

Summary of findings from the Conservation Action Planning Workshops with the Six NRT/NCC Conservancies

Introduction

Between August 25th and September 7th 2013, the six Coastal Conservancies under the umbrella of North Coast Conservation (NCC) (an affiliate of the Northern Rangelands Trust, NRT) completed 1 ½ day Conservation Action Plans (CAPs). Four of the Conservancies are in the Tana River Basin (Ndera, Ishaqbini, Hanshak-Nyongoro and Lower Tana Delta) and the other two are further north, one on Pate Island and the other, called Awer, near the Somali Border between the Boni and Dodori Forest Preserves (see Figure 1). Awer, Pate and Hanshak-Nyongoro are in Lamu County, Ishaqbini is in Garissa County and Ndera and Lower Tana Delta are in Tana River County.

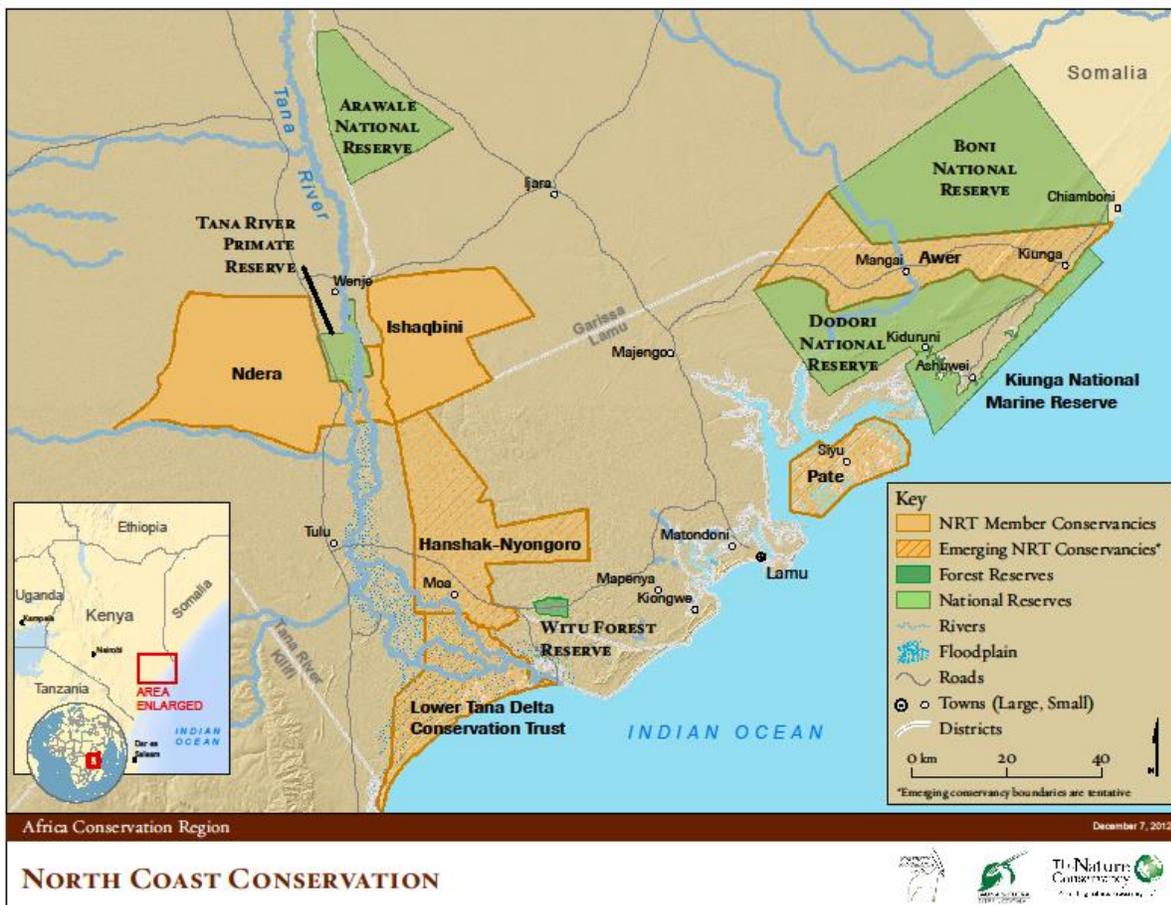


Figure 1: Locations of the Conservancies of North Coast Conservation

This document is designed to summarize the findings of the CAPs in order to prepare participants for the Strategic Planning Session, scheduled for Sept 27 and 28, of North Coast Conservation. The full document describing all the findings of the 6 conservancies is also available for review.

Conservation Action Planning Process

The agenda for each meeting was the same. It was planned in the weeks leading up to each meeting by the Facilitation Team with input from NCC and senior staff of The Nature Conservancy (TNC).

Each meeting accomplished the following outputs primarily through Breakout Groups with summary discussion from all present at the meeting.

- Targets for the Plan: Conservation, Social Development and Economic Development.
- Threats to the Targets with an Effort at Ranking the Severity of each Threat as follows: Very High (VH), High (H), Medium (M), Low (L)
- A Vision for the Conservancy for 2020 based on predictions of accomplishments over the next 7 years.
- Strategies and Actions to Achieve the Vision. During the meeting the participants determined strategies, actions and who should be responsible for the work. During the writing of the reports, the author added Objectives and Indicators for Monitoring Success.

The Facilitation Team Consisted of Peter Colverson, Titus Letaapo, Fred Obiya, and George Maina. Peter was contracted by TNC, Titus was resident with NCC, Fred was on loan from NRT and George is an employee of TNC. Each meeting lasted 1 ½ days.

The Tana River Basin Conservancies were visited first in this order; Hanshak-Nyongoro, Lower tana Delta, Ndera, and Ishaqbini. Following completion of the Tana River Delta Conservancies, the facilitation team moved on to the Awer Conservancy and then to Pate Island for the final planning session.

Findings

The first summary provides an overview of the common Targets, Threats and Strategies. The Strategies section is divided up into 3 sections; Conservation, Social Development and Economic Development. The second summary shows threats with threat rankings for each category of threats; Conservation, Social Development and Economic Development. The threats are shown based on which Conservancies identified them. Lastly, a ranking of Strategies is shown to provide a sense of which strategies carry the highest priority based on commonality of need. The Strategies are also divided up into the same 3 sections.

Common Targets, Threats and Strategies Identified by the NRT/NCC Coastal Conservancies

This document summarizes the Targets, Threats and Strategies that were identified during their recent Conservation Action Planning Sessions by the 6 Coastal Conservancies that form a part of the Northern Rangelands Trust and fall under the guidance of North Coast Conservation.

Common Targets Identified by Most if not All of the Conservancies:

- Many Rare Species, including Terrestrial, Aquatic and Marine
- Wildlife and Forest Conservation
- The Need to End Human/Wildlife Conflict
- Improvement of Education
- Improvement of Health Care
- Improvement of Infrastructure including Roads, Water Supplies and Sanitation.
- The Need for Improved Facilities and Security for Resident Safety and to Attract Eco-Tourists
- The Need for Improved Opportunities to Market Goods Produced within each Conservancy
- The Need to Improve the Ability of Residents to Farm and Fish More Effectively

Common Threats Identified by Most if not All the Conservancies as Serious

- The Need to End Poaching as a Threat to Wildlife (and Illegal and Damaging Forms of Fishing)
- Many Habitats Under Threat (Forests, Coral Reefs, Wetlands, Lakes and Important Breeding Areas)
- Poor Management of Livestock Causing Overgrazing and Other Habitat Damage
- Concern about Dams and Irrigation Schemes Upstream on the Tana Preventing Adequate Water Supplies from Reaching the Lower Tana River.
- Concern about Saline Water Infusing into Aquifers
- Lack of Awareness of Conservation and Sustainable Management of Natural Resources
- Severe Poverty leading to Illiteracy, Poor Access to Education and Poor Awareness of Health Care
- Land Grabbing by Investors Encouraged by Government Investment Schemes
- Lack of Power, Good School Facilities, Good Health Care Facilities and Adequate Supplies
- Corruption within Government Preventing Effective Development Strategies

Common Strategies to Counter Threats and Advance Targets

1. Conservation Strategies

- Develop Natural Resource Management Plans for each Conservancy that will guide priorities for the Manager and Board for Protection of important Natural Resources (note: this need is identified by the author, not the conservancies)
- Increased Security to Protect Rare and more common Species from the Threat of Poaching and other Human Wildlife Conflicts and to Protect Forested areas from Logging and Land Clearing (including mangrove forests)
- Modernize Fishing Methods to Prevent Primitive Fishing Methods from Decreasing Fish Stocks and Damaging Fish Habitat (both Marine and Aquatic)

- Establish Sanctuaries to Protect Wildlife from Poaching (Ishaqbini has 28 kms. of fencing around their Sanctuary) and to protect Marine Life from poor fishing methods
- Reforest areas that have been Cleared as well as an Effort to Increase Forest Cover by Planting
- Improve the Reliability of Water Supplies by Developing Water Catchment Dams and Rainwater Harvest Systems. This would benefit People, Livestock and Wildlife²
- Implement Planned Grazing Schemes to Eliminate Overgrazing and thereby Improve the Health of Livestock and Wildlife
- Acquire Secure Land Title to Conservancy Lands to Increase Security for Wildlife, People and Livestock

2. Social Development Strategies

- Build more Classrooms and Hire More Teachers to improve Access to Education
- Build more Clinics and Hospitals and Hire More Medical Staff to Improve Access to Health Care
- Ensure that Clinics and Hospitals are properly supplied with Medical Equipment and Medicines
- Improve the Infrastructure, in particular the Road Network, the Water Supply Network and Sanitation
- Improve Conservation Awareness and the Ability to Sustainably Manage Natural Resources
- Improve Cultural Awareness so that the Communities can retain their Culture against the perceived Threat of Westernization

3. Economic Development Strategies

- Engage with an Advisor to create Eco-Tourism Plans to Improve Facilities for developing Eco-Tourism including Camps, Lodges and Road Infrastructure. Plans should include a Fee Structure together with an Investment Plan for the Proceeds.
- Engage with an Advisor to assist the Conservancies to develop Livestock Markets and better access to Markets and ability to do marketing for all Products produced in the Conservancies (agricultural products, fish products, tourism opportunities, artisan products)
- Modernize Agricultural and Fishing Practices via the Provision of Training and Access to Modern Equipment as well as Improved Veterinary care
- Engage with the Carbon Market when doing Forest Restoration Work to earn Income for Carbon Credits together with an Investment Plan for the Proceeds.

Summary of Threats to Targets as Judged by the Conservancies

The figures that follow show the threats to the targets identified by the Conservancies. They are ranked as either Very High (red), High (yellow), Medium (light green) or Low (darker green). The figures show the threats as ranked by all the Conservancies with a Composite Threat Ranking in the right hand column. The threats are shown with Conservation first, Social Development second and Economic Development third.

Composite Threat Diagram: Threats to Conservation Targets

Threats	Hanshak-Nyongoro	Lower Tana Delta	Ndera	Ishaqini	Awer	Pate Island	Composite Threat Severity
Wetlands and lakes Under Threat due to Drought, Low Water Supply, Grazing and Sedimentation	VH	VH	VH sed'n)	H	VH		Very High
Deforestation	VH	VH	M	H	H	VH	High
Degraded Coral Reefs						VH	High
Poaching/Bad Fishing Techniques	H	VH/H	M/VH	L	V/H	VH	High
Land Grabbing/Lack of Land Ownership	M	VH	VH		VH	H	High
Habitat degradation (Terrestrial, Aquatic and Marine)			VH				Medium
Overgrazing/Encroachment of Livestock into Conservation Areas and/or Migration Corridors	VH			H			Medium
Agriculture/Settlement Encroaching onto Wildlife Areas		VH		H			Medium
Dams Upstream on the Tana	VH		VH				Medium
Lack of Conservation Awareness	VH	H					Medium
Corruption in Government	VH			H			Medium
Human Wildlife Conflict		H	VH	L			Low
Destruction of Important Breeding Areas	H (Crocodiles)						Low

	Hanshak-Nyongoro	Lower Tana Delta	Ndera	Ishaqibini	Awer	Pate Island	Composite Threat Severity
Threats							
Rough Roads	VH		VH	VH	VH	H	Very High
Poverty	VH	VH	VH		VH	M	High
Inadequate Health Care Facilities	VH	VH	H			M	High
Lack of Medical Staff	H	VH			VH	M	High
Insecurity	H	VH	VH	H	H		High
Corruption/Bad Governance	VH	VH			VH		Medium
Drug Abuse as a Threat to Education	VH		H			H	Medium
Illiteracy		H		VH	VH		Medium
Saline Water Infusing into Aquifers						H	Low
Inadequate School Facilities	VH	M				L	Low
Inadequate Number of Teachers				H		M	Low
Lack of Awareness of Conservation	VH	H					Low
Inadequate Hygiene and Sanitation		H		VH			Low
Food Insecurity			VH				Low

Composite Threat Diagram: Threats to Social Development Targets

	Hanshak-Nyongoro	Lower Tana Delta	Ndera	Ishaqbini	Awer	Pate Island	Composite Threat Severity
Threats							
Lack of Markets for Livestock and other Agricultural Products	VH	VH	VH	VH		H	Very High
Lack of Expertise among Local People on Agriculture and Business Development	VH	H	M	H	VH	H	High
Lack of Facilities for Tourism	VH	VH	H	H		M	High
Lack of Marketing of Tourism Opportunities		H	VH		H	H	High
Insecurity and/or Poaching (Threats to Tourism)		H	H	H		M	High
Poor Transportation Network		VH	VH		H		High
Crop Destruction by Wildlife			VH		VH	M	Medium
Inadequate Capital Investment		H		H		H	Medium
Natural Disasters (Floods and Droughts)	M	VH	H				Medium
Pests and Diseases affecting Livestock and Crops	H		VH				Medium
Lack of Government Support	VH			H			Medium
Lack of an Effective Communication Network		H	VH				Medium
Lack of Refrigeration for Storage of Fish		VH				M	Medium
Lack of Security Personnel	H						Low
Inadequate Security	H						Low

Facilities							
Cattle taking over Wildlife Lands (Threat to Tourism)	VH						Low
Poor Fishing Methods		VH					Low
Land Grabbing		VH					Low
Corruption				VH			Low

Composite Threat Diagram: Threats to Economic Development Targets

Strategies Ranked Across All Conservancies

Three figures are shown below to compare the importance of strategies as ranked by the 6 Conservancies. As before they are presented with Conservation Strategies first, then Social Development Strategies and then Economic Development Strategies. If a Conservancy had selected this strategy there is a number 1 in the column under the Conservancy and the right hand column shows the tally of the number of Conservancies that chose that strategy.

Conservation Strategies Ranked Across All Conservancies

Strategies	Hanshak-Nyongoro	Lower Tana Delta	Ndera	Ishaqini	Awer	Pate Island	Total Score
Conservation Strategies							
Plant Forests – both Reforestation and Aforestation - including Mangroves	1	1		1	1	1	5
Secure Land Ownership to the Lands of the Conservancies	1	1	1		1		4
Increase Security against Illegal Logging and Poaching by Adding More Security Scouts, Police and Rangers and making sure they are armed.	1	1	1		1		4
Regulate Water Use by Building Rainwater Catchment Dams and Systems within Villages			1	1	1	1	4
Community Awareness Program about Wildlife Conservation	1	1	1		1		4
Fence in Conservation Areas to Prevent Human Wildlife Conflict			1	1*			2
Enact Restrictions for Fishing Equipment that			1			1	2

damages fish Stocks and Fish Habitat							
Protect Rangelands used by Livestock and wildlife by Implementing Planned Grazing Systems				1			1
Community Awareness Program about Forest Protection					1		1
Initiate Focused Protection Actions to Protect Rare Species and Marine Areas that are Home to Important Coral Reefs						1	1
Establish BMUs for all Important Fish Breeding Areas		1					1

Social Development Strategies Ranked Across All Conservancies

Strategies	Hanshak-Nyongoro	Lower Tana Delta	Ndera	Ishaqbini	Awer	Pate Island	Total Score
Social Development Strategies							
Improve Road Network and other Infrastructure (2 Conservancies suggested using Local Labour)	1	1	1	1	1	1	6
Build more Classrooms and Hire More Teachers to Improve Educational Opportunities (some could be Mobile Classrooms)	1	1		1	1	1	5
Make sure that all Medical Facilities have enough Staff and Medications (Awer and Pate want Ambulances)	1	1			1	1	4
Improve Security Against Human to Human Conflict (hire more Guards and Coordinate with the Police and the Army)	1			1	1		3
Improve Cultural Awareness Through a Training Program and Cultural Centers	1	1		1			3
Improve Security by Holding Meetings for all Delta Communities on Land Planning and Management (could be labelled as a Peace Committee)			1	1			2
Improve Security by Initiating a "Surrender your Weapons" Program		1					1
Introduce a Family Planning Program which will make it easier for Families to Afford to Educate			1				1

their Children							
Build New Health Care Facilities and Get them Stocked and Staffed			1				1
Improve Sanitation by Building more Latrines and Installing Mobile Toilets				1			1
Initiate an Awareness Program about the Importance of Sanitation to Health				1			1
Improve Sporting Opportunities by Building More Facilities and Hiring Staff to Maintain them and be Coaches		1					1

Economic Development Strategies Ranked Across All Conservancies

Strategies	Hanshak-Nyongoro	Lower Tana Delta	Ndera	Ishaqbini	Awer	Pate Island	Total Score
Economic Development Strategies							
Generate Eco-Tourism by Planning and Building Improved Facilities	1	1	1	1		1	5
Improve Agriculture by Providing Modern Equipment and Training to Farmers in Modern Methods	1				1	1	3
Improve Agriculture by Preventing Crop and Livestock Pests and Diseases		1	1	1			3
Improve Abilities to Market Agricultural Goods (including Fish) with New Facilities and Training (Mango Processing for Ndera)	1		1			1	3
Create a Livestock Market	1	1					2
Improve Abilities to Market Opportunities for Eco-Tourism		1	1				2
Improve Bee Farming to Produce Honey via Recruitment and Training of Bee Keepers and Ensuring a Secure Water Supply				1	1		2
Create Jobs in the Community by Improving Capacity for Job Creation	1						1
Provide Reliable Water Supply for Agriculture with Boreholes, Catchment Dams and Drip Irrigation	1						1
Provide Micro-Finance Schemes to Allow Investment in new Businesses with				1			1

Government and NGO Support							
Improve Agricultural Production Through Fencing in a Farming Area to be Used by Whole Community					1		1
Destroy Safari Ant Colonies that Prey on Bee Hives					1		1
Protect Cultural Resources as a Tourist Attraction						1	1
Earn Payments for Ecosystem Services by Engaging with the Carbon Market when doing Reforestation						1	1

Pate Island

Pate Island Conservancy has a unique set of resources that they are concerned about compared to the other 5 Conservancies. Because Pate is an island, they are primarily concerned about marine resources (mangroves, fisheries, and coral reefs) whereas the other 5 Conservancies are more involved with terrestrial and other water resources including small lakes, dam and rivers.

For this reason it is important to consider the needs of Pate Island separately from the needs of the other 5 Conservancies. While fishing is important to some of the other conservancies, their resources are primarily freshwater fish, Pate is totally focused on marine fish and other marine organisms.

For these reasons, a separate table of strategies to protect marine resources is shown below for the Pate Island Conservancy.

Strategies to Protect Marine Resources off Pate Island
Initiate focused conservation actions to protect endangered and charismatic species such turtles, dugongs, dolphins and selected rare fish species. This strategy should include special protection zones in areas known to be important to each species. Additional research may be needed to determine exactly where these zones need to be.
Enforcing ban on illegal beach seine nets as it represents a threat to both near shore habitats and many juvenile fish.
Ensure that mangrove forests receive special protection and create a management and restoration plan for mangroves which should include plans for sustainable harvest.
Identify and protect important breeding grounds for key fish species as well as important invertebrates such as edible crab species and lobsters. Enact special fishing regulations for these areas during the breeding season to protect future stocks.
Support development of specific fisheries management plans (lobsters, key reef fishes).
Sensitization about the environmental impacts of different fishing gears in order to sustainably manage marine resources.
Identify and protect reef areas with high diversity of corals and regulate any form of exploitation in these areas.
Implement a pilot scheme to fatten mud crabs which will lead to increased fisher income and

less fishing pressure on wild stocks.
Empower Pate fishers to extend their fishing range beyond near-shore areas by providing engine propelled boats and fishing equipment which will allow them to increase their catch and decrease pressure on inshore areas where younger fish tend to concentrate.
Improve fish storage facilities, marketing and processing in Pate to reduce post-harvest losses and increase fishers' income.
Initiate research which will monitor fish stocks in order to maintain sustainable management.

Summary of Findings

Within the CAPs there was a clear emphasis on protecting wildlife, forests and rare species. There was also an emphasis on improving education, health care and infrastructure (roads, water supplies and sanitation) as well as improving infrastructure for eco-tourism and boosting each community's ability to process, store and market agricultural and fishery products. There was also a clear message that security for both people and wildlife needs to be improved.

In the threats category, deforestation as well as poaching (together with bad fishing methods), land grabbing by investors supported by government corruption and the degradation of wetland habitats and coral reefs were all considered serious threats. In the social section, important threats were inadequate health care and educational facilities together with a lack of staff for both health care and education, inadequate sanitation and communication systems, rough roads that prevent any effective transportation together with insecurity. Poverty was also considered an important threat. Economically, threats included the lack of effective markets for agricultural and fisheries products, the lack of expertise to engage in marketing and business development, the lack of tourism facilities, the poor transportation network and insecurity. Threats supported the selection of many of the targets and provide emphasis on what is needed.

Strategies to advance these targets and counter the threats also provide emphasis on similar needs. There was a common desire to plant more forests (including mangroves) and 2 of the conservancies discussed the possibility of generating income with this activity through carbon credits. Securing land ownership that would counter the threat of land grabbing was also considered a high priority together with increasing security against illegal or unsustainable logging, poaching, and fishing. Harvesting rainwater was also a high priority with catchment dams and rooftop harvesting systems together with increasing community awareness about conservation and sustainable management of natural resources. Improving the road networks was given a high priority and 2 conservancies suggested negotiating the use of local labour to assist with this task. To improve education and health care, there was a general agreement that more schools and more healthcare facilities are needed together with increased staff and better inventories of supplies and equipment. Several conservancies were interested in boosting awareness of local cultural traditions together through awareness programs and construction of cultural centers. It was recognized that insecurity needed to be dealt with too to improve economic opportunities. There was also general consensus that the need to provide better tourist facilities is

critical to the economic well-being of all the communities. Both agriculture and fishing methods need to be updated to more modern methods with modern equipment together with improved storage facilities and improved abilities to market produce. The Ndera Conservancy wants a mango processing factory and most conservancies need livestock markets. Pate Island needs improved fishing equipment and improved ability to store and market fish products.