



**FINAL
DRAFT**

**PARDAMAT CONSERVATION AREA
MANAGEMENT PLAN
2017-2022**



July 2017

Table of Contents

Table of Contents	ii
Approval Page	iii
Acronyms	iv
SECTION 1: INTRODUCTION	1
Vision Statement	1
Plan structure	1
Participation, benefits & beneficiaries	2
Section 2: Description of PCA	4
Section 3: Zoning	11
Section 4: Overview of goals.....	12
Section 5: Threats, Goals & Activities.....	14
Section 6: Implementing the Plan	24
Section 7: Measuring Impact	25

Figures

Figure 1. PCA Location	4
Figure 2. PCA Zonation	Error! Bookmark not defined.

Tables

Table 1. Wildlife Habitat	12
Table 2. Land Use, Culture & Livelihoods	12
Table 3. Tourism.....	13
Table 4. Cattle enterprise, management and grazing.....	13
Table 5. Security, Operations & Infrastructure	13
Table 6. Wildlife & Habitat	14
Table 7. Land Use, Culture & Livelihoods	17
Table 8. Tourism.....	20
Table 9. Livestock Grazing & Management	21
Table 10. Security, Operations & Infrastructure.....	22

Approval Page

The Pardamat Conservation Area management has approved the implementation of this management plan for Pardamat Conservation Area.

<i>On behalf of</i> Pardamat Conservation Area
Chairman
Date:

The Narok County Wildlife Conservation and Compensation Committee and the management of Kenya Wildlife Service have endorsed the implementation of this management plan for Pardamat Conservation Area.

<i>On behalf of</i> Narok County Wildlife Conservation and Compensation Committee	<i>On behalf of</i> the Kenya Wildlife Service
Chairman	Director General
Date:	Date:

Acronyms

CHP	Community Health Partners
HWC	Human Wildlife Conflict
KWS	Kenya Wildlife Service
KWT	Kenya Wildlife Trust
MEP	Mara Elephant Project
MMWCA	Masai Mara Wildlife Conservancies Association
MNC	Mara North Conservancy
NCWCCC	Narok County Wildlife Conservation and Compensation Committee
NGO	Non Governmental Organisation
PCA	Pardamat Conservation Area
TNC	The Nature Conservancy
USAID	United States Agency for International Development
WWF	World Wildlife Fund
LGT	Li

SECTION 1: INTRODUCTION

The Plan

This five year management plan for Pardamat Conservation Area (PCA) has been prepared in accordance with the management planning framework provided under the Fifth Schedule of the wildlife Conservation and Management Act, 2013. The Wildlife Act requires that conservation areas¹ develop management plans in consultation with the County Wildlife Conservation and Compensation Committee and the conservation area's neighbours. In accordance with the Act, the planning process for PCA was highly participatory and involving both its internal and external stakeholders.

Vision Statement

This plan is designed to achieve the long-term vision of PCA which is:

“Conservation that promotes coexistence of wildlife, people and livestock for mutual benefit”.

In order to achieve the PCA's vision, the plan serves the following functions:

- ▶ Provides a long term vision for the desired future state of PCA
- ▶ Promotes integrated land use management where livestock production, wildlife conservation and human settlement are the main land uses.
- ▶ Zones PCA to support the different land uses in the area
- ▶ Outlines long-term goals that PCA's aims to achieve and provides activities to achieve these goals
- ▶ Provides a plan implementation strategy

Plan structure

The plan has been divided into the following seven sections:

- ▶ section 1 is an **introduction** which provide the vision statement for the PCA, stakeholder participation in planning, and benefits and beneficiaries of the plan;
- ▶ section 2 gives a general **description of PCA**;
- ▶ Section 3 presents the **zoning** of the PCA;

¹ conservation area" means a tract of land, lake or sea with notable environmental, natural features, biological diversity, cultural heritage, or historical importance that is protected by law against undesirable changes

- ▶ section 4 presents the expected **impacts** for various management components after five years of plan implementation;
- ▶ section 5 gives the **plan implementation** schedules;
- ▶ section 6 is the **plan implementation strategy**; and
- ▶ Section 7 outlines how **impact will be measured**.

Participation, benefits & beneficiaries

Stakeholder participation in planning

In the development of this PCA Management Plan, stakeholder consultation meetings were carried out to generate, in a participatory manner, the threats, challenges, goals and activities as well as confirm all contents of the draft of this plan. Stakeholders consulted during this process included landowner committee members, PCA manager, Maasai Mara Wildlife Conservancies Association representatives, the Narok County Wildlife Conservation and Compensation Committee (NCWCCC), Area Chief, Church leaders, Kenya Wildlife Service (KWS), Chief Park Warden, Masai Mara National Reserve (representative of County Executive for Tourism and Wildlife), a representative of the County Environment, Water and Natural Resources Office, women and youth representatives, tour guides, Non-governmental Organisations (NGOs) and the Narok West Deputy County Commissioner. The Pardamat landowners were also consulted at a community baraza.

Benefits & beneficiaries

The following sections outline the benefits of establishing PCA and the beneficiaries:

- **Employment:** the operationalization of Pardamat Conservation Area has created employment opportunities for young men to work as rangers and a manager, which has had a positive economic impact on the wider Pardamat community. In future, there is potential for jobs to be created for guides, hoteliers, herders and others.
- **Lease payments:** currently, conservation lease payments are not paid to landowners of PCA. However, there is potential, once the area is secured for wildlife, for enterprises to be established which could contribute to conservation lease payments. PCA has gained a grant to cover lease payments for 3 years for 5,000 acres or 10% of the PCA land area.
- **Security:** The strengthening of security and awareness that has been created around PCA has been effective at reducing poaching, providing a benefit to wildlife and also to the community due to overall improved security.
- **Human-wildlife conflict mitigation:** Human wildlife conflict occurs regularly in PCA, particularly predation of sheep and goats. Funding from USAID has been allocated to help mitigate human wildlife conflict through erection of predator proof bomas, with the potential to benefit multiple households across the area.

- **Cattle enterprise:** MMWCA, together with Pardamat landowners, is developing a cattle enterprise model aimed at increasing incomes to the PCA landowners.
- **Beadwork:** currently, Maa Trust is working with some women within Pardamat in developing and selling beadwork, but there is potential for growth of beadwork projects across the area.
- **Grazing:** landowners of PCA are currently grazing their livestock randomly - some are grazing within their own parcels whilst others are grazing on their neighbours' land.

Section 2: Description of PCA

Legal Status

Pardamat was registered officially on 13th of May 2016 as an Association under the Societies' Act. PCA has a committee comprising of 16 elected men and 3 nominated women from the 8 clusters within Pardamat, with an elected Chairman, Treasurer and Secretary.

Location

The Conservation Area is located in Narok County, Narok West Constituency, Mara ward and Aitong sub location (see figure 1). It has 10 settlements namely Aitong, Olemoncho, Rekeru, Endoinyo Erinka, Mbitin, Oltorotua/Enkeju Enkoirien, Olkurroto, and Olesere.

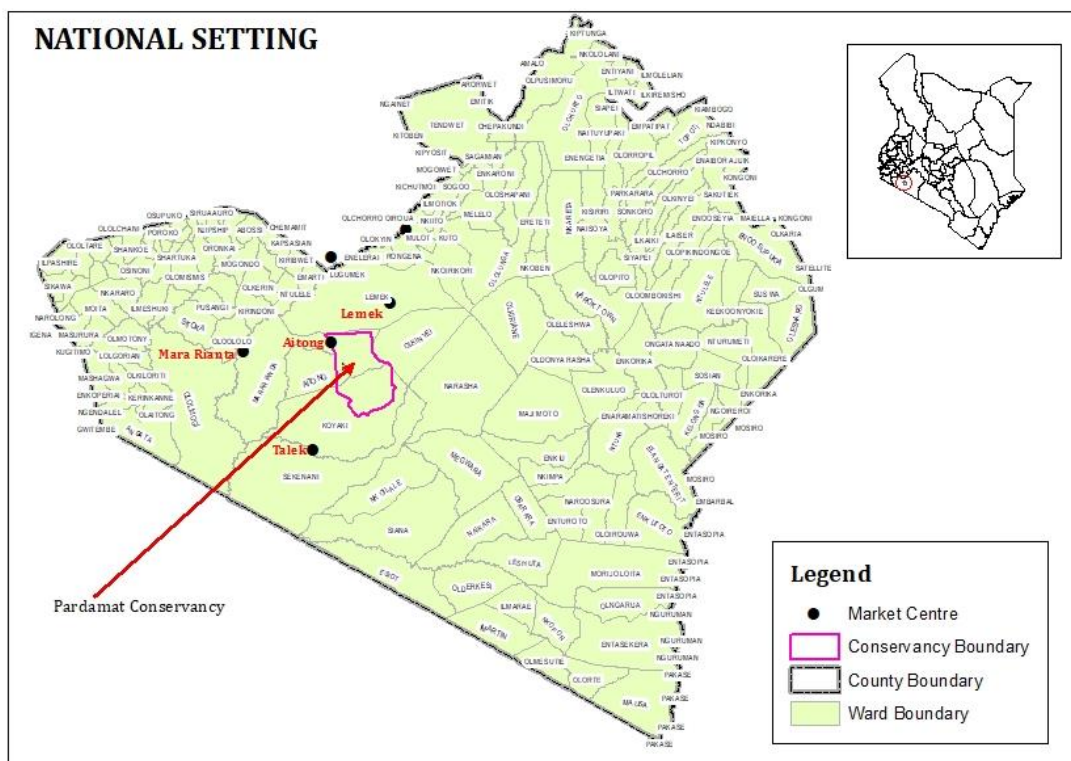


Figure 1. PCA Location

Wildlife & habitat

- **Key species.** Pardamat highly values the following species that are critical to the ecosystem:
 - Western white bearded wildebeest in their resident herds and great migration
 - Large carnivores, namely lions, leopards and cheetahs
 - African elephants,
 - Vulture species, including the Ruppels-Griffin, Hooded, Lappet-faced Vulture, White-headed Vulture and White-backed vulture
 - Large numbers of: buffalo, zebra, Maasai giraffe, eland, spotted hyena, topi and warthog.

Climate & Habitat

- **Rainfall** is unevenly distributed with an annual average rainfall ranging from 500mm to 1,800 mm. The long rains start from March to June and peak in April while short rains occur between the months of September and December.
- **Temperatures** are relatively constant with a mean of 18 - 20°C with a mean minimum of 12°C and mean maximum of 26°C.
- **Soils** are generally characterized by shallow, sandy, well-drained soils at the hills, changing to deep, silty, poorly drained soils, known as black cotton, at the plains.
- **Habitat** is largely tropical open savannah, featuring Croton, Acacia, Balanites and Elephant Pepper trees. The Conservation Area also features some wetlands, dominated by sedges. Vegetation is mainly indigenous.
 - **Common grasses:** Red oat grass (Olperesi o-rasha) and Bamboo grass (Ologor oing'ok).
 - **Common trees:** Whistling thorn (Eluai); Various Acacia species; Balanites (Olng'osua); Elephant Pepper trees, also known as the African greenheart tree (Osokonoi); various fig species; Wild olive, (Oloirien) and Giant Diospyros, Sand Paper Tree (Oseki).
 - **Common shrubs:** Croton (Olokirding'ai), Euclea (Olkinyei), Wild Camphor (Oleshwa) and wait-a-bit thorn (Olgirgiri).

Land use, culture and community livelihoods

The community has a colourful and proud cultural heritage, centred on the traditional semi-nomadic pastoralist lifestyle and strong communal social organization. Traditional dress, language, music and dance are all instantly recognizable as belonging to the Maasai. Age-old rituals form important pillars in identity and wellbeing. Traditional beliefs towards wildlife

have further enhanced a generally peaceful and mutually beneficial co-existence between people, wildlife and the land. The common religion is Christianity.

Land area, tenure and use

- **Area and ownership:** Pardamat covers 64,220 acres and it has 850 registered members
- **Land tenure:** land is subdivided into individual parcels with individual title deeds, which give landowners absolute rights of ownership and use. The community has also set aside certain parcels of land for public use within Pardamat, including the Chief's office, Administration Police post, schools, health centres, and water access points and trading centres. There are multiple churches in the area which are on parcels of land donated by individual landowners.
- **Land use:** Pardamat Conservation Area is 90% agricultural land where pastoralism is the main livelihood. Historically, grazing has been open for both livestock and wildlife, but there is a rapidly escalating trend of landowners fencing their plots to protect grass within their boundaries from being consumed by wildlife and other people's livestock.

Settlements

Settlement patterns are influenced by land use, land potential, land tenure and urbanization. Settlement takes places in various forms including permanent urban settlements, temporary or semi-permanent bomas, camps for wildlife forces bases, schools and health centres. Electricity reaches Aitong Centre.

Community livelihoods

- **Pastoralism** - predominant breeds are Zebu cattle, Red Maasai and Dorper sheep and Small East African Goats. Livestock are sold at the Aitong market on Thursdays and Talek on Wednesdays.
- **Leasing land for conservation** - more than 50% of PCA landowners own and have leased land in other conservancies including Naboisho, Olare Motorogi and Mara North Conservancies.
- **Employment** - PCA has created jobs for 21 rangers from the community with potential to create more job opportunities in future. Currently, there are no women employed by PCA. Other employers include: NGOs, health centres, schools, government and churches.

- **Businesses/trade** - Aitong, which is the main trading centre, has 70 businesses consisting mainly of retail shops, pubs and food kiosks. Talek is also a popular trading centre. The main items imported for trading include clothing, building materials (corrugated iron sheets, timber and hardware) and food items (maize, beans, rice, and wheat flour), mostly from Kilgoris, Kisii, or Narok town. The main exports are live-stock and beadwork.
- **Crop cultivation** - Crop farming in Pardamat is yet to be successful owing to low rainfall and competition with wildlife.

Access to water and grazing

- **Access to communal water:** Fencing has made it difficult for both wildlife and livestock to access communal water sources. As a result, many people have constructed small water pans for their livestock. On average, women walk for at least one hour to collect water from communal water points such as springs and boreholes.
- **Surface water with springs and dams:** there are many **Natural springs** along the hills, some of which can be accessed by the community whilst others are on private land. The main community springs are: Olenaimodu, Koyiaki, Olemoncho, Kipolto, Ilera Olesere and Esukuta (Aitong dam). The main private springs are: Olemaletu, Olekipetu, Olchorro Lentim, Leken, Olkisikong'u, Olekipera, Tuali and Noombitiyo.
- **Communal water pans:** Rehero near Chief Sitany's home, Koyiaki, Esukuta, Nkamuriak and Olenaimodu. There are also many small private water pans on individual landowners' land.
- **Ground water:** There are also **community boreholes** in the following areas: Olesere, Enoosidan, Enkupelia and next to Endoinyo Erinka Health Centre with a 6km pipeline at the end of which land has been set aside for communal water access. Land has also been set aside for Olkuroto Water Project next to the Olkuroto Primary School. Endoinyo Erinka Primary School also has a bore hole.
- **Rain water harvesting** is done at the home level but also at the community where several community rain water harvesting systems have been installed at Olkurroto, Olesere, Nkamuriak and Rehero.
- **Schools with Rainwater harvesting systems installed:** Endoinyo Erinka, Olesere, and Rehero primary schools and Maasai Mara Secondary School
- **Access to grazing:** Individual families graze their livestock within their own land and on neighbours' land based on mutual agreement. Families around Olesere and Olkurroto areas access grazing in Naboisho and Motorogi, respectively.

Institutions

- **Women's groups:** there are several community managed microfinance groups within Pardamat
- **Community Based Organizations:** These include; Olesere DO, Endoinyo Erinka DO, Eluaai self-help group, Ilchorroi self-help group, Mara Discovery Centre
- **Water committees:** Nailepo Community Water Project in Endonyio Rinka
- **Churches:** there are numerous churches in Pardamat (refer to map for full list and locations)
- **Health, education & sanitation**
 - **Health:** The PCA is served by two health centres and a dispensary run by the Community Health Partners (CHP). The Endonyio Rinka CHP clinic serves an average of 3,500 patients a year and Aitong CHP Health Centre serves an average of 7,000 patients a year and has a maternity unit. Olesere dispensary run by the Government serves an average of 2,000 patients a year. Government health services are limited and there is very little dental health support and people access this service at Maasai dental clinic in Siana. A new private clinic is being built in Endonyio Rinka. The most common diseases reported include malaria, typhoid, common cold, brucellosis, respiratory related diseases, dysentery, diarrhoea and HIV/AIDS. Most referral cases are made to Narok County Hospital, as well as Ki-jabe Mission Hospital in Kiambu County or Tenwek Missionary Hospital in Bomet County.
 - **Education:** There are 8 primary schools (Rekero, Olemoncho, Enkeju Enkoirien, Olkurroto, Olesere, Mbitin, Nterere and Endoinyo Erinka) and one secondary school in the area, serving collectively approx 3,750 pupils. 1 in 10 school age children are not in school. In nursery the ratio of boys to girls is nearly 1 to 1 but in secondary school this is nearly down to 10 to 1. Land has been set aside for a secondary school at Koiyaki next to the dam.
 - **Sanitation:** Availability and use of toilets is limited - only 16% of homesteads have a latrine whilst the remaining 84% use the open fields and bushes. Solid waste is not managed but an initiative has been set up to try to tackle this in Aitong.

Conflict

- **Human wildlife conflict:** There has been an increase in HWC within Pardamat, with the most cases reported involving predation at night by lions, hyenas and leopards and some involving cases of elephants breaking into fenced areas and killing livestock. The main reason for increased HWC is due to increased competition for natural

resources between humans and their livestock on the one side and wildlife on the other.

- **Hotspots:** along the critical wildlife corridors, including Rekeru, Pardamat hills, Ilchoroi, Endoinyo Erinka, Mbitin and Enoosidan.
- **Mitigation Efforts:** Pardamat has raised \$25,000 from USAID to set up predator proof fences in partnership with Anne Kent Taylor Fund with bomas installed in the above mentioned hotspots. The installation of over 100 bomas will be done over two years with 50% in 2017 and 50% in 2018. In partnership with KWS, WWF and Mara Elephant Project, the PCA scouts are working closely with the community to move wildlife from potential conflict areas. Moving fences and bomas from the key wildlife corridors is in the pipeline to prevent future HWC.

Community Outreach Work

There are several entities undertaking community outreach work within Pardamat. The following schools receive support from various non-governmental partners: Endoinyo Erinka, Rekeru, Olemoncho and Olesere Primary Schools. Programs include building of school governance systems (teachers' and School Management Committee training workshops) and enhancing parents' participation in the promotion of girl-child education (mother-daughter forums) by BCF and Obel-MNC; female empowerment (Community Managed Micro Finance & Bonga) program by BCF; Wildlife Clubs undertaken by KWT in Rekeru, Olesere, Olemoncho and Olkurroto; rain water harvesting projects by Maa Trust in Olesere, Rekeru, Olkurroto, Enkeju Enkoirien, Maasai Mara Secondary School in partnership with BCF, Dig Deep and Maa Trust; spring protection at Olemoncho by BCF. Maa Trust also runs a beadwork project for women from the following villages within PCA: Olesere, Enoosidan, Mbitin, Enooronkon, Nkamuriak, Olkurroto, Enkeju Enkoirien and Oltorotua.

Tourism Product & Numbers

PCA currently has no tourism partners, although this Conservation Area aspires to raising funds to establish a tourism presence in order to improve the sustainability of the area and provide additional income for the landowners.

Livestock & Grazing Management

- **Cattle enterprise & management.** PCA has developed an action plan and has some funding to implement a cattle enterprise within PCA that will lease 2,000 acres to be free from other livestock grazing. The plan is for the area to be protected by two rangers to ensure there is no access by sheep and goats and other cattle. The livestock enterprise targets to collect 350 steers, each weighing minimum 200kg, for fattening in PCA. The aim is for these to be taken to Mara Beef for fattening for the cattle to meet market value and thereafter be sold to Mara Beef at 300kg to 350kg per steer. The plan is to have 4 herders and a livestock manager working to manage this program.

- **Livestock grazing & principles.** PCA currently has no grazing principles or guiding structure for livestock management but there is intention, within the livestock enterprise, to improve management and develop grazing principles.

Security, operations & infrastructure

- **Rangers.** PCA has a total of 21 rangers from the community employed under a grant from the World Wildlife Fund, providing funds up until March 2017.
- **Training.** PCA rangers have been trained in the KWS Manyani Law Enforcement Academy
- **Partners.** Narok County Government, administration (Chief), KWS, NGOs, MMWCA, MEP, WWF, BCF, KWT, Maa Trust, Dig Deep, Nature Kenya, BAND Foundation, Mara Discovery Centre, USAID, TNC, Conservation Capital, LTG
- **Equipment.** PCA has three motorbikes, two for the rangers and one for the Conservancy Manager. PCA is in the process of purchasing a car funded by USAID for the management to enhance projects implementation and rangers patrols. There are four rangers' stations and in the pipeline are four solar systems for rangers' lighting as well as charging of phones and other equipment.
- **Infrastructure:**
 - **Roads:** There are no graded roads in PCA, however the Talek-Aitong road defines the western border of PCA
 - **HQ:** is located at Endoinyo Erinka at the former missionaries' house next to the dispensary and Community Christian Church
 - **Ranger bases:** PCA has 4 ranger bases - Olemoncho, Rekeru, Endoinyo Erinka at the HQ and Enoosidan.
 - **Airstrip:** There is no airstrip within PCA.

Section 3: Zoning

PCA has been divided into three major zones: Wildlife Conservation Area Zone; cattle rangeland; wildlife corridors; and human settlement zone (see figure 2).

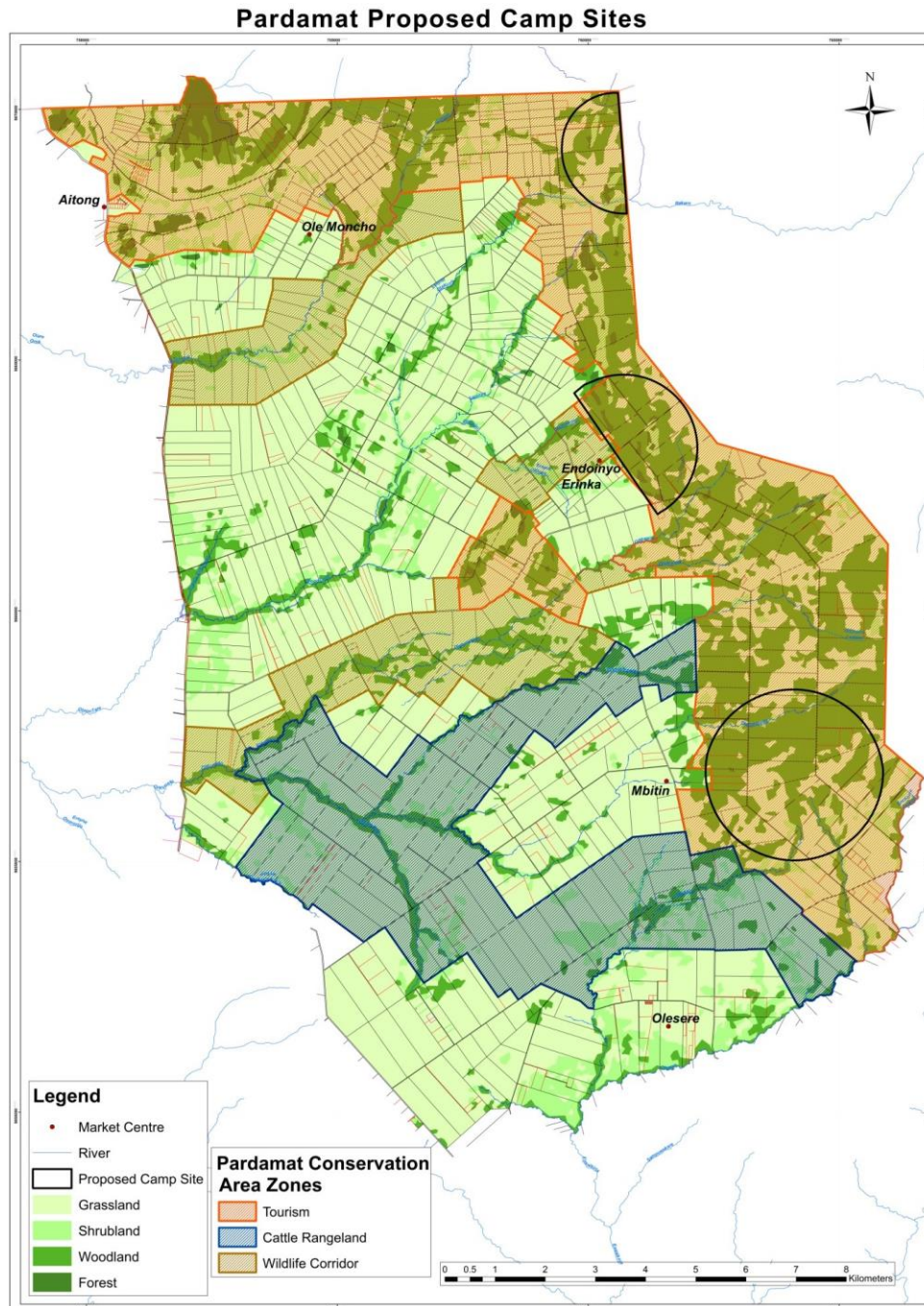


Figure 2. PCA Zonation

Section 4: Overview of goals

PCA's management goals for the next five years are presented in tables 1, 2, 3, 4 and 5 below. The goals are grouped according to the major management components at the Conservation Area. These are: wildlife habitat, land use, culture and livelihoods, tourism, and cattle enterprise, management and grazing, and security, operations and infrastructure.

Table 1. Wildlife Habitat

Sub-Topic	Goal / Impact after 5 Years
Wildlife	Reduce fences by 40% within 3 years
	Initiate payment of land leases
	To have succeeded in lobbying county government to set aside funds to support PCA
	Lobby government through MMWCA to reduce the payment period to a maximum of 1 year
	Reduce already existing settlement along the corridors by 20%
Habitat	Open 60% enclosed water sources in 3 years
	Reduce forest destruction by 70%
	Contribute to the county land use / spatial plan
	Provide access to family planning
	Plan settlement
	Reduce litter in town centres and around villages by 80%

Table 2. Land Use, Culture & Livelihoods

Sub-Topic	Goal / Impact after 5 Years
Community, ethnicity & culture	Ensure the community retains strong community values and practices
Land area, ownership and land tenure	Secure and consolidate productive land area
	To have contributed to the County land use / spatial plan
Settlements	Free movement wildlife
	Mitigate human wildlife conflict
	To have well managed land with high productivity
Livelihoods	Reduce numbers of livestock, improve breeds and introduce grazing zoning
	Establish a market for livestock products
	Increase training opportunities for PCA members
	To have established successful income-generating cultural manyattas
	Reduce fencing in Pardamat

Sub-Topic	Goal / Impact after 5 Years
Institutions	Reduce early pregnancies and increase girls' attendance in school
	Improve road and communication networks
	Increase number of trained, specialized personnel in health centres
Health	To ensure pit latrines are built in 60% of households
	To create access to clean water in every section of Pardamat
Education	Reduce drop-out rates by 80%
	To ensure all children in Pardamat are sent to school early as prescribed by government
Community Outreach	Ensure a functional adult literacy education program has been set up

Table 3. Tourism

Sub-Topic	Goal / Impact after 5 Years
Tourism	Develop tourist facilities

Table 4. Cattle enterprise, management and grazing

Sub-Topic	Goal / Impact after 5 Years
Cattle enterprise & management	To improve expertise of PCA cattle owners in cattle husbandry
	Improve cattle quality both for beef & dairy
	Commercialise cattle management
Livestock grazing	Reduce overgrazing and reduce numbers of sheep and goats, upgrade quality and establish a good market for sheep & goats

Table 5. Security, Operations & Infrastructure

Sub-Topic	Goal / Impact after 5 Years
Rangers	Establish proper housing/posts for rangers
	Establish a well remunerated staff
Training	To have secured funds for training of rangers, including refresher training
Partners	Secure long term financial commitments / contracts with partners
	To build County support for PCA
Equipment	To have consistent power supply
	Establish a well-coordinated radio communications system
	To have at least 2 cars for patrols and 4 motorbikes
	Put procedures in place to acquire at least 10 fire arms
Infrastructure	Open roads within Pardamat

Section 5: Threats, Goals & Activities

Tables 6, 7, 8, 9 and 10 set out the activity tables for the major management components at PCA. The tables outline the threats or challenges being addressed, goals or impact after 5 years, the activities that will be implemented and the parties that will be involved in implementing these activities.

Table 6. Wildlife & Habitat

Sub-Topic	Threat / Challenge being Addressed	Goal / Impact after 5 Years	Activity	Parties involved / responsible
Wildlife	Multiple fences	Reduce fences by 40% within 3 years	Raise funds to lease and secure fenced land for cattle enterprise and conservation. Create awareness of conservation. Undertake capacity building of the committee and landowners.	MMWCA, PCA Committee, KWS, County Government LGT
	Inadequate benefits from wildlife to landowners	Raise funds to pay landowners To have succeeded in lobbying county government to set aside funds to support PCA.	Initiate payment of land leases Lobby county government through MMWCA to set aside funds to support PCA.	Narok County Government, MMWCA, PCA Manager & Committee and LGT
	Delay in human wildlife related compensation from national government	Lobby national government through KWCA to reduce the payment period to a maximum of 1 year	Lobby national government through KWCA to process compensation forms within 3 months and ensure endorsement of the process forms by CWCCC.	PCA Committee, MMWCA, KWCA, KWS, CWCCC

Sub-Topic	Threat / Challenge being Addressed	Goal / Impact after 5 Years	Activity	Parties involved / responsible
	Settlement along wildlife corridors	Reduce existing settlements along the corridors by 20%	Raise funds to lease settled land along identified wildlife corridors for conservation. Relocate settlements according to PCA's relocation plan.	PCA Committee, MMWCA, Narok County Government, LGT, NORAD
Habitat	Privatization of water sources	Open 60% of recorded enclosed water sources in the coming 3 years	Firstly, ensure lease payments are made to secured land which contains water sources. Create awareness of the laws governing shared / community natural resources.	PCA Committee, Narok County Government, Chief, WRMA, NEMA
	Forest destruction	Reduce forest destruction by 70%	Awareness creation through community meetings. Carry out reforestation activities. Lobby government to implement the Forest Act Discourage charcoal burning Find alternative sources of energy	Chief, KWS, PCA Committee, Narok County Government, landowners, partners
	Lack of a land use plan	Contribute to the county land use / spatial plan	Zonation of Pardamat Conservation Area Contribute to and support the process of the county land use plan	Narok County Government, PCA Committee, MMWCA, KWS, KWCA
	Population increase	Provide access to family planning	Work with government and family planning organisations to increase access to family planning in PCA	Narok County Government, Community Health Partners (CHP) and other relevant NGOs, churches PCA Committee, MMWCA, landowners, administrations

Sub-Topic	Threat / Challenge being Addressed	Goal / Impact after 5 Years	Activity	Parties involved / responsible
	Unplanned settlements	Plan settlements	Zone PCA to identify settlement areas	Narok County Government, partners, PCA Committee, MMWCA, landowners, administrations
	Solid waste (litter)	Reduce litter in town centres and around villages by 80%	Sensitise and educate the community on the environmental and health impacts of solid waste (litter). Have a waste management team who will mobilise communities to deal with litter responsibly. Implement Environmental Management Conservation Act (2015).	MMWCA, NEMA, PCA Committee, community

Table 7. Land Use, Culture & Livelihoods

Sub-Topic	Threat / Challenge being Addressed	Goal / Impact after 5 Years	Activity	Parties involved / responsible
Community, ethnicity & culture	Erosion of culture due to modernization and religion	Ensure the community retains strong community values and practices	Reinforce mother tongue lessons in schools Encourage participation in annual drama and musical festivals Set up a cultural resource centre Promote non-harmful cultural practices	Schools & parents PCA Committee, Landowners
Land area, ownership and land tenure	Land sales and subdivision	Secure and consolidate productive land area	Sensitise landowners on effects of land sales and subdivision Lease land for conservation	PCA Committee, MMWCA, partners, Landowners
	Lack of land use plan, with unplanned settlement	To have contributed to the County land use / spatial plan	Contribute to the County land use plan and lobby county government to complete the plan Regulate settlement development Raise awareness about effects of unplanned settlement	PCA Committee, MMWCA, KWCA, Narok County Government
Settlements	Reduced movement of wildlife due to fencing	Free movement of wildlife	Reduce fences through leasing of land	PCA Committee, MMWCA, landowners, partners
	Increased human wildlife conflict due to unplanned settlement	Mitigate human wildlife conflict	Raise funds for and distribute HWC mitigation equipment e.g. predator proof bomas Encourage people to remove fences	PCA Committee, MMWCA, partners
	Reduced productivity of land due to high population growth	To have well managed land with high productivity	Improve management of land to increase productivity	PCA Committee, landowners & partners

Sub-Topic	Threat / Challenge being Addressed	Goal / Impact after 5 Years	Activity	Parties involved / responsible
Livelihoods	Loss of livestock due to drought	Reduce numbers of livestock, improve breeds and introduce grazing zoning	Raise community awareness and undertake exposure visits to successful cattle farms	PCA Committee, PCA Manager, MMWCA, WWF, NORAD,
	Insufficient market opportunities for livestock products	Establish a market for livestock products	Work with partners and county government to assess and address issues relating to market opportunities for livestock products, as well as improve quality of these products	PCA Committee, MMWCA, partners, community members
	Unskilled personnel leading to increased levels of unemployment	Increase training opportunities for PCA members	Create training institutions and empowerment centres Build a training centre Create employment opportunities Provide scholarships	Narok County government, Maa Trust, PCA Committee, PCA Manager, MMWCA, partners
	Low income from tourism among landowners in Pardamat	To have established successful income-generating cultural manyattas	Identify & set up cultural manyattas Set up agreements with other conservancies to use/visit cultural manyattas	PCA Committee, landowners, other conservancies, MMWCA
	Fencing	Reduce fencing in Pardamat	Lease land for conservation Explore a policy for negotiating with community members who pull down their fences Provide alternative access to water and water pipelines	MMWCA, PCA Committee & Manager, partners
Institutions	Early pregnancies and reduced girls' attendance in school	Reduce early pregnancies and increase girls' attendance in school	Provide guidance and counselling centres and conduct mother daughter forums in local primary schools	MMWCA, Chief, PCA Manager & Committee, partners, school committees, community members

Sub-Topic	Threat / Challenge being Addressed	Goal / Impact after 5 Years	Activity	Parties involved / responsible
	Poor road and communication networks limit access to institutions	Improve road and communication networks	Lobby county government and communication companies to improve infrastructure and communication networks that leads to institutions	MMWCA, PCA Committee & Manager, Communication companies and partners
	Low skilled personnel and lack of special expertise in health centres	Increase number of trained, specialized personnel in health centres	Raise funds for capacity building for health centre personnel	MMWCA, PCA Committee, partners, Narok County
	Lack of equipment in health centres	To have well equipped Health Centres	Raise funds for equipment Procurement of machines for health centres	MMWCA, Narok County, CHP
Health	Lack of pit latrines	To ensure pit latrines are built in 60% of households	Create awareness amongst communities about the importance of using pit latrines and encourage them to build them	PCA Committee, partners Public Health Sector, MMWCA
	Lack of clean water	To create access to clean water in every section of Pardamat	To fundraise to construct communal water points	All conservancies, National Government, MMWCA, Maa Trust & other partners
Education	High rate of school drop-outs	Reduce drop-outs by 80%	To raise awareness about the importance of education to both children and parents	PCA Committee, partners, MMWCA, Chiefs, village elders, parents, students, school administrators
	Lack of early enrolment	To ensure all children in Pardamat are sent to school early as prescribed by government	Raise awareness amongst parents on the importance of sending children to school early Seek partners to develop feeder schools in areas away from public schools	PCA Committee, Chiefs, village elders, partners, community members

Sub-Topic	Threat / Challenge being Addressed	Goal / Impact after 5 Years	Activity	Parties involved / responsible
Community Outreach	High rate of adult illiteracy	Ensure a functional adult literacy education program has been set up	To seek a partner to set up an adult literacy program To raise awareness and sensitize the community to join adult literacy classes Raise funds to pay for adult literacy classes	Partners, PCA Committee, churches, Narok County Government, schools

Table 8. Tourism

Sub-Topic	Threat / Challenge being Addressed	Goal / Impact after 5 Years	Activity	Parties involved / responsible
Tourism	Lack of tourism facilities (including camps, cultural manyattas and beadwork sales points)	Develop tourist facilities	Identify and map tourist sites within PCA Identify partners to work with to develop tourism facilities	PCA Committee and Manager, GIS expert, MMWCA, BCE, Africa Impact

Table 9. Livestock Grazing & Management

Sub-Topic	Threat / Challenge being Addressed	Goal / Impact after 5 Years	Activity	Parties involved / responsible
Cattle enterprise & management	Lack of expertise on livestock husbandry	To improve expertise of PCA cattle owners in cattle husbandry	Conduct training and capacity building of cattle owners in cattle husbandry Conduct exposure tours to successful livestock enterprises	Mara Training Centre, Mara Beef, other partners, MMWCA, PCA Committee
	Low quality grades of cattle	Improve cattle quality for both beef & dairy	Set up an improved quality breeding program for both bulls & heifers, potentially including artificial Insemination	Mara Training Centre, Mara Beef, MMWCA, Narok County Government Veterinary Officers,
	Sentimental values & cultural issues of wanting large herds and forming attachment to cows they want to keep for prestige	Commercialise cattle management	Encourage cattle owners to use cattle for commercial purposes	Cattle owners, PCA Committee, MMWCA, Mara Beef, Narok County Government
Livestock grazing	Overgrazing & overstocking of sheep and goats	Reduce overgrazing and reduce numbers of sheep and goats, upgrade quality and establish a good market for sheep & goats	Train communities in rangeland management Awareness meetings on impact of keeping larger flocks of sheep and goats Seek partners to improve breeds	Mara Training Centre, Conservancies, MMWCA, PCA Committee, partners

Table 10. Security, Operations & Infrastructure

Sub-Topic	Threat / Challenge being Addressed	Goal / Impact after 5 Years	Activity	Parties involved / responsible
Rangers	Inadequate Housing/posts	Establish proper housing/posts for rangers	Raise donor funds Construct posts Lease land for rangers posts Equip rangers posts	MMWCA, USAID, TNC, KWS, PCA Committee
	Low salary & incentives	Establish a well remunerated staff	Raise funds from donors and enterprises	Conservancy Manager, PCA Committee, MMWCA, partners
Training	Lack of funds for training & empowerment	To have secured funds for training of rangers, including refresher training	Raise donor funds Undertake training create collaboration with KWS Man- yani Law Enforcement Academy	MMWCA, partners, Narok County Government, KWS
Partners	Lack of funding sustainability from donors	Secure long term financial commitments / contracts	Continuously work on building relationships with partners and developing alternative revenue streams	MMWCA, PCA Committee & Manager, partners
	Inadequate County Government Support	To build County support for PCA	Plan for stakeholders meetings at high level To build relationships with County government	MMWCA, KWS, Area Member of Parliament area MCA, Ward Administration, Narok County, PCA Committee
Equipment	Lack of power	To have consistent power supply	Raise funds Install 4 solar power systems at ranger bases	PCA Manager, MMWCA, partners, solar companies
	Poor radio communication network /other equipment	Establish a well-coordinated radio communications system	Raise donor funds to fund survey of identify high points to establish aeri- als and purchase of handsets	MMWCA, partners, PCA Committee

Sub-Topic	Threat / Challenge being Addressed	Goal / Impact after 5 Years	Activity	Parties involved / responsible
	Lack of vehicles for patrols	To have at least 2 cars for patrols and 4 motorbikes	Raise donor funds Tendering / purchasing	MMWCA, partners, PCA Committee
	Lack of fire arms	Put procedures in place to acquire at least 10 fire arms	Work with the relevant authority for acquisition of fire arms & licenses Fundraise for firearms Register the rangers under Kenya Police Reservists Fire arms training Acquire fire arms	Conservancy Manager, MMWCA, KWS, County Government, Kenya Police, partners
	Inaccessible roads for accessing PCA	Open roads within Parda-mat	Fundraising for road development Identify roads Open & grade roads Maintain roads	PCA Committee, MMWCA, landowners, Surveyors, BCEF and partners

Section 6: Implementing the Plan

Legal & governance structure of Pardamat with any relevant historical information

As mentioned elsewhere in this document, PCA was registered officially on 13th of May 2016 as an Association under the Societies' Act. PCA has a committee comprising of 16 elected men and 3 nominated women from the 8 clusters within Pardamat, with an elected Chairman, Treasurer and Secretary. Pardamat intends, in 2017, to ensure that there is 1/3 female representation in the committee. The committee meets quarterly with the Conservancy Manager, who carries out all preparation for the meetings. Elections of committee members and office bearers occur every 3 years. Annual General Meetings are held in April each year. The current legal and governance structure has been reviewed and recommendations were submitted to Pardamat at the end of 2016.

Who is responsible for developing work plans, checking work plans, producing an annual compliance report and a 5 year third-party management report?

The Conservancy Manager is responsible for developing the annual work plans, which are to be based on this management plan. The PCA Committee is responsible for reviewing the annual work plans and progress of the plans in the quarterly meetings. The Conservancy Manager will produce the annual compliance report and submit annually to the PCA Committee. The Conservancy Manager together with the PCA Committee are responsible for contracting a third party to produce a management report at the end of the 5 year period of this plan.

Section 7: Measuring Impact

The monitoring to be undertaken and its frequency

PCA is introducing monitoring that will cover wildlife and ecology, patrol statistics and illegal activity. This monitoring will be undertaken consistently by the rangers and PCA management, with support from PCA Manager and MMWCA. Reporting will occur on a quarterly basis both to the PCA committee and back to the rangers themselves. PCA Committee will support partners already undertaking wildlife monitoring in the area. Tools that may be used include a smart-phone based application and centralised analysis on analytical software.

Progress against goals laid out in this management plan

Progress against this management plan will be presented via the annual compliance report at the PCA quarterly Committee meetings. Success shall be measured against key performance indicators in each work plan, which shall relate to the goals in this management plan.