



Kenya Coastal Development Project



KCDP News Brief

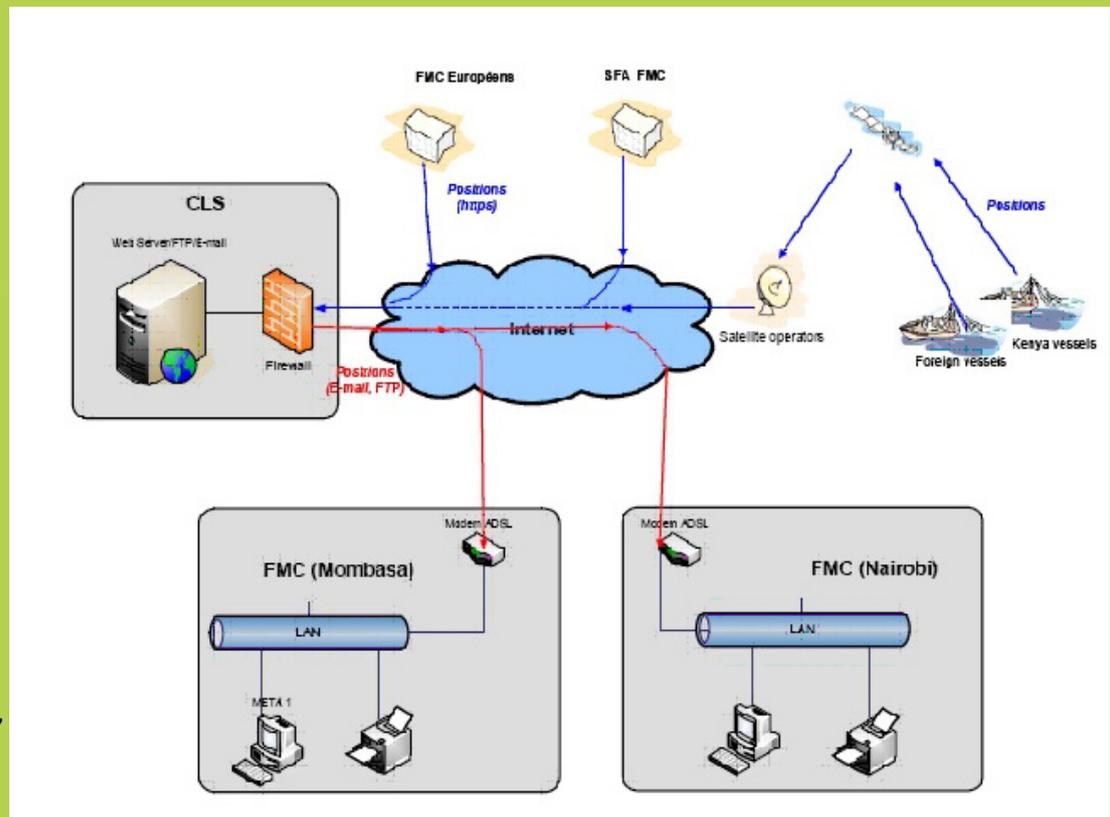
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New Frontier in Monitoring Marine Vessels in the Kenya Coast

The Kenya Coastal Development Project (KCDP) is embracing new technology to monitor vessels playing Kenya's coastal and marine environment. The use of Vessel Monitoring Systems (VMS) to plot positions of fishing vessels automatically is being adopted by countries globally. The on-board vessel equipment uses modern satellite communications systems that have an inbuilt Global Positioning System (GPS). VMS is among many modern tools that can be used in Monitoring, Control and Surveillance (MCS) of fishing vessels. VMS is capable of detecting vessels that are fishing legally and those fishing illegally and not fitted with VMS tracking equipment through elimination process. The system is also useful in detecting non-compliant vessels when used in conjunction with maritime patrols.

The Fisheries Department of Kenya, through the Fisheries Management Component under KCDP is in the processes of procuring the system. VMS is valuable for flag States to monitor the activities of their vessels when fishing in national zones and in the high seas beyond borders. It's usefulness is unmatched in the conservation and management of straddling fish stocks and those that are highly migratory because it monitors the activities of foreign-flagged vessels fishing in their EEZs ((Exclusive Economic Zones) under bilateral or multilateral agreements.



Schematic presentation of how a typical Vessel Monitoring System functions.

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Fleet of local fishing boats docked in the in the Port of Shimoni, south coast.

The system can also enhance the safety of the vessel and crew by programming it to transmit distress messages. Although the VMS was initially only programmed to automatically report position, some types are used to report catch and effort data as well as ancillary data essential for fisheries management. The introduction of electronic fishing logbooks can simplify the collection of catch statistics by providing a user-friendly interface, which the vessel crew can record in real time.

Within the coastal and marine environment of Kenya as part of the western Indian Ocean (WIO) region, it is now compulsory to fit VMS in all marine vessels primarily to deter illegal unregulated and unreported (IUU) fishing. Through support from KCDP, the Fisheries Department will upgrade and install computer software that is compatible with the rest of WIO region.

The VMS Infrastructure

Key Functions of the VMS comprises the following attributes:

- Tracking all the Kenya fishing vessels equipped with Inmarsat transmitters;
- Tracking all the foreign vessels licensed to fish in Kenyan waters;
- Monitoring legally registered fishing vessels and eventually deterring piracy activities;
- Monitoring and tracking Kenyan flag vessels fishing anywhere around the world;
- Detecting vessels fishing in inshore and territorial waters 15 meters and beyond.

This type of VMS is unique and routinely used in enforcing fisheries regulation in France, Korea, Central America, Norway, Russia, China, United States, Peru, Chile, South Africa, French Guyana, Oman, Senegal, Madagascar, Norway, Taiwan and Japan. Other coastal counties in WIO that utilize a similar system include Tanzania, Mozambique and Seychelles.

By Mr. Kennedy Shikami

Manager, Component on Sustainable Fisheries Management

KFS and KCDP Partners Focus on Developing Mangrove Management Plan



Coastal communities are the key custodians of indigenous knowledge on mangrove forests.

The development of a national mangrove management plan is among the key activities undertaken by KCDP Component 2, which is responsible for improving the management and regeneration of natural resources and biodiversity in the Kenya coast. The Component has set out to develop a national mangrove management plan for the conservation and expansion of the mangrove forests in the coast region. Mangroves are very efficient carbon sinks and play a key role in mitigating climate change. They are also important breeding areas for fish and other marine life.

A Workshop bringing together key partners in Component 2 was held on 16th May, 2012 to discuss the development of a mangrove management plan for the Kenya coast, among other activities of the Component.

During their deliberations, workshop participants expressed their concern that the degradation of Kenya's mangrove forests was increasing at alarming rates. They stated that immediate attention was required and they resolved to introduce measures to urgently address the situation in order to reverse the trend.

Other issues that were addressed focusing on mangroves and related coastal and marine natural resources included:

- Natural resource inventories
- Environmental and ecological research
- Research and extension
- Enhancement of tourism by identifying biodiversity products and markets that promote eco-tourism and associated spin-off industries.

The workshop was attended by 32 representatives from KCDP partner agencies - Kenya Forest Service (KFS), Kenya Marine and Fisheries Research Institute (KMFRI), Kenya Wildlife Service (KWS), Kenya Forestry Research Institute (KEFRI) and Coastal Development Authority (CDA) as well as collaborative partners from the Ministry of Tourism and National Museums of Kenya.



Mr. Emilio Mugo (R) Senior Deputy Director, KFS address Workshop participants.

NEMA initiates plans to promote sustainable development in Sabaki Estuary & Malindi accreted land with support from KCDP



Seawall constructed to save a coastal village in north coast of Kenya.

The recently launched ICZM Action Plan and Shoreline Management Strategy have identified the need to address the environmental issues facing Sabaki estuary and the adjoining Malindi accreted land as a priority in order to reverse environmental degradation and deterioration of the tourism industry in Malindi. The Sabaki Estuary is the discharge point for Sabaki River to the ocean and is an Important Bird Area (IBA). Silt discharged to the ocean through the river has over many decades been washed ashore through wave and wind action resulting in formation of the Malindi accreted land. Today the land is characterised by sand dunes and unique floral community.

Despite the ecological and socio-economic importance of the Sabaki Estuary and the accreted land, the area is experiencing serious environmental degradation as a result of various human activities. The key issues include: emerging uncontrolled and unplanned development in the accreted land; siltation and overexploitation of natural resources in the estuary; illegal tourism activities in the beach; and pollution from Malindi town among others.

To address the issues, NEMA has received support from the World Bank through the Kenya Coastal Development project (KCDP) to identify and implement measures that promote conservation and sustainable development in the area. The process to seek sustainable solutions to the area was initiated during a stakeholders workshop held on 17th -18th July 2012 in Malindi. The aim of

the workshop, organized by NEMA, was to discuss and provide initial inputs in a process aimed at developing an Integrated Action Plan to promote sustainable development in the area. While opening the workshop, the Deputy Director Coastal Marine and Freshwater Sub-Department of NEMA, Mr. Stephen Katua, urged stakeholders to actively participate in identification and implementation of activities that promote sustainable development in the area.

Key outputs from the workshop include identification of key issues facing the estuary and the accreted land and recommendations on key interventions needed. The outputs from the workshop will be forwarded to a consultant to be mobilized in due course by NEMA to assist in development of the proposed action plan. In order to ensure buy-in and stakeholder commitment in the implementation of the proposed action plan, NEMA will embrace a participatory and consultative process involving all the relevant stakeholders.

The efforts to promote sustainable development in Sabaki Estuary and Malindi accreted land are part of a wider programme conceived under the environmental governance sub-component of KCDP which is spearheaded by NEMA. The aim of the sub-component is to improve coastal and marine environmental governance through promotion of integration and coordination in natural resources management and compliance with environmental standards.

***By Mr. James Kamula,
KCDP Technical Coordinator. NEMA***

Summary of Activities Undertaken Recently by KCDP partners

COMPONENT 2: Kenya Wildlife Service (KWS) in collaboration with the **National Museums of Kenya (NMK)** and other stakeholders conducted a biodiversity survey of Shimba Hills from 30th March to 11th April. The objective of the survey was to assess, identify and quantify the biodiversity of Shimba Hills National Reserve and the adjacent areas. The survey focused on large and small mammals, birds, insects, reptiles, amphibians and plants. The survey quantified plant and animal that reside in the reserve, as well as migratory birds that transit in the reserve, presumably en-route to and from Africa, Europe and Asia. Results of the survey are being compiled by experts from KWS and NMK.

In another activity, KWS in collaboration with stakeholders such as **Kenya Forestry Service (KFS)**, **World Wide Fund for Nature (WWF)** and Mwaluganje Elephant Sanctuary of Shimba Hills conducted a workshop to design a strategy for the conservation and management of the Sable Antelope - a species endemic to Shimba Hills. The Sable Antelope population has been declining rapidly and the current population is estimated at only 60 individuals; hence the need for a conservation strategy to protect them. A draft conservation plan for the Antelope is in preparation and will soon be ready for finalization and implementation.

Establishment of woodlots by the **Kenya Forestry Research Institute (KEFRI)** has been on-going successfully. A total of 55 woodlots each with about 860 seedlings have now been established. These comprise 3 seed stands established at Gede in an area measuring 1.5ha, Witu (2ha) and Tewe school (1 ha). All these will yield up to about 3000 seedlings.

COMPONENT 3: The Department of Physical Planning (DPP) under the **Ministry of Lands (MoL)** undertook various activities that will ultimately contribute towards



The Sable Antelope is endemic to Shimba Hills area.

two main objectives of KCDP: i) preparation of land capability and spatial development plans and ii) establishment of an Information System in the entire coast region for the management of natural resources. The key activities undertaken comprised the digitization and updating of the base map of the coast region of Kenya at the scale of 1:100,000.

COMPONENT 4: In early May, Kenya Marine and Fisheries Research Institute (KMFRI) and Coast Development Authority (CDA) hosted several coastal Kenya based financial institutions and non-governmental organizations involved in the management of natural resources. The meeting was held at the Project Coordination Unit (PCU) and the aim was to explore avenues of collaboration in preparation for the implementation of projects under



Cross section of mangrove forests of Mida.



Environmental friendly toilet constructed by the community at Mida Creek near Malindi.

the Community Village Fund - **Hazina ya Maendeleo ya Pwani**. The discussions were convened by Managers of Component 3 and 4 and attended by the Technical Coordinators of the respective Components as well as other team members from KMFRI and CDA. Financial institutions that were represented included the First Community Bank (FCB), Kenya Commercial Bank (KCB), Equity Bank, KMFRI Saving and Credit Cooperative Society (SACCOS), Small and Medium Enterprise Programme (SMEP) Deposit Taking Microfinance Ltd. All these institutions support small and medium enterprises that engage the coastal community through micro-financing, and are well known for providing products that target women and the youth.

NGOs that sent representatives to this meeting included Wildlife Conservation Society (WCS), East African Wildlife Services (EAWS), World Wildlife Fund (WWF), Eco-ethics of Kenya, Mida Creek Conservation Area Group (MCCAG) and the Programme for the implementation of a regional fisheries Strategy for East

and Southern Africa –Indian Ocean region (SMARTFISH). Most of these NGOs are well known in mobilizing the coastal communities to access donor funds, they also have a good track record of supporting projects initiated by Community Based Organizations (CBOs) and encouraging them to embrace co-funding by providing matching contributions as a means of ensuring sustainability of various initiatives.

On conclusion of the workshop, which was in form of round-table discussions, the financial institutions expressed their willingness to collaborate with KCDP by supporting the Project to implement CVF once the related activities commence.

NGOs recommended that KCDP should consider establishing task teams to urgently review results and recommendations of concluded projects; and status of on-going projects and document existing gaps that require intervention. This would lay a useful platform on which to start collaborative work.



Sunset in the north coast.

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