

A Brief Note of COMMUNITY-CONSERVED AREAS Along Kenyan Coast for Coral Reefs Protection and Enhancement of Reef Fisheries

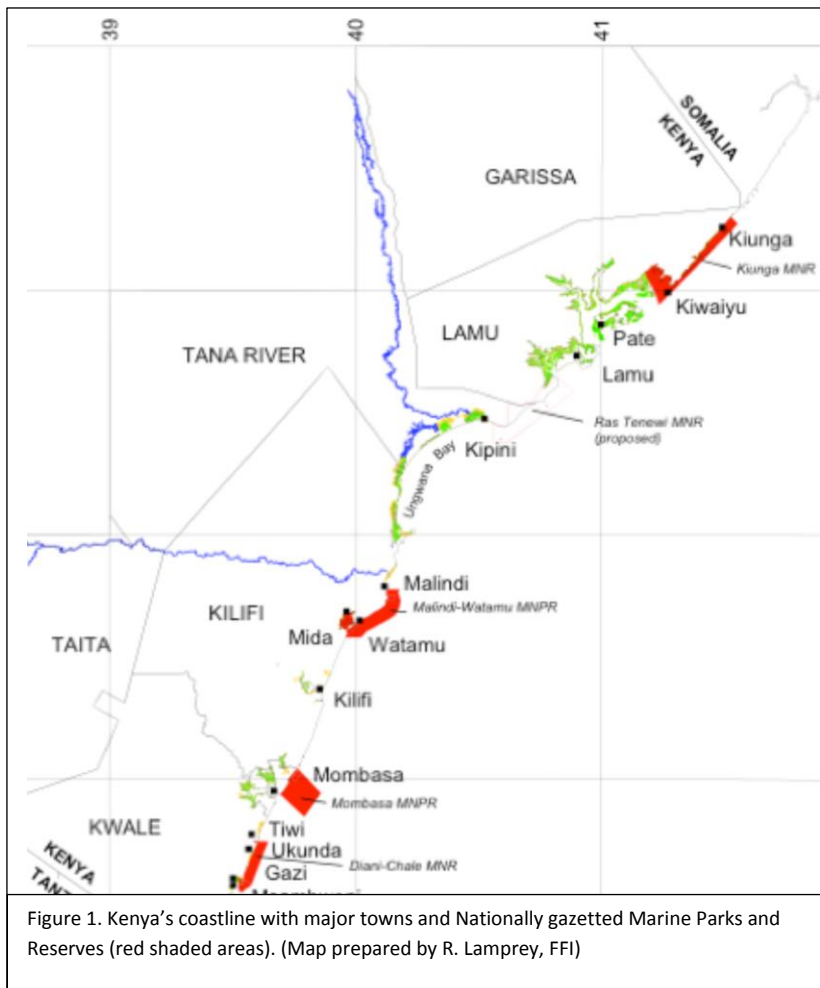
Background

Kenya's coastline extends about 600 km from Somalia's border at Ishakani in the north to Tanzania border at Vanga. It is richly endowed with natural resources including fisheries and coastal forests, but dominated by fringing coral reefs, seagrass beds, with broad stretches of beaches, rocky shores and sheltered bays. These resources host significant marine biodiversity, including > 250 species of fish, 200 species of coral, 10 species of mangroves and 12 species of seagrass (Government of Kenya 2009).

The coastal population, at 3.3 million people, represent 8.6% of the Kenya's population (GOK, 2009). Of these, 60% live in rural area and are largely dependent on natural resources for their livelihoods. Studies undertaken on the Kenyan coast have documented and highlighted the important roles played by these resources in sustaining coastal livelihoods, including food provision, building materials, recreation and employment. Overall, the resources contribute to the coastal and national economy through tourism, shipping and fisheries. However, coastal resources are threatened by many factors including conversion, overexploitation, pollution and, more recently, climate change. Fish stocks are being drastically depleted and critical habitats destroyed.

The government has enacted several measures to conserve and rehabilitate these resources, including establishment of marine protected areas. A total of 6 MPAs covering <7% of the coastal ecosystems are found along the coast, managed by the central government through the Kenya Wildlife Service (Government of Kenya 2009).

Unfortunately, the current MPAs have been established largely following a top-down approach or with minimal community involvement leading to some conflicts on resource use and opposition from adjacent communities dependent on resources contained within them.



Threats to coral reefs outside government-controlled MPAs in Kenya

The coral reefs and its associated biodiversity are increasingly under threat from over fishing and use of destructive and unsustainable methods such as purse seine and monofilament netting. With increased coastal human population and limited economic opportunities, numbers of fishers has over the last decades increased causing a serious threat to reef biodiversity as well as human livelihoods of coastal people.



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Community Conserved Areas (CCAs)?

CCAs are set aside areas previously used for fishing grounds for protection by local communities through consultations with fisheries department and donors and research organizations.

The establishment of community MPAs in form of CCAs along Kenyan coast has been motivated by the need to improve the health of reef ecosystem, reduce over exploitation and improve livelihoods.

There are several CCAs already established but vary in their stages of implementation. The main ones include: can include

1. Kuruwitu Community Managed Conservation Area (KCMA)
2. Iweni Community Managed marine Conservation area
3. Kibuyuni
4. Mradi
5. Bureni
6. Mwarembo

7. Wasini

The objectives of CCAs

CCAs have been established with a number of objectives.

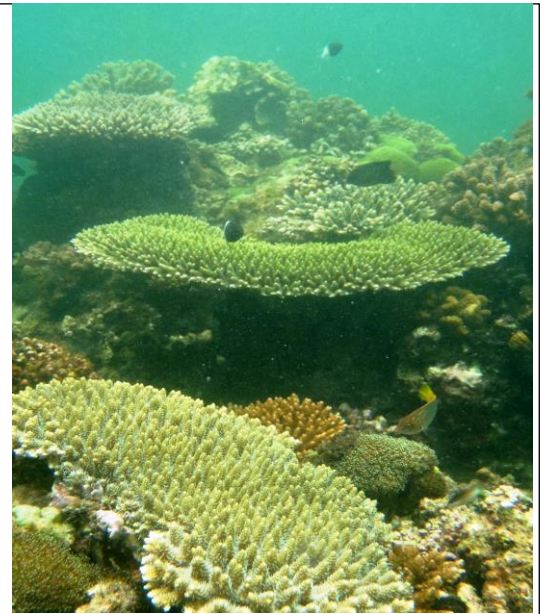
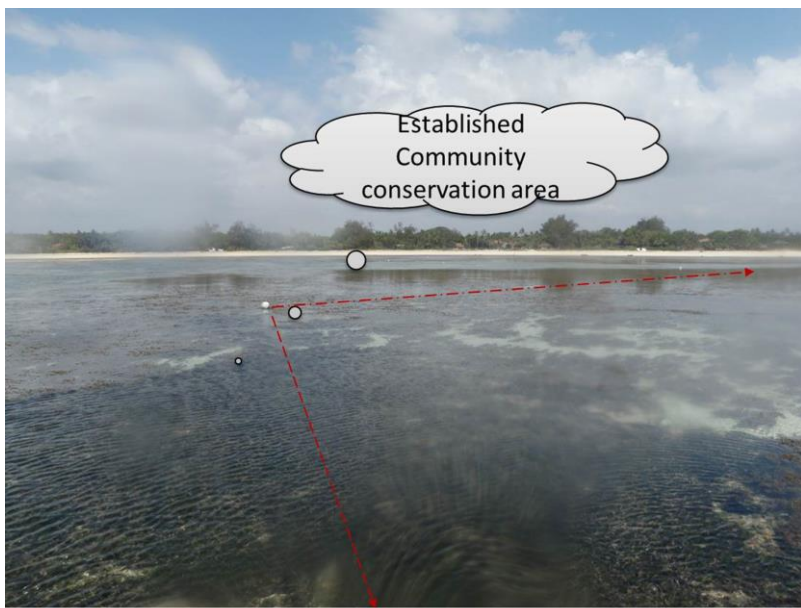
- 1) to protect critical habitats and threatened species
- 2) to eliminate destructive fishing techniques
- 3) to ensure maintenance of indigenous knowledge and practices capable of conserving nature in specific local context
- 4) to prevent overexploitation by providing refuge areas for exploited species
- 5) to secure sustainable access to livelihood resources
- 6) to secure collective marine tenure for the communities
- 7) to provide undisturbed localities, populations and communities for research and education
- 8) to obtain financial benefits to BMUs to be done through alternative livelihood practices such as ecotourism and creating access to new markets, and
- 9) to improve the extractive exploitation of certain species.

Important steps in CCA establishment

- 1) Consultative meetings between fishing communities, Conservation NGOs and Fisheries department.
- 2) Feedback to the larger stakeholder groups (i.e fishers, boat operators, fish traders, Residential hotels).
- 3) Development of management plan.



Map of Several CCAs locally known as "Tengefu" established along the Kenya coast. Different colours indicate the level stage level of development: Green (fully established and operational); Yellow (established but not yet operational); Red (either established and later collapsed or not yet established).



Community conserved Area	Kibuyuni	Wasini	Mwarembo	Bureini	Mradi	Kuruwitu	Iweni
County	Kwale	Kwale	Kwale	Kwale	Kilifi	Kilifi	Lamu
Total area (ha.)	27.5	31	0.22	5.2	12.5	29	300
Year established	2010	2008	2011	2010	2009	2006	2010
Management level	medium	high	low	low	low	High	high



Kenya's coastal fishing communities are embracing community managed areas as a promising tool for protecting coral reefs and thereby securing improved livelihoods. Led by Mr. Jelvas Mwaura, (KMFRI reef scientist), The Lamu marine conservation Trust, located in northern Kenya, trained community members undertook an underwater reef biodiversity assessment at their CCA in order to gain a better understanding of their economic potential for fisheries and eco-tourism

Community members involvement in the research project has improved local understanding of the function of marine protected areas and its importance to protecting biodiversity including target fisheries they depend on for their livelihoods.

Recognition and support of community conserved areas (CCAs) in Kenya

Both the concept and application of CCAs are emerging as a central strategy to improve local management of coral reef ecosystems and its associated reef fisheries in coastal Kenya. The first CCA in Kenya was established in 2005 by the Kuruwitu community members (i.e. fishers and fish traders) and has been successful in protecting coral reef, resulting in a reported 30% increase in live hard coral and 200% increase in fish abundance since 2011 (Lee 2011). This has led it to being a coastal model of community-marine protected area and has been replicated by several coastal communities stretching from Vanga to Lamu.



The INCRI Funded project supported the biodiversity and resource assessment inside and outside community conserved areas with a view of demonstrating their impacts to stakeholders, particularly the affected fishermen.

Mr. Jelvas M. Mwaura (KMFRI reef Scientist) and Mr. Katana Ngala Hinzano (Trained community member on reef underwater visual assessment).



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Way forward : Community conserved areas (CCAs) be recognised by the government fishery policy 2008 as ideal community-based approach to management marine resource management as evidenced from Kuruwitu community marine conservation area and raise awareness on the same.

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