MARINE TURTLES PROGRAMME
About WWF-Kenya

WWF-Kenya is an affiliate to World Wide Fund for Nature (WWF), the world’s largest and most experienced organisation dedicated to the conservation of the Earth’s natural environment. WWF has presence in more than 100 countries across the world to promote sustainable natural resource management.

WWF Kenya shares the spirit of the global WWF network’s mission, namely to stop the degradation of the natural environment and to build a future in which humans live in harmony with nature. In as such we aim to secure a healthy natural environment that also supports people and growth in Kenya. WWF therefore, recognizes the close links between people and nature, and have since developed social principles and policies to guide these initiatives.

The organisation began work in Kenya in 1962 with an initial focus on wildlife conservation. WWF-Kenya has since expanded its mandate to encompass management of scarce water resources, conservation of disappearing forests, climate and energy, marine resources under various programmes: Governance and Partnership, Species Conservation, Coastal Kenya and African Rift Lakes (ARL).
Lamu seascape is a WWF priority area aligned to the following WWF Practices: Oceans, Wildlife, Food, Markets and Governance. Lamu is an important feeding, breeding and nesting ground in Kenya. Five species forage and inhabit the rich and delicate marine ecosystem of Lamu seascape these are: Green (*Chelonia mydas*), The Olive Ridley (*Lepidochelys olivacea*), Hawksbill (*Eretmochelys imbricata*), Logger head (*Caretta caretta*) and the Leatherback (*Dermochelys coriacea*).

Collaborative conservation of sea turtle has been an integral approach for WWF work and interventions in Lamu. This has been achieved through implementation of the following key activities:

- Establishment of a functional turtle conservation group (TCG) network and capacity support, for example through the provision of field work equipment such as tag applicators, tag plates, GPS and radio handsets
- Harmonisation of sea turtle data collection tools across Lamu/Tana seascape
- Strengthened implementation of a turtle monitoring protocol for Lamu seascape
- Promotion of adoption of WWF turtle conservation best practices
- Sea turtle data collection and collation
- Collaborative analysis of sea turtle data (in partnership with research organisations) Review of baseline information and documentation of indigenous knowledge with regard to management of natural resources and turtles.
- Support for National sea turtle conservation strategy (to co-ordinate and report nationally on sea turtles)

This work contributes to objective 4 of the WWF Kenya strategic plan: By 2020, key freshwater, marine and terrestrial ecosystems are secured and populations of flagship and priority wildlife species in target places are stable and/or increasing.

In the Coastal Kenya Programme, sea turtle conservation is aligned to:

- Support action for reduced poaching of flagship species
- Promote community based natural resource management (CBNRM) to ensure ownership and participation in decision making, including benefit sharing and innovative funding mechanisms.
Sea turtles are iconic species. They are long lived and slow maturing, taking decades (between 20 and 30 years) to reach sexual maturity resulting in high vulnerability to predation and low recruitment rates from juvenile to adult life stage.

Five (5) species of the seven (7) species known worldwide are found in Kenyan waters. The sea turtle species are listed in the IUCN Red List as follows: Three of these are vulnerable (Logger head, Leatherback and Olive Ridley), one is endangered (Green) and the last critically endangered (Hawksbill).

Sea turtle populations are threatened throughout the world. World populations of sea turtles are estimated to have declined by 80%. The main challenges facing sea turtles include by-catch in fisheries, coastal development and pollution from deposition of sea debris by ocean currents, predation of sea turtles and their eggs by hyenas and porcupines, climate change and poaching. Lack of comprehensive data and information on their population size, nesting and foraging sites, migration and mortality pose as a challenge.

In Lamu seascape, turtling (harvesting of sea turtles for food, medicine and cultural practices) is a challenge despite the stiff penalties associated with harvesting of threatened species under the Fisheries Act 378 and Wildlife Conservation Management Act (WCMA), 2013.

The key strategy employed by WWF is collaborative conservation of sea turtles. This involves working in partnership with the community and relevant stakeholders. Approaches put in place for sea turtle conservation include:

- Incentivising sea turtle conservation. Nest reporters are paid for every nest reported and each successful hatchling. (we anticipate this cost to be gradually be covered by eco-tourism and other turtle linked income generation activities - before insecurity - each hotel guest was contributing 10 USD dollar day for turtles - used as incentives by local community and scholarship fund)

- Trainings on sea turtle conservation best practices. Turtle conservation groups (TCGs) Kenya Wildlife Service (KWS) rangers and Pate Marien Community Conservancy (PMCC) scouts have received training on carrying out beach patrols, nest verification and translocation, tagging and monitoring of sea turtles.

- Alternative livelihoods approach that involves the trash-to-cash programme. Women and youth collect flip flops and mould them into toys and other handicrafts, thus, cleaning up the beaches to ease sea turtle nesting. From their sales, they earn an income in a remote area where income generating opportunities are few.

- Sustainable fisheries: WWF has worked on reducing the use of unsustainable fishing gears in Lamu seascape and...
Creating awareness on sea turtles to deter targeted harvesting and reduce sea turtle by catch.

WWF believes that for sea turtle conservation initiatives to be successful, livelihoods must be considered. Alternative livelihoods approaches have therefore evolved to include Village Savings and Loans Associations (VSLAs). These are groups of 15-25 people who save together and take loans from those savings. The VSLAs enable members to start income generating activities. In addition to providing financial services, the VSLAs are a platform through which to engage the community in conservation issues.

As part of the livelihoods initiative, collaborative identification and setting up of ecotourism initiatives such as turtle-watch guided tours is planned. These initiatives will serve to deter poaching of sea turtles and their eggs.

Sea turtle monitoring efforts have been improved through the use of GPS (issued to TCGs) to enhance monitoring and surveillance of sea turtles and gauge effort.

Expected outcomes of sea turtle conservation

• Reduced mortality of sea turtles and other wildlife
• Enhanced and strong collaborative conservation of sea turtles in Lamu Seascape

Partners

We work with State Agencies such KWS, Kenya Forest Service (KFS), State Department of Fisheries (SDF), the Country Governments, Peer Organizations, Coastal Communities, Hotels and Tour Operators
Key achievements and successes

- Area under collaborative sea turtle conservation has increased from Kiunga Marine National Reserve (250 km²) to cover the entire Lamu seascape.
- Decreased poaching: WWF has created awareness on turtle conservation and provided alternative income generating activities to discourage sea turtle poaching.
- Awareness creation on sustainable fishing practices has seen a decrease in sea turtle bycatch.
- Intensive and extensive monitoring of nesting beaches has increased hatchling success rates to 81% (WWF database - Olendo et al. in press).

Current pressures

- Coastal development: increased commercial scale coastal and beach front developments, especially in the hotel and tourism industry, pose an eminent threat to turtle nesting beaches and foraging grounds for sea turtles.
- Infrastructure development: Lamu Port Southern Sudan-Ethiopia Transport (LAPSSET) Corridor will involve clearing of mangrove forests and dredging potentially destroying the coral reef ecosystems on which sea turtles utilise as refugia, spawning and foraging grounds.
- Offshore oil and gas exploration: this is a challenge especially when located in turtle migratory routes.

The sound and interference from the drilling results in disorientation of marine organisms - turtles, whales and dolphins.
- Marine debris interferes with both nesting female turtles and hatchlings.
- Diseases: Fibropapillomatosis, which causes tumors which often kill sea turtles, has been affecting large numbers turtles all over the world.

Emerging issues

- Variability in weather trends have led to changes in temperatures which lead to alteration in ratio of male to female turtle hatchlings as well as their gestation period, beach erosion and deposition which affects nesting patterns.
Assumptions and enabling factors

- Cooperation between community, government and non-governmental organizations to sustainable fisheries, reduce incidental catch, protect foraging grounds and sea turtles nesting beaches.
- There will be goodwill for the implementation of sea turtle conservation initiatives from relevant stakeholders.
- There will be political goodwill especially at the county level.

Call to action

WWF needs your support in ensuring healthy oceans supporting livelihoods and nature. We all have a part to play in ensuring the survival of sea turtles - they are the most robust indicators of the health of our oceans.

There are so many things you and I can do; volunteer at a turtle conservation programme, adopt a turtle, help to create awareness in your community about turtles or make a donation to ensure sea turtle protection initiatives are sustained.

A journey of a thousand miles begins with the first step. Support us today and go along with us on this incredible journey to work towards thriving populations of sea turtles in the world.
OUR VISION

A HEALTHY NATURAL ENVIRONMENT
SUPPORTING PEOPLE AND GROWTH IN KENYA

Why we are here.
To stop the degradation of the planet’s natural environment and to build a future in which humans live in harmony with nature.

www.wwfkenya.org