



**The Global Conservation Program
Achievements and lessons learned from 10 years of support for threats-based
conservation at a landscape and seascape scale**

Leader with Associates Cooperative Agreement

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EASTERN AFRICAN MARINE ECOREGION

Final Closeout Report

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Submitted by:
Judy Oglethorpe

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Acronyms and abbreviations

AfD	French Development Agency
AMREF	African Medical Research Foundation
ASCLME	Agulhas and Somali Current Large Marine Ecosystems Project
AU	African Union
BMU	Beach Management Unit
CBC	Canadian Broadcasting Corporation
CCP	Co-Management Structure
CDS-CZ-MICOA	Centre of Development and Sustainable Coastal Zone
CEA-NI	(WWF) Coastal East Africa Network Initiative
CHOGM	Commonwealth Heads of Government Meeting
CI	Conservation International
CMS COP-8	Conference of the Parties to the Convention on Migratory Species
COMESA	The Common Market for Eastern and Southern Africa
COP-5	Fifth Ordinary Meeting of the Conference of the Parties to the Convention on Biological Diversity
CORDIO	Coral Reef Degradation in the Indian Ocean
CSO	Civil Society Organization
CSPs	Coastal Strategy Plans
DANIDA	Danish Ministry of Foreign Affairs
DfID	Department for International Development (UK)
DNAC	National Directorate for Conservation Areas (Mozambique)
EAC	East African Community
EAME	The Eastern African Marine Ecoregion
EARPO	East Africa Regional Program Office (WWF)
EESP	EAME Enabling Support Program
EEZ	Exclusive Economic Zone
EWT	Endangered Wildlife Trust (Mozambique)
FAA	Fisheries Access Agreement
FAO	Food and Agriculture Organization
FiD	The Fisheries Department
FoD	Forest Department
FPAs	Fisheries Partnership Agreements
GAA	Government Aid Agency
GCLME	Guinea Current Large Marine Ecosystem
GIS	Geographic Information System
GoM	Government of Mozambique
GTZ	German Technical Cooperation
ICM	Integrated Coastal Management
ICSF	International Collective in Support of Fish workers
IMS	Institute of Marine Sciences
IOC-UNESCO	Intergovernmental Oceanographic Commission, United Nations Educational, Scientific and Cultural Organization
IOSEA	Indian Ocean and South-East Asian Marine Turtle MoU
IOTC	Indian Ocean Tuna Commission
IUCN	The World Conservation Union

IUU	Illegal, Unregulated and Unreported Fishing
JMT	Joint Management Team
KESCOM	Kenya Sea Turtle Conservation Committee
KEMFRI	Kenya Marine and Fisheries Research Institute
KFS	Kenya Forest Service
KMNR	Kiunga Marine National Reserve
KWS	Kenya Wildlife Service
LCC	The Lamu County Council
MACEMP	Marine and Coastal Environment Management Project
M&E	Monitoring and Evaluation
MBREMP	The Mnazi Bay Ruvuma Estuary Marine Park
MCO	Mozambique Country Office (WWF)
MICOA	Ministry for the Coordination of Environmental Action (Mozambique)
MPA	Marine Protected Area
MSC	Marine Stewardship Council
NEMC	National Environment Management Council (Tanzania)
NEMA	National Environment Management Authority (Kenya)
NEPAD-COSMAR	New Partnership for Africa's Development, Coastal and Marine sub-theme
NI	(WWF) Network Initiative
NOAA	National Oceanographic & Atmospheric Administration (U.S.)
NORAD	Norwegian Agency for Development Co-operation
NP	National Park
PADI	Professional Association of Diving Instructors
QNP	Quirimbas National Park
RAC	Regional Advisory Committee
RFMOs	Regional Fisheries Management Organizations
RUMAKI	Rufiji-Mafia-Kilwa Seascape (Tanzania)
SADC	Southern African Development Community
SCCaFCOM	Strengthening Community Capacity in Fisheries Co-management
Sea Sense	Formally known as Tanzania Turtle and Dugong Conservation program
SFF	Sustainable Fisheries Fund
SIDA	Swedish International Development Cooperation Agency
SocMon	Socioeconomic Monitoring for Coastal Management
SSA	Sub-Saharan African
SWIOFC	The Southwest Indian Ocean Fisheries Commission
TCMP	Tanzania Coastal Management Partnership
TED	Turtle Excluder Devices
TNC	The Nature Conservancy
TPO	Tanzania Program Office (WWF)
UNEP	United Nations Environmental Program
UNIDO	United Nations Industrial Development Organization
VOA	Voice of America
WB	World Bank
WCK	Wildlife Clubs of Kenya
WCS	Wildlife Conservation Society
WIO	Western Indian Ocean

WIO-C	A consortium for conservation and management of coastal and marine ecosystems in the western Indian Ocean region
WIOMSA	Western Indian Ocean Marine Science Association
WWF EARPO	WWF Eastern Africa Regional Program Office
WWF MCO	WWF Mozambique Coordination Office
WWF-SA	WWF South Africa
YoT	Year of the Turtle Events (Kenya)

Key achievements, impacts and lessons learned attained with GCP funding

The WWF Eastern African Marine Ecoregion received GCP2 funding during FY04– FY09. A review of the Program’s key achievements, impacts, and lessons learned demonstrates how long-term GCP funding enabled the Program to integrate achievements at both community and landscape scales, adapting strategies and refining objectives according to the changing context and to increased knowledge and experience, thus advancing toward significant and sustainable impacts for conservation of the biodiversity of the landscape.

FY05 Outputs and Outcomes

EAME Program:

- Declaration of the Zambezi Delta, the Tana River Delta and the Rufiji Delta as Ramsar sites
- National Action Plans developed and amalgamated into an EAME Conservation Plan (2005–2009)
- Governance structures for implementation of the EAME conservation plan established and operationalized including National Multi-stakeholder Committees, National Focal-point Institutions elected for Kenya, Tanzania and Mozambique
- WWF EAME Action Plan (2005–2009) developed and an EAME Regional Committee elected
- Exchange program for marine and coastal practitioners in EAME initiated as an integral step towards rapid adoption of good practices and support needed for implementation of the EAME strategy

Kiunga:

- Institutional and regulatory framework for effective management of Kiunga Marine National Reserve established by setting up a Joint Management Team with community participation. WWF, the Fisheries Department, KWS, and representatives from the fishing communities agreed on a joint work plan and 10 village-based fishing groups established
- Ecological information collected, analyzed and shared for management and with communities; socioeconomic survey conducted and stakeholders workshop endorsed the findings
- Improved livelihoods of communities living in the reserve through successful multifaceted integration of the community health program, alternative income generation activities such as eco friendly handicrafts, and the sustainable fishing gear exchange program

Quirimbas:

- Three new community-managed fishing sanctuaries created
- A monitoring system for fish capture and diversity around the sanctuaries developed and implemented by local fishermen and supported by rangers
- 40 Community Rangers trained and in operation

FY06 Outputs and Outcomes

EAME program:

- The World Bank approved a US\$60 million sustainable fisheries investment fund: the Strategic Partnership Fund for Sustainable Fisheries Management in Sub-Saharan African Countries. The countries endorsed the Regional Advisory Committee (RAC) as an advisory body to oversee the fund with the African Union as chair, and with WWF and the regional fisheries organizations in sub-Saharan Africa as permanent members.
- The governments in WIO region launched a forum to discuss fair and sustainable access to fisheries resources in the region that would be regularly convened by the EAME Secretariat, an important platform for discussing regional issues related to sustainable fisheries management and other marine trans-boundary resources.

- WWF in collaboration with partners in Tanzania initiated the implementation of a new generation of projects in EAME: the seascape. The Rumaki Seascape (Rufiji, Mafia, and Kilwa) project area is the first full-scale seascape program anywhere in the world and one of the 8 high priority 'Seascapes' under EAME. USAID supported the creation of this seascape and in 2004 supported the planning for another in the Lamu archipelago that included Kiunga MNR. The Rumaki Seascape project area is approximately 9,000 km², includes the largest contiguous block of mangrove forest on the Eastern African seaboard, extensive coral reef areas and important prawn, finfish and invertebrate fisheries.

Kiunga:

- The sustainable fishing gear exchange initiative began in all KMNR villages with a high level of community interest. A revolving fund for gear exchange was established to enable those who did not participate in the initial exercise to acquire sustainable and legal gear. By the end of FY06 there was a reduction in habitat destruction, a drastic reduction in juveniles of various fish species and by-catch caught, less pollution, and population growth of select target species.
- The turtle conservation and monitoring program noted a 40% increase in reported turtle nests with more than half reported by the community. Of all marine turtle nests reported in Kenya, 50% were from WWF KMNR Project. 170 marine turtle nests were recorded, of which 26 were return individuals.
- The community continued to improve their marine turtle conservation efforts demonstrated by their reporting more than 60% of the total nests identified. These results represent the community's positive attitude towards turtle conservation and working with WWF. The Joint Management Team (JMT) initialized the process of reviewing the KMNR management plan with full participation of community members.

Quirimbas:

- The Community Fishing Council (CCP) on Matemo Island, with the help of WWF, organized a visit to 4 neighboring coastal villages where they discussed the issue of fishing boats from these villages entering Matemo waters and invading their sanctuary. The Matemo CCP called on the leaders of the neighboring villages to control their people. Faced with a united front, the leaders of the villages consented, and no foreign boats have entered Matemo's waters since.
- A large bank of Cape Sand Oysters (*Pinctada capensis*) was discovered in deeper water just north of Ibo Island. The bank could be used both as a managed fishery (a rotating harvesting system) as well as a larval source for an eventual oyster production project.
- WWF identified two producer groups for oyster and prawn collection, and links were made between local producers and the hotels in the area.

FY07 Outputs and Outcomes

EAME Program:

- WWF-International in collaboration with EAME organized a side event during the UNFCCC COP-12 in November 2006 in Nairobi, where Mr. Rajabu Soselo, a locally identified climate witness from Dar es Salaam, presented his climate change story based on his observations of shoreline erosion, reduction in sea grass beds and fish catch, and weather related changes like shorter rainy seasons.
- EAME developed a 2-year implementation plan for its intervention on oil and gas developments in offshore areas of Eastern Africa, through both national and regional processes. The emerging oil and gas sector poses a serious threat to marine and coastal habitats and species. Key elements of the plan include petroleum industry policy analysis, national oil and gas workshops, supporting a regional process for oil and gas strategy and harmonization of the relevant policies. Policy analysis commenced in December 2006, and national workshops were held in May 2007.

Kiunga:

- KWS finalized the review of the KMNR management plan; the review process was hailed as inclusive due to representation of all stakeholders through the Joint Management Team and by the extensive community sensitization undertaken by WWF/KWS. Management structures such as the JMT and Beach Management Units have been strengthened and have attained relative functionality.
- 6419 turtle hatchlings successfully reached the sea as a result of the species protection program, the KMNR team including the youth and other participating communities.
- WWF shared findings of a scientific study detailing incidental catch of turtles in KMNR at the WIOMSA Incidental Catch Conference in November 2006.
- Coral reef monitoring with participation of representatives from all villages and technical staff from FiD, KWS, KEMFRI, CORDIO and WWF, monitored fish and invertebrate populations, coral reef health and diversity, conducted a benthic environment survey, and identified 40 fish families and 210 fish species.
- The discovery of a new coral species - the rare *Siderastrea savignyana* - a result of the work of WWF in collaboration with partners in EAME, was published in the journal *Zoological Studies*.

Quirimbas:

- Participatory evaluation carried out in the coastal areas to exchange views and experiences across communities, led to a much higher level community understanding of the park's activities.
- The Quirimbas Development Committee (COMDEQ) was established with representatives of NGOs, communities, and government institutions (Police, Agriculture, Fisheries, etc.) to advise on all major management decisions of the park, greatly increasing the transparency and legitimacy of the QNP.
- 10 Community Fishing Councils created within the QNP
- Both the fish and oyster sanctuaries created, reflected higher seasonal yields, both in size and biomass, and in biodiversity in the fish sanctuary at Quirimba Island.
- Initiated work on the Ibo Marine Sub headquarters of the park; two speed boats acquired and operated in cooperation with the Mozambique Navy

FY08 Outputs and Outcomes

EAME Program:

- In July 2008, Southern African Development Community (SADC) Ministers signed a historic declaration on Illegal Unregulated and Unreported (IUU) fishing for SADC coastal countries, a major precedent for agreements on regional protocols and standards for management of trans-boundary natural resources.
- EAME ensured that WIO countries made key decisions on issues related to sustainable fisheries and oil and gas developments in the region during the Nairobi Convention COP-5 in November 2007. EAME helped delegates recognize the importance of adopting a regional approach to Fisheries Partnership Agreements as the best hope to negotiate fair, equitable and sustainable Fisheries Access Agreements.
- After years of lobbying by EAME, Tanzania revoked the licenses of all boats fishing in the Exclusive Economic Zone (EEZ), becoming the first country in the region to send a strong message on its intention to address the issues of Sustainable and Fair Fisheries Access Agreements and IUU by stepping up monitoring, control and surveillance operations.
- The first MPA in Zanzibar, the Menai Bay Conservation Area became a major tourism attraction where there is now a resident dolphin population. This outcome is attributed to years of marine habitat conservation with WWF support and significant environmental education and awareness raising among local communities.

Kiunga:

- WWF's KMNR project hosted the final phase of the MPA learning exchange visits. MPA managers shared experiences, visited and interacted with communities and fishers and discussed: environmental

education, illegal fishing gear, gear exchange program, fisheries co-management success and challenges, participatory turtle conservation, and population health and environment linkages in marine conservation.

Quirimbas:

The Quirimba Island temporary closed zone demonstrated convincing results: 4500kg of fish were caught in three days, a huge increase over the average catch, and an amount that the island village elders said they had never seen in their lifetimes.

FY09 Outputs and Outcomes**EAME Program:**

- The Kenya National Fisheries Policy was formally launched and approved by the government for implementation.
- Shrimp fishery by-catch assessment for Mozambique commenced, with the active participation of the private sector. EAME also facilitated an all-inclusive stakeholder process of developing and finalizing the Kenya prawn fishery management plan.
- EAME initiated discussions with NEPAD and African Union for Africa Wide Fisheries Ministerial framework to address marine fisheries governance and trade related issues.

Kiunga:

- Use of data collected in management of the KMNR fishery. The Fisheries Department in collaboration with WWF, provided vital information on fish catch analysis and ecological conditions of marine resources in KMNR. The information was used by BMUs in drafting community fisheries management plans as mandated in the new fisheries policy.
- Ecotourism initiatives initiated in KMNR between local youth groups involved with turtle conservation in the project area and their peers who are tour guides in Lamu. These two groups reached a mutual agreement to market turtle conservation activities in the MPA as ecotourism attractions in return for increased revenues for Lamu tour operators. Ecotourism in KMNR will lead to increased opportunities for income generation for KMNR youth groups, increase the number of sites tourists can visit in the area, promote turtle protection, and educate more of the public about the turtle conservation activities within KMNR.

Quirimbas:

- QNP and the Provincial Department of Fisheries signed an MOU that allows for a formalized sharing of data on the fisheries activities in the Province as a whole and the park in particular. This marks a major step forward for co-management of fisheries in the park and for the surrounding areas.
- For the first time in some years, four turtle nests were recorded on Rolas Island, two of which hatched successfully.
- Fish and oyster sanctuaries reflected higher seasonal yields, in size, biomass, and in biodiversity, in the fish sanctuary at Quirimba Island.
- Introduction of a mud crab fattening project in the Mussemuco village in QNP followed an exchange visit of local fishers and NGO partners to the Tanga region in Tanzania. The group completed the first fattening cycle and marketed their product to the tourist operators on Ibo Island.

Lessons Learned**EAME Program:**

All of the available information from EAME reports including newsletters, numerous technical documents by WWF and partners, and several evaluations of the EAME program are summarized in the EAME GCP lessons

learned document. (We will provide USAID with a copy once the report is finalized). The lessons will be disseminated according to the existing EAME communications strategy to local, national, and international audiences by sharing published materials and through regional and international forums and media.

Some of the key challenges facing the EAME Secretariat include the inadequate resources and capacity to fully implement the EAME strategy and monitoring plan, including inadequate local expertise to deal with emerging issues such as climate change, IUU fishing, oil and gas, and Fisheries Access Agreements. The governments' political will and commitment to balance economic development and environmental sustainability has been inadequate, and the integration of policy and governance issues in design and implementation of field/site level projects will need to be improved in the future. There is also a need for more active and consistent participation of partners in implementing EAME-related activities.

Some of the key lessons learned from the EAME program include the following:

- There is a need to be innovative in finding incentives to bring together governments of the region as there is no common intergovernmental body for Kenya, Tanzania and Mozambique. Given the development agenda in the region, such incentives should link to sustainable development opportunities offered by natural resources such as oil and gas, fisheries, etc.
- Planning with partners, even WWF-supported actions, does build rapport and confirms transparency.
- While planning and the ecoregional vision are done at the regional level, it is important to remember the role of national governments in decision-making and delivery for conservation gain.
- WWF needs to make extra efforts to work with non-traditional partners (trade and investment institutions, extraction institutions, etc.).
- WWF will need additional capacity to deliver results in new areas such as oil and gas, energy, Environmental Impact Assessments, etc.
- Developing and managing effective and strategic partnerships is crucial to EAME's future program implementation. There is a need to develop a partnership strategy.
- Securing political will and support and addressing the governance issues (corruption) are the most difficult to achieve, but central to environmental sustainability in the region.
- Communication is an important issue especially between projects and stakeholders; however focus and efficiency on communications, marketing and fundraising are still limited in the region. These have to be well improved in the implementation of the Coastal East Africa WWF Network Initiative (CEA NI).
- The concept of the WWF Network Initiative is timely in the region, given the growing development initiatives and global pressure on natural resources and biodiversity in the region.
- Monitoring and evaluation at the ecoregional level is poor. M&E capacity is very limited within Ecoregion Secretariats and in Focal Institutions. There is limited ability to collect information from stakeholders.
- Securing additional funding and broader support to address global issues and global drivers has been a challenge - innovation will be crucial for CEA NI (PES, Carbon Finance, Private Sector, etc.)

Kiunga:

Some of the key lessons learned from the Kiunga program include:

- The capacity of fisher folk to effectively engage in resource management is critical. Sustainable resource utilization and management can only be realized if fisher folk understand their resources and the inherent challenges to sustaining them. BMUs are now integral partners in the co-management of fishery resources and will play an integral role in the wellbeing and sustainability of the Kiunga fishery.

- WWF-designed data collection tools are gradually being adopted by the BMU and Fisheries Department. WWF has the most extensive fisheries database of the Lamu fishery. This has resulted in a lot of interest from the Fisheries Department, Kenya Marine Fisheries Research Institute (KEMFRI), and other research organizations to use this data for joint publications and development of fishery specific management plans. Further, the wealth of fishery information and data collected under the GCP2 grant is an integral part of the Marine Stewardship Council lobster fishery assessment and possible certification of the Lamu lobster fishery.
- WWF has a wealth of fishery information, and through community feedback sessions fisher folk have been able to comment, review and interpret the Lamu fishery trends and suggest management measures such as closure, fishing gear overhaul and banning of destructive fishing gear. Fishers have proposed various management measures in response to the fishery trends and their interpretation, key among them the ban and eradication of destructive fishing gear such as lobster seine nets and beach/purse seine nets.
- Fishers have to be economically empowered through the creation of micro-credit and other financial and savings schemes. There is enormous potential, but this will require changes in the “non saving” culture among fishers. Financial institutions must be developed that are acceptable to the cultural and religious beliefs of the largely Muslim fishing communities. The fisher co-operative societies and BMUs have made good progress in introducing aspects of financial sustainability in fishing communities. This has to be sustained over the long term.
- The funding for alternative livelihood initiatives as a remedy to reduce over dependency on direct harvests from the environment needs to be explored, especially in such marginalized and poor communities. There is need to address sustainable livelihoods within conservation programs; the youth eco-tourism options that have begun will be a significant stride in this direction. Partnerships with organizations in the development sector can provide long term opportunities for sustainability.
- Increasing concerns over the effects of climate change introduce a new challenge to marine habitat resilience monitoring. Training fishermen to apply new monitoring methodologies will be a challenging task for WWF and its partners. Sharing lessons with partners will be an important step toward developing the large-scale approaches necessary to address threats to biodiversity posed by climate change.
- Enhanced cooperation by partners: Key partners and stakeholders are more than willing to co-operate with WWF and assist in advancing the conservation and sustainable resource utilization agenda. The GCP2 support towards village based organizations such as BMUs has spawned interest and awareness from other village based groups such as fisher co-operative societies and youth groups. This has resulted in closer collaboration between WWF and these groups.
- Children and youth are the most vital target groups in KMNR community. They are the leaders of tomorrow and have to safeguard their future which is threatened by consumerism. Engaging children and youth in the conservation initiatives prepares them for the role that they will one day play as adults to support sustainable development.

Quirimbas:

Key lessons learned from the Quirimbas program include the following:

- Both the fish and oyster sanctuaries now reflect higher seasonal yields, both in terms of size and biomass, and in diversity of the fish species. These observations are still largely subjective, but they are starting to be corroborated by the objective data sets. Thus, the local communities have a good understanding of the benefits of the sanctuaries. However, threats continue from immigrant fishermen who violate the sanctuaries, resulting in conflicts with the local communities. Despite the gains in higher yields, education and sensitization with migrant fishermen will be an ongoing concern.

- The need for partnerships with a variety of institutions and with a variety of levels of government. We were able to overcome difficulties with one department or Ministry through the assistance of another, for example, using Defense to liaise and keep channels open to Fisheries.
- Creating formal Coordination Councils (COMDEQ) is invaluable in both increasing ownership of the park and in solving many relationship problems. Having a common forum also is very efficient in increasing the flow of information and resolving common issues.
- Working with community fishing councils (CCPs) is a vital tool for establishing local management of the fisheries.
- New high value products such as oysters can make a massive difference in income if sustainably harvested and properly marketed (local markets are less demanding and capricious than high end tourism, and thus an obvious first market for new products).
- Temporary closed zones have great effect on popular opinion, visibly demonstrating what is happening in the permanent no-take zones.

GCP program background

WWF through the East African Marine Ecoregion (EAME) program is working from local to global levels with many partners to conserve the region's unique marine biodiversity, guided by the EAME Vision, Strategy and Conservation Plan – the products of a wide partnership of agencies in eastern Africa that seeks to ensure the sustainable management of marine resources throughout the ecoregion. The Conservation Plan ensures the implementation of the ecoregion strategy targeting a vision in which key policy and practice barriers are removed, best practices are learned and applied, incentives for conservation are promoted, and key research is done to inform management decisions and ensure that coastal communities/fishers have the ability to steward their natural resources sustainably. The following are the key biodiversity targets for the EAME Program:

Conservation of corals and associated communities. EAME has the longest continuous fringing reef system in the world providing food security to 20+ million people.

Conservation of coastal wetlands including deltaic mangrove ecosystems. EAME has nine mangrove species forming the largest mangrove systems in Africa.

Conservation of threatened species. EAME prioritizes the conservation of the following marine species: turtles, cetaceans, dugongs, coelacanth, bill and sword fish, sharks, and hump-head wrasses.

Conservation of commercial marine fisheries species. EAME is focusing on the tuna and shrimp fisheries; the region has one of the largest wild caught shrimp fisheries in the world that is near collapse due to poor fisheries management in Mozambique. In addition, Eastern African nations are not currently benefiting from the tuna fishery due to poor governance of trans-boundary resources in the Western Indian Ocean region.

GCP2 provided support to WWF for coordinating the EAME program through the regional Secretariat staffed by and hosted at the WWF Tanzania Program Office from 2003 through 2009. GCP2 also supported WWF work in two key priority sites within EAME: the Kiunga Marine National Reserve (KMNR) in Kenya, and the Quirimbas National Park (QNP) in the Mtwara-Quirimbas Seascape, Mozambique. The EAME Secretariat coordinated the integrated, cross-sectoral and multi-institutional EAME Program through established regional

and national level structures. The main goal of the Secretariat was to operationalize a functional *enabling environment* to implement the EAME Conservation Plan. Building on lessons learned along the Eastern African coast and by bringing in experiences from other marine programs. The EAME Program is focusing on conservation solutions that match the geographic scale of biological processes and are not constrained by political boundaries. Similarly, the EAME program has a long-term commitment to ensure that the region is achieving lasting changes. The Ecoregion is actively engaged in promoting and demonstrating the economic value of marine resources, so that communities themselves respect the need for conservation for now and for future generations.

Location, global importance and key threats to this landscape/seascape

Description of Seascapes and GCP-Supported Sites



Map of the EAME priority areas

The Eastern African Marine Ecoregion extends for over 4,600 km - a vast area that includes the territorial waters and Exclusive Economic Zones off southern Somalia, Kenya, Tanzania and Mozambique to Sodwana Bay in northeastern South Africa. The total estimated area covered by the ecoregion is 540,900 sq km, with the offshore limit extending to the 200m depth contour, beyond the continental slope.

Throughout the Eastern African coast, the shores and coastal seas harbor a characteristic set of species, habitats, dynamics, and environmental conditions. The main oceanographic influence is the South Equatorial Current that splits into the northerly flowing East Africa Coastal Current and southerly flowing Mozambique Current about half-way along the length of the ecoregion in northern Mozambique. These currents circulate water in the western part of the Indian Ocean and along the coastline, providing critical environmental conditions needed for survival of the abundant marine life in these tropical waters.

The north-south orientation of the EAME, covering about 30 degrees of latitude, contributes to high levels of biodiversity: over 1,500 species of fish, 200 species of coral, 34 species of marine mammals, 9 species of mangrove, 12 species of seagrass, 1,000 species of marine algae, several hundred sponge species, 3,000 species of mollusks, 450 species of crabs and at least 300 species of echinoderm. EAME is home to an impressive list of marine species including the five species of turtle found in the WIO (Green, Hawksbill, Olive Ridley, Loggerhead and Leatherback), whale sharks, hump-back whales, dolphins, reef and pelagic sharks, bill fish, sword fish and hump-head wrasse. EAME also hosts the coelacanth – or dinosaur fish - and the rarest marine mammal on the planet - the dugong. While a wide variety of fish species and marine life is traded locally and regionally, of major concern are the tuna and tropical shrimp fisheries which are under significant pressure from global market forces.

An estimated 10-15% of species in EAME are considered to be endemic to the region. Examples include several species of coral, starfish, mollusks, and fish. Discovery of endemism is bound to increase with more studies, especially in border areas such as South Africa-Mozambique and Kenya-Somalia that have been little studied to date. As research continues, the number of species recorded for these waters is rising, but already we know that EAME supports an incredibly rich species composition, exceeding 11,000 species of plants and animals.

The coastal people of the EAME number around 20+ million. They are the main stakeholders in the region, with most relying on the coastal environment for their livelihoods with some employed by foreign businesses in the region (e.g. hotels or fishing companies). Although there are some areas of the EAME that remain in almost pristine condition, coastal development continues to destroy marine biodiversity, undermining the integrity of the ecosystem and the resources it provides to people.

Two key priority sites within EAME include the Kiunga Marine National Reserve (KMNR) in Kenya, and the Quirimbas National Park (QNP) in Mozambique:

KMNR lies in the very north of the Lamu Archipelago, an area of globally outstanding ecological and cultural richness. KMNR and the inland Dodori and Boni National Reserves (877 km²) were designated a UNESCO Man and Biosphere Reserve in 1980. KMNR extends 1 to 2.5 km into the open sea to include 55 islands and inner reefs. In 1979, Kiunga Marine National Reserve gained protection status. In addition to a healthy coral fringing reef, the rich habitats of Kiunga support key marine species such as turtles, dugong, whales, dolphins, and one of the last main global nesting sites for the roseate tern. It also has the last major stands of mangroves, and provides lobster and crabs for the tourism industry of the whole country.

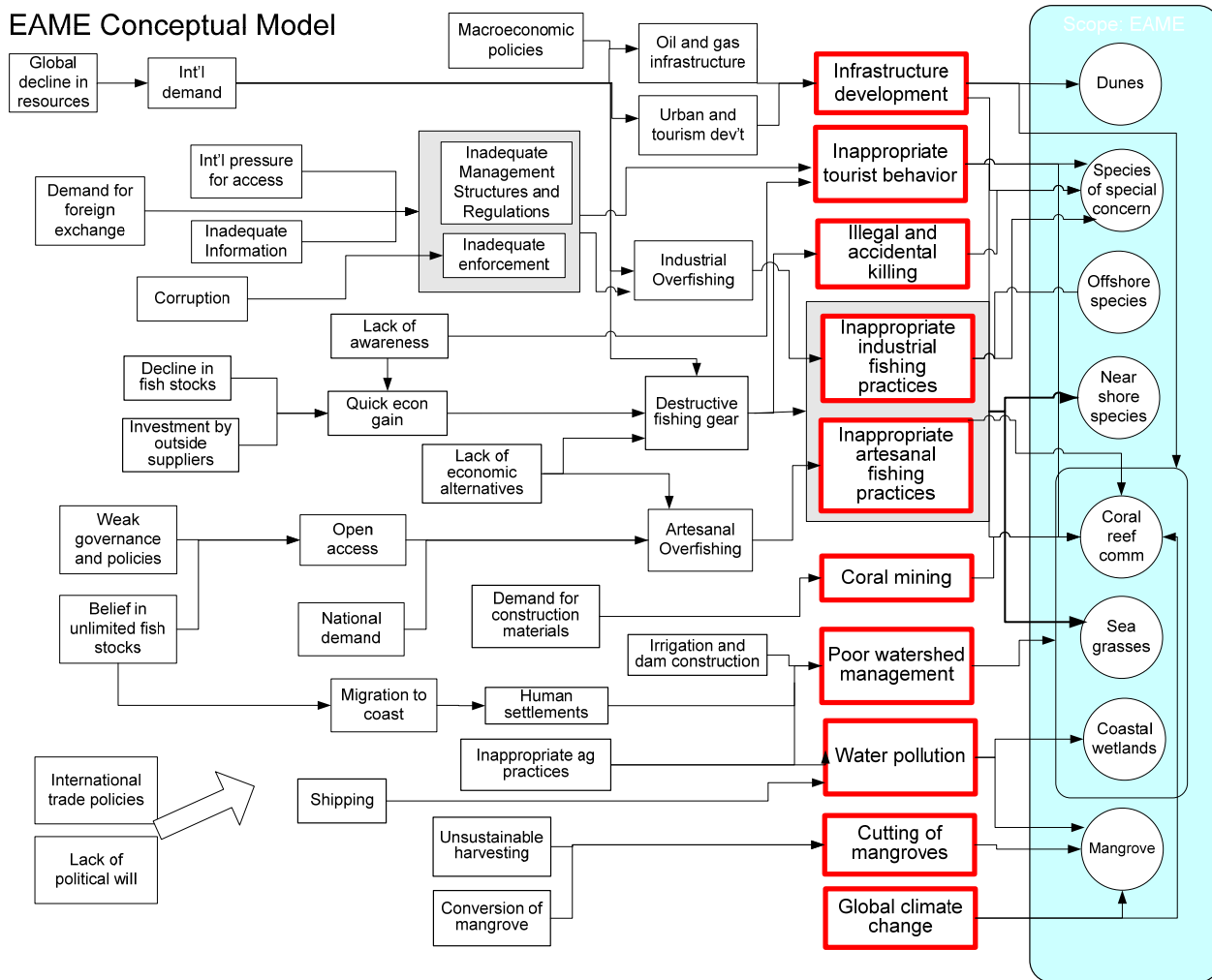
The Quirimbas Archipelago represents the centerpiece of the Mtwara-Quirimbas Seascape which is a chain of 28 islands stretching along almost 400 km of coastline. The southernmost 11 of these islands and a vast expanse of terrestrial woodland, coastal forest, and coral rag thicket are included in QNP which was established in 2002. The total area is 750,639 ha, of which 152,237 ha are in marine and island habitats, making this one of the largest marine protected areas in the WIO and in Africa. The park also supports important turtle, whale, and dolphin populations and provides the livelihoods of 40,000 rural people.

Key Threats to Biodiversity

The Eastern Africa coastline supports a population of more than 20 million people, most of whom depend on the marine biodiversity for their livelihoods. In the last fifty years, this growing population has in places changed, over-harvested, and even destroyed the marine environment and its rich biodiversity. The problem has been exacerbated by migrant and foreign fishers. While many highly productive ecosystems remain, others have been wiped out by unsustainable fishing methods and an “open-access” regard toward the use of marine resources. Development impacts from tourism, infrastructure development, inland land uses, and climate change also threaten EAME’s biodiversity. As pressure on the ecoregion continues to rise, destruction will increase, unless systems of rational, managed use and protection can be successfully adopted.

As part of a detailed analysis to develop the EAME Conservation Plan a series of strategic planning workshops, partly funded by GCP, were carried out to analyze key direct threats to biodiversity in EAME. A detailed conceptual model was developed:

EAME Conceptual Model



Flowing from this conceptual model, the detailed direct threats and their rankings are as follows:

Threat	Criteria			Total	Rank	
	Areas	Intensity	Urgency			
Artisanal fishing	8	6	9	23	1	HIGH
Infrastructure development	9	4	10	23	1	HIGH
Global climate change	10	10	1	21	3	MED
Cutting of mangrove	6	8	6	20	4	MED
Illegal/incidental killing	5	7	8	20	4	MED
Industrial fishing	7	5	7	19	6	MED
Poor watershed management	2	9	5	16	7	MED
Coral mining	3	2	4	9	8	LOW
Inappropriate tourism practices	4	1	3	8	9	LOW
Water pollution	1	3	2	6	10	LOW

Notes:

Areas: number of priority areas where this threat is relevant, out of the 21 priority areas identified in EAME - the higher the ranking, the more areas are affected by the threat.

Intensity: the value reflects a ranking of the threat intensity, 10 being the highest

Urgency: ranking indicates which threats are most urgent, 10 having the greatest urgency.

Threats include more specifically:

Artisanal fishing: over-harvesting of coral and pelagic fish species, marine turtles and marine mammals, invertebrates, ornamental fish and coral, including species used in traditional medicine.

Infrastructure development: development resulting in physical damage of reefs, pollution, increased demand for high-value species and building materials such as mangrove poles and coral blocks. Road and bridge building result in unregulated open access to resources. Gas and oil extraction development destroys habitat, opens up new areas to settlement, and brings a risk of pollution.

Global climate change: extreme weather variability resulting in a change in river run-off and increased sedimentation of marine systems and subsequent changes in water temperature resulting in habitat change and coral bleaching are among the most prominent effects of climate change in the region.

Cutting of mangroves: clear cutting and conversion of mangrove forests for fuel, building materials, salt production, sand and mineral mining, and shrimp farming.

Illegal/incidental killing: of marine turtles, sooty terns, dugong, cetaceans, etc.

Industrial fishing: long-distance access agreements, illegal long-distance fishing fleets, destructive industrial fishing practices, bottom trawling, drift-net and long-line fishing, over-harvest and over capacity, etc.

Poor watershed management: deforestation, agricultural runoff, pollution, sedimentation, water flow management.

Coral mining: live coral extraction for lime production, poor fossilized coral extraction, mangrove cutting for lime production.

Inappropriate tourism development: poor coastal development planning, water use, sewage, pollution, beach erosion, coral reef destruction, etc.

Water pollution: agricultural run-off, inappropriate or lack of water sewage treatment, pesticide, etc.

GCP partner historic and current roles in this landscape

Although the EAME region is still one of the least ecologically disturbed oceans compared to other regions in the world, it is increasingly in jeopardy. In the last 3 decades, the coastal and marine environments in EAME have started showing significant ecological changes and signs of degradation, attributed to both natural factors (e.g., coral bleaching) and a variety of human activities, acting at different intensities and in various combinations. Some of the anthropogenic factors include: increased pressure on resources; increased and widespread use of destructive fishing methods; pollution and unplanned coastal tourism and industrial development. The root causes of these problems were identified as poverty (Tanzania and Mozambique rank among the thirty poorest countries in the world), rapid growth in coastal population and urbanization, inadequate policies and legal framework, inadequate knowledge, institutional weakness, inadequate or weak management strategies, and inadequate financing mechanisms and lack of investment.

In its attempts to address these issues, WWF, working with the Governments of Kenya, Tanzania and Mozambique facilitated the initiation of conservation efforts or establishment of protected areas in Bazaruto Archipelago, Mozambique (1989); Mafia Island, Tanzania (1992), Menai Bay, Zanzibar (1995); the Kiunga Marine National Reserve, Kenya (1996), and the Quirimbas National Park, Mozambique (2001). These projects have all adopted a core strategy of working with local communities and government to promote the sustainable utilization of resources. In parallel, under the EAME program WWF is addressing policy and management issues that impact across the entire ecoregion. Efforts in these areas have resulted in a number of successes, where, for instance in Mafia Island Marine Park the fishers claim that their catches have improved considerably due to the elimination of dynamite fishing and reduction in other destructive practices. Today 70% of all the Marine Protected Areas in Eastern Africa are in some form supported by WWF.

In acknowledgement of the limitations of the approaches focusing only on species conservation, Marine Protected Areas and public awareness, WWF started developing and promoting ecoregion based conservation in the region in 1989, an approach that supports working with stakeholders in planning and implementing conservation of biodiversity efforts at much larger geographic scales and better integration of conservation efforts into national and regional planning processes. Although the earlier initiatives resulted in noticeable successes, they had not proven to be effective in dealing with the existing and future challenges.

WWF's role has been that of facilitator and coordinator among partners to implement, monitor, and adapt the EAME Plan at the local, national, and landscape scales. Since 2005, EAME has been coordinating the implementation of Seascapes, for example the RUMAKI Program, a continuation of WWF's efforts in marine and coastal management with an expansion to non-marine park areas. It is a new initiative for EAME, involving a large-scale conservation approach with strong emphasis on community based resource management.

GCP partner approach to threats based conservation at a landscape scale

The WWF Approach to Large-scale Conservation

The World Wildlife Fund's (WWF) approach to large-scale conservation began in the late 1990s with the development of the Global 200, a biodiversity priority setting exercise that used a representative approach to select 238 of the earth's most outstanding terrestrial, freshwater, and marine systems (Olson & Dinerstein, 1998). Subsequently, WWF embarked on ecoregion-based conservation planning in which spatial priorities were identified in many of the Global 200 regions. Ecoregions are defined by WWF to be relatively large units of land containing a distinct assemblage of natural communities and species, with boundaries that approximate the original extent of natural communities prior to major land-use change (Olson et al., 2001). Ecoregions are often larger than landscapes but not always. In essence, WWF realized that only at relatively large scales (generally greater than single protected areas) could conservation planning and implementation adequately understand and preserve habitats and ecological processes. Since the first ecoregion-based conservation planning workshop was held in 1997, for the Chihuahuan Desert, there have been more than 30 ecoregion (or ecoregion complex) analyses. Across all these planning analyses priority areas for conservation implementation were identified based predominantly on biological characteristics. Priority areas within ecoregions (or ecoregion complexes), while varying greatly in size depending on the specific region and set of local circumstances, form the basis for WWF's landscape-scale conservation planning and implementation. However, in some cases, landscape-scale conservation planning has been performed for entire small ecoregions. The same large-scale planning needs concerns (representation of habitats and species in protected areas, incorporation of ecological processes in spatial plans) are believed to be applicable at both ecoregional and landscape scales. However, only at the small-ecoregion and landscape scales does planning address the spatially explicit decisions required to make a conservation plan practically implementable.

There are two important aspects of WWF's approach to spatial landscape planning. Firstly, strategic planning for conservation action is a critical complement to spatial planning. WWF uses a best practice strategic planning framework called the WWF Program Standards (WWF, 2005), which is similar to The Nature Conservancy's Conservation Action Planning and is derived from the Conservation Measures Partnership's Open Standards for the Practice of Conservation (Conservation Measures Partnership, 2007). Ideally, spatial planning and strategic planning are seamlessly integrated.

Secondly, WWF is a network of semi-independent country organizations (often referred to as the WWF Network), and there are no mandated approaches to conservation planning at the ecoregion or landscape scale. Consequently, there is a wide variety of approaches used in different countries and under different situations that have to do with data availability, conservation targets, and opportunities to coordinate with partners. Furthermore, WWF's approach to ecoregion and landscape-scale conservation planning has continued to evolve, especially as systematic conservation planning software and other tools have become increasingly available and user-friendly over the past decade.

WWF's landscape level conservation planning approach aims to address the goals of: (1) Representing all distinct natural communities within conservation landscapes and protected area networks. (2) Maintaining ecological and evolutionary processes that create and sustain biodiversity. (3) Maintaining viable populations of species. (4) Conserving blocks of natural habitat that are large enough to be resilient to large-scale stochastic and deterministic disturbances as well as to long-term changes (Dinerstein et al., 2000, modified from Noss, 1992).

WWF's initial efforts at large-scale planning were heavily skewed towards expert-driven workshops involving many experts and stakeholders but less repeatability (Mittermeier et al., 1994). More recently, many of WWF's ecoregion and landscape conservation planning efforts have involved more systematic approaches. These systemic conservation planning efforts have involved varying levels and formats of expert and stakeholder input. This reflects a shift towards greater rigor as systematic conservation planning tools have become more prevalent, user-friendly and documented in the scientific literature.

The advantages of entertaining a variety of approaches are many. Each landscape has its own unique combination of culture, capacity, data, resources and geography. Providing for a variety of methods that can be chosen and mixed depending on the specific situation provides maximum flexibility to a diverse organization. In general, the variety of assessment approaches within WWF reflects differing time and budget constraints, the amount and quality of data available, perceived stakeholder capacity, WWF technical staff capacity, and the technical interest of WWF country programs.

Development of the EAME Conservation Plan

The overall 50-year Vision for EAME is *a healthy marine and coastal environment that provides sustainable benefits for present and future generations of both local and international communities, who also understand and actively care for its biodiversity*. WWF's activities in the ecoregion are guided by *The Eastern African Marine Ecoregion Strategic Framework: 2004-2024*, a comprehensive 20-year conservation framework that was completed in 2005 through a WWF-facilitated, collaborative process with multiple stakeholders. This plan was endorsed by key actors and includes five-year National Action Plans complemented by a Regional Action Plan, *The Eastern African Marine Ecoregion Conservation Plan: 2005-2009*. Within the 20-year framework, there are five strategy components:

1. Promoting planning and implementation within priority seascapes through a marine protected area network;
2. Conserving wide-ranging species and addressing transnational threats;
3. Enhancing the enabling policy and legal environment;
4. Supporting sustainable livelihoods;
5. Monitoring for adaptive management, catalyzing innovation, and strengthening capacity for long-term sustainability.

This suite of strategies was harnessed to ensure the long-term stability and diversity of the representative species, habitats and ecological processes - *coral reefs and coral communities, sea grass beds, and mangrove forests*- across the ecoregion. The Ecoregion planning process in Eastern Africa started in 1999 and involved the participation of a number of experts, including representatives of the governments of the region, non-governmental organizations and other stakeholders from within and outside the region. The planning process was coordinated by the EAME Secretariat at WWF and comprised of the following key phases:

- i. **Reconnaissance.** This phase involved mainly the preparation of three reports which synthesized up-to-date information on the biological values (Kemp, 2000); the socio-economic condition (Sosovele, 2000) and institutional arrangements and policy framework (Hatton, 2000) for the EAME countries. These reports were used as inputs to the development of the biodiversity vision for EAME.
- ii. **Development of the Conservation Vision.** In March 2001, a workshop was held in Mombasa, Kenya where a 50-year conservation Vision for EAME was developed. Experts defined 21 priority areas for conservation for the six community/taxa groups identified during the Reconnaissance phase. The priority sites were selected based on a number of criteria including: Unique/endemic species, species assemblages and/or associations; Intact biota (including presence of top predators); Important ecological processes;

Unique physical habitats and habitat features; and Species richness. Other criteria were: Species of special concern; Important feeding, breeding and/or resting sites; Seasonal migrations; Complete or unique habitat complexes and; Degree of representation (WWF-EAME 2004).

- iii. **Development of EAME Strategic Framework.** Using the outputs of the visioning process, conservation targets for species, habitats and landscape, as well as the root causes of biodiversity loss were identified through national and regional workshops. WWF and its partners developed a 25 year-EAME Strategic Framework through a participatory process.
- iv. **Development of the Ecoregion Conservation Plan.** This five year (2005-2009) Plan, on the basis of the strategic components of the EAME Strategic Framework, identified priority activities at the regional and national levels to be implemented by WWF and its partners, including the governments of Kenya, Tanzania, Mozambique, and to some extent, South Africa. The Plan identified the seascape planning of the eight global and eight ecoregional priority areas and establishment of marine protected areas as its key activities.
- v. **WWF Ecoregion Action Plan.** This Plan describes WWF's priorities in relation to the implementation of the EAME Strategic Framework. This Plan has the same timeframe as Ecoregion Conservation Plan (2005-2009). General criteria such as area (the extent of the area affected by the threat), intensity (severity of the impact) and urgency as well as WWF-specific criteria such as its comparative advantage, window of opportunity, its capacity and institutional gap, were used to identify priority threats to be addressed by WWF. This process was followed by the selection and prioritization of strategies to address priority threats. Criteria used for prioritization of strategies included: Window of opportunity for WWF to act; Ongoing commitment (for example, where funding is already available and projects underway); WWF capacity to implement the strategy (EAME and Network); Partner capacity to implement the strategy; Likely conservation impact if that impact is implemented and Cost/benefit ratio for implementing the strategy. Based on these criteria, the following priority strategies were proposed:

- Reduction of inappropriate Artisanal and Industrial Fishing Practices (Including By-catch and Sea Turtle Poaching)
- Designing a System of MPAs
- Mitigation /Adaptation to Global Climate Change in EAME
- Reduction of inappropriate Oil and Gas Infrastructure Development
- Reduction of inappropriate Tourism Infrastructure Development
- Reduction of cutting of mangroves

For each of the strategies, a result chain, a work plan, and monitoring plans for each objective were developed. It is evident from the above descriptions of the EAME planning that the process of developing the program was objective and the priorities for action identified in both the Ecoregion Conservation Plan and WWF Ecoregion Action Plan are scientifically based and relevant to national as well as regional needs. The national governments of Kenya, Tanzania and Mozambique, through their relevant line ministries, as well as responsible departments and parastatals were actively involved in the process, hence ensuring their governments' priorities are reflected in the Plans. This comprehensive planning process led EAME to evolve a framework with specific actions, targets, and timeframes.

The scale of the planning process, in terms of time taken (from 1999 to 2004), number of experts, institutions involved, and more importantly, the comprehensiveness of the process, was unprecedented in the region.

Goal of GCP2 project in EAME

The priority focus of USAID-funded activities in EAME is the conservation of coral reefs and coral communities. Specifically, the defined target is to halt or reverse the decline in the quality of coral reef/community areas by 2010. The anticipated overall result/output is defined as: none of the 15 priority reefs in EAME have greater than 20 percent of their total area damaged, and four medium quality¹ and three high quality² coral sites have improved by at least one status level.

In 2006 the EAME Strategic Action Plan was adapted to this new target and strategy and finalized in FY07.

With USAID funding, the EAME Secretariat has worked to improve partnerships among WWF, donor agencies, field staff, focal institutions and communities; facilitate effective management of MPAs, and facilitate the process of establishing an adaptive management framework for the ecoregion. In an ecoregion such as EAME that is highly connected by ocean currents, tides, monsoon winds, and human activity, efforts have focused on promoting connectivity in strategies and learning, including across international boundaries. The EAME Secretariat seeks to compare and learn across interventions and contexts to promote a steady process of learning and improvement of marine conservation.

WWF worked jointly with TNC, IUCN and WCS in establishing a global MPA learning partnership program and the EAME Program actively participated in this. The idea was to share lessons on how MPA networks can be effectively designed, implemented and how these networks could become representative and more resilient throughout the world's tropical marine ecosystems. One of the roles of EAME secretariat is to raise awareness, promote exchanges and facilitate a lesson learning process in order to foster best practices and rapid implementation of EAME Strategy. With USAID support, the MPA learning partnership enabled representatives from MPAs and key reserves invited to jointly design a learning program.

The goal of the GCP2-supported WWF Kiunga Conservation and Development Project is to: “safeguard the biodiversity and integrity of physical and ecological processes of the Kiunga Marine National Reserve (KMNR) for the health, welfare, enjoyment and inspiration of present and future generations.” Conservation efforts in Kiunga also benefit coastal Somali communities across the border, where South to North currents transport fish and other sea life into these impoverished areas. To achieve these results, better management structures were needed. The objectives of the project were to:

- **Strengthen KMNR collaborative management structures and institutional mechanisms with full participation of local communities and other stakeholders.** The Joint Management Team was established and made fully operational. Community representatives and relevant government agencies, participated in the management plan review process, the draft document was completed, and the final process now lies with the statutory government agency (KWS) to spearhead its ratification, adoption and implementation through the KWS board of trustee and finally the community.
- **Build the capacity of the local community to undertake and participate in conservation management programs.** Beach Management Units (BMUs) were first piloted by WWF in 2005 prior to the government's legal recognition and support, which ensued after the gazettelement of the fisheries BMU regulations in 2007. WWF, in partnership with the fisheries department (now a ministry), has been

¹ The medium status level of coral reef communities has been defined as: widespread and advanced degradation of habitat structure and complexity; trophic structures minimally disrupted; some sensitive species missing altogether; mortality of characteristic and key taxa exceeding replacement, with net downward trend and reduction in extent and diversity of populations and structure.

² The high status level of coral reef communities has been defined as: minimally degraded habitat structure/complexity; trophic structures unaltered; some species may be depleted; mortality balanced by replenishment over time scales of 5–10 years, with no net tendency for reduction in extents of populations in habitats.

involved in capacity building, community sensitization, mentoring, and monitoring of BMUs in Lamu archipelago. There are now 7 BMUs fully certified by FiD. Although a lot has been achieved, much work still remains to ensure full functionality of these important co-management entities.

- **Enhance the capacity of the local community to undertake conservation-compatible income generating activities (IGAs) and rural enterprises as an alternative means of livelihood.** After years of capacity building and WWF support, WWF's role has gradually shifted from facilitator to partner. The youth and women's groups engaged in eco-friendly handicrafts production now have autonomy to manage and market their products. WWF has focused its efforts in support of youth groups involved in enterprise development and harnessing other available income generation activities in a sustainable manner.
- **Establish and implement resource management programs.** In conjunction with the BMUs and FiD, WWF has facilitated community policing initiatives, participatory ecological monitoring, and joint fisheries patrols. Fishery resource information has been collected (namely fin fish, lobster landings) and mapped and indigenous knowledge has been integrated into resource management.
- **Enhance information management.** Continuous fishery information sharing mechanisms have been established and implemented throughout the duration of the project. These include, but are not limited to: weekly interactive community meetings, monthly BMU meetings, community feedback forums, presentation in scientific symposiums, publications and reports shared with relevant stakeholders, partners and the general public.

The KMNR project worked with all stakeholders towards ensuring co-management of key fisheries resources, maintaining ecological integrity of the ecosystems, stabilizing populations of flagship species such as marine turtles and dugongs, and reducing the associated risks by promoting the formulation of sustainable-use policies, law enforcement, and community based management frameworks. Investing in sustainable alternative livelihood for coastal communities is another key strategy adopted by the project to reduce pressure on declining marine resources as outlined in the EAME conservation action plan.

As a contribution towards accomplishing WWF marine program goals, the project focused on establishing institutional and regulatory frameworks for effective management of KMNR, strengthening management operations, collecting and analyzing information on ecological, economic and social trends to inform management, ensuring all community stakeholders fully participate in conserving marine resources and facilitating government agencies to support communities' sustainable use of KMNR resources as well as exploring livelihood improvement options.

The overall objective of **Quirimbas NP** is to conserve the diversity, abundance, and ecological integrity of all physical and biological resources in the park area, so that they may be enjoyed and used productively by present and future generations. This objective is supported through six goals:

1. to protect, conserve and, where necessary, restore the ecosystem processes and the species and genetic diversity of all terrestrial and marine resources (living and non-living) in the park area and its area of influence;
2. to promote the economic and social well-being of the park's ancestral inhabitants by the promotion of sustainable resource use strategies, the development of ecologically sensitive livelihoods options; and by prioritizing their interests in the economic opportunities deriving from the establishment of the park;
3. to insure that all stakeholders—including but not limited to residents, tourist operators, investors, and park management structures—share both the benefits and the management responsibility for the park;
4. to protect, conserve, and rehabilitate historical monuments, ruins, and other cultural resources in the park

- area (including local culture and tradition);
5. to stimulate and facilitate the growth of eco-tourism in the park area, the province, and the north of Mozambique; and
 6. to ensure the sustainability of the park itself by the adoption of appropriate fund-raising mechanisms, cost-effective operational systems, and the development of partnerships with other stakeholders and relevant research institutions.

These goals reflect the QNP's long-term concern both with the conservation of the park area as well as the 'conservation' of its human inhabitants; the Park is intended to be of direct benefit to local users, who will also participate in the management of the park's resources. To this end, harmonization of potentially conflicting uses is a main strategy of the park, while zoning is a main tool. Three types of zones are created, allowing for a range of human uses and impacts from total protection to community development and (sustainable) use. These zones interact with each other in a synergistic way, benefiting all concerned. For example, research in neighboring countries shows that the creation of marine sanctuary areas (no-fishing zones) actually results in increases in fish capture over a wide area (known as "spillover"), thus benefiting tourists (who can visit the sanctuary), local fishermen (who catch more fish in the surrounding areas), and the environment of the park.

Fisheries co-management is one of the two key objectives in the WWF Quirimbas National Park (QNP) Project (the second objective is animal-human conflict reduction in the terrestrial part of the park), which was started in July 2002.

Implementing conservation at a landscape or regional scale: overcoming challenges, grasping opportunities and managing adaptively

Previous sections explain how we addressed limiting factors such as conservation design, management systems, stakeholder engagement, government policy and legislation, and institutional capacity. Following the EAME threat ranking described earlier, in 2005 WWF undertook an analysis to identify those high priority threats where there are particular opportunities for action, and where WWF itself had capacity and comparative advantage:

Threat	Criteria				Total	Capacity Rank	Threat Rank
	WWF Comparative Advantage	Window of Opportunity	WWF Network Support / TA	Local WWF Capacity			
Artisanal fishing (includes bycatch and turtle poaching)	5	4	1	5	15	#2	#1
Infrastructure development	2	3	4	2	11	#3	#1
Global climate change adaptation	1	2	3	1	7	#5	#3
Cutting of mangroves	3	1	2	3	9	#4	#4
Industrial fishing (includes bycatch)	4	5	5	4	18	#1	#6

WWF Comparative Advantage: WWF holds a comparative advantage where it is better suited to deal with a given threat than other entities working in the region. A “high” level of comparative advantage exists where WWF has strong convening power or influence, experience working on policy, global reach, and access to economic and political powers.

Window of Opportunity: A window of opportunity exists if the threat can be effectively addressed in the next 5 years.

WWF Capacity: WWF’s capacity to address the threat is based on available skills and knowledge.

The ranking of the above-stated threats provided WWF with an opportunity to make strategic decisions for future activities under its own Ecoregion Action Plan (a subset of the multi-partner EAME Conservation Plan), based on tangible assessments of ecological need/importance, and WWF’s comparative advantage to tackle the threats. Unsustainable artisanal fishing practices, along with infrastructure development, were ranked as the greatest threats to the ecoregion. This confirmed the priority we had placed on mitigating the impact of artisanal fishing. USAID investments were already sponsoring a gear exchange for artisanal fishermen to trade in their harmful fishing nets for alternatives that will not decimate fish stocks. In Quirimbas NP, the threat of artisanal fishermen was being mitigated through the establishment of fishing replenishment zones that prohibit fishing activities in certain breeding areas.

Sustainability

One of the key objectives of the EAME program was to create an enabling environment for sustainability over a 20 year period. The EAME program believes that an enabling environment for sustainability should include the following characteristics:

- The enabling environment will be maintained by permanent stakeholders, particularly the respective Governments and their joint approach through the Nairobi Convention. The EAME Enabling Support Program (EESP) needs to work with these Government Departments to ensure this happens, rather than developing unsustainable parallel WWF structures.
- Pressure needs to be maintained on the respective Governments to manage EAME sustainability, particularly through empowered resource users – key among these are the coastal communities and fisher-folk – an important feature of EESP. The empowerment needs to be designed in a way that it is sustained by the resource users, and is not dependent on ongoing WWF facilitation.
- The learning approach, involving exchanges between different land/seascape projects, should be developed in a way that is not dependent on prolonged WWF facilitation. Once institutions and programs are comfortable working together and exchanging information, and they experience the benefits of this approach, it should be sustainable.
- Certain parts of the program, such as the environment prizes, could in the future be amenable to commercial sponsorship and sustained independently of WWF.
- The National and Regional EAME Committees may not be sustainable. However if they successfully create a sustainable enabling environment, they do not need to be. If they continue to prove useful at the end of the 20-year period it is likely that the respective participating institutions may take steps to continue the coordination without WWF involvement.

Capacity Building of Partners

EAME has carried out several capacity building initiatives ranging from MPA manager trainings, professional training up to MSc and PhD level, supporting individuals to participate in regional and international

conferences, support to government officials to attend meetings of relevant conventions and sub-regional commissions, training of local communities on sustainable resource management and sustainable livelihood initiatives etc. These local to regional capacity building initiatives will go a long way in ensuring sustainability of the various projects that were initiated by WWF over the last 10 years.

Adoption of Activities in National programs

Activities that are being implemented in close collaboration with government institutions have a higher probability of being adopted by the participating countries than those that are implemented in isolation. For example, facilitation and support of Fisheries certification programs, oil and gas activities, and Fisheries Access Agreements all greatly benefited from close government collaboration. EAME is also working closely with local NGOs to facilitate their involvement in lobbying to ensure that environmentally friendly oil and gas practices are adopted and implemented in national projects. This activity stands a good chance of being continued by CSOs even after the ending of the WWF project.

Support of National Task Forces

EAME has also taken a number of steps to ensure the sustainability of some of its activities. For example, while WWF helped to establish the WIO-Marine Turtle Task Force, most of its marine turtle conservation activities are now being handled by the CMS-recognized national task forces that are fully anchored in relevant government institutions.

Link with Nairobi Convention

EAME is working closely with the Nairobi Convention in order to anchor its work more in the Convention framework.

Coastal East Africa Network Initiative (CEA NI)

WWF has accepted EAME as part of the new Coastal East Africa Network Initiative that is anticipated to provide funding for continuation of some of the policy, market, cross-cutting and site activities previously funded by GCP2. The CEA NI emerged from WWF US's priority setting as one of the 12 places of highest priority for the organization's focus. WWF US's technical support and investment in EAME will therefore likely increase in the future. This includes a concerted effort to seek additional funding from a wider range of sources and through a range of mechanisms that can sustain long-term financial support for the overall ecoregion program and project sites.

The aim of the CEA NI is to build on the existing field programs and ecoregion work to transform the governance of natural resources and markets at national and international levels in order to reduce pressures on natural resources and ensure the survival of globally important habitat and species. The NI will build on the many years of GCP support to address and reduce large-scale threats at the ecoregion scale.

The CEA NI will need to maintain the structures that were established for the delivery of the Ecoregion Strategies, involving continued collaboration with focal institutions through national and regional committees. The CEA NI completed the development of their Conservation Plan in June 2009.

EAME as part of the WWF CEA NI is earmarking significant investments in the coming years to bring about transformational reforms in tuna and shrimp fisheries governance in the WIO region. As part of developing the CEA NI Marine Program, a fisheries core team developed the Fisheries Strategy for tuna and shrimp. A set of strategies were proposed including a Fisheries Accord, institutional reforms in marine fisheries/ocean governance, and stepwise marine fisheries certification. These will certainly inspire and bring about

transformational change and make these fisheries more profitable and sustainable while addressing ecosystem concerns.

Local Community Involvement

To ensure that activities initiated with USAID-funds will continue beyond the life of GCP2, sustainability was designed into the program by having the ongoing implementation tasks performed almost entirely by permanent stakeholders – primarily local communities and local government in both implementation sites (Kiunga MNR and Quirimbas NP). To achieve this, activities undertaken by local communities were designed to ensure net livelihood benefits to communities, justifying the time they invest in the planning and management process. The project also worked to ensure that plans are enforceable for local community members as well as ‘outsiders’, by strengthening governance processes. Similarly, local governments need a good enabling environment in order to carry on a difficult job. Part of this relies on appropriate enabling policy and legislation that can empower and provide the resources or incentives necessary for effective governance.

The long-term sustainability of the EAME Secretariat is ensured through additional funding from DANIDA, DFID, and WWF offices. Funding for Kiunga has been secured for the Raising Community Capacity for Coastal Management (RaCCCoM) program in the Lamu Seascape that is working to strengthen community capacity for coastal and fisheries management. In addition, WWF was able to obtain funds from the Keane Family Foundation to support both the Quirimbas and Kiunga projects for the next five years (FY09-FY14). In Quirimbas, WWF is in the process of submitting a second phase funding proposal to the French Development Aid Agency, AfD. It is anticipated that this will be secured beginning in January 2010.

Beyond financial sustainability, many of the processes funded by GCP have catalyzed action at different levels and helped to create a framework of enduring partnerships and strategies that partners are fully committed to implementing in the medium and long term, helping ensure program sustainability beyond GCP.

Establishment of WIO-C Consortium

The WIO-C Consortium was initiated in 2006 after the first evaluation of the EAME program recommended that WWF strengthen the coordination of the EAME program with other international organization initiatives in the region. This is a consortium of international NGOs (WWF, WCS, CORDIO, WIOMSA, and EAWLS) and inter-governmental organizations operating in the region: IOC-UNESCO (Intergovernmental Oceanographic Commission), IOC (Indian Ocean Commission), IUCN, UNEP, and NEPAD.

Partnership with other national and regional programs

These partners are contributing significant resources annually in the WIO region for implementing various projects related to the EAME strategy in order to have a coordinated approach for these efforts:

- MACEMP Project in Tanzania: World Bank and GEF funded, totaling \$60 million, 2007-2012;
- ASCLME regional Program: WB, GEF, and implemented by UNDP, totaling \$25 million for 10 countries of Nairobi Convention between 2008 – 2013;
- SWIOFP regional Program: WB and GEF funded, implemented by WB, totaling \$25 million, for 10 countries of Nairobi Convention between 2008 – 2013;
- RECOMAP regional Program: EC funded, EU18 million for advancing integrated coastal management initiatives in WIO region, 2006-2010;
- WIO-Lab regional project: NORAD and UNEP funded with \$11million from2004-2009 for WIO region, for addressing land based sources of pollution and activities to the marine environment;

- SSA Partnership Fund: \$260 million, EAME in partnership with FAO/AU/WB under the Partnership Fund for Sustainable Development in Sub-Saharan African countries, a large scale approach for marine biodiversity conservation in Eastern Africa. EAME is preparing the Kenyan Coastal Development project with key components including sustainable environmentally and socially sustainable private sector growth, spatial planning, fisheries, biodiversity and protected area management, sustainable tourism management and development, project management and regional cooperation and governance. (See FY09 GCP report for details.)

Measures of success

EAME's work has concentrated on delivering conservation outcomes on the ground in priority sites and development of a robust regional marine policy program to address transboundary issues, especially on sustainable fisheries and oil and gas developments.

Success Highlights

- Significant increase in both the coverage of area under protection and number of MPAs in the Ecoregion over the last 10 years.
- Establishment of a seascape conservation approach in Rufiji-Mafia-Kilwa EAME priority site.
- Key habitats saved through establishment and improved management of government parks/reserves and community managed areas.
- Conservation of dugongs in Bazaruto MPA where we still have the only viable breeding population in the Western Indian Ocean region. Dugongs have also been adopted as a Flagship species by the Mozambique government.
- Significant increase in green turtle population.
- Endemic and threatened species protected (mainly in reserves).
- Increased community interest and benefits from conservation.
- Increased civil society engagement in conservation.

Key areas where EAME has done quite well over the past five years include:

1) **High level government engagement.** There seems to be no doubt that major conservation gains have resulted from WWF-EAME's engagement with the highest levels of government, for example to develop shared conservation visions such as the 'Ecoregion Vision' for protection of coastal and marine areas. The vision forms the building block of the overall Ecoregional approach for the development of a tri-national vision for conservation and sustainable management of Coastal East Africa's marine resources.

2) **Large scale (seascapes) conservation priority setting and planning.** The work done within EAME Action Programs to define a common vision of the core areas for conservation at sea is regarded as having transformed conservation delivery in the region. This work is overarching and links into many of the issues outlined in other WIO regional programs; identifying priorities and planning based upon knowledge of biodiversity hotspots and challenges.

3) **Building marine protected area networks.** WWF's work to build marine protected area networks is universally agreed to be transformational. Key protected area gaps have been (and are being) filled, and in Mozambique large new protected areas have been created. Connectivity between protected areas to benefit

wide-ranging species and to establish gradients along which species can migrate over time in the face of climate change is an important emerging element of this work. WWF's future work will cluster geographically in and around these areas and build outwards along corridors.

4) **Community involvement in conservation.** It is generally agreed that the paradigm shift of involving communities in conservation, especially around protected areas, has delivered significant conservation and human development benefits. This has been facilitated by changes in policy and law in all three countries.

5) **Partnerships building on areas of key expertise.** WWF has been instrumental in building key conservation partnerships in the region, often linked to the Ecoregion Action Plans (e.g. WIO-C). Once established these partnerships can share a common vision of what should be done on the ground, and different agencies can play their various roles. Newly developing partnerships with rural development partners such as CARE will allow us to address community needs, reducing poverty and opening more space for communities to take a longer, more sustainable approach towards their livelihoods strategies. Resource exhaustion is coming to be more widely recognized as a driver of poverty and thus WWF perspectives on this issue are more widely sought by potential partners.

6) **Monitoring impact and effective communication.** On the occasions where WWF has collected detailed monitoring data on its impact in the field, and communicated these effectively, they have had a major and lasting impact in motivating interest and participation of governments, communities, and funders. More comprehensive monitoring, using comparable methodologies across the region, linked to follow-up communications campaigns, will be a powerful tool in the future.

7) **Establishment of sustainable finance mechanisms.** One of the problems of establishing protected area networks is the need to fund their management, and provide livelihood improvements for local people. The WWF-assisted work to establish sustainable funding mechanisms in Tanzania and Mozambique has partly solved some of these problems, and provides a valuable platform to build upon in the future.

8) **Fishing gear exchange.** The fishing gear exchange program has gradually evolved into a micro-credit scheme as it was envisioned. The fisher co-operative societies are taking up their rightful role in assisting fisher folk access better and sustainable fishing gear. To sustain the impetus WWF is involved in enhancing the capacity of fisher co-operative societies and promoting functional cooperation between BMUs and fisher co-operatives.

9) **Marine Turtle:** The total number of successful (success defined as hatched and entered the sea) hatchlings from the WWF-led integrated marine turtle monitoring and conservation program has so far (FY04-FY09) resulted in 75,360 individuals. This is an increase over the number when the program started.

Advances toward achievement of the EAME Vision:

- The development of a Consortium of NGOs for Conservation of Coastal and Marine Ecosystems for the Western Indian Ocean region, a new initiative known as "WIO-C" that was launched during the 5th Nairobi Convention Conference Of Parties in 2007.
- The development of Fisheries profiles for Kenya and Tanzania as part of the process towards marine fisheries certification in Eastern Africa - the necessary first stage in the MSC fisheries certification process where the details of specific fisheries (catch data, management status, etc.) are outlined and

used in determining the suitability of these fisheries for further consideration in the certification process.

- Championed the endorsement of SEAs by Nairobi Convention as an important tool for addressing the environmental impacts of oil and gas development in the region.
- Coordinated the policy analysis exercise in Mozambique, Tanzania and Kenya for addressing environmental issues related to the emerging oil and gas industry. This analysis identified key gaps/points of engagement for WWF in the oil and gas sector, outlining how WWF will address the pervasive issue of effectiveness of policies and institutions.
- Facilitated the production of a fisheries by-catch report for WIO region, vital statistics for one of the main fisheries management issues in the region. This report was critical to document with clear and credible statistics the trends and status of fisheries in the region for any future engagement with partners and governments.
- Participated in the process for WB/FAO approval of US\$260 million for sustainable fisheries investment fund in Sub-Saharan Africa and Partnership for Sustainable Fisheries for SSA countries signed in May 2006.
- Coordinated the establishment and implementation of the \$1 million ScaFCom Project funded by NORAD for the establishment of collaborative fisheries management and beach management units in RUMAKI Seascape in Tanzania.
- Participated in the process for the establishment of a \$2 million World Bank/GEF funded Climate Change Project for Tanzania, Cameroon and Fiji on vulnerability assessment and development of adaptation strategies for coral reefs and mangroves.
- Co-authored the Dugong Book for Western Indian Ocean region that was launched during the 4th Nairobi Convention Conference of Parties in Madagascar (2004).
- EAME coordinated the process for development of WWF Marine Action Plan (2005-2009).
- EAME Coordinated the development of CEA NI Conservation Plan (2010-2015)
- Presentation in international meetings - Promoted the image and profile of the Ecoregion in regional and global events: the Conference Of Parties on Climate Change, Nairobi Convention, CMS, International Congress and Summits: World Parks Congress in Durban 2003, IMPAC Congress in Australia 2005. Coordinated the WWF Side event during the 2003 World Parks Congress in Durbin, where the EAME states made a commitment for meeting the WSSD targets on Marine Protected Areas.
- Facilitated the initiation of the EAME MPA managers exchange program in December 2005.
- In collaboration with partners produced the MPA management tool kit and WWF-WCPA guide in MPA management effectiveness. Also presented these documents on behalf of partners during the first MPAs Congress (IMPAC1) in Geelong Australia (2004).
- In collaboration with partners (government and non state actors) coordinated the work of WWF in safeguarding and management of 70% of all protected areas in the Eastern Africa Marine Ecoregion.
- Published one of the most comprehensive books on the status and future of MPAs in Eastern Africa with specific recommendations for establishing representative network of MPAs.
- In collaboration with WWF-TPO pioneered the approach for expanding site project (MPA) activities into wider seascapes (not protected by law) especially with the establishment of the RUMAKI Seascape Project in Tanzania as the first ever in WWF Network.

Threat Abatement:

Threats to fisheries, such as unsustainable artisanal fishing practices, identified as the primary threat to long-term conservation in Kiunga Marine National Reserve (KMNR), were addressed through strengthening of

collaborative management structures and institutional mechanisms at the local level, involving all relevant stakeholders.

- A community focused approach to developing local fishing zones and fish breeding zones (no-take zones) was introduced in the Lamu District, including local fisher groups, politicians, and traders. Beach Management Units, established as fully functional community fisheries management units, were instrumental in highlighting areas of infringement, sanctioning offenders, and curbing use of illegal and destructive fish gear. BMUs have galvanized and changed the way fisheries resources are managed and perceived by fisher folk, who now have a sense of ownership towards the fisheries resources and are part of the decision making process. As a result of BMUs, fisher folk are more co-operative in fishery management as they have become actively engaged in the decision-making process. An increased sense of ownership and active participation in the decision-making process has helped to improve the relationship between fishery managers (FiD, KWS) and the resource users (BMU – fisher folk), as well as other stakeholders.
- BMUs and fisher groups within the project catchment have made tremendous progress in managing their fishery. The project facilitated the implementation of regulatory codes set out in the initial establishment of the BMUs. These BMUs enforced the by-laws and regulation of all stakeholder groups in the fish landing sites, thereby reducing cases of unsustainable fishing practices. WWF facilitated discussions on gear use with all six BMUs, and it was agreed that each BMU will develop a phase out plan for the beach seine nets. After demonstrations by the Fisheries Department and WWF, the fisher representatives categorically accepted that beach seines have high by-catch.
- The Joint Management Team (JMT) played a key role in collecting community feedback during the drafting of the new KMR management plan. They have also been very instrumental in enhancing dialogue between communities and government agencies involved in managing marine resources both within and outside the protected area. KWS through the JMT has granted communities controlled use within the reserve of resources such as mangroves for non-commercial purposes.

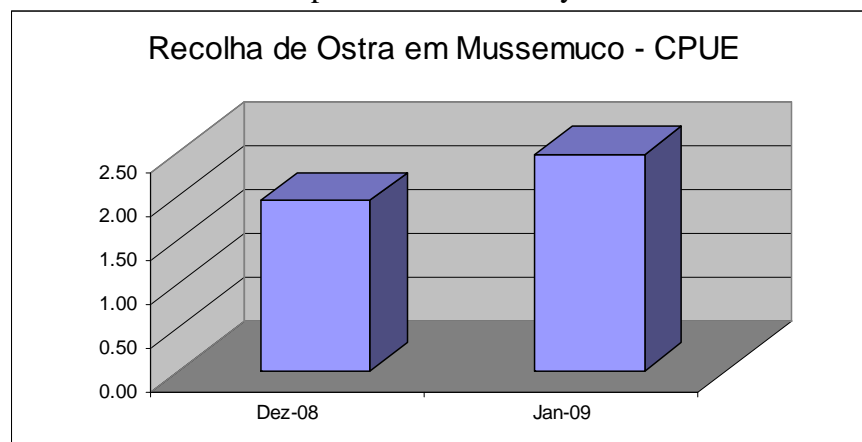
WWF also worked to reduce the threats from artisanal fishing in Quirimbas National Park by establishing new community managed fish-replenishment zones, enforcing park rules and regulations, and strengthening co-management of park activities.

- There was a significant increase in cooperation between the Ministry of Fisheries and QNP and WWF, joining forces to create Fisheries Co-management Committees (CCPs) throughout the QNP. These committees, created using fisheries legislation, are the Government of Mozambique-approved mechanism for fishing communities to exercise management rights over their home waters. The fact that the Ministry of Fisheries for the first time worked with the QNP on this issue represents a very significant step forward, and this was formalized by a MOU signed in May 2009. In total, 13 CCPS have been created and are functioning. The committees have helped completely eliminate any industrial scale poaching in the QNP. The committees have created 2 temporary closed zones, 3 fishing no-take zones, and 2 rotating oyster harvest zones.
- The operation of the Quirimbas Development Committee (COMDEQ) committee, which involves the respective government institutions, communities, and the private sector, continues to be an excellent example of inter-organizational coordination. This body, with representatives of NGOs, Communities, and government institutions (Police, Agriculture, Fisheries, etc.) considers and approves all major management decisions of the Park, greatly increasing the transparency and legitimacy of the QNP.

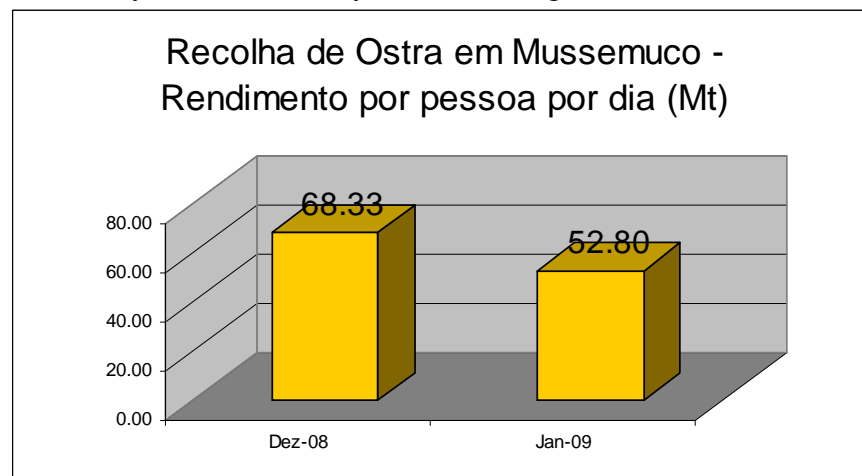
COMDEQ provides a forum for discussion of various issues and allows WWF to diffuse many tensions and misunderstandings before they become a serious problem.

- On Quirimbas Island, the temporary closed zone, an initiative of local leaders carried out without Park or WWF support, is serving to demonstrate results to leaders of neighboring islands, with a huge increase in the average catch (4500kg were caught in just 3 days) , when opened to fishing after a period of closure.
- 8 sanctuary zones have been replotted using GPS, and these positions have been plotted in GIS for management and monitoring purposes. The oyster sanctuary zones have been monitored by the harvesters through the year to capture catch per unit effort data. These community members have been given training in the use of Management Oriented Monitoring Systems (MOMS) as a means of recording their off-take and the returns from this.
- The Ibo oyster bed was protected and marked, and rotating harvest zones were established around a central total protection zone. All of the surrounding communities are respecting the zone, which has the support of local leaders. One of the CCPs formed on Ibo is responsible for the management of the oyster sanctuary. The fishers have accessed new markets for this product, adding value of nearly five times more than the original market (see data tables below).

Recent Catch per unit Effort of Oyster collection



Per person Daily Income from Oyster Harvesting in Mussemuco (25Mt=1USD)



- As residents' increased (voluntary) compliance with fishing regulations, the focus shifted to addressing fishing pressure from outside QNP - including industrial tuna boats, illegal buyers of live prawns, and small scale operators illegally cutting mangrove inside the Park for sale in Pemba – enlisting the support of the Ministry of Defense to assist community guards and rangers in executing their duties. Working together with all these institutions and the communities, all industrial scale poaching in the QNP has been eliminated.

Overcoming Limiting Factors:

The EAME Secretariat played a critical role in engaging and supporting strategic partnerships for effective implementation of the five-year EAME Conservation Plan. Key progress was made to support coordination with partners to tackle the prioritized threats:

- Increased capacity of the EAME Secretariat to increase partner engagement in building an enabling environment for conservation in the ecoregion and tackle priority threats;
- Increased integration of site-based programs and the overall ecoregional strategy;
- Coordinated implementation of the EAME Conservation Plan through National and Regional Committees;
- Harmonizing planned activities with national integrated coastal management strategies and agendas as an entrée for engaging with governments;
- Coordinating the consortium for the Western Indian Ocean conservation of coastal and marine environment (WIO-C).

What Worked:

The EAME approach to conservation is cutting edge in the region

The development of EAME around a framework with specific actions, targets, and timeframes allowed EAME to work at different scales and levels of government, while providing effective linkages between site-based activities at the seascape level and activities at the national and regional levels. EAME mandated the involvement of a multitude of stakeholders in both the planning and implementation stages of conservation efforts at much larger geographic scales, while improving the integration of conservation efforts into national and regional planning processes. EAME has developed a unique niche in its approach to conservation, and its many successes have earned it considerable respect throughout the WWF network and the entire region. EAME partners have strongly recommended that members of the WWF Network increase their technical and financial support to EAME, while EAME should devote more of its time to resource mobilization.

Developed strategies and structures

The Secretariat played a key role in the development of the strategic documents such as EAME (2004) and WWF-EAME (2004) and in the setting up of the implementation structures such as Regional and National Committees. Within WWF, the Secretariat successfully set up a high-level advisory group, the EAME Advisory Group, which oversees the implementation of WWF-specific components of the broader EAME strategy.

The Positive Impact of EAME in the Region

The strengths of the EAME program lie in the fact that EAME is well respected by stakeholders and the actions implemented have great value for the region. There is a very committed secretariat team and partners who are willing to participate in implementation of the program's activities. Even though the EAME strategy has not

been endorsed by governments, it is already playing a significant role in influencing the governments' decisions (e.g. the establishment of new MPAs in Mozambique and Tanzania). During FY09, EAME has succeeded in bringing coherence and focus to a range of activities undertaken within the WIO region.

Raised the profile of the Ecoregion Conservation approach

The EAME ecoregional conservation approach and its priority sites are recognized by different organizations and experts in the region and have been referred to and quoted in numerous publications and proposals. For instance, a proposal "Transboundary Networks of Marine Protected Areas for Integrated Conservation and Sustainable Development: Biophysical, Socio-Economic and Governance Assessment in East Africa" submitted to the European Union by a consortium of twelve institutions from within and outside the region, in providing the justification for selection of their priority sites "The transboundary case study areas (in the boundary between South Africa and Mozambique which comprises the Greater St Lucia Wetland Park World Heritage Site and in the boundary between Mozambique and Tanzania) proposed in this proposal constitute important biogeographical units with unique character, and referred to by the WWF and EAME as priority areas of global importance".

Resource mobilization

The EAME Secretariat in collaboration with other members of the WWF network developed a number of successful proposals to implement activities in the priority sites. These include: Strengthening Community Capacity in Fisheries Co-management (SCCaFCOM) in RUMAKI seascape and Mnazi Bay Community Based Natural Resource Management (CBNRM) project for Mtwara-Quirimbas EAME priority site. The projects that have resulted from these proposals have advanced the innovative approach of EAME.

Partnerships Developed

EAME played a key role in facilitating the establishment of the Consortium for the Conservation of Coastal and Marine Ecosystems in the Western Indian Ocean (WIO-C). This Consortium provided EAME and its partners yet another mechanism which could be used to implement the EAME Strategy within the framework of the Nairobi Convention.

The EAME Secretariat improved the coordination between itself and its regional partners through the establishment of the WIO-C and widened the membership of the Region Committee by bringing in more regional partners as well as with its key collaborating partners within the WWF network. The EAME priorities have been used for UNEP's Transboundary Diagnostic Analysis (TDAs) and Strategic Action Program (SAP) process.

Improved policies, laws and regulations

EAME has contributed to the development of new policies and plans such as Kenya National Fisheries Policy and Prawn Fishery Management Plan; advised the Government of Tanzania through the Fisheries Department on revisions needed in the Fisheries Policy and Fisheries Act; and has influenced a number of key decisions for the Nairobi Convention Conference of Parties. Through its on-going work in oil and gas, there is a high likelihood that participating countries may adopt recommendations aimed at improving their policies and laws for guiding the development of oil and gas sector in their countries.

Improved collaboration with key stakeholders

Since the beginning of EAME, WWF has improved its collaboration with other organizations dealing with coastal and marine issues, particularly with the Nairobi Convention, IOTC, and WIOMSA, at the regional level

and national institutions such as Departments of Fisheries in Tanzania and Kenya and NEMC in Tanzania and NEMA in Kenya.

In Kiunga, the establishment of BMUs and the eventual government support and legitimization heralded the turning point in resource management in Lamu archipelago. The local resource users have enthusiastically taken their role in resource management and enhanced co-operation between the various stakeholders. Participatory ecological resource monitoring and fishery data collection led to the dissemination of research and accompanying science to the fishers, enhancing the reach and acceptance of the monitoring/research findings as well as the mitigation measures.

Village Based Management Structures Increase Capacity for Sustainable Fisheries Management

The BMUs and fisher groups within the KMNR project catchment made tremendous progress in managing their fishery. The project facilitated the implementation of regulatory codes set out in the initial establishment of the BMUs. These BMUs enforced the by-laws and regulation of all stakeholder groups in the fish landing sites, thereby reducing cases of unsustainable fishing practices. WWF facilitated discussions on gear use with all six BMUs, and it was agreed that each BMU will develop a phase out plan for the beach seine nets. After demonstrations by the Fisheries Department and WWF, the fisher representatives categorically accepted that beach seines have high by-catch.

What did not work:

- The EAME Secretariat did not have adequate resources and capacity to fully implement the EAME strategy and monitoring plan. Adequate local expertise to deal with emerging issues such as climate change, IUU fishing, oil and gas, and FAAs was also lacking.
- The governments' political will and commitment to balance economic development and environmental sustainability was also inadequate; the integration of policy and governance issues in design and implementation of field/site level projects will need to be improved in the future.
- Implementation of the monitoring plan developed in 2005 was weak due to very limited capacity within the EAME Secretariat and in Focal Institutions and to their limited ability to collect information from stakeholders. As a result, monitoring and evaluation at the ecoregional level was poor. Better monitoring reporting based on EAME's targets and indicators could result in improved recognition of EAME's activities and successes.

Value of the GCP program

GCP funds were very strategically used to support EAME structures and other core costs, something that was difficult to fundraise for from other sources. The development of EAME around a framework with specific actions, targets, and timeframes allowed EAME to work at different scales and levels of government, while providing effective linkages between site-based activities in the seascape and activities at the national and regional levels. EAME mandated the involvement of a multitude of stakeholders in both the planning and implementation stages of conservation efforts at much larger geographic scales, while improving the integration of conservation efforts into national and regional planning processes. EAME has developed a unique niche in its approach to conservation, and its many successes have earned it considerable respect throughout the WWF

Network and the entire region. EAME partners have strongly recommended that members of the WWF Network increase their technical and financial support to EAME, while EAME should devote more of its time to resource mobilization.

GCP funds were catalytic in supporting EAME secretariat functions that in turn leveraged other significant resources for EAME activities and projects. Both the financial and programmatic support from GCP enabled the EAME Program to achieve program goals and conservation objectives. Given its unique niche in the region as well as within the WWF Network, and its successes to date from key GCP support, the EAME Program is now well positioned to achieve even more successes in the future. The Coastal East Africa Network Initiative will build on the many years of GCP support to address and reduce large-scale threats at the ecoregion scale. The CEA NI will need to maintain the structures that were established for the delivery of the EAME Strategy, involving continued collaboration with focal institutions through national and regional committees.

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