Recommendations

- We recommend that Kenya look at the Tanzania national mangrove management plan as an option for managing its mangroves.
- We would like to see harmonisation between the Forest and
 Fisheries Act and the management of these resources between
 the two Ministries. The Kenya Wildlife Service is also mandated
 to protect mangroves and its regulations should also be
 harmonised with the Forest and Fisheries Acts.
- There is need for a policy that reconciles all the marine policies.
 The Integrated Coastal Zone Management (ICZM) Policy that has been under development for many years is an option and should be given priority for finalisation so that it is taken to Parliament for endorsement.
- We would like Kenya to invest in mariculture trials as an alternative livelihood for coastal people.



The Eastern and Southern Africa Regional Office of International Union for Conservation of Nature (IUCN) together with Coastal Oceans Research and Development-Indian Ocean (CORDIO) and the East African Wild Life Society (EAWLS) convened two coastal community workshops in Kenya and Tanzania in 2007/2008. Community representatives reflected on the status of the marine environment and put forward concrete recommendations on improving marine resources and livelihood sustainability and enhancement. This series of one page publications are a product of this work.

The community workshops are part of a bigger project 'Conservation as Core Assets for Livelihoods in Eastern Africa' funded by the International Development Research Centre (IDRC), The Ford Foundation and also 'Building capacity and strengthening policies for coastal communities to manage their marine resources in East Africa' funded by the Kiedanren Nature Conservation Fund (KNCF). The objective of these projects is to enhance knowledge on the contribution of biodiversity conservation to livelihoods and to assist communities to demonstrate to politicians and senior policy makers on this importance.

Opinions expressed in this publication do not necessarily reflect the views of IUCN, IDRC, The Ford Foundation, KNCF, CORDIO or EAWLS.

Photo credits: Nyaga Kanyange/CORDIO H. Becha/EAWLS

Building Capacity for Coastal Communities to Manage Marine Resources in Kenya



Mangroves & Mariculture



Lucas Fondo Mwichambi K. Mtoro Grace Luvuno Tima Matano

Introduction

Mangroves

Mangroves are salt tolerant evergreen forests found in the area between dry land and the sea in relatively sheltered areas along estuaries and lagoons with low energy waves. Along Kenya's coastline mangroves are found in Kiunga, Lamu, Tana Delta – Kipini, Ngomeni – Mida creeks, Kilifi – Takaungu, Mtwapa -Tudor - Portreitz creeks, and Funzi – Mwachema – Vanga. The largest mangrove stands in Kenya occur in Lamu – Kiunga followed by Vanga – Funzi.

Mangroves are vital to the lives of many coastal villages. Mangroves serve as nurseries and hatcheries for fish and prawns. Their well —being is important for the continuation of artisanal and subsistence fishing and the commercial fishing industry. Mangroves provide building material for houses, furniture, and timber for boat making, fuel wood and charcoal. They also support bee-keeping and honey production and are used as medicinal plants. Mangroves support bird life and other animals important for tourism.

Mariculture

Mariculture in Kenya is still at its infancy, but has considerable potential as a source of livelihood, alternatively and as additional income.

However, this subsector has been constrained by low technology and capital investment, and inadequate availability of quality extension services. Prawn culture has been tried at Ngomeni in Malindi. There is a fish and prawn pond in Ngomeni managed by a local women's group. The mangrove areas of Mtwapa, Mombasa, Kwale and Lamu have potential for mariculture. A number of community projects have been started, including mangrove mud crab farming at Mtwapa, Tsunza and Vanga, and oyster farming at Gazi.



A national coastal community workshop was held in Kilifi from 17th to 19th December 2007. The aim of the workshop was to give coastal communities an opportunity to interact and share practical experiences in marine resource use and management and to articulate their needs. As representatives of mangrove rehabilitation and mariculture groups we gave our views, aims, activities and issues of concern at this meeting. These are presented below. We also came up with recommendations which appear at the end.

Summary of community aims, activities and issues of concern

ORGANIZATION	AIMS AND ACTIVITIES	ISSUES OF CONCERN
Majaoni Youth Development Group Mombasa	Rehabilitation of mangrove forest Crab farming	 Poverty and lack of alternative income generation Pollution of the mangroves
Moyo wosi group Tisunza-Kwale	Mangrove plantingCrab farmingBee keeping	Lack of market to sell crabs
Gazi women mangrove boardwalk Gazi-Kwale	Mangrove boardwalkOyster farmingMangrove plantingHandicraft	 Lack of tourists visiting the boardwalk Lack of ready market to sell our products
Jimbo Conservation Group Kwale	 Mangrove planting Sanitation and health Beach clean up Turtle conservation Crab farming 	 Dynamite fishing Marine pollution by sediment loads Lack of sea wall Poor sanitation facilities Lack of funds

Issues of concern

- Unregulated and uncontrolled mangrove harvesting occurs in Kenya. Areas such as Funzi Bay in Msambweni and Kipini are examples. We do not know whether or not the ban on mangrove cutting had been lifted. Mangrove cutters claim they have licences. Our concern is that the Kenya Forest Service is issuing licences to people who do not understand the mangrove ecosystem. The result is indiscriminate and non-selective felling of mangrove trees.
- The consequences of mangrove degradation is the destruction and loss of fish nursery areas and breeding sites, increased beach and coastal erosion, increased scarcity of certain mangrove species, as well as conflicts between mangrove cutters and other resource users particularly those involved in mariculture (e.g. mudcrabs) and mangrove rehabilitation activities.
- Mangrove restoration initiatives fall under the Forest Act 2005.
 Mariculture initiatives such as crab and oyster farming fall under the Fisheries Act yet the ecosystem in which these are done is within the mangroves. This creates tenure insecurity on the part of those undertaking mariculture. Similarly, mangrove and mariculture activities are often incompatible.
- The current management of mangrove forests is lumped together with terrestrial forests yet they have very different ecosystem needs and challenges.
- Many marine policies and legislation give different provisions for resource use and management. We feel that more often than not it creates resource use conflict amongst the users.

