fever tree grove extends and stretches along the drainage that extends all the way to near the Amboseli Park boundary to the north.

## **Challenges to Natural Resource Sustainability**

### **1. Land tenure**

The land in ONKCC is a mix of individual holdings carved out of Kimana Group Ranch land. A few land owners in all the three conservancies have backed down from the lease initiative and

are now sandwiched inside the conservancies. This means that they are free to do whatever they want with their land. On the other hand, most of the district is under communal land tenure and livestock moves freely across the district with seasons and grass availability. The ONKCC area is also utilized by livestock from the neighbouring Mbirikani and Olgulului group ranch. Whereas the people of ONKCC have come together to practice conservation compatible land use, other neighbouring land owners are under no obligation to practice a form of land use that is compatible with conservation. They could sell land, farm it, fence it or carry out other incompatible land use, which would in turn threaten the conservation value of these conservancies.

Also the future of the current lease after expiry in two years for Osupuko and Nailepu in five years and in fifteen years for Kilitome Conservancy has no guarantee and depends on the perceived benefits of setting aside land for conservation. However, AWF is working to develop a long-term strategy to keep ONKCC open as a corridor for generations to come by seeking more funds and establishing ways and means to ensure the conservancies are self sustaining financially, as well as extending the existing shorter term leases into long term leases.

## **2. Livestock production and conservation**

Livestock is the main livelihood of the Maasai people. Most are subsistence producers and milk is the most important product for household use. Livestock are sold to meet needs for food, clothing, education etc. Livestock are sold in organized markets or to middlemen who traverse the area buying stock. The Maasai pastoral system is designed to ensure the survival of a relatively large number of livestock as insurance against losses to drought and diseases. Herds are also moved frequently in order to get to the best pastures available. Movement is between wet and dry season grazing areas; the drier the area, the more the movement. Another strategy involves dispersing the herd through stock friendships and reciprocal relationships (see Herlocker, 1999).

Clan members living together may herd their livestock together in order to share labour but decisions about grazing are individual and conditioned by agreements regarding access to pastures. People of a certain area may decide to defer an area for grazing only in the dry season. Such decisions historically regulated the use of pasture but they are becoming less effective now than in the past. The challenge here is how to manage both livestock and wildlife on the same land and balance the needs of the two and of the community. While livestock and wildlife have been compatible in the past, an increase in human population combined with increased settlement and sub-divisions has made their co-existence challenging. As a result, most of the ONKCC land is overgrazed and highly degraded.

## **3. Rainfall reliability**

Most of Loitokitok district region is composed of semi arid to arid lowlands receiving between 250 mm and 500 mm mean annual rainfall. Long rains here are between March to May and short rains between October to December. Most of ONKCC is classified as semi-arid to arid land that is suitable for ranching. Agriculture in a few areas is supported by Mt. Kilimanjaro's runoff (Katampoi et al., 1990). The success of the proposed zoning and deferred seasonal grazing

regime will depend on rains falling during the long and short season to allow productivity of enough forage to sustain livestock and wildlife during this period of drought.

#### **4. Land degradation**

Most of ONKCC is highly degraded from overgrazing, with very little grass cover in the dry season. Generally the land to the east, south and north has very low grass cover, is mainly bare ground with loose surface rock in the more stable areas and rill as well as sheet erosion in the areas covered by red clays. In KLTC, the areas to the south are also hilly, rocky or sloping and therefore of poor range condition and vulnerable to soil erosion. In Osupuko and Nailepu areas far away from humans' settlement have more bush, more grass cover and better range condition while areas near settlements like Namelok face heavy degradation. Although Kilitome receives more visitors due to the presence of Tawi lodge, the land cannot support a high density of road network and there will be need to limit the road network and regulate use by season. Also the nature of tourism practiced in the entire conservancy will have to be low-impact tourism as the area is delicate and with a low tourist carrying capacity.

#### **5. Resource access and zoning**

Kilitome has only two permanent sources of water in the dry season; one is the community dug shallow water point near the Amboseli border (Figure 4). These well are used to water livestock in the dry season, particularly cattle. The shallow wells fall in the conservancy but the community will need to access this in the driest months of the dry season. The wells are at the edge of the proposed conservancy boundary and this may increase possibility of access whenever needed without creating so much interaction between livestock and wildlife. The second source, the natural low volume flowing spring at the southwest corner of Kilitome in the vicinity of Tsavo-Amboseli road is mainly used to water sheep and goats. This however is outside the conservancy but will require harnessing and careful management to conserve water and maintain flow. The presence of high human settlements and intensified irrigation agriculture threatens the availability of water throughout the year in Osupuko from the Namelok springs (fenced) and Isinet springs. This has also resulted in increased incidences of human wildlife conflicts as they try to access the water and their resultant invasion of the farms. In Nailepu there is limited resource conflict as the existing water source at Engumi springs is permanent with free access to wildlife from the conservancies, livestock as well as the nearby Namelok settlements that have piped the water from the source for their domestic use.

# OBJECTIVES AND MANAGEMENT ISSUES

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## Broad Objectives

The broad objectives of this Participatory Management Plan for ONKCC are:

- Maintain a historical corridor and wildlife dispersal area in Kilitome, Nailepu and Osupko that links Amboseli National Park to Chyulu and Tsavo National Parks.
- Conserve the ecological integrity of the Wildlife Corridor and dispersal area
- Promote vegetation recovery and regeneration in all ONKCC
- Promote the Wildlife and livestock interface at all the ONKCC as the optimal and sustainable land use
- Optimize opportunities in conservation and development at ONKCC
- Ensure security of land ownership and flow of benefits to the local community through promotion of sustainable land use and enterprise that are compatible with conservation

## Critical Management Issues

There are critical management issues facing ONKCC that require the involvement of key stakeholders and the need for an integrated and Participatory Management Plan

- Leases and Agreements
- Education and extension
  - Understanding the lease and the Conservancy concept
  - Resource ownership, tenure and legal issues
- Community participation
- Sustainable Use of Resources (discussed in detail in the Zonation Scheme)
- Pasture and water resource management
- Security
- Conflict resolution years

### 1. Leases and Agreements

One of the potential problems with the lease programme in realizing benefits from land is that conservation leases, unlike farming or other business leases require long periods of time. Differences may arise during the lease period and the land owners may want to have their land back after the expiry of the current lease agreement and do whatever they may want thereafter. Although this is not anticipated, it is important to devise a means that will ensure the financial sustainability of the conservancy that will lead to increased benefits for the land owners.

## **2. Education and Extension**

### **Lease and the Conservancy concept**

The communities need to be educated on the real meaning, the practicalities and the operational structure of a conservancy and what the lease entails. During the preparation stages of this Management Plan, and at all the meetings held with the communities, it became apparently clear that despite the fact that people are expected to give room to wildlife, issues related to grazing management were not being received whole heartedly. A fact finding tour to working conservancies in other parts of the country like Samburu, Narok and Laikipia Districts would help. Although a lot of grass-root education on operations of conservancies involving community representatives was carried out, more education is recommended so that the whole community understands the meaning and the potential benefits for the community from conservation.

### **Resource Ownership, Tenure and Issues**

Along with the education on the conservancy concept, the communities need to be trained and sensitized on the ownership issues relating to the resources within the area they have set aside for conservation. They need to be made aware that the creation of the conservancy results in some form of security of ownership and tenure to hitherto open access use resource. However, they need to be made aware of the legal implications governing the use of resources and the modalities of a conservancy. All the policy issues listed and explained in the previous section should be explained and community obligations to these emphasized. The leasee expects that the community respect the Lease Agreement in entirety. This Management Plan also recommends the enactment of community by-laws to govern and control resource use in the various use zones within the conservancies so that the resources can be used sustainably. The community needs to be aware of the implications of these by-laws and how they would affect their normal lives, particularly the fines and other forms deterrent mechanisms to control misuse.

## **3. Community Participation**

The conservancies have been created on land set aside by the individual owners. However, the leasee will have a bigger stake in decision making even though the conservancy concept stresses that community ownership, participation and control is key to the success of a conservancy. Community participation has been sought and consultations with community representatives and other stakeholders were held at all stages of the development of the Lease Agreement and of this Management Plan. It is stressed here that this is a community initiative. Individuals may own land but the land is under lease, therefore management cannot be individuals neither can individuals change their mind mid-way. The most important thing to note is that the land is worth a lot more when pulled together and collectively owned than when under individual ownership. Their involvement and representation will be secured in the creation of the ONKCC Management Board that has full community representation. In this proposed management structure, the community is well represented in the decision making and management programmes that may be undertaken.

## **4. Pasture and Water Resource Management**

A Grazing and ecological management programme has been drawn and will be implemented in collaboration with and after consultations with the community. The successful implementation of a pasture and water Management Plan and a security (scouts) monitoring programme (see Section 5.0) will be seen as the ultimate success in the implementation of the Zonation programme and the working of the conservancy.

## **5. Security**

The creation of a scouts monitoring programme (Section 5.0) was prioritized in these conservation conservancies. Scouts that have been trained will be hired as well as training of new recruits. Currently there are 16 scouts in the Conservancies. Protection and security for wildlife still remains the mandate of Kenya Wildlife Service but the scouts and the community plays a big role in monitoring and reporting. The scouts programme will be the initial step in securing the resources being conserved as well as creating jobs for the plan.

## **6. Conflict Resolution**

The ONKCC Community Conservancies are situated in an area hitherto under an open access resource use system even though land is individually owned. It was grazing area not only for the local residents but also a dry season grazing for pastoralists from other parts of Kimana and from other group ranches. However, the current lease restricts grazing by non-conservancy members. Whereas the local community wishes to set aside this area for conservation, thereby regulating access, consultations and communication of the development will need to involve the communities' members. Conflicts on resources will inevitably arise, between community and leasee and between the community and other communities over restricted access. It should be noted that in the three years of the lease program, there has only been one violation, which indicates a commitment and understanding by the community. These among others have been in existence. To the extent that local and regional conflict will affect conservation in ONKCC, the communities will need to create a conflict resolution committee that will involve the local and regional government administration in order to buffer the conservancies from internal and external conflicts. In the interim, most conflicts are expected to arise from pasture access so that the proposed Grazing committee can also function as a conflict resolution committee.

# **ZONATION SCHEME**

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Zoning is a key management tool for multiple-use areas such as ONKCC. It allows areas to be set aside for particular activities such as protection of key habitats, grazing areas, research, education, and tourism among others. The ONKCC Zoning Scheme aims at reducing or eliminating conflict between different resource users of the conservancy by setting aside specific

areas where grazing as a land use activity is allowed and at the same time delineating areas specifically for wildlife use and to allow range regeneration in the degraded areas.

In delineating ONKCC zones, the plan put into account the current status of the following ecological variables as they were at the time of the ecological assessment.

- Seasonal waters use and distribution (little or no water in the area in dry season)
- Proximity to Amboseli and linearity of the area to serve as corridor
- Habitat integrity
- Seasonal pasture use and critical needs periods (the area is a critical dry season grazing site for both wildlife and livestock)
- Wildlife distribution and densities (some areas such as Kilitome and Nailepu have high densities of wildlife)
- Resource conflict hotspots (areas near the Kimana Sanctuary/farmed/settled areas are prone)
- Current settlement patterns (the end of the corridor near the Sanctuary is settled)
- Areas of exceptional resource values/culture etc (none will be denied access to community)
- Proximity to already negotiated and initiated tourism development such as Tawi lodge

The zonation recognizes that the critical resources are pastures that would be denied to the community as a result of creating a use-restricted zone for conservation. The zoning would therefore be mutually acceptable to the community and to leasee if dispensation is made from both sides to accommodate each other.

This plan therefore proposes a zonation and grazing control system based on two zone categories but which do not strictly follow the IUCN (1994) categories. The zoning framework to be applied to ONKCC will include:

- Core Wildlife Zone/Conservation Zone
- Grazing zone/Grazing area (for grazing and conservation)

## Core Wildlife Zone (CWZ)

This zone is a component of the ONKCC designed to protect and conserve biologically significant habitats that have initially been over utilized and degraded so as to allow for rehabilitation and regeneration. This area will be strictly protected and preserved in its near pristine state and should only be used for wildlife conservation. However, to balance human uses and enhance harmonious co-existence with wildlife amongst the ONK community, controlled grazing will be allowed during a three-month critical period of the dry season. The months when this is allowed will be August to November but only during severe drought when there is no alternative grazing site. In Kilitome located within this area is Tawi lodge while in Nailepu and Osupuko there are no touristic developments; however, potential for game drives and nature walks exists. There is however scattered settlements in the southern end of Osupuko

as well as irrigation farming in the northern part of Osupuko. On the edge of Kilitome, next to Kimana gate, there are uncontrolled settlements and business structures mainly owned by people working in the neighbouring hotels. The upcoming and unplanned centre at Kimana gate is expanding at an alarming rate as more and more people seek employment and also provide support services.

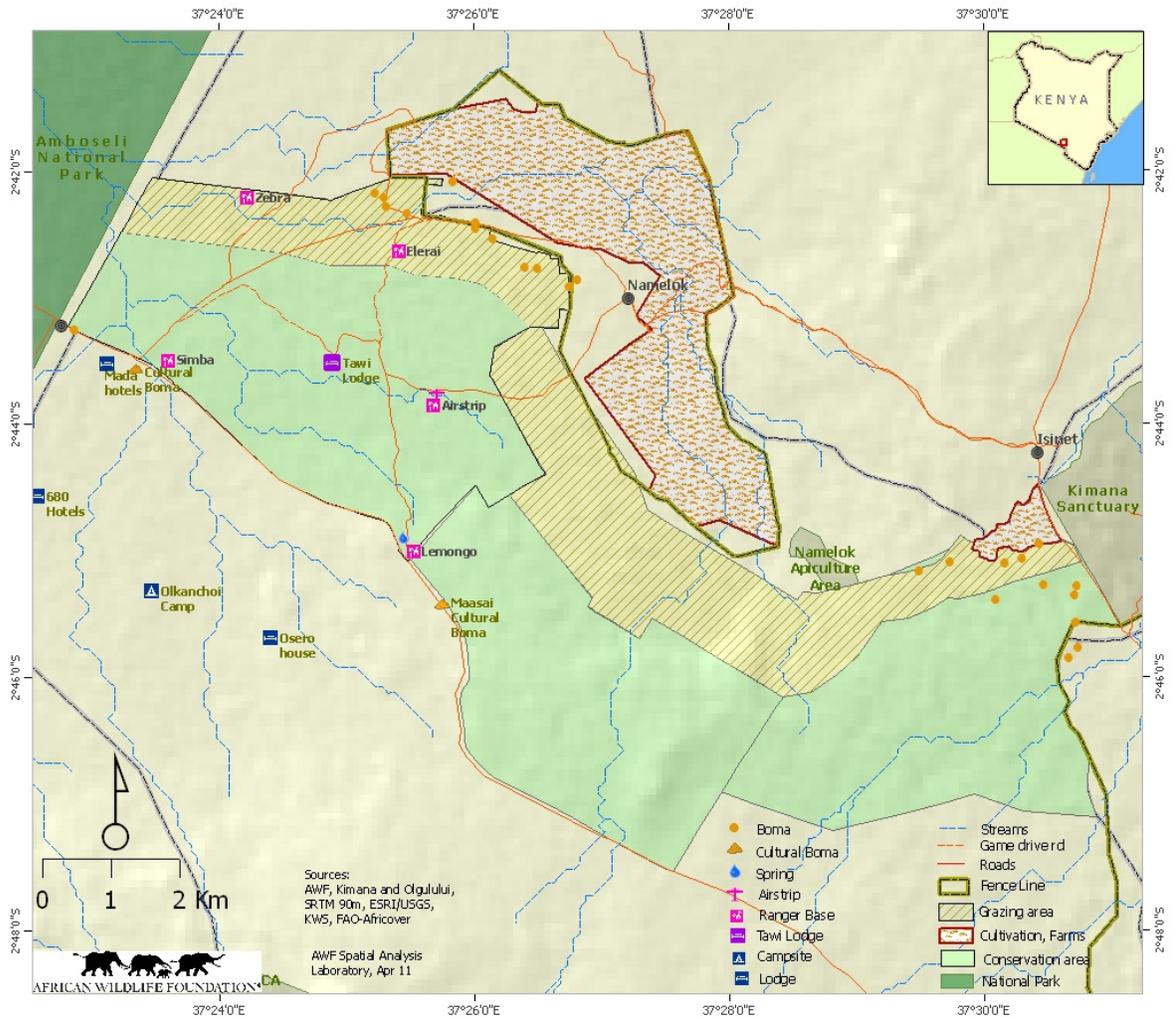
This zone will therefore be highly protected where the removal or harm of plants or animals is prohibited including collection of firewood. However, a number of recreational activities that do not harm the habitat nor interfere with services that the habitat provides to populations that use them will be permitted.

## Zonal description

The ONKCC Core Wildlife Area connects the Amboseli Park through Kilitome to Nailepu then to Osupuko onwards to Kimana sanctuary. It is therefore that strip of land to the southern side of the ONKCC that runs from the boundary of Amboseli National Park to Kimana sanctuary without any interruption (see Figure 6 below). The reason for its establishment is to ensure the free movement of wildlife without any physical barrier, or interference by human activities such as grazing. The Amboseli - Tsavo roads acts as the southern end boundary from Kimana gate constituting about 30 land holdings for Kilitome. In Nailepu, Amboseli-Tsavo road still acts as the southern boundary while to the north eastern side the boundary is at the foot of the elongated hill that cuts across Nailepu. The boundary excludes three land parcels from Namelok fence running parallel all along to Osupuko where it ends in Emali-Loitokitok road connecting to Kimana Sanctuary (see Figure 2). The rest of the area forms the Grazing Zone for ONKCC.

### Resource values in the CWZ

The natural resources in this zone include the best closed and open bush and woodland habitats with several Kopjes. Water is available in the wet season but no permanent water is found here. Nailepu offers unique landscape with presence of an elongated stretch of hills punctuated with stark kopje outcrops. This zone is an important habitat for many species of wildlife, both resident medium to small mammals and large migratory ungulates. The Hills and Kopjes offers ideal panoramic game viewing sites and getting up high is the best way to scan the horizons for herds of game as well as getting picturesque view of Mt. Kilimanjaro. Indeed the kopjes are recognized for being hideouts and breeding areas for hyenas, with one popularly referred to as (*'Mlima wa fisi'-hyenas' hill*) by locals. Lions are known to also take advantage of this opportunity, and can be seen hunting on these slopes and plains. The zone has high numbers of giraffes due to presence of browse materials, mainly *Acacia tortilis*.



**Figure 6: ONKCC Zonation Scheme showing the two major zone types (Core Wildlife Zone/Conservation Area and the Grazing Zone/Grazing Area)**

### Reasons for controlled grazing in the CWZ

- (i) Uncontrolled community grazing will continue to degrade the land and to exclude wildlife from the conservancy areas
- (ii) Grazing in the conservancy will increase interaction between people and wildlife and therefore increase human wildlife conflict
- (iii) Setting aside this area for conservation will promote tourism development
- (iv) Reduce overstocking and reverse range degradation
- (v) Allow wildlife to use the area as a dispersal area and corridor

- (vi) Most of the range, especially the southern end of Osupuku connecting to Kimana Sanctuary, is currently in a degraded condition and will need remedial measures to allow rehabilitation leading to sustained use
- (vii) Most species of grass in the area are annuals as a result of the grazing and degradation cycle; the range will need restoration to allow establishment of perennials that can support grazing for longer periods in the year.
- (viii) Harmonize conservation, grazing, tourism and other enterprise development
- (ix) Save the area as a critical dry season grazing area
- (x) ONKCC have in the past been used by pastoralists from outside the area and zoning will help control use

Ecologically, however, prolonged grazing exclusion may lead to the establishment of dense vegetation that will be unsuitable for most grazing ungulates thus lead to low wildlife diversity and therefore every few years, the leasee is encouraged to negotiate with communities and allow limited access to livestock in critical periods to reduce moribund grass dominance.

Range rehabilitation will be vital to the success in the conservation of vegetation and wildlife as well and to allow for seasonal controlled livestock access. The proposed grazing plan will not only allow range restoration but will also encourage raising quality livestock. The focus for the grazing management in the conservation zone will be the zoning plan that is to provide a framework for maintaining the integrity of ONKCC while allowing communities to practice livelihoods that are compatible with conservation. This will be done in line with the natural resources conservation and management objectives as well as the by-laws to be set by the community relating to conservation, grazing, environmental protection and management in the conservation zone.

## **Zonal prescriptions in the CWZ**

### **1. Tourism facilities and activities**

No more than the existing developments should be allowed here. There exists at present the Tawi Lodge in Kilitome conservancy. No more campsites or any extra tourist facility may be allowed here in ONKCC. However, to add value to the conservancy geared towards ensuring financial sustainability, only eco-friendly tourism products and activities will be allowed (see the FSP). Nature friendly, low-impact tourism may be allowed in Nailepu and Osupuko such as walking safaris, rock climbing, sundowners, bush dinner/breakfast. Nailepu hills, for example, have ideal sites for establishment of a high end starbed. Any type of development will only be allowed after agreement with the land owners and the leasee. This area is otherwise closed to further facilities development and is only accessible for use for low impact tourism, scientific pursuit, and for purposes described above where no alternatives exist elsewhere.

### **2. Road infrastructure**

Currently, there are two main access roads, one from Kimana Gate through to Namelok and another that accesses the Lodge from the Amboseli-Tsavo road onward to Namelok in Kilitome. Nailepu has no formal road whatsoever. The hills in Nailepu and the rocky outcrops make it hard to come up with roads to traverse the conservancy. As a result, only one road should be constructed connecting Kilitome-Nailepu onwards to Osupuko to Emali – Loitokitok road. This road should only be on the northern side of the hills to reduce further impact in the conservation zone. No more road network will be allowed except well marked game-walking tracks and the above proposed road. Currently there exists enormous number of off road tracks traversing all over the conservancy. This is due to the loose structure and texture of the soil and cars gets stuck in the mud during wet seasons or even in loose sandy soil. The bad sections of the road therefore become unattractive to use and motorists look for alternative, unmarked routes as long as the vehicle can navigate through. To prevent further off road driving through the identified roads in the conservancy will be graded and marrumed just like is the case with the Amboseli-Tsavo road. No off road driving will be allowed here after the roads are well established. The Conservancy management board will establish penalties to be imposed on those who will be caught off-road driving.

### **3. Settlements, grazing and associated activities**

There will be no settlement and no grazing allowed here except during extreme drought periods as per the agreed periods. There are however existing settlements in Osupuko and efforts will be made to have those settled here to willingly move to other areas. The conservation lease limits any further development and expansion. This will call for candid negotiations by the Management Board to have them relocate willingly. In the settled areas, crop cultivation is also being practiced, mainly in Osupuko towards the mouth of the ONKCC connecting to Kimana Sanctuary. Based on the lease agreement, their agricultural practices are not permitted in the leased areas. Landowners should opt to lease land in permitted areas for cultivation (within Namelok Isinet or fenced areas of Kimana) and allow for the corridor connectivity. Selected cultural ceremonies that have low impact on the ecological integrity may be allowed but with consultations with the relevant management board and the elders. No collection of plant or animal material is allowed except with consultation with the concerned authorities when there is no other option available elsewhere. Continuous scout monitoring will be done on wildlife, water, livestock and vegetation. Security should be done to maintain the integrity of the area. In order to ensure security of the resources, four scout outposts will be strategically placed in the zones to deter illegal activities and monitor resources trends.

### **4. Management strategy**

Active management will be undertaken as and when necessary to promote recreational and scientific (research and educational) objectives. The CWZ will be protected to retain its pristine state in order to provide unique experience, undisturbed habitats and a secure environment to wild animals. The immediate management authority for this zone is the ONKCC Management Board.

## Guidelines for the activities and development within the CWZ

Activities within the CWZ must be compliant with the lease guidelines. In addition, the following guidelines will be followed:

- No extraction of any kind should happen inside the CWZ. This includes but is not limited to (i) cutting of plants/grass for building (ii) collection of dead wood for whatever purpose (iii) mining of earth for building or whatever purpose (iv) collection of animal products, skins, bones, etc for display on-site or off-site.
- Endangered species should not be introduced into the conservancy unless they already exist here at the time of the establishment of the conservancy.
- Exotic plant and animal species should not be introduced in the conservancy.
- No fences or any physical barriers should be built in the conservancy until an EIA is carried out as per the requirements of EMCA.
- There should be no trapping, baiting nor any form of luring or handling of animals e.g. for tourism purposes, except by permit from Kenya Wildlife Service.
- Any habitat modification inside the conservancy such as provision of water or minerals, drainage, channeling and other forms of habitat enrichment will follow EMCA requirements.
- Intensive scout monitoring should be done in this more than any other section to discourage poaching.

## Grazing zone

The grazing zone of ONKCC is the area set aside for specific uses where activities will be regulated to some extent. This zone will allow ongoing grazing activities collection of dry firewood and other activities provided that these activities are ecologically sustainable and consistent with the overall objectives of ONKCC. The grazing zone will remain a communal grazing area and run under the grazing and ecological management programme. As part of implementation of this management plan, a grazing committee will be formed that will be tasked to develop grazing by-laws in collaboration with the scouts. The grazing by-laws will ensure the success and enforcement of the prescriptions herein as well as to regulate pasture use in the conservation zone during the agreed upon periods (August – November). These by-laws will be paramount towards the implementation of the grazing management programme.

## Zonal description

This zone includes the strip of land between the Core Wildlife Zone and the settled areas. It essentially entails any other land that is not CWZ but is within ONKCC boundary (Figure 6). This area generally lies to the North east of the CWZ and to the west of the Namelok fence extending all the way to Emali-Loitokitok road. The vegetation is dominated by Open *Acacia tortillis* woodland (Plate 4) and *Balanites spp.* dominated open woodland and grassland in some areas. The range condition is not good and is overgrazed owing to its proximity to settlements and requires good range management practices.

## **Zonal prescriptions in the Grazing Zone**

### **1. Settlements, grazing and associated activities**

There exist some scattered settlements in the ONKCC grazing zone. These are mainly in the Osupuko side towards the mouth of the conservancy connecting to Kimana Sanctuary. The settlement pattern here at present is unplanned. Whereas this plan does not support the evacuation or relocation of anyone settled in this zone, the plan proposes that no further settlement can be allowed within the leased land. For those with settlements on the land, there will not be further expansion of settlements in the manner of development of new buildings or any other amenities within the period of this plan. No such new amenities as wells, shambas, kitchen gardens, roads, tracks etc will be allowed. The plan also proposes that negotiations be initiated between the Management board and the owners of settlements in ONKCC and those near the Kimana Sanctuary. Such negotiations would involve voluntary relocation or seeking a solution to corridor blockage that now exists.

No further settlement will be allowed in this zone and the current people residing here will be encouraged to move into the fenced Namelok or centers like Isinet or Kimana. Communities will be allowed to graze livestock and carry out cultural activities such as harvesting of herbal medicines and to do rituals that may not be allowed in the CWZ. Activities practiced here should be compatible with the conservation. The zone will also deter encroachment into the CWZ. Development of road network for tourism, apart from the one proposed above is not allowed as there is already adequate road network especially in Osupuko. No campsites will be allowed and no tourism facility may be erected here.

### **2. Water Supply**

Currently, ONKCC members such as in Osupuko obtain water from two springs, Isinet and Namelok. The lack of water in the dry season allows for control of pasture use in this season. This is because livestock have to walk long distances to water. This scenario augurs well for wildlife as land carrying capacity is small allowing for coexistence. This management plan proposes that the current water situation in the area remains unimproved for the period of this management plan. If surface water is provided to the area in the dry season, both wildlife and livestock will remain in the area for prolonged periods of time leading to both increased human wildlife conflict and range degradation.

The Isinet spring should be fenced off to discourage wildlife use. Prolonged closure to wildlife will discourage wild animals, particularly elephants from deviating away from the main corridor in search of water thereby bringing them into conflict with humans.

### **3. Road network**

The current road network through ONKCC consists of the Kimana-Namelok and the Isinet-Namelok roads, among others that cross in the middle of Osupuko. These roads are adequate for accessing any critical resource in the area. Nailepu has no well established road and only one road will be established as indicated in the CWZ. Only one road connects through Kilitome

from Namelok, traversing through the CWZ to Kimana gate. This well established but will need grading and murraming to prevent off road driving. No other roads should be developed in ONKCC during this plan's period. In Osupuko, the track from the farms near Kimana Sanctuary and those from the Bomas near the corridor mouth that run inside towards the center of the conservancies should be closed down. All access paths other than the two main roads mentioned should be closed down. This restricted access will make it easy to monitor access to the conservancy.

#### **4. Fencing**

Fencing of any part of land within the conservancy is not allowed as per the Lease Agreement. will be discouraged. This plan however recognizes that the creation of a corridor that narrows towards the Sanctuary will inevitably increase Human Wildlife Conflict (HWC) in the Isinet area and the area near Kimana Secondary School. The plan proposes the renovation of Kimana fence from the Sanctuary as far back as the Loitokitok road near the junction of Amboseli-Loitokitok-Emali roads. This will reduce the possibility of channeling HWC into Kimana as a result of creating the corridor. The plan also recommends phasing off the shambas near Isinet as this area is a potential HWC hotspot and fencing here is not viable.

#### **5. Plant resources utilization**

The ONKCC especially Osupuko area has been experiencing unprecedented spates of charcoal burning, wood extraction for building and Boma fencing. This plan proposes that extraction in this area for the above products be made illegal. Already, the community here, particularly individual land owners do not allow charcoal burning in their plots. This status should be maintained, and efforts by the Scouts in controlling this will be important in saving wood resources in the conservancy. Firewood collection will be allowed but only from dead wood. Alternative source of fuel wood and for building and fencing material will need to be investigated. The community will also need to liaise with community development officers to access support in the development and use of energy saving technologies to help reduce the amount of fuel needed for domestic use.

#### **6. Management strategy**

The community and the ONKCC management committee need to work together in order to regulate the developments and activities in this zone. It is important to ensure wildlife corridors and dispersal areas remain and attempts to increase wildlife tenancy are discouraged. Overstocking is the main challenge in this area leading to poor range condition. In Osupuko, for example, the 50 members of the Osupuko conservancy own approximately 1900 animals. Out of these animals, about two-thirds are using the Osupuko conservancy during a given time of the year (see table 1 below). The current livestock density based on the existing numbers using the conservancy is about 23/acre.

**Table 1: The current population of livestock owned between the 50 landowners of the Osupuko and their use of the conservancy area.**

Livestock type	Using Conservancy	Not using conservancy	Total
<b>Cows</b>	366	205	<b>571</b>
<b>Sheep</b>	374	247	<b>621</b>
<b>Goats</b>	519	190	<b>709</b>
<b>Total</b>	<b>1259</b>	<b>642</b>	<b>1901</b>

This is very high compared to the stocking rates for other areas of similar rainfall e.g. Laikipia where the stocking density 1.4/acre. The current level of 23 is therefore unsustainable and the subsequent grazing plan is addressing this issue.

Since Osupuko is overgrazed and has poor range condition in the grazing zone, the following grazing plan will be applicable to Osupuko only. The grazing plan only applies to the livestock of the leaseholders. The lease (appended) prohibits any and all livestock from non-conservancy members. Modalities will be worked out on how to facilitate access by non Osupuko Members from the larger ONKCC. It is also imperative that the proposed grazing committee will be able to implement the grazing plan.

**Core Wildlife Zone:** Is closed for nine months in a year to livestock. It will be **opened** to grazing in the critical dry period between **August to November**. When opened, **any** livestock will be allowed access but the limits will be as follows:

**Cows = 100 cows on any given day**, every day **for three months**, the community to decide on the details

**Sheep: 50 sheep on any given day**, every day for three months, community to decide details

**Goats: 200 goats on any given day**, every day for three months, community to decide the details

## **Guidelines for activities and development in the Grazing Zone**

- This plan recognizes that the creation of ONKCC will increase wildlife numbers, increase wildlife tenancy in the corridor and lead to increased human wildlife conflict. The plan recommends the rehabilitation of the old Namelok fence, to fence in all farming and settlement areas.
- Settlements already exist here and the lease between AWF and the community restricts any and all new development of any kind; thus, no more development will be allowed including buildings or provision of other amenities like water.
- No major road network or tracks construction will be allowed here except those that have been proposed above.
- Community or developers will not be allowed to set up campsites within this zone. That means there will be no visitor facilities here.

- No physical facilities such as buildings will be erected anywhere within the Grazing Zone.
- Grazing will be allowed here only for livestock of the ONKCC members who have entered into the lease agreement

# MANAGEMENT PROGRAMMES

In coming up with the management programmes for ONKCC, the approach used is rather different compared to the one employed in identifying management programmes for protected areas. In protected areas, the methodology used follows the KWS Protected Areas Planning framework-PAPF (KWS, 2006) that gives an elaboration of management programmes setting out the objectives, actions and activities to be delivered by protected area management under a variety of different themes, such as tourism management, ecological management, security, park operations, and community outreach. Again for ease of implementation and ownership, the programmes are aligned with protected area management section(s), and/or KWS HQ departments allocating responsibility for implementing individual management programmes to heads of the sections to which the programmes are pegged.

This management plan sets out only three management programmes for the conservancy which is envisaged to cover broad aspects that needs to be addressed as the conservancy gets operationalized. The choice of these programmes is due to the fact that; (i) the landowners have much more limited management capacity and resources than is the case with KWS protected area managers, and therefore the need to define a simpler set of criteria for the contents of the management programmes than does the PAPF, and (ii) such a plan cannot cover all possible programmes as the area is not strictly a conservancy *per se*.

The ONKCC management plan and the conservation lease will guide and control the management of the ONKCC and the proposed zones. The implementation of this plan will be participatory and will not only be left to ONKCC proposed management, but also other conservation partners. Through these management programmes, the plan provides guidance for the foundation of development activities and management actions of the surrounding areas and the effective conservation and utilization of the area, as well as control development as indicated in the zonation scheme.

# Grazing and Ecological Management Programme

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In light of the apparent global climate change, pastoral livelihoods are threatened by prolonged and unpredictable droughts which take a huge toll on both livestock and wildlife. In light of this environmental uncertainty a diverse range of innovative strategies to minimize this unpredictability and risk are needed. Through this programme, this plan has addressed these challenges through a robust habitat improvement programme which prescribes measures that will see livestock pastures increasing in quality thereby increasing the livestock carrying capacity of the range. In addition, to mitigate against droughts brought by climate change, the plan has zoned the ONKCC into two major zones (Core Wildlife Zone and Grazing Zone) which are geared towards ensuring that overgrazing in the entire conservancy is reduced by disallowing grazing in the CWZ but only at critical dry spells.

This programme recognizes that alternatives for increasing range carrying capacity for livestock such as range rehabilitation and other forms of improving range production are either expensive for pastoralist to afford or the technology is not readily available. As a result it calls for combined effort by scientists and researchers especially those operating within the Amboseli Ecosystem to assist in coming up with ideal solutions towards range rehabilitation. However, the most readily available solution towards enhancing range rehabilitation is destocking, which unpopular and untenable amongst the land owners. In the past, pastoralists have been reluctant to sell their livestock leading to serious livestock losses. Through the Grazing committee, however, it is envisaged that the land owners will be enlightened on the best options for livestock off take by provision of better prices for livestock. In addition, breeding few but high quality livestock that have drought tolerant traits and yield high quality livestock products is yet another option that this programme seeks to promote.

Three management objectives haven proposed to provide the ONKCC managers with clear long-term goals to work towards over the 5-year implementation period of this management plan. The following sections describe these management objectives and describe the management actions needed to achieve them. The Management Actions will further be broken down into discrete activities detailing persons responsible for their implementation, timeframe and milestones necessary for the delivery of each management action over the first 5-year timeframe of this management plan.

## **Objective 1: Pastoral Herd Off-take for ONKCC community promoted and enhanced**

There are various forms of livestock-related off-take. These include live animals, milk, meat, hides and skins, manure, among others. Off-take may be seen as removal of live animals or

their products from the herd to within the household, mainly for consumption, or to outside destinations such as other households, for various reasons, or to markets for sale. The most important of the livestock related off-take is in the live form. Livestock off-take is, thus, defined as the percentage of the current year's herd that is removed through sales, deaths, gifts, home-slaughter or even theft. This kind of off-take is calculated from the total herd size kept in a year (Nyariki and Munej, 1993).

Pastoralists are sometimes reluctant to sell stock, because they have to maintain a certain level of production for subsistence. They must also hedge against the vagaries of the highly uncertain climate, epidemiological conditions and an equally uncertain political environment (Bonfiglioli, 1992). For example, the Maasai accumulate animals as social and economic assets rather than as a source of income. The Maasai believe that large herds act as a guard against a drought. The larger one's herd is at the beginning of drought, the more likely one is to have a viable herd at the end of the drought (Grandin and Lembuya, 1987; Nyariki and Wiggins, 1999). Through this objective therefore, the ONKCC community will be encouraged to practice smart livestock husbandry and to offset their livestock at the right time. Efforts will be made to encourage the ONKCC community to aim at acquisition of maximum returns in terms of money from cattle sales, rather than the maintenance of a big herd which apart from degrading the environment is uneconomical at the long run. The following actions have been proposed.

#### Proposed Management actions

- 1. Encourage ONKCC members to sell cattle to procure grains for food when they are in acute need of money rather than waiting to sell in the dry season.**
  - Identify mature male cattle for sale because income received is sufficient to procure goods and services to support the family.
- 2. Formalize and support the Market Access Programme (MAC)**
- 3. Liaise with livestock department for re-stocking after a serious drought**
  - The aim here should be to strengthening the productive base of the livestock rather than focusing on destitute pastoralists.
  - The post-drought mitigation interventions should best focus on animal health, strategic feeding of breeding stock and restocking.
- 4. Comply with the early warning issued by the government and de-stock accordingly**
  - The initial action against drought is de-stocking.
  - Conduct sensitization to the ONKCC members with respect to the market economy and early warning of impending drought which could be a cost effective destocking strategy.
  - At the early stages of drought, these preparedness strategies can be assisted by subsidies that reduce the cost (to pastoralists, private traders or NGOs) of removing certain pre-determined numbers and types of livestock from pastoral herds to terminal markets.

## **Objective 2: Ensure the ONKCC members and non-members clearly understands the zonation scheme**

This plan includes a zonation scheme to enable different types and intensities of use in different parts of the area, and to help reconcile the sometimes competing conservation and development objectives. To ensure that the landowners understand the purpose of this zonation, it will be imperative to create adequate awareness on the same and the prescriptions under each zone. Currently, the exact boundaries for the proposed ONKCC zones are ambiguous. Although zones have been marked on the map (Figure 5), marking of the zones boundaries on the ground has not been carried out. The zonation will ensure that locations of interactions between human and wildlife, or any other activities will be known; whether inside the conservancy or outside.

### **Proposed actions**

#### **1. *Clearly demarcate and map out the exact boundaries of the proposed zones***

- Clearly define the actual boundaries of the zones - It is essential to have the ONKCC grazing zones boundaries clearly marked so that no doubts exist as to what location is inside the conservancy, controlled grazing zone and what is outside.
- Use natural physical features on the ground for demarcation but in areas where this is not applicable, beacons can be erected or painting of big trees or stones with colours. The marking activity will involve marking the exact boundary on the ground.
- Marking should be done in liaison with the community.

#### **2. *Sensitize the community on zone boundaries and prescriptions under each zone***

#### **3. *Ensure the enforcement of the zonal prescriptions***

- Develop and enforce the Grazing By-Laws for ONKCC – the formulation of the grazing By-laws is very crucial towards the sustainability of the whole conservancy idea. It is through the formulation of mutually agreed upon rules and regulations to govern the use of the conservancy, especially with regard to grazing that conflict over the utilization of the resources can be evaded.
- Recruit appropriate scouts for enforcement of the grazing by-laws.
- Identify ideal sites for establishing scouts outposts at strategic points
- Joint enactment and enforcement of by-laws regulating use in various zones will be a means of protecting the corridor and the dry season grazing areas.
- Extend sensitization of the zonation to the wider Kimana Group Ranch and neighbouring Group Ranch members with regard to the by-laws and restricted access to the conservancy by non-members. To avoid misunderstanding and conflict non conservancy members will need to know that the conservancy will be under the management of the leasee in close consultation with the management board of ONKCC and not merely by the landowners. Unpermitted livestock grazing inside ONKCC should be prohibited. The habitats shall also be protected from incidental fires by developing and creating adequate awareness on fire outbreak prevention.

#### **5. Allow dry season access to water and pasture**

- Some of the critical issues in the proposed grazing areas are: Seasonal waters use and distribution: Kilitome, for example has about two water sources in the dry season.
- The Investor (Tawi lodge) will need to allow the community limited dry season access to the community wells near Amboseli. The well near the southwestern corner of Kilitome has low flow and is currently used to water shoats. In order to ensure sustainability, the status quo will be maintained. Issues of compliance to the grazing plan and community drawn grazing by-laws will be critical.
- The zonation scheme recommends the landowners access to pasture during extreme periods of drought in the Core Wildlife Zone during the months of August to November. This activity needs to be coordinated to avoid conflict and therefore the conservancy management together with the Board of Management will formulate modalities to be used to facilitate smooth access during this period.

### **Objective 3: Monitor trends in plant and animal numbers and give adequate protection of resources in ONKCC habitats**

The zonation scheme had been prepared to facilitate range recovery by reducing the impact of livestock in the CWZ. It will be necessary therefore to monitor the trend in plant and wildlife numbers in this zone, as well as the impact grazing will have caused in the Grazing Zone. Deferred grazing is recommended for the ONKCC conservancy area for four reasons (i) ONK areas are already overgrazed and a grazing plan will help restore habitat (ii) Community will need grazing area for livestock (iii) Grazing exclusion may lead to the establishment of dense vegetation that will be unsuitable for most grazing ungulates thus lead to low wildlife diversity and (iv) Uncontrolled grazing will continue to degrade the land and to exclude wildlife from the conservancy. This grazing plan recommends control of stock numbers and stock access in order to reduce overstocking and reverse range degradation, allow wildlife to use the area as a dispersal area and corridor, allow the range to restore and as most grasses are annuals, to allow establishment of perennials that can support grazing for longer periods in the year, as well as in order to harmonize conservation, grazing, tourism and other enterprise development and settlement.

#### **Proposed Actions**

1. Initiate an ecological monitoring programme for ONKCC
  - Estimating temporal trends in plant and animal populations is a common goal of biologists and managers. It will therefore be imperative to introduce an ecological monitoring programme for ONKCC.
  - Approach appropriate authority to assist the ONKCC management to be conducting monitoring on regular basis

- Encourage volunteer researchers to conduct research on voluntary basis
2. Link with the Ecological Monitoring Department of KWS to identify key variables that will be used for monitoring trends in both habitat and animal species.
  3. Set appropriate threshold levels for key animal and habitat variables which can act as early warnings. Whenever threshold levels are exceeded, management intervention should be recommended or engage third party researchers to study the underlying reason for change.

# Community Partnership and Education Programme

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The aim of this programme is to enlighten the ONKCC members on the importance of the venture they have mutually agreed to undertake and the importance of ensuring its sustainability. This is geared towards making certain that sustainable conservation of community lands becomes a reality and that the ONKCC becomes a showcase of a successful community conservancy. In particular, the programme seeks to address issues of; (i) awareness on conservancy establishment, operationalization and expected returns, (ii) environmental education, (iii) human-wildlife conflicts (HWC), and (iv) increasing benefits accruing from natural resource management and use. This programme will be guided by a set of principles which are set out in the following sections.

Three objectives and their respective actions have been proposed to guide the realisation of this programme. These are discussed below.

## **Objective 1: The level of community awareness on conservancy and importance of practicing conservation compatible land uses improved**

Public awareness of the importance of the establishment of the ONKCC is critical to continued support for conservation in the area. In general, conservation in the Amboseli Ecosystem is under serious threat from competing land uses and unless the local community is made aware of the opportunities and benefits of conserving the ecosystem, conservation might lose out in the long run. Luckily, the land owners of ONKCC through AWF have realised this and have agreed to practice conservation compatible land use through establishment of a community conservancy. In order to gain support for the established conservancy, an elaborate conservation awareness programme targeting the landowners and key stakeholders will be carried out.

Whereas landowners have set aside land to establish the Osupuko, Nailepu and Kilitome Community Conservancy, a lot of them have expressed concern that they do not fully understand the working modalities of a conservancy. Several community representatives will need to be taken on educational tours and visit areas where the concept of conservancies has been implemented successfully such as those in Laikipia and Samburu districts. The members will need to be educated on what conservancies really are, what their obligations and those of the investor are, and what resources they have to forego *in lieu* of the lease payment. A lot of them have high expectations of the venture, yet they need to understand that it takes several years before success can be achieved. Education will need to go to schools, churches, warriors, women and other organized cultural and traditional institutions. In the past, these communities

have coexisted with wildlife. In the present situation, this interaction will be controlled as some land will be set aside exclusively for wildlife. Cases of human death and injury as well as livestock depredation will need to be addressed carefully to create a harmonious coexistence.

The following actions have been proposed

**1. Conduct thorough community sensitization meetings in ONKCC and its environs**

Although the communities have agreed to set up the conservancy and that they are well aware of the value of conservation, they need to be sensitized on the following:

- The conservancy concept
- The value of conservancy (benefits)
- Sustainable conservation and livelihoods
- Lease obligations
- 

**2. Identify and adopt appropriate media for extending conservancy awareness and outreach programmes.**

This could include; local radio, TV, posters, and also incorporate this on their attires on shuka designs, local print media.

**3. Organize a trip for selected community representatives and ONKCC management to visit identified successful community conservancies**

The trip will be an eye opener to the community in understanding how a conservancy is managed and benefits that can be accrued from a well established and operational conservancy.

**4. Improve the public relations and interactions between ONKCC management and the local communities**

With the establishment of the conservancy, the land owners will be restricted access to the conservancy especially in the Core Wildlife Zone. Grazing will also be restricted more so to non ONKCC members. With this restriction, it is expected that some animosity may result and that the ONKCC members may also be restricted from accessing certain resources from the neighbouring non members. To avoid conflict and enhance harmonious existence, this action will be undertaken. The local leaders will be involved in this exercise to promote peace and also to encourage other non members to join the conservancy. On the other hand, the neighbouring group ranch members will be encouraged to follow the ONKCC approach and establish their own as well.

**5. Liaise with WCK and KWS to strengthen the value of conservation to school going children.**

Focus on young children to educate them on importance of conserving animals at an early age. This could be done by engaging them in activities like paintings, competitions, dances, drama and trips to conservation areas. It is also possible to introduce an exchange programme with children from other conservation areas.

#### **6. Popularize the ONKCC to the general public**

- Introduce an ONKCC public day – to be celebrating the establishment of the conservancy and conservation effort that is initiated by community. Activities could include presentations, songs and dances to invited guests.
- Introduce activities that can be performed in the conservancy such as racing, cycling in the wild, etc

#### **7. Recruit a Community Liaison Officer (CLO) for ONKCC**

The CLO will serve as the link between ONKCC and the community. The CLO is to initiate the education and extension programme to foster coexistence between people and wildlife. The CLO will guide and direct the development of ecotourism programmes and encourage communities to adopt land uses that are not in conflict with the management of ONKCC. The Community Liaison Officer will also work with Kenya Wildlife Service to handle issues of mutual concern to leasee, investor, landowners, community and wildlife including conflicts. The CLO will work with the board as secretary and will identify local biodiversity conservation and management issues and act as a link between international development and conservation groups and the local community. The CLO will not be employed by nor work for the investor rather but should be engaged by the ONKCC management board.

## **Objective 2: Community sources of livelihoods diversified and their sustainability ensured**

Community enterprises in the greater Amboseli Ecosystem are mostly tourism based. This has been risky as tourism associated business is very vulnerable to local and international uncertainty. As part of ensuring financial sustainability for ONKCC, this plan also calls for tourism product diversification. Apart from tourism venture there is an urgent need to diversify enterprises with a view to increasing benefits from natural resource use as a way of reducing impacts of a tourism slump. This objective will be implemented in line with Objective 3 of the Community Partnership and Education Management Programme of the Amboseli Ecosystem Management Plan. The objective advocates for diversification and ensuring equity on community benefit sharing across the Amboseli Ecosystem. It is important to laud the landowners of ONKCC for agreeing to set aside their land to support conservation. This said, therefore, KWS has an obligation to give the ONK members special consideration when it comes to benefit sharing across the entire ecosystem. KWS can give support to community projects aimed at diversifying sources of livelihoods so as to avert the over reliance on livestock as the only source of livelihood.

The following actions have been proposed.

**1. Support and promote alternative sources of livelihood and enterprises**

This action will be implemented in cooperation with other agencies that operate in the greater Amboseli Ecosystem, in order to both enhance the land owners appreciate the benefit of leasing their land for conservation. Supporting the community in identifying projects that can deter them from keeping huge herds of livestock may be a milestone in deterring them from thinking of taking back their cattle to the proposed conservation zone. This is particularly important over the implementation period of this plan, as land tenure moves from communal to individual ownership, and viable economic, conservation-compatible alternatives to permanent agriculture or other inappropriate developments need to be found. Examples of such enterprises include; walking safaris and tour guiding to be conducted by the youth so as to benefit from the lucrative tourism business, Bio-prospecting – explore the potential of propagating and domesticating aloe in their farms as is being practiced in other arid and semi-arid areas such as in Baringo district, Eco-tourism activities such as establishing cultural centres or dance troops that can be hired to entertain guests in hotels, etc.

**2. Liaise with KWS and the Kimana Group Ranch officials to ensure the ONK members are given special priority in bursary disbursement**

As part of benefit sharing, KWS through the Amboseli Park management disburses bursaries to the group ranch officials (all group ranches) for them to identify and fund education for needy group ranch members and their families. However, disbursement of these bursaries has been met with irregularities in the past. The money goes to the group ranch officials who meet and identify the needy cases. Instead of the bursary going to needy cases as identified by the group ranch members, issues of nepotism and corruption arises and the money ends up benefiting undeserving cases. In the year 2010, for example, the Kimana Group Ranch did not receive their allocation as a result of these wrangles and money was returned to KWS after the long delay. ONKCC, having willingly accepted to practice compatible land uses, should be given special consideration, or even KWS to directly deal with the ONKCC land owners instead of going through the group ranch officials.

**3. Improve the management and leadership of nature based enterprises**

It is acknowledged that there is limited capacity for ONK members to initiate and manage income generating enterprises. Capacity building is therefore needed in areas of enterprise conception, business plan development, and project and finance management. As such, under this management action, the management teams of existing projects and potential ones will be trained in leadership, project management, and basic entrepreneurial skills, to enhance their capacity in business development and financial management.

**4. Assist the community to initiate a water capturing, filtering and bottling plant to take advantage of the natural spring at Engumi spring in Nailepu**

- Organize a sensitization meeting with the management of ONKCC to understand the potential of water bottling
- Prepare mutually agreed regulations to govern the water extraction and bottling as well as sharing of revenue generated
- Recruit appropriate staff to manage the enterprise

## **Objective 3: Adverse human-wildlife interactions reduced**

Wildlife continues to affect the Amboseli Ecosystem community negatively through incessant crop raiding, human injury and livestock predation. Crop raiding is rampant in irrigated areas around wetlands as a result of changes in land use. The areas around the Kimana sanctuary in Osupuko have been reverted to cultivation blocking wildlife movement and blocking of the migratory corridor. As a result new HWC fronts continues to emerge. Conflict mitigation measures adopted by KWS and other stakeholders include: raising the wildlife tolerance threshold of affected people by paying some form of compensation, problem animal control through scaring or shooting culprit wildlife, improving the habitat by providing water outside the Park, and using physical barriers to keep wildlife out of farms. Despite implementation of these measures, HWC seems to be increasing particularly in the cultivated areas leading to increased resentment of wildlife. To gain support for conservation outside the Park and minimize resentment of wildlife, effective measures to curb HWC will be put in place. These will include rehabilitation of the Kimana and Namelok electric fences which have broken down due to neglect among other measures. This objective will be implemented in line with the Amboseli Ecosystem Management Plan (KWS, 2008), Objective 2 of the Community Outreach and Education Programme. This is in recognition that KWS has the jurisdiction to protect and mitigate HWC cases beyond the protected areas.

### **The following Actions have been proposed**

- 1. Provide adequate compensation for deleterious conditions caused by wildlife according to the Wildlife Act CAP 376.***

There should be established a proper mechanism of establishing genuine cases of injury or death caused by wildlife. When these are established, adequate compensation should be done immediately. This will minimize the negative attitudes that the victim may have towards wildlife. Even though these programs serve to show the community that the authorities care about their welfare, experience has shown that these compensation programs do not actually work. The best and more practical alternatives include the sensitization of livestock keepers to secure their livestock by building predator proof bomas for livestock and using effective herding methods like communal herding and use of dogs.

- 2. Fast track the rehabilitation and maintenance of wildlife barriers***

This action conforms to Action 2.1 of the Community Outreach and Education Programme in the Amboseli Ecosystem Management Plan. Given the high incidences of HWC in the ONKCC and the surroundings, maintenance of the Kimana and Namelok electric fences is the best way to reduce the cost of problem animal control by KWS. The ONKCC management will thus liaise with KWS and other stakeholders to fast track the implementation of this action as is proposed in the greater Amboseli Ecosystem Management Plan.

### ***3. Liaise with KWS to reduce incidences of Human Wildlife Conflict***

HWC in the entire Amboseli Ecosystem takes five dimensions which include the following: crop and property damage by wildlife especially elephants, injury and death of people caused mainly by elephants, livestock killing by elephants and lions, competition for resources and disease transmission from wildlife to livestock. Due to interaction with wildlife by the ONKCC community, it is eminent that it is next to impossible to curb HWC. The best option is to seek for means to reduce the incidents that will lead to minimized conflicts. Through this action therefore, the ONKCC community will be educated and trained on the best methods of reducing HWC. These could include:

- Construction of predator proof Bomas (see also Action 2.5 of Amboseli Ecosystem Management Plan Objective 2 of the Community Programme).
- Wildlife scaring methods such as, use of banger sticks to scare away animals, applying pepper mixed with grease to ropes or fences, inter-planting of chilli peppers with other crops to discourage elephants from eating them. These are methods that have been employed in areas like Laikipia and helps in reducing the conflict.

# ONKCC Operations Programme

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This programme is designed to be the backbone of this management plan. It is the programme that will provide support necessary for the implementation of this management plan. Although the ONKCC is new with little to no established structures to guide the implementation of this management plan, the conservancy operations will need to be greatly strengthened in order to ensure that they are supporting the entirety of the plan's implementation, and providing a conducive and supportive working environment for the existing and proposed staff. It is therefore the programme that will deal with staffing issues, housing, equipments and security issues of the conservancy. As such three objectives have been proposed to guide the realization of this programme.

## **Objective 1: Support the operationalization and staffing of ONKCC**

This objective is in line with the financial sustainability plan section on human resources planning. With the implementation of the FSP then this objective will be realised. The proposed requirements in the FSP will be incorporated in the operational plan and thus will not be repeated here. This is in reference to the number of staff, organization structure, and initiation management team to steer the operationalization of the conservancy. The following actions have however been proposed meant to enhance and motivate the management team.

- 1. Operationalize the proposed organizational structure for ONKCC (see the FSP)***
- 2. Identify and operationalize a reward scheme for ONKCC***

Categorize the reward scheme to different groups. For example, the best member in good livestock husbandry practices, for example, those adapting to the proposed zonation and livestock off take schemes proposed here in.

- The best woman in conservation practices
- The best person in outreach practices for example promoting conservation whenever opportunity presents itself like in churches, barazas, market places, etc
- The best school and student practicing conservation activities, in liaison with WCK
- The best youth group and individual morrans practicing and promoting conservation activities

### **3. Identify, construct and equip a functional office for ONKCC management**

The FSP proposes for establishment of an office (the site to be determined by the ONKCC Board of Management) but preferably at Kimana town to act as the administration center of the conservancy. The office will require office equipments such as computers, printer, telephone, furniture, etc.

### **4. Introduce a training programme for the present and proposed staff of ONKCC**

This action will be implemented in line with Action 3.2.3 of the Ecological programme of the Amboseli Ecosystem Management Plan

- Train the proposed staff on basic computer application
- Train the scouts on basic data collection methods

## **Objective 2: Enhance the security operations of ONKCC**

This objective will be implemented in line with Action 2.4 of the Security Management Programme of the Amboseli Management Plan. This action aims at coordinating the activities of community game scouts to enhance wildlife security outside the Amboseli Park. *In lieu* of this, since the scouts do not have any legal mandate as regards wildlife management, it is important that their work is coordinated by KWS, the national custodian of wildlife. Towards this, KWS will work closely with the ONKCC management to establish a programme of work for the game scouts. It will also ensure that KWS rangers are involved in all sensitive security operations that the game scouts will be carrying out e.g. anti-poaching operations. In addition, game scouts will receive basic wildlife security training to enhance their wildlife protection skills.

### **Proposed actions**

#### **1. Liaise with the regional KWS office to have all scouts to undertake a basic fitness training at KWS training centres**

Discipline among the uniformed cadre is of paramount importance and has to be observed at all times. Laxity and lack of alertness for uniformed personnel performing security duties could cause untold damage in case anything happens. As part of appreciation of support given by scouts in ensuring security of wildlife, KWS will be approached to facilitate and assist the ONKCC management to have all the scouts trained.

#### **2. Introduce a reward scheme for scouts who performs exceptionally**

The ONKCC management and the board should device a reward scheme to appreciate staffs who goes an extra mile in performing their duties to achieve exceptional results though under strained resources and numerous challenges.

The reward could be inform of promotion, salary increment, gratuity, cash token, certificate of appreciation, etc

### ***3. Introduce a periodical skills upgrading programme for ONKCC***

Discipline is paramount to any uniformed staff. Although the scouts are not allowed to handle firearms, it is important for discipline to be instilled so that they can respect ranks and orders from their seniors. As a result, it is necessary to introduce a regular skills upgrading or refresher courses. Some of the existing Amboseli-Tsavo game scouts working in ONKCC have been trained but there is need to upgrade their skills during the implementation period of this management plan.

### ***4. Procure appropriate security operation equipments***

Security officers need to be supported with appropriate equipment for them to be efficient in executing their duties. Due to lack of resources, scouts in the larger Amboseli Ecosystem lacks basic equipments which compromises and demoralizes them in performing their work.

- Through this action the security team will be provided with basic equipment which will include: good tents, sleeping bags, night scopes, uniforms including boots, binoculars, etc. Currently, the operation teams don't have these items to enable them camp as and when necessary.
- Procure appropriate communication radios and accessories – currently the scouts are provided with hand held radios to communicate with different outposts in the conservancy as well as to Amboseli-Tsavo Game scouts. Only Amboseli-Tsavo Game Scouts have direct channel to KWS. It is recommended that, once the conservancy becomes fully established and operational and the proposed outposts established, KWS will provide one common channel to enable each outpost to communicate directly to KWS whenever there is need. On the other hand, each outpost will be provided with two hand held radios with their accessories including spare batteries and solar chargers.

### ***5. Identify and establish scouts outposts at strategic points in the ONKCC***

For the purposes of enforcement, especially with regard to the zonation scheme and to curb illegal activities in the conservancy, four scouts outposts will need to be erected. Some of the outposts are already established, notably in Kilitome (two outposts) and Osupuko (one outpost). One additional outpost will be established in Nailepu to oversee security issues in Nailepu. Temporary housing facilities (preferably tents) will be erected so that recruited scouts can occupy these. There should be no permanent structures and any form structures that could encourage permanent or 'community type' occupation should be discouraged.

### ***6. Conduct joint security operations with Amboseli-Tsavo Game Scouts and or KWS***

Joint security operations could be carried out once there is need upon which the ONKCC scouts feel that there is need for support or if the situation demands presence of well equipped persons. When this presents itself, the head scout will liaise with the Amboseli-Tsavo game scouts and KWS for support.

## **Objective 3: Ensure financial sustainability of the conservancies in collaboration with other stakeholders**

This objective is recognized under the financial sustainability plan for ONKCC. Successful operationalization and implementation of this management plan can only be realized through the support of all stakeholders. ONKCC is just small fraction of the entire Amboseli ecosystem. Its importance as an important wildlife migratory and dispersal area largely depends on the adjacent community and Amboseli Ecosystem stakeholders. Luckily enough, the Amboseli Ecosystem has an array of stakeholders with diverse interests such as tourism investors, researchers, local administration and security agents, conservationists and land owners. It is therefore important that working relations between stakeholders are strengthened and coordinated to generate synergy and strengthen unity of purpose.

The following actions have been proposed:

### ***1. Liaise with KWS to have ONKCC included in the Amboseli Ecosystem Trust and enhance external funding***

The Amboseli Ecosystem Management Plan proposes for the establishment of the Amboseli Ecosystem Trust to provide a mechanism to bring a balance between conservation and development in the Amboseli Ecosystem. On the other hand, the trust was meant to be mobilizing resources to support implementation of the greater Amboseli Ecosystem Management Plan (see *Action 1.1* of the Amboseli Ecosystem Operations Management Programme). The founders of the Trust were meant to be key stakeholders in the Amboseli ecosystem including KWS, Amboseli Group Ranches, Oloitokitok County Council, conservation NGO's operating in Amboseli, and representatives from the tourism industry. ONKCC will seek to be included as a separate entity from that of the Kimana Group ranch in this Trust. The management will also seek support for the implementation of this management plan from this trust as may be necessary.

### ***2. Liaise with other stakeholders in carrying out conservation and development activities in ONKCC***

As mentioned in the previous sections, it is important to enhance stakeholder collaborations to ensure a holistic management of the ecosystem. To facilitate this, appropriate collaboration and networking with other stakeholders will be sort throughout the implementation of this management plan. The FSP under partnership establishment details how different types of stakeholders can participate in support of the proposed activities under this management plan

and the eventual realization of financial sustainability. Actions to be developed under this will therefore appear in the final operational plan.

# **FINANCIAL SUSTAINABILITY PLAN (FSP) FOR ONKCC**

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# INTRODUCTION

This section presents a financial sustainability plan that has been developed to assist ONKCC to realize financial sustainability. This Plan has been developed based on field visits to ONK and discussions with conservation partners and hoteliers.

For purposes of this management plan, financial sustainability for ONK refers to the possibility of the conservancy having its own sources of finances that will enable it to grow its operations in a manner where the income earned from different activities is sufficient to ensure the long term operations and security of the Amboseli-Kimana Sanctuary corridor and pay the land owners reasonable amount of money in a satisfactory manner. Essentially, this concept involves the ONKCC acting as a sustainable enterprise in terms of meeting all its financial obligations while continuing to have access to or generating financial resources for its growth. While this is very close to the conventional notion of profitability, this should not be considered the case and should rather be given time especially for the range condition to recover and attract sustainable number of wildlife that will boost visitation and ensure the connectivity to Kimana sanctuary from Amboseli Park. As such, a financial sustainable plan for ONK have been proposed here aimed at ensuring the conservancy is managed and run to become self-sustainable in the long run. Simply put, this plan will act as a tool to help the ONK conservancy - and more importantly, its goals – to thrive and allow it to continue thriving over the long term.

In developing this FSP, it was assumed that the land owners of ONK have willingly agreed to lease their land for a period of 2 years and to practice conservation compatible land uses, and that they will work towards ensuring that it becomes a successful case study that will influence others who have not agreed to do so as well as those who may wish to do the same in other group ranches.

# FSP DESCRIPTION

## Plan Assumptions

In order to promote sustainable land use and ensure biodiversity conservation, the community who lives and bears the burden of wildlife menace, must be empowered to manage and conserve natural resources within the social, cultural, and economic context of their communities. This is possible with the adoption of community-based conservation, where the communities willingly puts their land together and establish community conservancies to enable them live with and economically benefit from wildlife.

This FSP is based on five fundamental assumptions:

- a. *That the long-term success in achieving our conservation vision requires financial sustainability– i.e., reliable, long-term and sufficient levels of funding from a diversity of sources.*

- b. *Conservation should have a development context that recognizes, respects and supports sustainable livelihoods and community development aspirations*
- c. *ONKCC will capitalize on the services offered by the ecosystem and use business development as a tool for conservation. As such operations will be responsible for the sustainability of the conservancy. A business consists of operations that define its nature, scope and scale. Good operations generate a profit. Therefore, there is a direct relationship between business operations and hence sustainability. This will lead to the sustainability of conservation projects and programs by ensuring availability of financial resources to deliver conservation results long after the current donors or partners have exited.*
- d. *Operations must take place in a conducive environment for growth to be achieved.*

There are several wrangles amongst the land owners and Kimana group ranch officials which do not offer a conducive environment for the land owners to benefit by offering their land for conservation. The environment can be determined by a whole host of things, including regulations and policies. When these are conducive, growth is easily achieved.

- e. *Payment of ecosystem services (PES):* By developing markets for ecosystem services, payment for ecosystem service arrangements will provide a way for public and private beneficiaries to pay for ecosystem services that might otherwise not be valued. PES arrangements will provide a framework for the land owners to improve their standard of living through stewardship of natural resources.

## **Fundamentals of the Financial Sustainability Plan for ONKCC**

The proposed FSP for ONKCC consists of six fundamental elements:

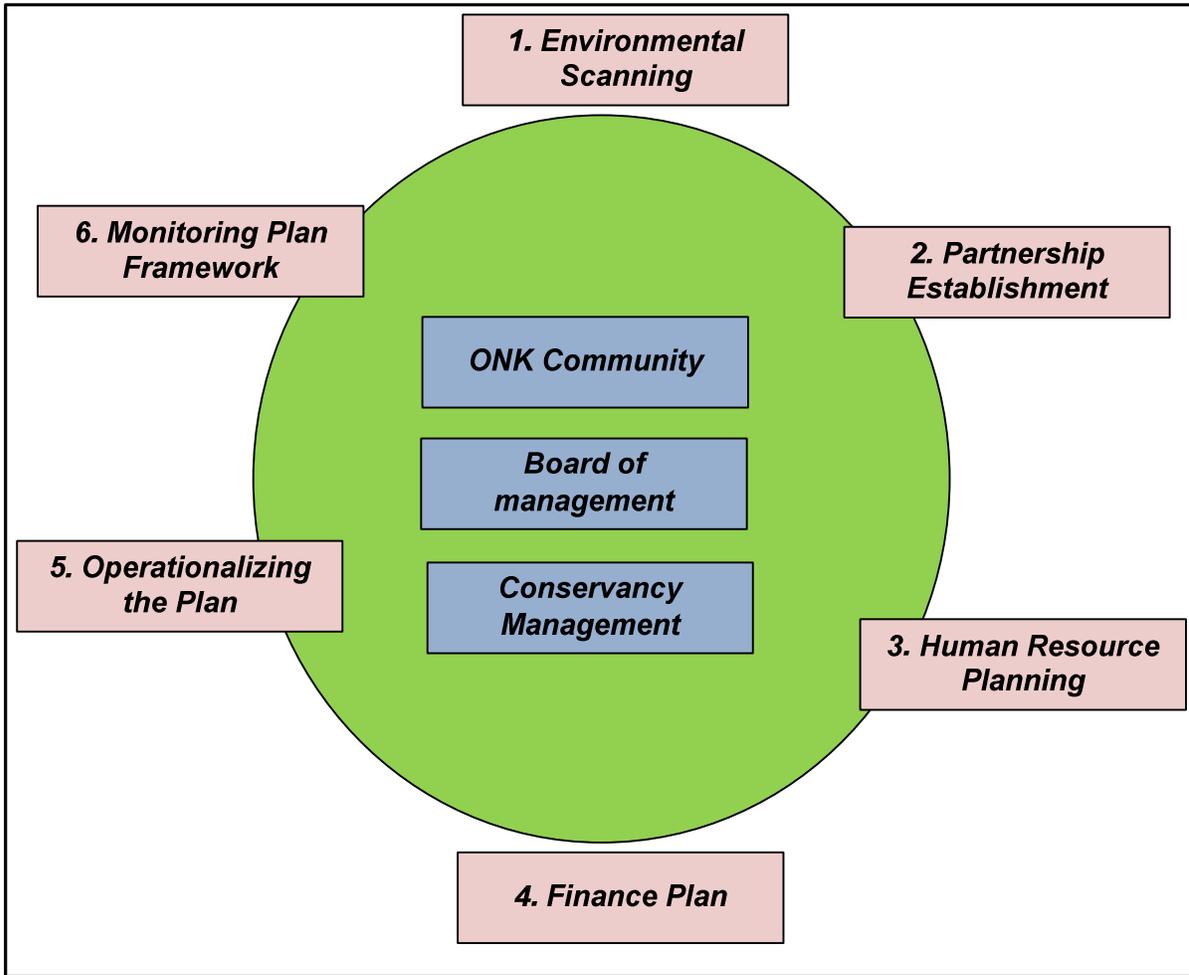
1. Environmental Scanning
2. Partnership Establishment
3. Human Resource Planning
4. Finance Plan
5. Operationalizing the Plan
6. Monitoring Plan Framework

In Figure 7 below, the circle represents the ONKCC itself. The ONCC Community, Board of Management and Conservancy Management will be the key players in the ONKCC. It is assumed for purposes of this plan that:

- a. The community has already been mobilized and that the idea of a community conservancy is owned by them and that the three units (Osupuko, Nailepu and Kilitome (ONK) will be managed as one conservancy (ONKCC) and share benefits thereof.

- b. The Board of Management for each conservancy has been appointed and is already functional and that one common board will be appointed and a general manager be employed to oversee the operations of the conservancy.

The six elements of the plan are the steps that require to be taken in order for conservancy to become financially sustainable and are discussed in Figure 7 below.



**Figure 7: A simple presentation of the FSP for ONKCC**

**Environmental Scanning**

This is a process of gathering, analyzing, and dispensing information for tactical or strategic purposes. It is the first step in the process of establishing a financially sustainable community owned conservancy. In a business perspective, for example, the environment is what provides both market opportunities and threats to the business enterprise. The environmental scanning stage for the ONKCC has already been undertaken that lead to the ONK land owners to come together and establish a community conservancy. The purpose of environmental scanning for ONKCC therefore was to understand the environment better and to assess its potential.

Further, environmental scanning has led to the assumption that the conservancy should be able to attract its own visitors as well as receive reasonable visitor numbers originating from neighbouring lodges. Indeed, the large proportion of visitors to the Amboseli Park comes from the lodges and camps outside the park. Due to the high number of visitors and minibuses that go to the park in a day, the quality of visitor experience is compromised and it is likely that the lodges will find the conservancy a good destination. This will be made possible once the range condition of the conservancy improves and become a preferred habitat for wildlife and the connectivity to Kimana Sanctuary ensured. Currently, the conservancy, especially in Kilitome and Nailepu, is a preferred habitat for browsers like giraffes and gazelles compared to the park that have been degraded living little to no browse materials standing. Therefore, in performing environmental scanning, the following questions were reflected that needs wider thought and have partially been answered in the subsequent stages of the FSP:

1. Is the conservancy capable to accommodate the percentage spillover of visitors from the neighbouring lodges and from Amboseli Park?
2. Apart from Tawi lodge, what are the other potential lodges that may be willing to have their clients use the conservancy?
3. Are the land owners willing to go by the zonation scheme that provides prescriptions to the use of the conservancy so as to make the whole idea worthwhile or should we seek to extend the coverage area beyond the current size?
4. Which other conservancies are providing services similar to ours and at what pricing mechanisms have they devised?

### Partnership Establishment

The success of the community conservancy can only be guaranteed with the involvement and support of partners. The community which has agreed to set up this conservancy is itself a partnership. Ideally, for the conservancy to achieve its mandate there is a need to involve other external partners. Examples of such external partners are Government, Local Authority, Local and international NGOs, churches, donors and local companies.

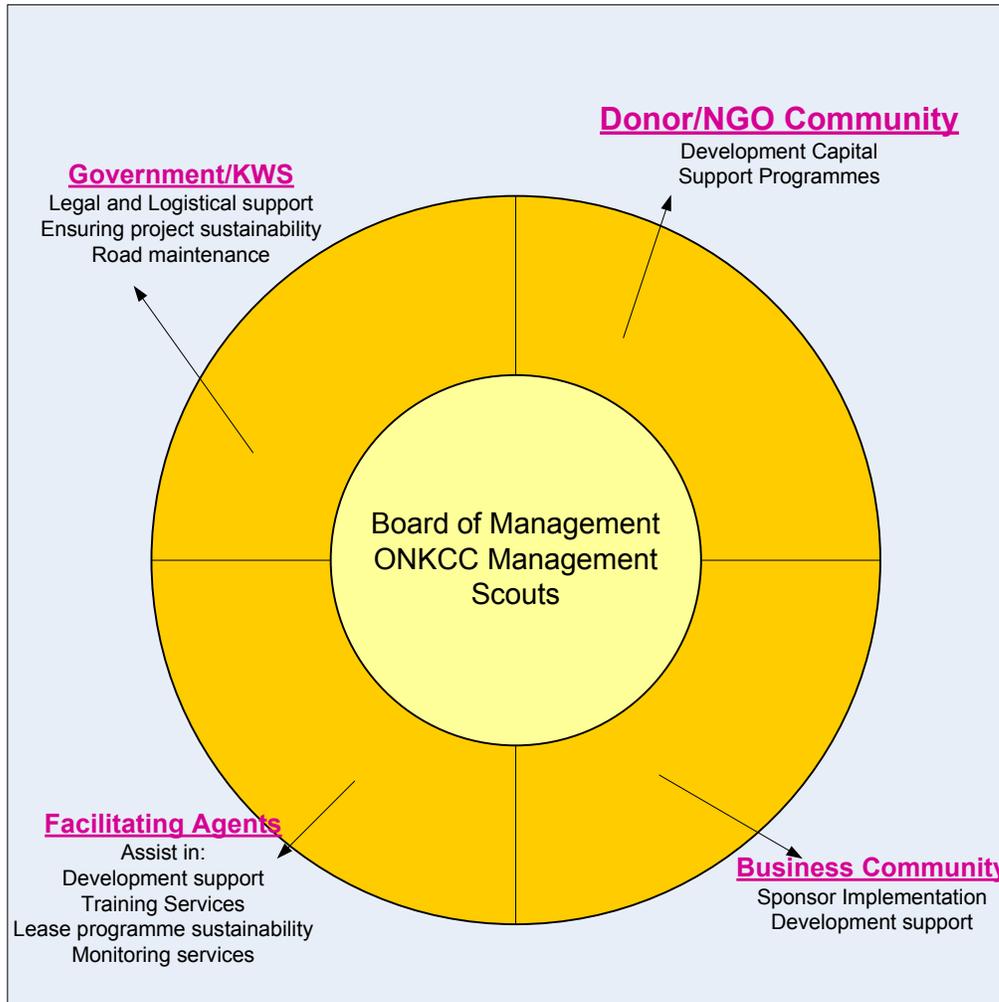
In most cases where community conservancies are already established, too much focus is placed on partnership with donor agencies, making sure that it attracts more money from the donor. This is quite unfortunate since, in reality, relations with other stakeholders are just as important for the growth and survival of the community conservancies and must be well managed. In this case, ONKCC will not only focus on donor partners but also the government, notably KWS that is mandated to manage wildlife countrywide on behalf of Kenyan people.

Some of the role players in the ONKCC include; community residents, local leaders, community structures such as religious group, grazing management committee, NGO's, Government officials, donors, volunteers, consultants, and experts.

These potential partners can also be categorized into five groups, namely;

- Government
- Donor community/NGOs
- Business community
- Facilitating agents

These groups and their potential contributions are outlined in the ONKCC partnership Plan presented in Figure 8 below:



**Figure 8: A representation of ONKCC partnership groups**

Three of the partner groups shown above require further explanation:

### 1. The Donor/NGO Community

It is very difficult for the community to rise up and agree to establish a community conservancy on their own. Indeed a community conservancy can barely be established without the support that comes from donors. The reason behind this is lack of technical knowhow, resources and knowledge on how they can benefit from such an enterprise. Lack of expertise in natural resources management is another drawback to such an endeavour and has to rely on external experts mainly donors to support them. Some basic equipment such as binoculars,

communication radios and their accessories, etc., are required by scouts to enhance communication and report any illegal activities. These are expensive for the community to afford more so during the initial stages of the establishment of the conservancy. Recognition of the importance role of donor community, as an important partner, in the establishment and eventual running of the conservancy is very important. However, ONK community conservancy should not rely on donors to provide them with financial support forever.

## **2. Facilitating agents.**

One of the facilitating agents among the partners is a development support entity whose role is to facilitate the development of the conservancy. AWF has been very instrumental and took the lead in facilitating and spearheading the establishment of ONKCC. Through their effort, the land owners have been enabled to realize the importance of practicing conservation compatible land use through establishment of ONKCC. The idea of leasing the land on voluntary basis is very important for the success of this conservancy and eventual attainability of financial sustainability.

The following are some of the responsibilities of the facilitating partner:

### **a. Administration**

AWF has acted as a co-ordination centre for the establishment of the conservancy by the land owners. Their effort is appreciated by other conservation partners including KWS and therefore AWF has helped to establish networks, which will create a conducive environment for growth and stability of the conservancy.

### **b. Training**

The facilitating entity has organized and participated in coordination of training of scouts who have been tasked to ensure no illegal activities are practiced especially in enforcing the grazing controls as per the zonation of the conservancy. On the other hand, during the operationalization of the conservancy, the role of the facilitating agent will also be required to ensure the capacity of the ONKCC Board of Management as well as the General Manager is enhanced so as to ensure the sustainability of the whole community conservancy idea.

### **c. Lease fees**

AWF together with the investor from Kilitome paid the initial leases to facilitate the establishment of the conservancy setting the stage for other willing donors and conservation agencies to come forth and assist in future.

### **d. Trust Fund**

The facilitating agent could become the coordinator of funds as; conservation fees, aid packages, donor funds, etc., through establishment of a Trust Fund for ONK conservancy through which other supporting groups can channel their funds. The trust should however be owned and managed by the community with the facilitating agent offering technical backstopping.

### ***e. Research and monitoring***

The entity could assist or conduct research and monitoring of the progress of the conservancy in terms of implementation of the management plan as well as research on changes in the range condition with the implementation of the management plan.

### **3. The business community**

The basic philosophy of this FSP is that conservation should pay for itself and therefore just like a business enterprise, it should be run as a business. The only difference is that the conservancy will not be considered as a profit making organ but any excess funds gained will be regarded as a surplus and be shared amongst the land owners to sustain their livelihoods.

With this regard, the conservancy must establish and maintain a relationship with an affiliate sponsor because the financial support from such a sponsor is essential for its survival particularly in the early stages of its establishments. In this case, the conservancy should not only be anchored to AWF and the investor alone but should establish a good relationship with the government through KWS whose 'wildlife' uses their land as dispersal area and corridor to other protected areas. This kind of relationship is important because it will prove that the conservancy is a serious entity capable of working with other partners of different sizes. The whole conservancy project should therefore not be considered as an AWF affair but rather as a national issue as is envisaged in Kenya's Vision 2030 – to secure wildlife migratory corridors in the country.

The following questions should therefore be asked about each of the five partner groups that are appearing in the partnership Plan above:

1. Who in each group should become our partner in this journey of establishing a sustainable conservancy and to what extent?
2. What are their areas of interest?
3. What contribution can they make to the whole idea?

### **Human Resources Planning**

Human resources are a critical element in the success of ONK community conservancy. Any institution is made successful due to availability of better informed human resources at all levels, which gives it greater chances of its becoming financially sustainable. The same case applies to ONKCC. Many conservancies that have been established in the past have suffered from poor management and misappropriation of funds due to lack of a better trained human resources. It is a fact that the Group Ranch concept in Amboseli Ecosystem could not work due to lack of informed and focused human capital leading to collapse of some of the group ranches such as Kimana Group Ranch.

This section on Human Resource Planning will be implemented in line with the Amboseli Ecosystem Management Plan, Community Partnership and Education Management

Programme, Objective 3. Under this objective, Action 3.2 for example, calls for improving the management and leadership of nature based enterprises. This means establishing the right number of personnel needed to run the conservancy and enhancing their capacity. KWS should be involved in achieving human capacity needs for the ONKCC conservancy.

ONKCC will need four groups of human resources from the time this management plan is approved and being operationalized. These are:

- The Steering committee
- The Board of management
- The interim management
- The Conservancy Management

**a. *The Steering Committee***

The steering committee is the first team of human resources to be established and operationalized for the ONKCC. This committee should comprise members of the community who understand the importance of a community conservancy and are prepared to invest their time and effort to implement one. It will also be composed of the Kimana Group Ranch Officials who are in support of the establishment of the conservancy. One representative of the grazing committee will also be a member of the steering committee. The role of the steering committee is primarily to facilitate the establishment and operationalizing the conservancy. The team should comprise the people who played key role in the initial stages of establishing the conservancy.

**b. *The Board of management***

Once the Steering Committee has been established and endowed with the knowledge of the importance of a community conservancy and having been taken for field trips to areas where community conservancies have succeeded, and satisfied that ONKCC has the potential to become a showcase, they will then appoint a Board of Management to oversee the operationalization of the conservancy. Once the conservancy is well established and running, the Board will then play a directing role. The membership of the board should be well thought of and where possible involve people who are in higher decision making offices, who can also assist in seeking alternative sources of finances for the conservancy. Efforts should be made to exclude politicians as members of the Board.

The Board will need training in order for it to function effectively in its role. Those who will eventually become Board members may not have had experience of operating at Board level. Therefore it will be important that all the Board members receive training in the following areas:

- The role of a Board member as strategic thinkers and the difference between management and Board roles.
- The strategic planning process.
- Corporate governance.

**c. *The Interim Management***

Before the conservancy becomes fully operational, it will be advisable to have an interim manager an assistant and an accountant to oversee the actual launch and operationalization of the conservancy. The interim management should comprise a team of experts employed on a short-term contract merely to assist with the process of getting everything together for the operationalization of the conservancy and should be working in line with a team of local managers employed to run the conservancy once it becomes operational. The team of experts will have undertaken or participated in the initial stages of establishment of a conservancy and eventual running of the same, and they will play two key roles in the conservancy:

- They will use their expertise to ensure that all aspects of the conservancy are in place prior to launch of the management plan to ensure a successful launch and operationalization.
- They will act as trainers for the new managers who are employed to run the conservancy after the launch.

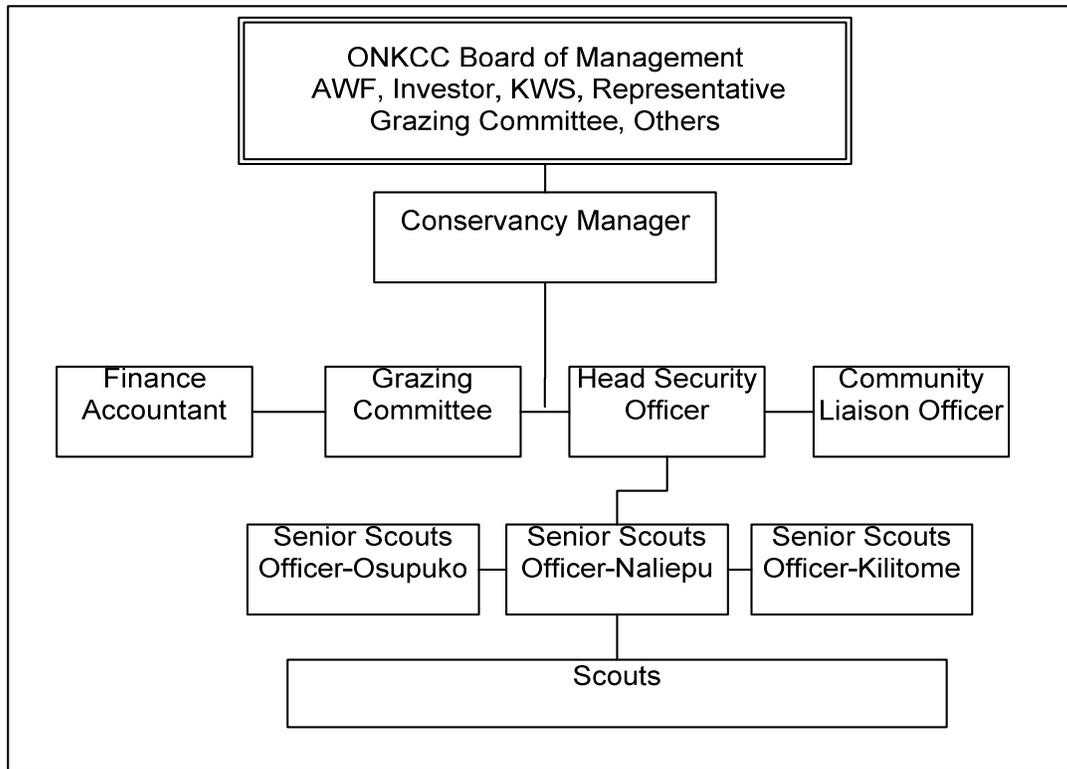
It is advisable that the need for hiring services of external experts should be taken seriously since the success of the whole conservancy idea depends on standards that will be set from the start. The Land owners should be made to understand why such experts are needed to avoid a misunderstanding.

#### ***d. The Conservancy Management***

Once the conservancy operations have been launched, the local managers of the conservancy must now take over its running, supervised for a while by the expert managers. Their key roles are to ensure that all aspects of the conservancy are running effectively and that it is meeting its core functions which includes ensuring the corridor is not blocked and that the conservancy generates own finances.

#### ***Proposed ONKCC Organizational Structure***

A simple organizational structure for ONKCC has been proposed as shown in Figure 9 below:



**Figure 9: Proposed Organizational Structure for ONKCC**

### Finance Plan

A Finance plan refers to the means by which cash will be acquired to cover future expenses, for instance through earning, borrowing or using saved cash. It is ideal to know potential sources of finances for the operationalization of the ONKCC so as to ensure sustainability and reduce the aspect of donor dependency.

### Conservancy establishment and operational costs

The cost to the conservancy establishment and operational costs for ONKCC relates to the cost of establishing conservancy itself and then maintaining them to ensure their sustainability. These costs, which are direct or indirect, could be classified as; management costs, indirect costs and opportunity costs.

### Management costs entail:-

- Cost of leasing the land
- Cost of equipments (radios, radio accessories, scout uniforms, etc)
- Wages for the conservancy management team
- Buildings (the plan proposes there to be a management office for ONKCC-Location of the office to be determined by the management.
- Running costs
- Policing

**Indirect costs cover:-**

- Loss of grazing land
- Increased conflicts, for example, with neighbouring group ranches
- Bloated expectation by the community and group ranch officials
- Erosion of family values due to tourism related activities
- Environmental degradation – foreseen and unforeseen over the long run
- Livestock losses
- Crop destruction
- Competition for resources

**Opportunity costs**

- Alternative land uses – embracing conservancy as an alternative land use
- Technologies – embracing better livestock husbandry and ensuring market availability
- Increased investor interest
- Preferred habitat for wildlife

**Potential Funding Sources*****Government***

It is expected that the government through KWS will step in to fund certain aspects of the conservancy. KWS being the government parastatal charged with the responsibility to manage wildlife mainly concentrates on protected areas. Although KWS funds community projects, funds for conserving wildlife beyond the protected areas are always inadequate. KWS has however increased support for establishment of community conservancies and according to the KWS Strategic Plan (2009-2012), KWS is expected to secure wildlife corridors and migratory routes under Strategic Objective 1, Strategy 1.3. This means the effort being undertaken by AWF and Tawi Investor to lease land for conservation so as to security Amboseli-Kimana Sanctuary corridor is a milestone towards achieving this Strategy and KWS is in full support. It is expected that KWS will take over the issue of taking care of the leases once the current lease has expired to enable AWF to support other activities that will eventually ensure the financial sustainability of the conservancy. Apart from taking up the issue of meeting the cost of the leases, KWS should also support in operationalizing the conservancy establishment through support such as grading the access roads, training community scouts, and funding activities under the operational plan. Once KWS takes over the payment of leases in future, AWF will have the opportunity to direct their funds to support other projects for the conservancy.

***Donors/NGOs***

The international community provides the bulk of finances for most of conservation based initiatives, which are either in the form of grants or loans. Amboseli Ecosystem is well endowed with many conservation NGOs and willing donors. Most donors support projects that shows signs of success and ONKCC is no exception and will eventually attract donors as the whole concept is operationalized. This will however be made possible if the ONKCC management proves that they can manage the conservancy and more so ensure financial transparency and accountability. As stated above, the conservancy will recruit a general manager and a qualified accountant (see the organization structure above). However, if the conservancy is run the way

group ranches are run with only a few individuals benefiting then donors will shy away and give support to other areas where financial accountability is guaranteed.

### ***Trust Funds***

Trust funds are financial mechanisms that can be used either to magnify (“leverage”) donor contributions or to extend them over a long period of time (Spergel, 2001). This is a funding mechanism where a donor (country or countries, private companies or individuals) channel financial resources through the government or NGOs in support of tourism development or community conservation initiatives. Funding for such initiatives could be released based on project appraisals or concepts among other requirements. ONKCC could benefit from such schemes through donor partners (NGOs) operating in the region. On the other hand, under the Amboseli Ecosystem Management Plan through which this Management plan for ONKCC is pegged, under the Community Partnership and Education Programme, Objective 2, Action 2.4, it calls for the establishment of an endowment fund with contributions from all stakeholders in support of the existing NGO-supported consolation scheme where interests accruing from this fund will be used to settle the consolation payments. With the implementation of the above action, ONK land owners who have set aside their land for conservation will benefit and consequently there will be increase support for conservation. Given the above scenario, ONKCC management will liaise with KWS Community Wildlife Office at Loitokitok to have the conservancy represented in the above scheme and seek means through which the conservancy can benefit from the endowment fund.

ONKCC could also benefit from the Community Development Trust Fund (CDTF) which is a joint initiative of the Government of Kenya and the European Union with the objective to contribute to poverty alleviation in the country by offering support, in form of grants, to community-based projects which address social, economic and environment priorities). Under the Vision 2030, one of the flagship projects for The Environment is Securing the Wildlife Corridors and Migratory Routes Initiative by the year 2012. The ONKCC is an important migratory corridor that links Amboseli to Kimana Sanctuary onwards to the Tsavo Conservation Area through Chyulu National Park. This means this community initiative by the ONK land owners is a national objective and the government will be willing to fund such an initiative through CDTF under its Community Environment Facility (CEF) component. The conservancy Manager will therefore liaise with KWS and AWF to seek for ways to access these funds for the operationalization of the ONKCC.

Apart from the CDTF, ONKCC could also benefit from Tourism Trust Fund (TTF) under the Tourism Diversification and Sustainable Development Programme (TDSDP). TTF is also a joint initiative of the European Union (EU) and the Government of Kenya. The TDSDP programme is designed to diversify the tourism product by supporting new and existing ventures, projects and initiatives. It aims to create an enabling environment for tourism development and to enhance product quality, sustainability and market acceptability. The ultimate goal of establishing the ONKCC is to enhance conservation compatible land use by the ONK land owners. This will be possible if the conservancy realizes financial sustainability and tourism is one way to enhance sustainability. With good management, therefore, ONKCC will seek funding from TTF to support some of their tourism initiative, such as developing game viewing roads and tourism sites,

tourism product development, asset preservation (e.g. development of community areas tourism plan) capacity building, marketing and sustainable eco-based products from the conservancy, among others.

### ***Improving existing Sources of Funding***

Currently, the only existing sources of funds are from the Kilitome Investor and AWF for the Osupuko and Nailepu conservancies which are in form of leases. The agreed lease fee by the land owners and both AWF and the Investor is Ksh. 30,000 per year per person. This fee may be adequate to start with but given the changing value of land in the Amboseli Ecosystem and the rate at which land is being sold by different individuals to developers such as hoteliers, farmers and other speculators, it may be imperative to increase the lease fee in future. With each group ranch member holding individual titles to their land and are free to practice any type of use they wish, they may change their course once the current lease period expires or even demand for renegotiation. The demand for land in the region has gone high and it will be a matter of time before the land owners are approached by land speculators with better offers for their land that may be more appealing than the current arrangement. This financial sustainability plan recognizes this predicament and the following projections have been proposed for seeking alternative sources of finances aimed at ensuring financial sustainability.

- **Improving existing charges (conservation fees)** – currently the Investor in Kilitome charges their guest some conservation fees. These include bed occupancy and aircraft landing. Based on the performance of the Investor after the lease period expires, the board will meet and deliberate on whether it may be necessary to review the fees or retain the current ones.
- **Efficiency of revenue collection** – it is only visitors destined to Tawi lodge who pay conservation fees in Kilitome. The neighbouring hotels also take their guests to the conservancy at no fee. This is simply because there are no modalities in place to charge such guests conservation fees. There is no gate or revenue collection point for the conservancy. There is also no specific entry point to the conservancies and off road driving is a norm. All these cause serious degradation of the conservancy yet at no fee. To support conservation, only two entry points will be allowed in Kilitome from the Tsavo-Amboseli road:
  - One from Kimana Amboseli gate through to Namelok (already existing) and
  - Tsavo-Amboseli road to Tawi lodge onwards to Namelok (already existing)

Currently these are the major roads in the conservancy. Kimana Amboseli to Namelok is a public road and accessed by anybody. However, once new modalities to charge visitors who do game drive in the conservancy have been established, an outpost will be put in this area to ensure that visitors pay conservation fees for entering the conservancy. Locals will however not be charged.

The other road Tsavo-Amboseli to Tawi onwards to Namelok is the one mostly used to access the conservancy by Tawi Lodge and by guests from other lodges. As a result, an

outpost will be put in place near the entrance to be recording number of visitors accessing the conservancy. To make it easier for the conservancy management, the information on the new charges for entering the ONKCC and for other activities will be presented to the lodges so that the lodges can be charging their guests the conservation fees so that the scouts manning the outpost will only be keeping records of visitor entry and not handling any cash. The recording methods and modalities for charging conservation fees for the different products will however be worked out during the implementation of the management plan.

- **Diversifying tourism products** – the main product on offer at the ONKCC is game viewing. There are other activities that have informally been conducted in the past which could be enhanced to generate more revenue for the conservancy. These could include:
  - **Bush breakfast** – this is a product that has gained popularity amongst hoteliers in Kenya where guests get their breakfast in the wilderness far from their hotels. Bush breakfast is a memorable experience before setting off for game drives into the bush.
  - **Bush dinners** – bush dining is another good experience where visitors get a chance to dine in the wild. The experience is even enhanced further when it is enlivened by the presence of a group of Maasai morans (warriors) to entertain the guests as they have their dinner. Bush dinner could be combined with sundowner beginning with sundowners then dinner around the campfire.
  - **Sundowner** – this is an essential part of traditional safari life, the concept of having drinks whilst watching the sun go down dates back to the time of the great safaris of the 1920's, all of which featured the serving of elegant 'bush' cocktails against the unforgettable backdrop of the African sunset. Sundowner is timed to commence as the sun starts its descent, which on the Equator is usually around 6 pm. Good experience for a sundowner depends on selection of a scenic spot giving vantage points to view the sun go down uninterrupted, and where chairs, lamps, campfire and bush bar with cocktail snacks are set up. Musical entertainment can also be provided. The elongated Nailepu hill with its numerous kopjes presents ideal sites for sundowner and also offers good panoramic view of the Kilimanjaro Mountain.

Given the size and fragility of the ONKCC, few tourism products should be allowed so as not to compromise features of biodiversity that we are trying to conserve. All in all the activities proposed above should be in tandem with the purpose to which the ONKCC is being established, *'to conserve the ecological integrity of the ONK wildlife corridor and dispersal areas that connects Amboseli and Tsavo Conservation Area'*.

As part of ensuring financial sustainability of ONKCC, the following points need to be given due consideration:

- There is need to develop standards and regulations for the new rates/conservation fees for the proposed tourism products
- The proposed products in this FSP aimed at ensuring financial sustainability are not final and that mechanisms can be developed to ensure innovative funding is realized over the long run
- There is need to build capacity for local people to negotiate with private investors to ensure they get true value of their natural resources.
- There is need to build capacity of local communities in proposal development to enable them effectively compete for donor funds.
- There is need to have a system where donor funds do not end up benefiting a few individuals or officials of the conservancy at the expense of the local community.

## Proposed projections based on visitor charges from two conservancies that are operational

Financial sustainability is a long-term goal that requires the concerted efforts of the entire organization. The financial sustainability of the conservancy is its capacity to obtain revenues in response to a demand, in order to sustain productive processes at a steady or growing rate to produce results and to obtain a surplus.

In order to obtain the amount of revenue the conservancy a break even analysis was carried out. Break even analysis was carried out for 2 conservancy which have been in operational in order to propose rates for the Tawi lodge as regard the ONKCC revenue sources. At the breakeven point profits are 0. A lower sales volume would be unprofitable and a higher volume would be profitable. Break-even analysis focuses on the relationship between fixed cost, variable cost (or cost per unit), and selling price (or selling price per unit).The breakeven point was calculated by the following formula:

Break Even Point = Fixed Costs / (selling price-variable costs) for the 2 different conservancies to provide a base of determine the rate the ONKCC conservancy can charge and still obtain a profit. The results are presented in the table below

**Table 2: Break even calculation using rates charged by different conservancy**

	Conservancy A	Conservancy B	Proposed charges for Tawi lodge
Conservancy fee	30,000/5400=6	30,000/1800=17	70USD
Landing fee	30,000/2700=11	30,000/2700=11	50USD
Bed night fee	30,000/3150=10	30,000/1800=17	90USD
Cultural fee	30,000/2700=11	30,000/2700=11	50USD

In order to determine the breakeven point fixed cost which include lease fee was used. The aim of determining the breakeven point is to find out if the conservancy can be able to meet its operational costs and how many units (Guests) does it require to break even. The rates charged by similar conservancy were used as the selling price to calculate the breakeven point. The Selling price include; conservancy rate, landing rate, bed/night fee and cultural fee. The break even calculation provides a basis for proposing the rates which the conservancy can charge.

Conservancy rate at 60USD and 20USD require 6 and 17 units representatively to break even. This indicates the conservancy should not charge a rate less than or equal to 20USD as it will not be profitable and a fee more than 60 USD will be more profitable, thus the proposed conservancy fee from the analysis was 70USD. The proposed landing fee, Bed night fee and cultural fee from the break even analysis was 50USD, 90USD and 50USD representatively. The proposed rates were used to project the financial sustainability of the conservancy. Projections of both expected income and future expenditure are therefore important to conservancies' financial planning and management.

### **Projected profit and loss statement**

#### **Total revenue**

Conservancy revenue 70USD@34	2380	
Landing revenue 50USD@3	150	
Bed/Night fee 90USD@34	3060	
Cultural revenue 50@34	1700	
Total revenue	7290	
<b>Total Revenue @ 100 operating days</b>		<b>729,000 USD</b>
<b>Expenses</b>		
Lease fee (333@100)	33,333	
<b>Profit</b>		<b>695,667 USD</b>

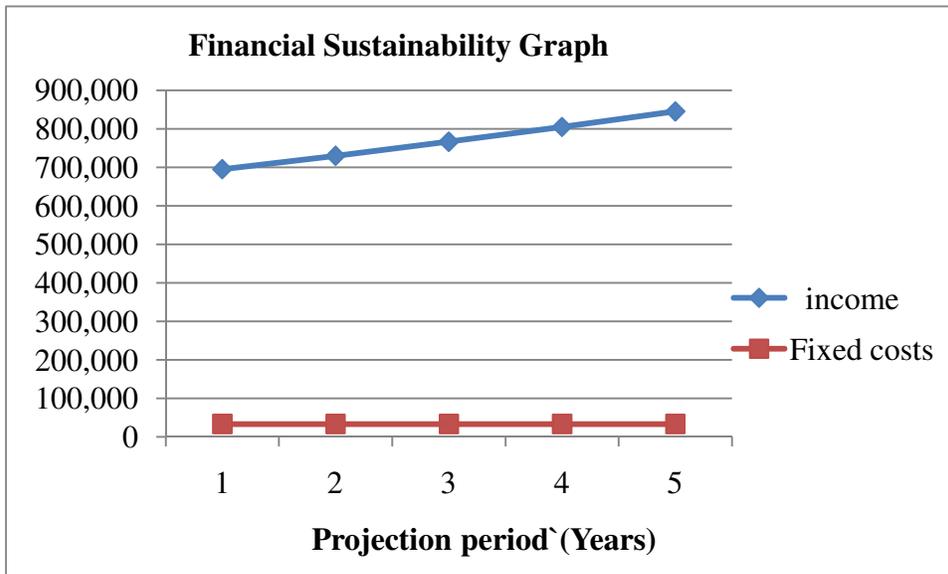
#### Assumptions

1. The number of guests were assumed to be 34 per day
2. The number of operating days was assumed to be 100 days
3. Profits for the next five year was projected to be at 3.5% for the next 5 years

Using the proposed rates the conservancy will be able to obtain a surplus of 695,667USD per operating period hence the conservancy will be able to cover its operational costs. In order to become financially sustainable, a conservancy needs to generate more income than it spends so as to cover its operational costs as well as to provide benefits to members.

### **Financial Sustainability graph**

The Financial Sustainability Graph contain all of the relevant financial information needed to project five years into the future, and provides the conservancy with a reasonably accurate projection of income and expenditure. The development and review of the graph should be a key activity incorporated into the overall financial management planning undertaken by the conservancy annually.



From the projection the conservancy will be able to meet its operational costs hence become financial sustainable.

## Operationalizing the Management Plan

This is the next major stage that will contribute towards ensuring financial sustainability. It focuses on the implementation of this FSP and the management plan. It will provide the ONKCC management team with a clear and consolidated summary of management actions to be carried out under each programme, who is responsible for implementing them, and when this should take place. This operational plan breaks down individual management objectives for each programme into actions which are further broken down into a series of tangible management activities. It also sets out the timeframe for their implementation, and allocates responsibility for their completion. In addition, each activity sets out specific and timebound implementation “*milestones*” that management aims to achieve for each action. The milestones will be used for monitoring and evaluation of plan implementation. The operational plan is for five year and each year has been divided into two (half year) for ease of monitoring the implementation progress.

**Table 2: ONKCC Operational Plan**

<i>Management Action and Activities</i>	<i>Persons responsible</i>	<i>Timeframe</i>										<i>Milestones</i>
		2011		2012		2013		2014		2015		
		1	2	1	2	1	2	1	2	1	2	
<b>Grazing and Ecological Management Programme</b>												
<b>Objective 1: Pastoral Herd Off-take for ONKCC community promoted and enhanced</b>												
<b>Action 1.1 : Encourage ONKCC members to sell cattle to procure grains for food when in acute need of money rather than waiting to sell in the dry season</b>											ONKCC members empowered and adopt best husbandry techniques	
1.1.1 Conduct regular outreach programmes to instill the benefit of the off-take programme	AWF, Scouts, Grazing Committee (GZ), Livestock department											
1.1.2 Liaise with the Loitokitok district livestock department for adoption of the best animal husbandry and stock species												
1.1.3 Integrate the outreach programme to incorporate the local leaders and laibon for wisdom												
<b>Action 1.2: Formalize and support the Market Access Programme (MAC)</b>											Two sensitization meetings conducted on annual basis  MAC Programme adopted by Dec 2013	
1.2.1 Extend sensitization exercise on the MAC programme	AWF, Scouts, Grazing Committee (GZ), Livestock department Conservancy Management											
1.2.2 Liaise with KMC to popularize the programme												
1.2.3 Identify and promote alternative animal product markets for example, milk, leather, horns, bones for jewelry, manure, etc												
1.2.4 diversify the livestock MAC programme pool (target regional and international market)												
1.2.5 Incorporate microfinance institutions for the support and enhancement of the MAC programme												
<b>Action 1.3: Liaise with livestock department for re-stocking after a natural calamity</b>											Quality stocks acquired after a natural calamity	
1.3.1 Encourage pastoralists to insure their livestock for compensation after a serious drought	Grazing Committee (GZ), Livestock department, Conservancy Management											
1.3.2 Focus on animal health, strategic feeding of breeding stock and restocking as post-drought mitigation intervention												
1.3.3 Aim at strengthening the productive base of the livestock rather than focusing on destitute pastoralists												
1.3.4 Follow up with the Livestock Department to acquire quality stock from ADC farms for restocking												



2.2.1 Conduct village level mobilization meetings in conjunction with the Community Partnership and Education Programme	AWF, Scouts, Grazing Committee (GZ), Livestock department, Conservancy Management	■	■	■	■									prepared by June 2012
2.2.2 Develop and enforce the Grazing By-Laws for ONKCC		■	■	■	■	■	■	■	■	■	■	■	■	
2.2.3 Recruit appropriate number of scouts for enforcement of the grazing By-laws		■	■											
2.2.4 Identify ideal sites for establishing scouts outposts at strategic points		■												
2.2.5 Conduct joint enforcement of the ONKCC by scouts of either conservancies		■	■	■	■	■	■	■	■	■	■	■	■	
2.2.6 Legalize the grazing By-laws using the local channels and base it on the Lease Agreements		■	■	■	■									
2.2.7 Extend sensitization of the zonation and grazing By-laws to the wider Kimana Group Ranch and neighbouring Group Ranch members		■	■	■	■									
<b>Action 2.3: Allow dry season access to water and pasture</b>														
2.3.1 Enact the proposed ONKCC Grazing Plan	AWF, Scouts, Tawi Lodge, Grazing Committee, ONKCC Board of Management	■	■	■	■	■	■	■	■	■	■	■	■	
2.3.2 Develop and enforce a dry season grazing agreement with relevant stakeholders to avert possible conflict		■	■											
2.3.3 Fence off Isinet springs to prevent wildlife access so as to reduce HWC				■	■	■	■	■						
<b>Objective 3: Monitor trends in plant and animal numbers and give adequate protection of resources in ONKCC habitats</b>														
<b>Action 3.1: Initiate an ecological monitoring programme for ONKCC in liaison with other researchers</b>														
3.1.1 Approach appropriate authority to assist the conservancy management to be conducting monitoring on regular basis	AWF, Scouts, KWS, Tawi Lodge, ONKCC Board of Management			■										Ecological monitoring programme initiated and operation by June 2014
3.1.2 Establish temporal trends in plant and animal populations as an imperative to introduce an ecological monitoring programme				■	■	■	■	■	■	■	■	■	■	
3.1.3 Encourage volunteer researchers to conduct research on voluntary basis		■	■	■	■	■	■	■	■	■	■	■	■	
<b>Action 3.2 Link with the Ecological Monitoring Department of KWS other researchers</b>														
3.2.1 Make efforts to know what kind of ecological monitoring activities have been and are being undertaken in the larger Amboseli Ecosystem	KWS, Researchers, AWF, ACC,			■	■	■	■	■	■	■	■	■	■	

3.2.2 Establish a forum for dissemination of research findings and other information in the larger Amboseli Ecosystem	Council of Elders												
3.2.3 Set appropriate threshold levels for key animal and habitat variables which can act as early warnings													
3.2.4 Link with the council of elders to provide indigenous knowledge based on trends in animal and plants sustainable levels													

## Community Partnership and Education Programme

### Objective 1: The level of community awareness on conservancy and importance of practicing conservation compatible land uses improved

#### Action 1.1 Conduct thorough community sensitization meetings in ONKCC and its environs

1.1.1 Organize and conduct village level community Barazas for ONK conservancies	Community Liaison Officer (CL, AWF, Scouts, Council of Elders)													At least three sensitization meetings held annually
1.1.2 Use appropriate media to make it appealing for people to attend the barazas														
1.1.3 Use Local Influential persons (LIPs) to ensure adequate attendance														
1.1.4 Ensure gender equality and mainstreaming during the sensitization														

#### Action 1.2: Identify and adopt appropriate media for extending conservancy awareness and outreach programmes.

1.2.1 Approach potential media such as local radio, TV,	CLO, AWF, Scouts, Council of Elders,													
1.2.2 Incorporate sensitization messages on their attires on such as shuka/olkarasha designs, local print media														
1.2.3 Identify other possible means to extend conservancy awareness														

#### Action 1.3: Organize a trip of selected community representatives and ONKCC management to visit identified successful community conservancies

1.3.1 Identify key personalities to be included for the trip ensuring gender and all group representation	CLO, AWF, KWS, ONKCC Board													Two trips undertaken by June 2012
1.3.2 Establish an exchange/link with a successful conservancy, both locally and regionally														
1.3.3 Establish a mechanism for information dissemination by those who go for the trip to other members														

1.3.4 Bring the trip to people through recording of activities during the trip e.g., videos and audios																					
<b>Action 1.4: Improve the public relations and interactions between ONKCC management and the local communities</b>																					
1.4.1 Facilitate the proposed community liaison officer (CLO) to be able to perform his duties	CLO, AWF, KWS, ONKCC Board, Conservancy Management																			<b>Public relations improved and CSR activities initiated</b>	
1.4.2 Involve the group ranch officials from Kimana and neighbouring group ranch officials to disseminate ONKCC position																					
1.4.3 Empower the proposed ONKCC office to be able to pass information on the conservancy to visitors/residents																					
1.4.4 Organize simple CSR activities to the community - to popularize the conservancy and extend benefits																					
1.4.5 Popularize the conservancy by being more involved and engaged in activities and any other opportunities within the Amboseli Ecosystem																					
1.4.6 Extend public awareness of the conservancy by erecting Billboards at strategic points																					
1.4.7 Introduce a scheme to have the top best student to be sponsored by the conservancy																					
<b>Action 1.5: Liaise with WCK and KWS to strengthen the value of conservation to school going children</b>																					
1.5.1 Work closely with the Community outreach and education office of KWS to promote conservation awareness to school	CLO, AWF, KWS, Conservancy Management																			<b>Number of schools registered with WCS and conservation projects introduced per school</b>	
1.5.2 Encourage formation of wildlife clubs in schools through liaison with WCK																					
1.5.3 Avail WCK educational materials to schools																					
1.5.4 Organize conservation education field trips for children to protected areas for exposure																					
1.5.5 Organize conservation competitions to involve activities such as poems, dances, drama, essay writing, etc amongst schools in Amboseli Ecosystem																					
1.5.6 Liaise with other conservation partners to form conservation partnership to promote community conservation awareness to schools and community e.g. David Sheldrick Wildlife Trust, AWF, etc to offer talks, show conservation films, etc																					
<b>Action 1.6: Recruit a Community Liaison Officer (CLO) for ONKCC on contract basis</b>																			<b>CLO recruited</b>		



2.2.3 Seek other sources of bursary funds such as CDF, Amboseli Trust Fund, other conservation NGOs in the region																					
<b>Action 2.3: Improve the management and leadership of nature based enterprises</b>																					
2.3.1 Organize seminars/workshops to have leaders and managers of nature based enterprises trained on some basics of leadership and management	CLO, AWF, KWS, Conservancy Management																				
2.3.2 Identify local leaders/managers to attend short courses on leadership, entrepreneurial and management																					
2.3.4 Ensure new projects/ enterprises employ educated community leaders to ensure their sustainability																					
2.3.5 Encourage diversification of enterprises/projects to have a fall back mechanism in case of any eventuality in either																					
2.3.6 Organize field visits of the leaders to other areas where nature based enterprises are a success																					
<b>Action 2.4: Assist the community to initiate a water capturing, filtering and bottling plant to take advantage of the natural spring at Engumi spring in Nailepu</b>																					
2.4.1 Extend some awareness on the potential of establishing a water bottling plant as a business venture	CLO, AWF, Conservancy Management, ONKCC Board, Tawi Lodge																				
2.4.2 Form a committee from the ONKCC to come up with the brand name, potential market, pricing, quality assurance, etc.																					
2.4.3 Ensure ownership of the project and have community identified persons trained to run the project																					
2.4.4 Identify potential sources of funds to procure the necessary equipments																					
2.4.5 Prepare mutually agreed regulations to govern the water extraction and bottling as well as sharing of revenue generated																					
2.4.6 Recruit appropriate and qualified staff to manage the enterprise																					
<b>Objective 3: Adverse human-wildlife interactions reduced</b>																					
<b>Action 3.1: Provide adequate compensation for deleterious conditions caused by wildlife according to the Wildlife Act CAP 376.</b>																		<b>HWC reduced and level of awareness on the same</b>			
3.1.1 Liaise with KWS to fast track compensation claims	CLO, KWS, Conservancy Management,																				
3.1.2 Raise the level of awareness for community members																					

to be aware on what can be compensated as per the Act	ONKCC Board,													<b>increased</b>
3.1.3 Sensitize livestock keepers to secure their livestock by building predator proof bomas														
3.1.4 Raise awareness and adopt on effective herding methods like communal herding and use of dogs														
<b>Action 3.2: Fast track the rehabilitation and maintenance of wildlife barriers</b>														
3.2.1 Work closely with KWS to have the Kimana and Namelok fence rehabilitate as provided for under Action 2.1 of the Community Outreach and Education Programme of the Amboseli Ecosystem Management Plan	CLO, KWS, AWF, Conservancy Management, ONKCC Board,													Kimana and Namelok electric fences repaired by December 2012
3.2.2 Work closely with other stakeholders in the Ecosystem for the rehabilitation and general maintenance of the fence														
3.2.3 Extend community awareness to prevent the continuous vandalism of the fence line														
3.2.4 Devise some stringent and punitive measures to those who vandalize the fence, for example, use local mechanism to enforce these measures														
<b>Action 3.3 Liaise with KWS to reduce incidences of Human Wildlife Conflict</b>														
3.3.1 Initiate a campaign to have all members of ONKCC practicing cultivation in the conservancy to move fenced areas of Namelok and Kimana	CLO, KWS, AWF, Conservancy Management,													HWC incidences reduced,  Cultivation of crops in the conservancy stopped by Dec 2012
3.3.2 Liaise with researchers and KWS to seek for alternative means to reduce the incidents that will lead to minimized conflicts														
3.3.3 Educate and train community on the best methods of reducing HWC														
3.3.4 Encourage the community to adopt the best methods such as predator proof bomas, use of banger sticks to scare away animals, applying pepper mixed with grease to ropes or fences,														
3.3.5 Liaise with KWS to establish quick response mechanism to HWC														
3.3.6 Sensitize the community on the best means to respond to HWC and reduction of the incidences														
<b>ONKCC Operations and Programme</b>														

Objective 1: Support the operationalization and staffing of ONKCC											
<b>Action 1.1 Operationalize the proposed organizational structure for ONKCC (see the FSP)</b>										The new ONKCC fully operationalized by June 2012	
1.1.1 Conduct a needs assessment of the staffing levels required	KWS, AWF, Conservancy Management, ONKCC Board	■	■								
1.1.2 Recruit the appropriate number of qualified staff as recommended in the FSP		■	■	■							
1.1.3 Introduce a training programme for the present and proposed staff of ONKCC		■	■	■							
1.1.4 Recruit necessary staff depending on identified needs during the five year lifespan of this plan		■	■	■	■	■	■	■	■		■
1.1.5 Review the proposed organization structure, improve and strengthen areas of weakness		■	■	■	■	■	■	■	■	■	
<b>Action 1.2: Establish and operationalize a reward scheme for ONKCC</b>											
1.2.1 Form a committee of distinguished members of the conservancy to be responsible for the reward scheme	AWF, Conservancy Management, ONKCC Board		■								
1.4.2 Develop the reward criteria to be adhered to and the type of the reward			■								
1.2.3 Establish categories of the rewards and type of reward under each category			■								
1.2.4 Set an annual date/event for the awards ceremony			■								
<b>Action 1.3 Identify, construct and equip a functional office for ONKCC management</b>										ONKCC office block constructed and equipped by December 2011	
1.3.1 Identify an appropriate site for establishment of the offices		■									
1.3.2 Seek for funds for the establishment of the ONKCC offices		■	■								
1.3.3 Provide necessary office equipments to the proposed office for ONKCC management		■	■	■	■	■	■	■	■		
Objective 2: Enhance the security operations of ONKCC											
<b>Action 1.3 Identify and establish scouts outposts at strategic points in the ONKCC</b>										All outposts in place by October 2011	
1.3.1 Identify appropriate number of outposts at strategic areas of individual conservancies (Osupuko, Nailepu and Kilitome) in collaboration with the existing scouts	AWF, Tawi Lodge, Conservancy Management, ONKCC Board		■								
1.3.2 Support and equip existing and proposed outposts with necessary resources			■								

<b>Action 2.1 Liaise with the regional KWS office to have all scouts to undertake a basic fitness training at KWS training centres</b>											
2.1.1 Seek funds for training of the scouts	Scouts, Amboseli Tsavo Community Rangers (ATCR), AWF, KWS										<b>All scouts undertake a fitness training by December 2012</b>
2.1.2 Establish a training schedule for scouts											
2.1.3 Apply the KPR Act/Regulations to discipline errant and indisciplined scouts											
2.1.4 Introduce a periodical rotation of scouts within the ONKCC (scouts should not remain in one post forever)											
2.1.4 Establish a scouts promotion procedure tied to skills											
<b>Action 2.2 Introduce a periodical skills upgrading programme for ONKCC</b>											
2.2.1 Seek for funds for the upgrading	Scouts, Amboseli Tsavo Community Rangers (ATCR), AWF, KWS										
2.2.2 Develop a schedule for the upgrading											
2.2.3 Promote exceptional scouts to undertake fitness training and specific skills at NYS/KWS											
<b>Action 2.3: Procure appropriate security operation equipments</b>											
2.3.1 Provide appropriate equipments for scouts <ul style="list-style-type: none"> <li>▶ Hand held radios and spare battery– 2 per outpost</li> <li>▶ Install solar chargers for every outpost</li> <li>▶ Rechargeable touches – one per outpost</li> <li>▶ Uniforms replaceable annually and differentiate ranks</li> <li>▶ Water bottles for patrols</li> <li>▶ Sleeping bags per scout</li> <li>▶ Binoculars</li> <li>▶ Digital cameras</li> <li>▶ Motorbikes – one per conservancy</li> <li>▶ Patrol knives per scout</li> <li>▶ Identification badge for scouts</li> <li>▶ 44 bags</li> </ul>	AWF, Committee, KWS, Tawi										Security Operation equipments procured by December 2012
<b>Action 2.4 Establish a scouts welfare programme</b>											
2.4.1 Identify applicable scouts welfare needs that should include: <ul style="list-style-type: none"> <li>▶ Medical</li> <li>▶ Allowances/incentives</li> </ul>	ONKCC Management, ONKCC Board, Tawi Lodge, AWF										An elaborate scouts welfare programme prepared by June



<b>Action 5.2: Liaise with other stakeholders in carrying out conservation and development activities in ONKCC</b>											
5.2.1 Ecosystem level conservation meetings whenever called for	ONKCC Management, AWF, ATCR Scouts, KWS										<b>Stakeholder collaboration enhanced</b>
5.2.2 Establish networks and linkages with other conservation agencies operating in the greater Amboseli ecosystem											
5.2.3 Invite other stakeholders in the ecosystem to share experiences and seek advice on emerging issues in the conservancy											

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### Websites

<http://www.ttfkenya.org/index.html>

<http://www.cdfkenya.org/>

[http://www.cdfkenya.org/opencms/export/sites/default/resc/downloads/cdi/CDI\\_call\\_for\\_proposal\\_guidelines.pdf](http://www.cdfkenya.org/opencms/export/sites/default/resc/downloads/cdi/CDI_call_for_proposal_guidelines.pdf)

# Annexes

## **The Lease Agreement: Osupuko Community Conservancy**

The Lessor hereby covenants with the Lessee as follows:-

- (a) not to subdivide the Property;
- (b) not to construct any kind of settlements, structures, houses, huts, sheds, camps, garages or any other structure or expand any existing structures without the express written consent of the Lessee;
- (c) not to undertake any agricultural activity on the Property other than beekeeping and grazing of cattle in accordance with the Management Plan;
- (d) to graze on the Property only in accordance with the Management Plan;
- (e) not to cut any trees or other plants for fuel, charcoal or for any other purpose;
- (f) not to excavate the Property or create dumps;
- (g) not to unlawfully kill any animal;
- (h) not to undertake any non-conservation commercial and industrial activities (such activities to be identified by the Lessee in its sole discretion);
- (i) not to undertake any activity that would be in conflict or inconsistent with the obligations of the Lessee herein or activities that would prevent the Lessee from performing any of its obligation under this lease;
- (j) to maintain the Property at all times in good conservation value as described in the Baseline Report, and in the event that the Property is degraded, to rehabilitate and restore the degraded area as far as possible to the original state as described in the Baseline Report;
- (k) not to fence the Conservation Area with any and all materials, including but not limited to wire, metal, branches, wood or create any barriers that may limit wildlife movement;

- (l) to keep any part of the Property that is not built upon in good condition free of any waste, rubbish or refuse;
- (m) to use the Property in accordance with the Management Plan;
- (n) to ensure that the Property is retained predominantly in its natural and scenic condition, to protect the native plants and animals, to prevent damage to or destruction of wildlife, habitat and to prevent any use of the Property that will significantly impair or interfere with the conservation values of the Property;
- (o) to protect and maintain the natural land and water systems of the Property and to rehabilitate eroded and disturbed areas of the land;
- (p) not to discharge or dispose on the Property or any part thereof any hazardous, toxic or radioactive substance, chemical, oil or mixture containing oil contrary the provisions of this Lease or any law in Kenya;
- (q) to take all practicable steps to ensure that all persons who are lawfully on the Property shall use natural resources within the Property in an ecologically sustainable manner and shall not adversely affect the biodiversity in the Property;
- (r) to take all reasonable precautions against animal and plant diseases on the Property and in the event of any such disease occurring to report the same forthwith in writing to the proper authority and to the Lessee;
- (s) to take all necessary steps to prevent:
  - (i) the creation of new and un-necessary footpaths or roads over the Property.
  - (ii) any trespass on the Property and to inform the Lessor in the event of such trespass.
  - (iii) any encroachment on the Property or the acquisition of any new right of passage, drainage or other easement over upon or under the Property and to give notice to the Lessee of any threatened encroachment or attempt to acquire such easement.
- (t) to ensure that any transfer of any Property by him contains a covenant that the new owner of the Property or any part thereof will be bound by the covenants, terms, conditions, rights and restrictions detailed in this Lease and that any charge over or sub-lease of the Property or any part thereof or other encumbrance as may be registered against any of the title is made subject to this Agreement to Lease;

(u) to control poaching of animals, grazing and wood cutting upon the Property by others.

