



NDERA COMMUNITY CONSERVANCY

CONSERVANCY MANAGEMENT AND
COMMUNITY DEVELOPMENT PLAN (2019-2024)



INTRODUCTION

This Conservancy Management and Community Development Plan has been Developed by Ndera Community Conservancy with support from the Northern Rangelands Trust. The plan was developed through a participatory Process led by the Conservancy Board. The process included the following steps:

- **Background information** - including reference to previous reports, Baseline statistics on human livelihoods.
- **Mapping** -participatory and field mapping of key features across the Conservancy, development of a conservancy map to visualize the current Status and future vision for the conservancy.
- **Board brainstorming session** - to identify the main challenges and long-term priorities for the conservancy, also, identify key partners and stakeholders for inclusion in the planning process.
- **Consultation with community and key partners** - meetings with community, government and partner organization representatives in all zones of the conservancy, to discuss and develop the goals and objectives.
- **Draft plan** - a draft plan was developed and circulated to Conservancy Management for discussion with the Board to ensure it accurately captured discussions and priorities from community and stakeholder Meetings.
- **Final plan** - presented to the AGM for endorsement, publication and dissemination of the plan to partners.

The purpose of this plan is to capture the holistic, long-term vision for community development and conservation success of our Conservancy. It is a tool to:

- Guide the conservancy management in their activities, ensuring they focus on priorities that have been determined by the wider community, conservancy staff and Boards.
- Provide continuity of management and hold managers and boards to account by their members.
- Assist with fundraising and developing partnerships, highlighting where additional resources are required

- Meet the requirements for registration of Conservancies under the Wildlife Conservation and Management Act 2013.

It is a concise document that identifies key features and values of the conservancy and sets out the primary issues the conservancy is seeking to address, with a broad vision and objectives. The specifics of how the conservancy will tackle these issues, actions to be taken and resources needed will be captured in more detailed plans for each sector, e.g. land-use and settlement, tourism development, business and sustainability, integrated water resources development, etc. Annual operational plans and budgeted activity plans will be developed by the Conservancy Management and Board at the start of each year. It is a living document that needs to be used, adapted and referred to continually.

This Management Plan has been endorsed by the community represented by Ndera Conservancy through their annual general meeting, and approved by the Conservancy Board.

Signed: _____

Signed: _____

Date: _____

Date: _____

Conservancy Chairman

Conservancy Manager

NDERA COMMUNITY CONSERVANCY

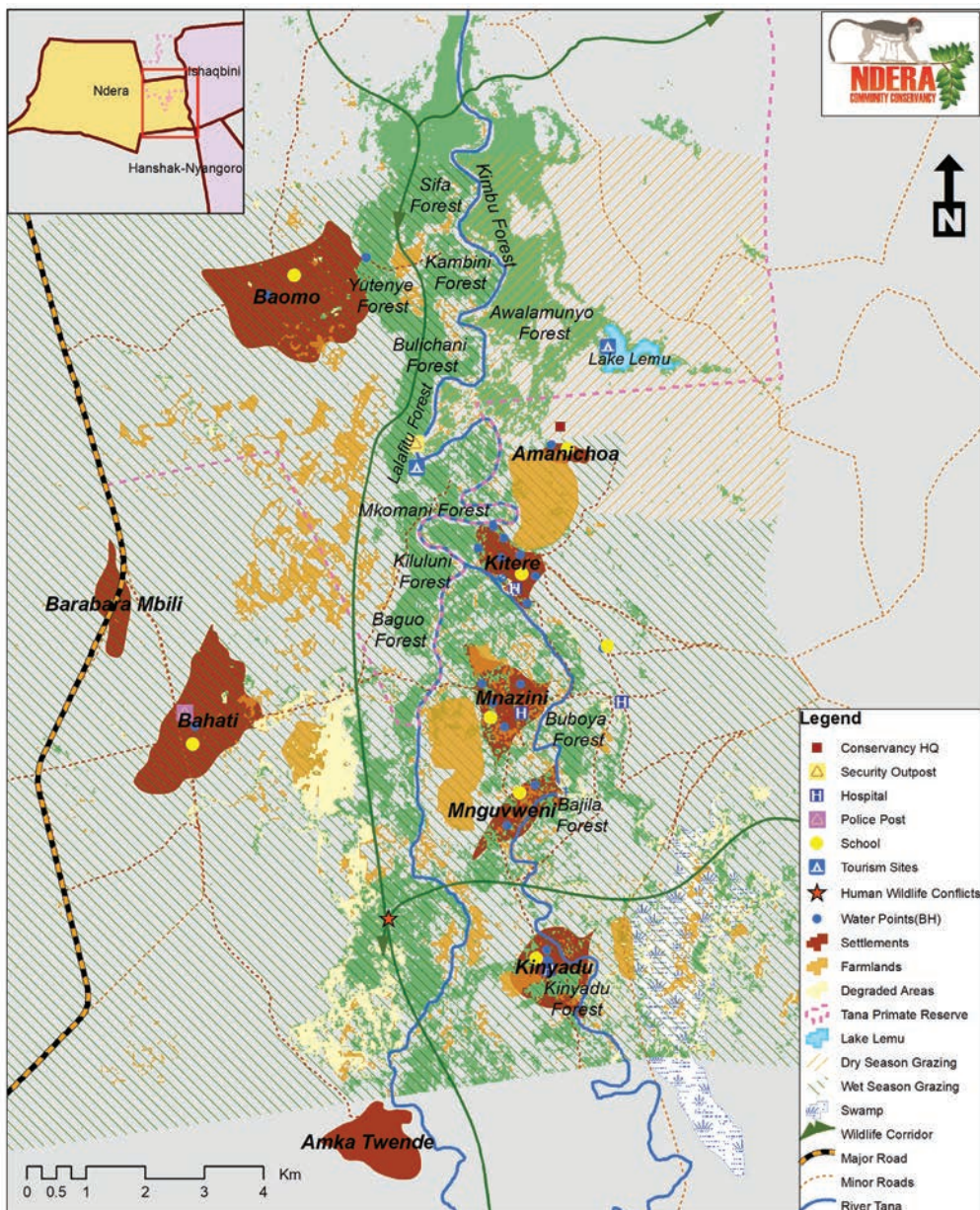


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SECTION 1: THE NDERA CONSERVANCY COMMUNITY

County	Sub-County	Ward	Location	Sub-Location	Settlements	Population	
						2009	Pre-censur in 2018
Tana-River	Tana-Delta	Garsen North	Ndera	Mnazini	Mnazini, Mguveni, Kinyadu	3,852	5,880
				Baomo	Baomo, Amani, Kitere, HQ		3,235
				Bahati	Bahati, Kibaoni, Amka-Twende, Tawakal		2,975
TOTAL						6,422	12,090

The community

- Ethnicity:** Ndera is home to 2 ethnic groups, Pokomo and Wardei people. The Pokomo community is predominant and their livelihoods almost entirely depend on crop farming for subsistence and commercial use. The Wardei communities are pastoralists and also do small scale businesses and farming.
- Land area and ownership:** Community Land. Total area 15,000 hectares.

Natural Assets: Forest Management

- Forests:** Ndera Community Conservancy area is a mix of riverine forests, bush and grass land with diverse plant species.
 - The main forests are; Kimbu, Awalamunyo, Lalafitu, Nkambini, Sifa, Yutenye, Bulichani, Mkomani, Maramba, Nkanu, Kiluluni, Baguo, Buboya, Bajila, Kinyadu, Omara Gullu, Singo, Kakija, Mpangalani & Matanama
 - The Matanama and Kakija forest are woodland areas
 - The Lalatifu, Awalamunyo, Bulichani, Kiluluni and Baguo forests are currently in good condition with good forest cover



- Kinyadu, Singo, Kakija and Matanama forests are in poor condition due to destruction and Nkambini forest has slight destruction

Overall, there has been a decrease in forest cover over the last 10 years, due to drier climate and changing flood dynamics of the River Tana, illegal logging, clearing of forests for farms, encroachment by livestock herders and charcoal burning.

The main tree species found in Ndera conservancy include; Mguvwe (*Mimosa Fruitcosa*), Mkuru (*Diaspera Misplifomis*), Mchochozi (*Garcinia Livingstonei*), Mchachampili (*Albizia Gumifera*), Mlalahi (*tanapopulusilifolia*), Mugo, Mlalani, Mucho, Mubo (*Bligia Ulijigata*) and a variety of fruit tree species especially mangoes.

There are existing traditional rules on sustainable forest use and conservation that are upheld to a degree in some areas and no longer working in others. The conservancy intends to use these traditional rules to develop by-laws for forest use and once endorsed by the wider community these will be enforced by the elders with support from the conservancy.

Some of these traditional rules/values are as follows:

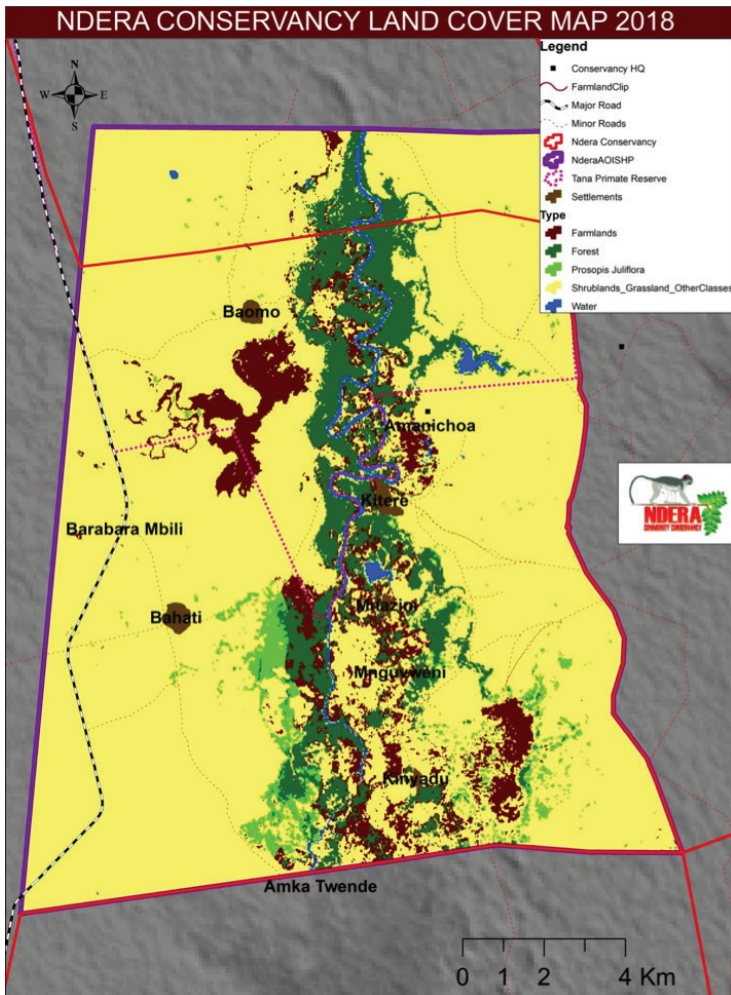
- Some forest patches are protected because they contain certain plants which are of cultural or medicinal use, or are considered sacred areas
- Some trees are not allowed to be cut because the Pokomo people believe they bring rain, and also for their medicinal value
- Fires are not allowed in the forest
- Some forest areas act as hiding places during conflict and therefore must not be cut
- Anyone wanting to cut certain trees for making canoes must first seek permission from elders
- Elders are responsible to protect and uphold rules of forest use
- Traditionally, anyone who breaks these rules are punished by elders in a public gathering

■ **Invasive plants:** Invasive tree species *Prosopis julliflora* (Mathenge) occurs mostly at Matanama forest with approximately 500ha of dense, impenetrable thicket and is a serious concern to the community. Other invasive species include *Opuntia spp.* (cactus) and Blue Gum (*Eucalyptus spp.*) which also affect farming and grazing lands. Invasive species have increased due to forest clearance, frequent floods and livestock movements that lead to transfer of seeds from one grazing area to another.

Ndera Land Cover Change 2010 - 2018

Analysis of land/vegetation cover using satellite imagery and field based information shows that an estimated 1,300ha of riverine forest has been lost between 2010 – 2018, representing a 35% decline in forest cover. Forest has been replaced by a combination of shrubland, farmland and the invasive plant (*Prosopis juliflora*). Farmland adjacent to the river has increased by 576 ha. The area of land covered by *Prosopis* is almost 500ha, an increase of over 1,000% compared to 2010. This is a serious concern and highlights the threat of this invasive species. Most forest loss has occurred in the south-eastern part of the Conservancy close to Mnguvweni, Mnazini and Kinyadu settlements largely as a result of drying up of the forests and some forest destruction.

Type	Area Ha 2018	% of Habitat	Area Ha 2010	% of Habitat	Change Ha	% change
Farmlands	1,247	5.1	1,823	7.5	576	46%
Water	290	1.2	293	1.2	3	1%
Shrublands/ grasslands/ floodplains	19,176	78.4	19,442	79.5	266	1%
<i>Prosopis</i>	39	0.2	504	2.1	465	1192%
Forest	3690	15.1	2383	9.7	-1,307	-35%



Natural Assets: Water and Wildlife

■ Water resources:

- The River Tana passes through all villages
- Boreholes are in Amani, Kitere and Minhaj secondary school
- Shallow wells: 4 in Kinyadu – of which, 2 are not functional, 1 in Baomo, Bahati and 1 near the new Ndera HQ, and 7 in Kitere -2 of these are salty (hospital & primary school), 2 closed and not in use & 1 non-functional
- Temporary lakes: Mkombani, Yokwa, Lemu, Mlonde, & Baomo (Samtula, Mabolani, Buku, Kakija, Chira, Mpangalani, Bubwoya)
- Oxbow lakes: Makange, Kilwa, Mchangani, Pacha, Mkoleni
- Water pans in Shan-Farot.

The rivers, lakes & water pans are for domestic use, livestock and wildlife while the boreholes and shallow wells are only domestic use.

- ### ■ Wildlife:
- The key wildlife species in Ndera Conservancy include the critically endangered Tana River Mangabey *Cercocebus galeritus*, Tana River Red Colobus *Piliocolobus rufomitratu*s and Hirola antelope *Beatragus hunteri*, as well as Elephants, Buffalos, Hippo, Crocodile, Reticulated Giraffe, Cheetah, Leopard, Lion, Hyena, Bush pig, Oryx, Ostrich, Grants gazelle, Bush buck, Lesser Kudu, Red Duiker, Eland are among others and a broad diversity of bird species.



De Jong & Bonyinski



Michael Gunther



Juñet King



Vincent van Zalinge

Physical Assets

- **Roads:** The main Mombasa – Garissa tarmac road passes through Kibaoni settlement. All other roads are murrum and earth roads that are impassible during rainy seasons, thus limiting access to markets for farm products, hinder security operations, health services and local trading. Roads include Gamba-Kitere, Kibaoni-Forozani, Kibaoni-Choa, Mnazini-Balatiro, Kibaoni-Baomo and Baomo-Choa. Only the Wema-Ngumu road is passable in the rainy season.
- **Airstrips:** There is a short airstrip close to the Ndera Conservancy HQs.
- **Other Infrastructure:** There are two secondary schools, six primary schools, and a mosque in each village. Permanent settlements include Baomo, Kitere, Amani, Mnazini, Mguveni, Kinyadu, Bahati & Kibaoni. There are health dispensaries in Mnazini, Kitere & Kinyadu.

Human Assets

- **Health:** Common diseases include; malaria, typhoid, pneumonia, high blood pressure, ulcers, tuberculosis and HIV. There are traditional birth attendants and community health worker that respond to health issues. Community members seek relief with herbal remedies and conventional medicines found in Mnazini, Kitere and Kinyadu dispensary. Livestock diseases include Nagana, Homa ya mapafu-CBPP (Contagious bovine pleuropneumonia), foot & mouth. The crops are mostly affected by earth worms especially beans.
- **Nutrition:** Maize and green grams are the staple food supplemented by bananas.
- **Education:** There are 6 primary schools and 2 mixed day secondary within Ndera conservancy. The literacy level is slightly high compared to other areas within the County.

Social Assets

- **Institutions:** The Pokomo council of elders called Gasa represents all Pokomo community within Ndera conservancy. All Important decisions are mainly made by Gasa. There are also informal women /youth groups that engage in small scale businesses, savings, revolving funds (kikozi) and diversify livelihoods. There are number of NGOs (NRT, Minhaj Foundation, Tana River life foundation & FAO), County government, government agencies (CDF, KFS, KWS & Kenya Police Service) and private companies (Galaxy, Nile crocodile and Kazuri) that operate within the conservancy area providing various livelihood support to the communities.

Livelihoods

- **Farming for subsistence and Commercial:** Majority of the community members engage in farming and earn their living through farming and sale of farm products mostly maize, green grams, mango and water melon.
- **Livestock:** A few percent of the community members earn their living through sales of livestock and livestock products (milk, meat). Majority of Wardei community own cattle, goats & sheep.
- **Small business:** Some of the community members are engaged in small business like running small shops, kiosk, operating boda-boda and bee keeping.
- **Employment:** Very few community members are employed through the conservancy, government agencies, NGOs and some engage in casual labour.

Conflict

The **inter-ethnic conflicts** are mainly as a result of competition on grazing areas and incitements by politicians. Some of the ethnic clashes in the past were; Bobua conflicts between Pokomo vs Somali in 1887, Pokomo vs Somali in 1986

and Wardei vs Orma / Pokomo in 2001. Tension between neighboring ethnic groups still remain.

Human-wildlife conflict has a significant impact on human livelihoods predominantly through crop-raiding, human injury and death and predation of livestock. The wildlife species that cause most human wildlife conflict are elephants, hippo, buffaloes, bush pig, crocodiles, hyenas and baboons.

Drought and vulnerability

Unexpected floods and drought have been a challenge for the community, resulting into disease outbreak, displacement of the people and deaths for livestock, wildlife & people. The **floods** experienced in living memory include 1946, 1961, 1967, 2006 & 2018; **droughts**: Njaa ya mukolo in 1956 & Njaa foleni in 1980; **Diseases**: small pox in 1941/1942, Cholera in 1972, 1997 & 1998. Some of the coping mechanisms were drying of milk and meat for use during drought seasons, depending on fruits for food and reservation of dried curd from cow's milk.



SECTION 2: COMMUNITY DEVELOPMENT AND CONSERVATION PRIORITIES

- Wildlife and Forest Conservation
- Water
- Health
- Education
- Conservancy Infrastructure
- Peace and Security
- Business Enterprises
- Agriculture
- Human Wildlife Conflict Mitigation
- Climate Change & Natural Disasters Mitigations

COMMUNITY VISION FOR THE FUTURE "20 YEARS"

CONSERVE NATURAL RESOURCES AND IMPROVES LIVES OF CURRENT & FUTURE GENERATIONS



GOALS

IMPACT IN 5 YEARS

Conserving our wildlife and forests

- Increased wildlife populations
- Reduced human wildlife conflict
- Reduced poaching
- Water available for both wildlife & livestock
- Core conservation area/sanctuary established and well managed
- Improved forest cover & condition
- Forest by-laws developed and upheld
- Degraded lands rehabilitated & invasive plant species reduced

Improving access to water, health & education

- Improved availability and access to clean water for domestic use
- Improved governance and management of water projects
- Improved access to good quality education
- Reduced rate of school drop out
- Improved access to good quality healthcare

Improving conservancy infrastructure

- Improved road network within the conservancy
- Improved transport for ranger patrols
- Effective radio communication network

Building peace and security

- Peaceful co-existence between Ndera & Ishaqbini conservancy communities
- Reduced security incidents

Growing enterprises

- Improved availability and access to markets
- Improved income from the sale of farm products & hand crafts
- Eco-tourism established and generating income
- Improved conservancy visibility and communication
- Youth & women empowered through microfinance programs

Improving agriculture

- Improved food security through increased food production from farming

SECTION 3. ACTION PLAN AND KEY PARTNERS

GOAL	CHALLENGES	ACTION	PARTNERS
Conserving our wildlife and forest			
Wildlife	<ul style="list-style-type: none"> ● Insufficient ranger numbers ● Competition with livestock ● Human wildlife conflict - crop raiding ● Poaching for meat ● Predation by domestic dogs ● Expansion of farmland ● Inadequate water and pasture during dry season 	<ul style="list-style-type: none"> ● Establish Sanctuary targeting Hirola ● Establish a core conservation area ● Co-management agreement with KWS on Tana Primate National Reserve ● Construct water pans for wildlife ● Employ additional rangers ● Implement effective wildlife monitoring ● Conduct anti- poaching awareness meetings ● Train & equip security teams ● Identify alternative livelihoods for subsistence poachers ● Reduced human wildlife conflict through: fencing of farms, KWS & ranger protection of farms, identification of wildlife corridors to prevent encroachment of farms. ● Agreement between Ndera & Ishaqbini on grazing plans, water points and areas for livestock bomas 	<ul style="list-style-type: none"> ● NRT ● KWS ● National Government ● WWF ● Judiciary

Forest	<ul style="list-style-type: none"> ● Drought ● Illegal logging and use of power saws ● Encroachment by livestock herders ● Charcoal burning & bush fire ● Invasive plant species ● Changed flood dynamics of River Tana ● Traditional rules on forest conservation no longer followed 	<ul style="list-style-type: none"> ● Strengthen traditional rules ● Carry out awareness on traditional rules ● Establish 1 CFA ● Develop community forest management by-laws and enforce ● Develop penalties based on traditional rules 	<ul style="list-style-type: none"> ● NRT ● KWS ● National Government ● WWF ● KFS
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Rangeland	<ul style="list-style-type: none"> ● Soil erosion ● Invasive plant species 	<ul style="list-style-type: none"> ● Placing dykes ● Clearance and control of invasive species <i>Prosopis</i> (Mathenge) 	<ul style="list-style-type: none"> ● NRT ● KFS ● KWS
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Improving access to water, healthcare & education

Water	<ul style="list-style-type: none"> ● Diversion of river Tana due to natural dynamics & Tarda irrigation scheme ● Unsafe water for domestic use ● Long distance to water from some villages 	<ul style="list-style-type: none"> ● Improve access to clean water in all settlements ● Rehabilitate existing & non-functioning water infrastructure ● Improve water infrastructure in all settlements ● Improve governance and management of water projects 	<ul style="list-style-type: none"> ● County Government ● National Government ● NRT ● DANIDA ● USAID
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Education	<ul style="list-style-type: none"> ● Poverty ● Inadequate education infrastructure and facilities ● Few teachers in primary schools ● School drop outs 	<ul style="list-style-type: none"> ● Provide education bursaries to needy students ● Provide full scholarship to the top 6 pupils every year ● Construct and upgrade the EDC and primary schools in all settlement's areas ● Increase support for the youth vocational trainings ● Education campaigns emphasizing importance of sending children to school and to curb early marriages 	<ul style="list-style-type: none"> ● NRT ● USAID ● County government; ● National government ● CDF ● Ministry of education
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Health	<ul style="list-style-type: none"> ● Inadequate health facilities ● Lack of ambulance and emergency response team ● Disease outbreak during floods & drought seasons 	<ul style="list-style-type: none"> ● Construct, upgrade and adequately equip the health facilities ● Establish, train & equip 1 emergency response team ● Establish a mobile clinic program during floods & droughts seasons 	<ul style="list-style-type: none"> ● Ministry of health ● County Government ● National government ● Red Cross
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Infrastructure Development

Conservancy infrastructure	<ul style="list-style-type: none"> ● Inadequate means of transport ● Lack of permanent rangers outpost ● Poor radio network 	<ul style="list-style-type: none"> ● Construct conservancy rangers outpost ● Construct airstrip ● Purchase 1 land cruiser & 1 boat to support conservancy operations ● Ensure effective radio communication system 	<ul style="list-style-type: none"> ● NRT ● TNC ● WWF ● USAID ● National Government ● County Government ● Safaricom
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Communication ● Poor mobile phone network ● Install Safaricom booster at Balatiro

Road ● Poor road network ● Improve the road networks within the conservancy
 ● Upgrade the existing earth roads to Marram

Building Peace and Security

Peace and security within and around Ndera Conservancy

- Conflict on grazing lands
- Land use competition between farmers and pastoralists
- Insufficient rangers
- Rangers not armed
- Peace campaigns
- Strengthen existing Ishaqbini & Ndera peace committee
- Joint patrol between rangers
- Lobbying for arming rangers
- Develop grazing plans
- NRT
- Ishaqbini
- KWS
- National Government
- County Government

Growing Enterprises

Markets & Micro-enterprise

- Lack of market for farm products and hand crafts
- Poor road network
- Increase access to market for Mango, green grams & honey
- Microfinance program for youths and women
- Improve road network
- NRT
- NRTT
- County Government
- KWS
- USAID

Eco-Tourism

- Lack of tourism facilities
- Lack of marketing / low profile
- Build tourism facility
- Identify & market diverse tourism activities
- Improve conservancy signage and visibility

Improving Agriculture

Farming

- Low rainfall
- Lack of modern farming tools & methods
- Pests & diseases
- Pests and diseases control program
- Establish Farmers' cooperative to encourage savings & investments
- Support farmers with irrigation pumps
- Training farmers on modern farming methods
- Support local vet officers
- Develop flood mitigation strategy
- Support to 125 acres of Ndera conservancy irrigation farm
- Support agricultural extension officer
- Purchase tractor for farmers to hire
- NRT
- County Government;
- Red Cross
- FAO



SECTION 4: IMPLEMENTING THE PLAN

The Ndera Community Conservancy

- Ndera Community Conservancy was established in January 2010 as a CBO and was later registered as not-for-profit company Ltd in 2013 under the company act (cap 486)
- The Conservancy will be responsible for implementing this plan which has been developed in a participatory manner through discussions with members or their representatives and key stakeholders in the community.
- The Conservancy consists of board of 12 elected community members, representing 3 sub-locations. The board appoints and oversees a work force of 11 employees which includes a Conservancy Manager and 10 rangers.
- The sustainable community development and conservation efforts here were part of the inspiration behind the forming of Ndera Community Conservancy. By establishing a Community Conservancy, the community aims to improve the management of their land and natural resources and diversify their income through alternative livelihoods.

Partnerships

As the Ndera Conservancy community, we are not able to fully implement this plan on our own. We will rely on close partnership with Tana River County Government, National Government, NRT, KWS, KFS and NGOs and Donors, as well as on investments by commercial partners and entrepreneurs. These partnerships, identified in the Action Plan above, will bring mentoring support, grant funding, technical expertise, training and investment. As relationships with key partners develop, detailed operational plans, budgets and timetables will be developed with each partner. The Conservancy management will lead in developing funding proposals, partnerships and investments.

Benefit-sharing amongst members of Ndera Conservancy

Community Funds: Conservancy income will be distributed as follows: 40% to conservancy operations, 60% to community development. The decisions on the

spending priorities are made at the AGM with all conservancy/community members present.

Employment: All conservancy employees are recruited from the local community, except where special technical expertise or qualifications are required, in a transparent process, equitably shared between the settlement areas.

Communication: The AGM remains the most important event for community-wide communication; the Board, sub committees and Conservancy staff also play an important role in raising awareness, and informing our community about decisions made.

Measuring impacts and creating sustainability

Measuring success: With the support of other partners the Ndera Conservancy is setting up a range of monitoring tools for measuring the status of wildlife, rangelands and community livelihoods and perceptions. These are Conservancy-led monitoring systems which will be used to measure the impacts of this plan.

Sustaining progress: With clear plans, effective partners, and increasing commercial activities in Ndera Conservancy, we expect to sustain the progress of this plan in future.



Community Development and Conservation Priority Areas and Actions

GOAL	AREA	PRIORITY
Conserving our wildlife and forest		
Wildlife	Eastern bank of River Tana (Lake Iemu)	Establish Sanctuary targeting Hirola
	Mchelelo-Mwina to boundary with Garissa County	Core conservation area
	Ureni between Alijarira-Kitere, Baratiro – Samtula, Rarab in Bahati location	Construct water pans for wildlife
Human Wildlife Conflict areas	Owani, Choa, Mihemani, Baomo, Bubo, Viluzani	Fencing of shambas with mobile electric fences, rangers & KWS to help protect farms during seasons with high conflict and identification of corridors for wildlife to prevent encroachment of farms.
Degraded areas	Kinyadu, Mnguvweni & Mnazini	Placing of dykes
	Balatiro, Mangalani & Bubo	Re-afforestation
	Kibaoni & Furuzani	Clearance and control of invasive <i>Prosopis</i> (Mathenge)



Improving access to water, health & education

Water	Bahati A, Bahati B, Tawakal, Aftein, Kwa china, Bahati primary, Starehe primary school & Daresalam	Piping Water from Kibaoni borehole
	Baomo	Piping water from Maridadi borehole and have water Kiosks.
	Ghamakekwa, Nkambini, Maga, Gagani, Choa & Amani	Construct borehole(s)
	Mguvweni primary schools & Kiluluni	Renovate 2 existing boreholes
Education	Choa & Amani	Construct primary schools
	Baomo village	Construct 7 class rooms & admin block
	Kitere Primary School	Construct 2 additional classrooms and administration block
	Kitere Secondary School	Construct 4 class rooms and administration block
	Mnazini primary school	Construct ECD classes & renovate 2 classrooms
	Minhaj Secondary school	Construct admin block & equip laboratory
	Kinyadu	Renovate and equip the dispensary
Health	Kibaoni & Baomo	Construct and equip health Centre
	Mnazini	Upgrade dispensary to have maternity wing, laboratory, wards, enough medical staff & ambulance

Infrastructures Development

Conservancy Infrastructure	Conservancy HQ	Vehicle & boat to support ranger patrols & conservancy operations
	Salama	Airstrip
	Mnazini junction in Kibaoni, Lalafitu	Rangers outpost
Roads	Gamba Kitere Kibaoni-Forozani Kibaoni-Choa Kibaoni-Baomo Baomo-Choa	Improve the existing roads
	Madhila bridge	Rehabilitation

Growing Enterprises

Eco-Tourism	Lalatifu, Kimbu forest or Lake Lemu	Identify area for eco-lodge/camp
	Minjila, Makutano, Kibaoni & Balatiro	Conservancy signage
Farming	Mpangalani	Support to 125 Acres of Ndera Conservancy irrigation farm



ACKNOWLEDGEMENTS





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