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Eastern African Marine Ecoregion Annual Report

10/01/2008 - 09/30/2009

for

World Wildlife Fund

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Acronyms:

AMA	Association for Our Environment
AMREF	African Medical Research Foundation
AU	African Union
BANP	Bazaruto Archipelago National Park
BMU	Beach Management Unit
CBC	Canadian Broadcasting Corporation
CDS-CZ-MICOA	Centre of Development and Sustainable Coastal Zone
CEA NI	Coastal East Africa Network Initiative
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
CORDIO	Coral Reef Degradation in the Indian Ocean
CSO	Civil Society Organization
CSPs	Coastal Strategy Plans
DANIDA	Danish Ministry of Foreign Affairs
EAC	East African Community
EAME	The Eastern African Marine Ecoregion
EAWLS	East African Wild Life Society
EWT	Endangered Wildlife Trust (Mozambique)
FAA	Fisheries Access Agreements
FAO	Food and Agriculture Organization
FiD	The Fisheries Department
FoD	Forest Department
FPAs	Fisheries Policy Agreements
GCLME	Guinea Current Large Marine Ecosystem (Ghana)
GCRMN	Global Coral Reef Monitoring Network
ICM	Integrated Coastal Management
ICSF	International Collective in Support of Fish workers
IDPPE	Institute of Development of Small Scale Fisheries
IMS	Institute of Marine Sciences
IOC	Indian Ocean Commission
IOSEA	Indian Ocean and South-East Asian Marine Turtle MOU
IOTC	Indian Ocean Tuna Commission
IUCN	The World Conservation Union
JMT	Joint Management Team
KESCOM	Kenya Sea Turtle Conservation Committee
KMFRI	Kenya Marine and Fisheries Research Institute
KMNR	Kiunga Marine National Reserve
KWS	Kenya Wildlife Service
LCC	The Lamu County Council
MACEMP	Marine and Coastal Environment Management Project
MBREMP	The Mnazi Bay Ruvuma Estuary Marine Park

MICOA	Ministry for the Coordination of Acção Ambiental (Mozambique)
MOMS	Management Oriented Monitoring Systems
MPA	Marine Protected Area
MSC	Marine Stewardship Council
NEMA	National Environment Management Authority
NEMC	National Environment Management Council (Tanzania)
NEPAD	New Partnership for Africa's Development
NOAA	National Oceanographic & Atmospheric Administration
NORAD	Norwegian Agency for Development Co-operation
NP	National Park
QNP	Quirimbas National Park
PHE	Population, Health, and Environment
RAC	Regional Advisory Committee
RACCCoM	Raising Community Capacity for Coastal Management
RFMOs	Regional Fisheries Management Organizations
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
UEM	University Eduardo Mondlane
UNEP	United Nations Environmental Program
UNIDO	United Nations Industrial Development Organization
VOA	Voice of America
WCK	Wildlife Clubs of Kenya
WCMC	World Conservation Monitoring Center
WCS	Wildlife Conservation Society
WIO	Western Indian Ocean
WIOMSA	Western Indian Ocean Marine Science Association
YoT	Year of the Turtle Events (Kenya)

The WWF Coastal East Africa Network Initiative's 9 priority land and seascapes.

Eastern African Marine Ecoregion

PROJECT OVERVIEW

Description of Site

The **Eastern African Marine Ecoregion** (EAME) is considered globally outstanding for marine biodiversity, supporting diverse coral reefs, extensive mangrove forests and sea grass beds, spectacular sand dunes, and a large number of ecologically critical lagoons and estuaries. Biodiversity in the ecoregion is high, with more than 11,000 species identified in an area of more than 770,000 square kilometers along the Eastern African coast. Of these, up to 15 percent are narrowly endemic to EAME. WWF is targeting key areas for coral conservation, where there is currently a lack of sufficient support from government. WWF, through this grant, has identified two of these globally outstanding priority areas for biodiversity conservation.

Kiunga Marine National Reserve (KMNR) in Kenya lies in the very north of the Lamu Archipelago seascape on the Kenya-Somalia border, an area of globally outstanding ecological and cultural richness. KMNR and the inland Dodori and Boni National Reserves (877 square kilometers) were together designated a UNESCO Man and Biosphere Reserve in 1980. KMNR extends 1–2.5 kilometers 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, and dolphins, and provide one of the last principal 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.

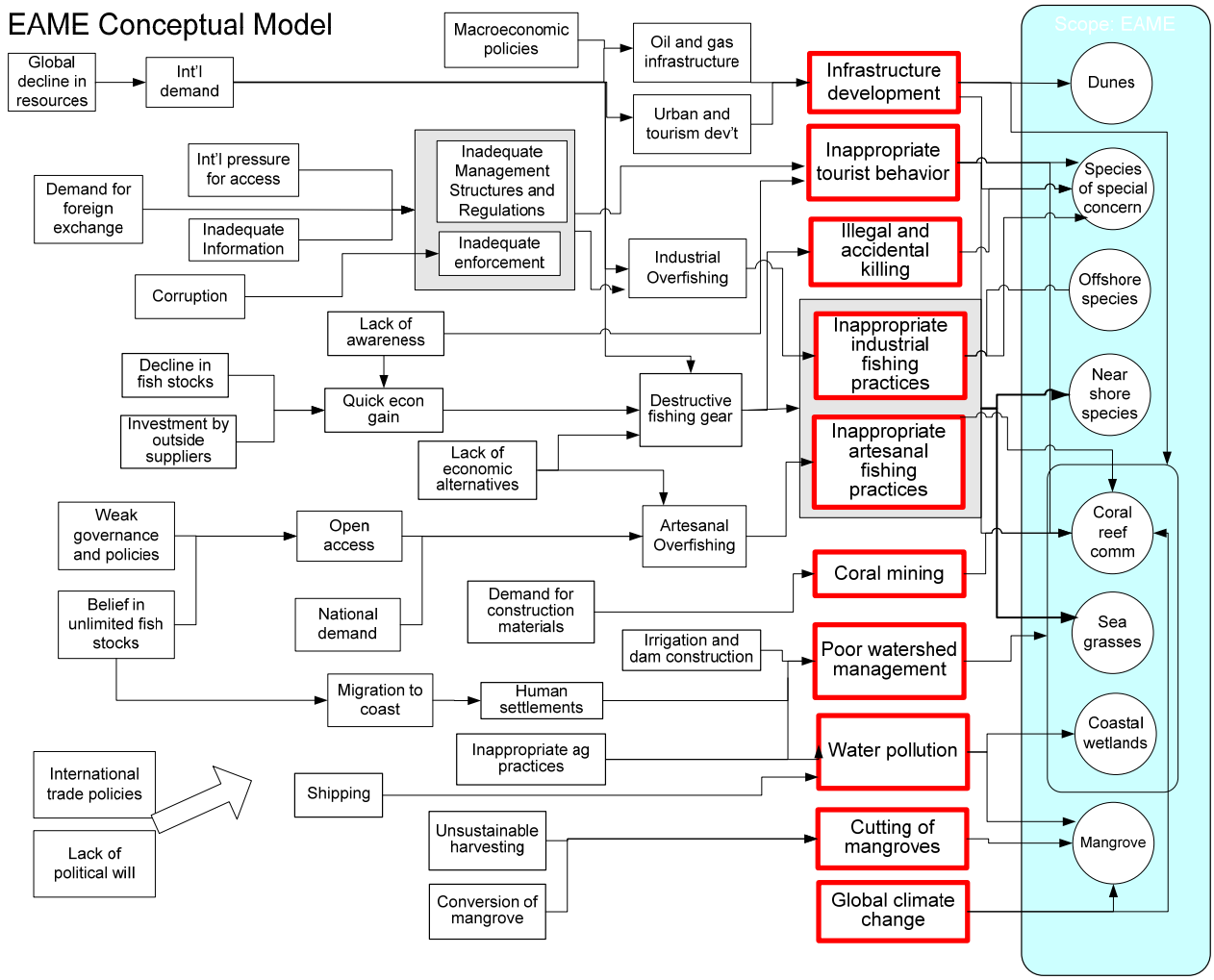
The Quirimbas Archipelago represents the centerpiece of the Mtwara-Quirimbas seascape within the Greater Ruvuma Landscape in Mozambique which is a chain of 28 islands stretching along almost 400 kilometers of the coast. The southernmost 11 of these islands and a vast expanse of terrestrial woodland (Miombo), coastal forest, and coral rag thicket are included in the **Quirimbas National Park** (QNP), established in 2002. The total area of the park is 750,639 hectares—of which 152,237 hectares are in marine and island habitats—making this the largest marine protected area in the western Indian Ocean and in Africa. The park also supports important turtle, whale, and dolphin populations, and provides the primary livelihood of some 40,000 rural people.

The goal of the **EAME Secretariat** is to establish and maintain a functional enabling environment for the implementation of the jointly developed *EAME Conservation Plan: 2005-2009*, completed in 2004. The implementation of the EAME conservation plan takes place through the strategic regional and national action plans. The Secretariat works to ensure the implementation of the ecoregion strategy so that key policy and practice barriers are being removed, best practices are being learned, incentives for conservation are present, key research is

conducted to inform management decisions, and coastal communities/fishermen have the ability to act as stewards of their natural resources, assuring sustainability.

Threats

As part of the detailed analysis to develop WWF's EAME Action Plan and strategy we revisited our analysis of key direct threats to biodiversity in EAME. The detailed conceptual model for the WWF Action Plan is below.



Flowing from this, the detailed direct threats 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

Areas: areas where this threat is relevant. Areas are the 21 priority areas identified in EAME
Intensity: the value reflects a ranking of the threat intensity, 10 being the highest intensity of all threats.
Urgency: ranking amongst the 10 threats according to which one is the most urgent to deal with, 10 being the most urgent.

Threats include more specifically:

Artisanal fishing: over-harvesting of coral and pelagic fish species, marine turtles and marine mammals, invertebrates, ornamental fish and coral, and 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: change in river run-off resulting in increased sedimentation of marine systems; and change in water temperature, resulting in habitat change and coral bleaching - among the most prominent effects of climate change;

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: 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, pollution, water flow management;

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

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

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

The table below shows WWF's ranking assessment of its capacity to tackle these threats, undertaken at a strategic planning workshop in Pemba, Mozambique in December 2005:

Threat	**Criteria**				**Total**	**Capa-city Rank**	**Threat Rank**
	WWF Compara-tive Advantage	**Window of Opportunity**	**WWF Network Support / TA**	**Local WWF Capacity**			
Artisanal fishing (includes by-catch and poaching of turtles)	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 by-catch)	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 provides WWF with an opportunity to make strategic decisions for activities based on tangible assessments of ecological need/importance, and to strategically scale up capacity where threats are high and capacity is low. Unsustainable artisanal fishing practices have been ranked as the greatest threat to the ecosystem, thereby confirming our focused efforts on mitigating this threat. USAID investments are already sponsoring a gear exchange for artisanal fishermen to trade in their harmful fishing nets for alternatives that will not decimate fish stocks in Kiunga MNR. In Quirimbas NP, the threat of artisanal fishermen is being mitigated through the establishment of fishing replenishment zones that prohibit fishing activities in certain breeding areas.

Strategic Goals and Objectives

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 complimented 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 is harnessed to ensure the long-term stability and diversity of the representative species, habitats and ecological processes across the ecoregion. Of these, the **priority focus of USAID-funded activities 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 quality[1] and three high quality[2] coral sites have improved by at**

[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

least one status level.

COLLABORATORS/PARTNERS

EAME program:
WWF is staffing and hosting the EAME Secretariat on behalf of a much wider group of stakeholders, including local, national and international NGOs, different government bodies from four of the five EAME countries (South Africa, Mozambique, Tanzania, and Kenya), academic institutions, etc. Key EAME partners include UNEP-Nairobi Convention Secretariat, the Kenyan Ministry of Fisheries, Mozambique's Ministry of Environmental Affairs (MICOA), Tanzania's National Environment Management Council, Kenya Wildlife Service (KWS), WIOMSA, and IUCN.

Additional partners include Kenya Sea Turtle Conservation Committee (KESCOM), Sea Sense (formally known as Tanzania Turtle and Dugong Conservation program) and Endangered Wildlife Trust (EWT), Coral Reef Degradation in the Indian Ocean (CORDIO), East African Wildlife Society, FAO, KMFRI, IMS, MICOA, NEMC, TCMP, MACEMP, ICM, and the World Bank. The EAME Secretariat is working closely with the National EAME Committees of Mozambique, Tanzania, Kenya, the EAME Focal Institutions in these three countries, and with the Regional EAME Committee.

Kiunga:
The program is jointly managed by WWF as a facilitator, and the Kenya Wildlife Service (KWS) as the mandated management authority. Further, the program is implemented through collaboration with other key stakeholders including the Kenya Forest Service (KFS), the Fisheries Department (FiD), the Lamu County Council (LCC), local communities in and around the reserve, Wildlife Clubs of Kenya (WCK), National Environment Management Authority (NEMA), Kenya Marine and Fisheries Research Institute (KEMFRI), the Ministry of Health (MoH) and Family Health International (FHI).

Quirimbas:
During this past year, the major collaborating agencies were the Quirimbas National Park, the Quirimbas Development Committee (COMDEQ), the Ibo and Quissanga District Administrations, the Marine Administration of Cabo Delgado Province, the Police Commando of Ibo District, the Gorongosa Wildlife College, the Fisheries Department of Cabo Delgado, the Marine Corps (Marinha de Guerra) of Mozambique, the Ministry of Defense, and the Ministry of Tourism (MITUR).

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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.

SUMMARY: PERIOD 10/01/08–09/30/09

Highlights

EAME program:

- With leveraged funds, three major national stakeholder's workshops on Marine Fisheries Certification were conducted in Mozambique and Tanzania. Fisheries pre-assessment commenced and field work was completed for Octopus fishery in Tanzania, Lobster fishery in Kenya and Shrimp fishery (both Shallow & Deep – water) in Mozambique.
- The Kenya National Fisheries Policy was formally launched and approved by the government for implementation. The revision of Tanzania Fisheries Regulations was also finalized 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 all inclusive stakeholder process of developing and finalizing the Kenya prawn fishery management plan.
- WWF and partners' lobbying succeeded in increasing the priority of By-catch and IUU fishing on the IOTC programme of work. The Working Party on By-catch was expanded to cover ecosystems. IOTC performance review commenced, and WWF/TRAFFIC lobbied for and was allowed a slot on the review panel.
- EAME initiated discussions with NEPAD and African Union for Africa Wide Fisheries Ministerial framework to address marine fisheries governance and trade related issues. There was also follow up with the Nairobi Convention and other regional partners in supporting a process for WIO countries to sign a fisheries accord to address regional trans-boundary fisheries issues, including FPAs, by-catch and IUU.

Kiunga:

- Fisheries co-management improved ownership of resources. Fishermen agreed to be held accountable for their resources and promised to work closely with government and other agencies in conservation and development. This was a direct response to the decentralization of decision making processes in fisheries management to the BMU at the grass root level.
- 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. An agreement was reached between these two groups to market ecotourism attractions in the MPA for turtle conservation for the first time, in return for increased revenues for Lamu tour operators. Until now, Lamu tour operators did not bring tourists to KMNR on dhow sailing excursions. This agreement will benefit both the KMNR turtle youth groups and Lamu tour operators with increased revenue.
- Collected data used in management of the KMNR fishery. Fisheries Department in collaboration with WWF, have been able to provide vital information on fish catch analysis and ecological conditions of marine resources in KMNR. BMUs have used the

information in drafting community fisheries management plans as mandated in the new fisheries policy.

- Understanding emerging challenges such as climate change. Through its work with fishermen in the community the project has been able to understand climate change perspectives and potential effects on marine resources and livelihoods. This information allowed the project to leverage funds from other donors and produce a documentary on Climate Change Witnesses in KMNR.

Quirimbas:

- An MOU was signed between the QNP and the Provincial Department of Fisheries - a major step forward in the co-management of the fisheries sector in the park and the surrounding areas. The MOU allows for a more formalized sharing of data on the fisheries activities in the province as a whole and the park in particular.
- The creation of new Community Fishing Councils and the joint capacity building of the existing ones has further enhanced WWF and the QNP's relationship with the fisheries sector.
- For the first time in some years, this past season has seen the recording of four turtle nests on Rolas island, two of which have already been observed to hatch successfully.
- According to fishers and project staff, both the fish and oyster sanctuaries created a few years ago in the fish sanctuary at Quirimba Island now reflect higher seasonal yields, in size, biomass, and in biodiversity. Thus, the local communities have a good understanding of the benefits of the sanctuaries.
- A recent exchange visit of local fishers and NGO partners from QNP and the Tanga region in Tanzania, has resulted in the introduction of a fledgling mud crab fattening project in the Mussemuco village in the QNP. The group has already completed the first fattening cycle and has successfully marketed their products to the tourist operators on Ibo Island who have offered to continue purchasing the crabs for the immediate future.
- The QNP continued to distribute 20% of park revenue to more communities through the community natural resource management committees that were created at the Administrative Post level to assist in the process of decentralization.

Objective 1: Promote measurable results across the ecoregion by facilitating multi-stakeholder actions from field to policy levels

In FY09, the EAME Secretariat used GCP2 funding to continue work to ensure partnership cohesion between WWF, donor agencies, field staff, focal institutions and communities as the foundation for implementation of the EAME strategy. During this final year of GCP2 support, and with the support of partners, EAME played a catalytic role and both focused on key initiatives and influenced partners to take the lead in some activities, including: capacity building in MPAs through the new MPA managers certification initiative; sustainable fisheries management focusing on the shrimp and tuna fisheries; marine fisheries certification process; by-catch reduction strategies; oil and gas development; CSO capacity building; monitoring and

documentation of the process and lessons on establishing the adaptive management framework for the ecoregion; and communication of lessons for replication of the East Africa experience to other parts of Africa and the world. Because the EAME ecoregion is highly connected, efforts focused on promoting connectivity in strategies and learning across marine conservation interventions and contexts.

Below are specifics of the results achieved with USAID/GCP2 funding in FY09.

Activity 1.1: Maintain overall project management and constructive working partnerships between WWF, donor agencies, field staff, focal institutions and communities.

Collaborate with national and regional committees to incorporate elements of the EAME Strategy into government strategies and action plans at country and regional levels.

EAME National Committees

EAME National Committees were established in Kenya, Tanzania and Mozambique for providing advice and assistance on the implementation of National Action Plans. Focal institutions in Kenya, Tanzania and Mozambique are hosting the EAME National Committees and are directly involved in overseeing the implementation of EAME National Action Plan in their respective countries. Focal institutions provide administrative support to the National Committees, including facilitation of activities of the National Committees and management of available funds. In FY09 the National Committees held meetings twice a year supported through EAME sub-contracts to the focal institutions that provided guidance and contributed in making key decisions relevant to the implementation of the EAME action plan in their respective countries. Major activities for this year included preparing plans to sustain implementation of the EAME Strategy after the GCPII Program ends. Also, the National Committees were tasked with the production of lessons learned through the process of implementing the EAME conservation plan for the past five years. The lessons are included in the final EAME GCP lessons learned document.

Kenya National Fisheries Policy Process

With the support of EAME and partners (GTZ, WWF and FAO), the Kenya National Oceans and Fisheries Policy was finalized and formally launched by the Kenya Prime Minister in March 2009. The process of developing the policy has been ongoing since 2003, spearheaded by a technical working group comprised of representatives from various interest groups, including the government, private sector, civil society and NGOs. During the period under review, EAME worked closely with the newly established Ministry of Fisheries Development towards the finalization and adoption of the national fisheries policy in addition to providing technical input. The key elements of the National Oceans and Fisheries Policy include the framework on

fisheries development and aquaculture, marine and deep sea fisheries, inland lakes and riverine fisheries as well as appropriate recommendations for effective enforcement, development and implementation. The review of the Fisheries Act Cap. 378 to conform to the Oceans and Fisheries Policy is underway. The draft Fisheries Management and Coordination Bill has been prepared and endorsed by the Parliamentary Committee on Agriculture, Lands and Natural Resources.

The Oceans and Fisheries Policy and the Oceans and Fisheries Management and Coordination Bill recommend the creation of a new institutional framework for effective management of the fisheries sector through the establishment of the Kenya Ocean and Fisheries Council (KOFC) and creation of Kenya Oceans and Fisheries Service (KOFS) and the linking of the Kenya Marine and Fisheries Research Institute (KMFRI) as the research component of the sector. This will enhance active stakeholder participation in the fisheries sector, improved coordination and effective management and sustainable use of fisheries resources in the country.

Prawn Fishery Management Plan for Kenya

EAME has been providing financial and technical support to the Kenya government towards a participatory and consultative process for the development of a prawn fishery management plan in Kenya. During FY09, a number of stakeholder meetings and technical working sessions were conducted. The prawn fishery management plan was finalized by the working group and submitted to the Ministry of Fisheries Development. A training workshop to guide the implementation was held and plans are underway for drafting the relevant legislation. The government has also initiated a process to sensitize the key stakeholders in the prawn fishery sector on the implication of implementing the prawn fishery management plan. The salient feature about the plan is the requirement for environmental impact assessment reports/environmental audit reports for all trawl vessels, quota allocation for available fishing opportunities, zoning, closed areas/seasons, mechanisms for cost and benefit sharing as well as conflict resolution, and stronger stakeholder engagement in research, decision making and management of the prawn fishery.

Opportunity to Review Tanzania National Fisheries Policy

The government of Tanzania in collaboration with the partners has been revising the Fisheries Act 2003 and the Fisheries Regulations of 2005. In this reporting period, EAME took advantage of this process to advise the Government of Tanzania on revisions needed, including a comprehensive amendment to conserve and protect the endangered species - namely the sea turtles, dugongs, cetaceans and whale sharks - as well as their habitats. EAME proposals were accepted, and the revised Fisheries Regulations were finalized, adopted and approved by the Minister for Livestock and Fisheries Development.

Plans are underway to revise the Tanzania National Fisheries Policy (1997) to conform to the revised Fisheries Regulations and the Fisheries Act (2003, also under revision). The government

Fisheries Division has asked EAME for technical and financial assistance to support this process. The stakeholder consultation process has commenced, and it is expected that the revised policy should be in place by the end of 2009.

WB/WWF/FAO Partnership Fund for Sustainable Fisheries in Sub-Saharan African Countries

EAME is involved in information dissemination in EAME range states as part of its communication role to sensitize the countries on the process to access the Fund resources. WWF recruited a Communications Officer, and a draft communications strategy has been developed. EAME is also engaged in the project concept note (PCN) development process, the means by which countries apply to access the Fund. In Mozambique EAME engaged the services of a local fisheries expert to assist in the collection and analysis of information as an input to Mozambique's PCN. Plans are underway for a mission to Mozambique by the RAC coordinator and WWF in the first quarter of FY10 to hold discussions around the PCN process.

The Kenyan Coastal Development Project (KCDP) preparation is on course with funding from World Bank for the project preparation as per the approved Kenyan PCN. Key components of the KCDP include 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. The project appraisal mission was conducted by the World Bank in June 2009. The KCDP is being spearheaded by the Kenya Marine and Fisheries Research Institute (KEMFRI), with other implementing partners including the Fisheries Department, National Environment Management Authority (NEMA), Kenya Wildlife Services (KWS), and the Kenya Forest Service.

During FY09 a number of meetings were held involving the Partners as well as the Regional Advisory Committee (RAC) of the partnership. A Partners meeting was held in Nairobi in October 2008 to assess the progress of implementation and develop an action plan for the year. The RAC Coordinator was appointed and started working in the beginning of January 2009. The 2nd meeting of Partners was held in March 2009 in Rome as a side event during FAO's COFI (Committee on Fisheries) meeting.

Championing the marine fisheries certification process in Kenya, Tanzania and Mozambique

With funds leveraged from other sources based on the GCP support to the EAME Secretariat, WWF-EAME is implementing a marine fisheries certification programme along the MSC standards in Kenya, Tanzania and Mozambique. In early 2008, the WWF-US Community Fisheries Program, WWF East Africa Regional Programme Office (WWF-EARPO) under the Eastern African Marine Ecoregion (EAME) Programme, and WWF-Mozambique completed a pre-analysis project involving the promotion of sustainable fisheries and MSC certification to fishers, fisheries management agencies, scientists, and industry in Kenya, Tanzania, and Mozambique. As part of this project, the potential candidate fisheries for the MSC certification

process were identified as follows: the lobster and octopus fisheries in Kenya; the octopus and mud crab fisheries in Tanzania; and the deep-water prawn and shallow-water prawn fisheries in Mozambique. In September 2008, Fisheries Departments in Kenya and Tanzania conducted a national consultative meeting on marine fisheries certification with financial support and technical backstopping by WWF and the Marine Stewardship Council (MSC). The meetings recommended that the lobster fishery (Kenya) and the octopus fishery (Tanzania) should move forward to the pre-assessment phase and that the lobster fishery management plan be developed as a matter of priority. Similar meetings held in Mozambique in November 2008 and in March 2009 recommended that both deep sea and shallow water prawn fisheries proceed with the pre-assessment.

In April 2009, WWF-EAME and WWF-US went into a contractual agreement with Moody Marine (UK), an MSC-accredited certification body, to undertake the pre-assessments for the concerned fisheries in the respective EAME states. WWF and the respective Fisheries Departments in the EAME countries are the co-clients. This work commenced in May 2009 with the octopus fishery in Tanzania and was later followed by the lobster fishery in Kenya and prawn fishery in Mozambique in late June 2009. The report of the pre-assessment is expected in the first quarter of FY10. During this reporting period, EAME also provided financial and technical support to the government Fisheries Departments in Kenya, Tanzania and Mozambique to develop lobster, octopus, and deep sea prawn fishery management plans respectively. It is expected that these fishery specific management plans will be finalized by the end of 2009.

Influence the establishment of new MPAs and Trans Border Conservation programs across the Tanzania-Mozambique and Tanzania-Kenya borders.

The EAME Secretariat provided leadership for the region to consolidate the progress made towards scaling up the conservation programmes from MPAs to the Seascape approach, particularly building on the collaborative fisheries management initiatives that were successfully launched for Rufiji-Mafia-Kilwa (RUMAKI) Seascape. The basic idea was to move into the development of Lamu seascape in Kenya and then into Mtwara-Quirimbas Seascape in Mozambique. In FY09 with the support of NORAD, EAME successfully launched the RACCCoM (Raising Community Capacity for Coastal Management) program in Lamu for strengthening the capacity of local community groups (BMUs) to conduct collaborative fisheries management. This has become a launching pad for the Lamu Seascape programme, and a number of learning initiatives were undertaken for communities and government authorities, including sponsored visits to RUMAKI and other places. The Mtwara-Quirimbas transborder conservation programme was also revitalized with support for the operationalization of government-led provincial committees along the Tanzania-Mozambique border. A number of meetings and bilateral discussions were held between Tanzania and Mozambique teams.

EAME also worked on the development of National Frameworks for ensuring sustainability of National Marine Forums (like the one it helped establish in Tanzania last year) to effectively deliver on their intended purpose. The Forums' objective is to bring together practitioners from

different sectors, academics, community representatives, decision-makers and representatives of the business community to share expertise, experience and solutions to issues related to the coastal and marine environment. The specific objectives of the Forums are to:

- Provide the opportunity for coastal and marine stakeholders to share scientific information and exhibitions on research findings, best practices and management experiences.
- Provide inputs for the production of National State of the Coast Reports.
- Facilitate the documentation of current scientific knowledge and experiences through publication of high quality scientific papers, proceedings and other means of dissemination.
- Provide the opportunity for all stakeholders to discuss problems and issues related to coastal and marine management for the purpose of formulating recommendations on relevant management actions and influencing policy.
- Raise public awareness on the importance of the marine and coastal environment to the wellbeing of coastal communities and the national economy as well as on issues related to sustainable resource utilization.

MPA managers' capacity increased through cross-site learning/exchange programme and sharing of success stories and challenges

A learning program for managers and stakeholders of marine protected areas in EAME countries was developed in 2005 at a stakeholders' meeting that was held in Pemba, Mozambique. The main purpose of the program is to form a network of MPA managers and create a forum for learning from each other and share information and experiences on successes and challenges of MPA management. The first learning visit was made in 2005 to Quirimbas National Park in Mozambique. The second visit was made in 2006 to Mafia Island Marine Park in Tanzania and the third in 2007 to Kiunga Marine National Reserve in Kenya**.**

EAME coordinated a learning visit for MPA managers from Kenya and Mozambique to the RuMaKi seascape Programme in Tanzania in November 2008. This was the fourth learning visit since 2005. The main purpose of the visit was to provide an opportunity for MPA managers and stakeholders to learn from each other and share knowledge and experience on the seascape conservation approach and management. Tanzania is the only country in eastern Africa that has successfully launched a seascape conservation programme by effectively scaling up the Mafia Island MPA almost 10 times in size through WWF-EAME support and in collaboration with partners. Nineteen participants from Kenya participated in the learning trip. The visit was aimed to enlighten Kenyan stakeholders on the process of developing a seascape program that extends outside Marine Protected Areas. It is anticipated that lessons learned and knowledge gained from the visit will help improve management of coastal and marine resources in Kenya and Tanzania and facilitate effective development of new seascapes in Tanzania and Kenya.

Maintain and build strategic partnerships with global and regional institutions, agreements, and initiatives.

After years of EAME and partners lobbying, in June 2009 the WIO countries agreed on a legally

binding Draft Protocol for the protection of the coastal and marine environment from land based sources and activities - a major milestone in implementing the Nairobi Convention that first came into force in 1985. Following years of negotiation, the 10 countries that are the WIO states and are signatories of the Nairobi Convention reached an agreement in June 2009 on the final text of the protocol for the protection of the marine and coastal environment from land-based sources and activities (LBSA) in the Eastern and Southern Africa region. In accordance with the decision CP5/4 of COP-5, the final meeting was convened with the goal of adopting the final text of the LBSA protocol. The adoption of the final text of LBSA protocol will pave the way for the convening of a conference of plenipotentiaries to adopt the LBSA protocol. The adopted protocol will then be presented to the 6th conference of contracting parties (COP-6) scheduled to be held in Mauritius in November 2009.

The protocol negotiations began in 2005 with the support received from the Government of Norway, Global Environment Facility (GEF) and the United Nations Environment Programme (UNEP). Several regional meetings on the formulation of the Protocol have since been held in various countries in the Western Indian Ocean region, notably, Madagascar in 2005, Kenya in 2006, Zanzibar - Tanzania in 2007, and South Africa in 2008.

The final negotiation meeting on the draft LBSA Protocol was held in response to decisions reached during the 4th Regional Meeting of the Legal and Technical Review Task Force held in Cape Town, South Africa, in November 2008. During that meeting, the Nairobi Convention Secretariat was requested to organize a follow-up and final negotiation meeting on the draft LBSA Protocol. The final meeting was also in response to the Conference of Contracting Parties decision CP 5/4 on the Revision of the Nairobi Convention and related Protocols as adopted during the fifth Conference of the Contracting Parties to the Nairobi Convention (COP-5), held in Johannesburg, South Africa in November 2007.

The Draft Protocol has undergone four consecutive revisions by the Legal and Technical Experts Regional Task Force that is made up of legal and technical experts nominated by the Contracting Parties to the Nairobi Convention. The Draft Text of the LBSA Protocol has provisions in various Articles that are relevant to key issues for regional and sub-regional cooperation in tackling the problems of marine and coastal environment pollution and degradation resulting from land-based sources and activities in the Western Indian Ocean region.

This protocol is important for several reasons:

- These protocols are important legally binding instruments for implementation of Nairobi Convention among member states.
- This is the first protocol since the Nairobi Convention came into force in 1985.
- The protocol presents a major step forward by WIO countries on taking significant decisions towards the protection of the marine environment and its resources.
- Similar protocols need to be developed for management of trans-boundary fisheries resources including “Fisheries Accord for addressing Tuna management, FAA, By-catch, IUU and protection of critical habitats for maintaining ecological function and marine biodiversity”.

- This is a major stepping stone for the region to advance the agenda on transformation of tuna management and adoption of much wider protocol on joint responsibility in the management of trans-boundary fisheries resources *"The WIO Fisheries Accord"*

Continue lobbying for the development and adoption of a regional protocol for management of transboundary fisheries resources and issues related to IUU, by-catch and FAAs.

Fisheries access agreements remain critical for ensuring sustainable fisheries management for all WIO range states. In FY09 WWF continued with its engagement on issues related to fisheries access arrangements. EAME participated in a number of relevant meetings, including the 3rd RAC Session held in May 2009 in which a case study on fisheries access agreements was presented by a consultant commissioned by the African Union. The issue featured prominently in the discussions, and participants called upon the governments to ensure that any form of fisheries access agreements should be fair and equitable. They also called for a common approach to negotiating for access agreements and suggested an Africa wide framework.

During FY09 EAME initiated discussions with NEPAD and the African Union for an Africa-Wide Fisheries Ministerial framework to address marine fisheries governance and trade related issues. EAME lobbied NEPAD and the African Union to co-host with WWF the next Directors of Fisheries meeting in WIO for stimulating discussions about WWF's Coastal East Africa Network Initiative (CEA NI), the strategy for transforming tuna fisheries management and other trans-boundary fisheries related issues.

In June 2009, EAME commissioned consultancies to analyze the supply chain for shrimp and tuna products, including the export market, to inform policy and decision making particularly on fisheries access. Initial focus is on shrimp in Mozambique and tuna in Kenya and Tanzania. The information generated is to inform the CEA NI strategy development process.

EAME also conducted an analysis of the Distant Water Fishing Nations (DWFN) EU fleets active in the Indian Ocean coastal and islands states under some form of EU access agreement as guided by the EU Common Fisheries Policy. This piece of information fits into the CEA NI fisheries strategy development where influencing of the EU Common Fisheries Policy is high on the agenda.

EAME will continue discussions with donors and related institutions, including the WB, GAAs, and FAO through SWIOFC and IOTC, to support efforts to address by-catch, IUU and stock assessment for WIO countries.

In FY09, EAME made a number of attempts to lobby for various stakeholders in the WIO region to take serious steps on ensuring that fisheries resources are making increased contributions to national economies through the application of ecosystem approaches to fisheries and

development of stronger regional alliance and agreed regional protocols for management of the transboundary fisheries resources. EAME particularly focused on tuna resources and the initiative for developing and signing a regional Fisheries Accord to address regional trans-boundary fisheries issues, including Tuna management reform, FAAs, by-catch and IUU.

Other specific initiatives taken include:

Engagement with Regional Fisheries Management Organizations (RFMOS)
The Regional Fisheries Management Organizations (RFMOS) are important partners in the implementation of EAME strategy. In the fiscal year EAME has worked closely with the Indian Ocean Tuna Commission (IOTC) and the South West Indian Ocean Fisheries Commission (SWIOFC) on sustainable fisheries management of the coastal and high seas fisheries.

The 2nd Meeting of the IOTC performance review panel was held in January 2009 in Seychelles. Kenya participated in this meeting. The key issues highlighted included addressing uncertainty in data and in stock assessments, strengthening law enforcement and compliance to IOTC resolutions, and taking into consideration special requirements of developing coastal and island states. The final report of the review was adopted for implementation by the 13th Session of the IOTC Commission meeting that was held in Bali.

EAME participated in the drafting of WWF's Position Statement to the 13th Regular Session of the IOTC Commission meeting that was held in Bali, Indonesia on the 30th March – 4th April 2009. The key issues that were of concern were: the need for renegotiation of IOTC Agreement by member states based on the commitment to ecosystem-based management (EBM); increased technical and financial support for capacity building to developing coastal and island states in order to effectively implement the IOTC resolutions; immediate introduction of a total allowable catch (TAC) and or a total allowable effort (TAE) management mechanism; and clear and transparent mechanisms and procedures for limiting fishing capacity and allocation of fishing quotas. The IOTC for the first time set catch limits on yellow fin, bigeye and skipjack tuna and swordfish, as advocated by WWF.

EAME supported a Kenyan government delegation to participate in this meeting. The Kenyan Director of Fisheries was elected the Chair to the Finance and Administration Session. Kenya was part of the African group spearheaded by Australia who conducted an adhoc meeting to discuss the way forward for a common position among developing coastal and islands states in the Indian Ocean.

Lobbying for SADC IUU Fishing Declaration

Following two years of lobbying by WWF and partners, ministers responsible for marine fisheries from the eight SADC coastal countries (Tanzania, Mozambique, Angola, Madagascar, Mauritius, South Africa, Namibia and Congo DRC) agreed on commitment to curb Illegal, Unreported and Unregulated (IUU) fishing in Southern Africa in July 2008 at a Ministerial

Conference in Namibia. The Ministers signed a statement of commitment that was a step forward in combating illegal fishing activities in the region. At the conference, illegal fishing was firmly classified as a crime that violates development efforts to improve the livelihoods of the already poor fishing communities and the legitimate work of the fishing industry. IUU fishing is said to take more than $1 billion dollars of fish from the waters of sub-Saharan Africa each year. Governments in SADC have recognized the need for the region to unite and act.

Promoting Smart Gear Competition in EAME

As part of WWF's global efforts to promote fisheries by-catch reduction, EAME hosted the 2009 Smart Gear Competition. EAME provided support in raising awareness and coordinating participation of candidates from EAME countries in the 2009 Smart Gear competition. A number of publicity materials were produced and disseminated as part of an outreach program to create awareness of the issue of fisheries by-catch. 17 entries from East Africa were received - the highest rate of participation since the competition started in 2004. The increase in candidates was influenced by the allocation of a regional award specific for candidates from the Eastern Africa countries (based on the previous year's high number of entries from EAME states) coupled with outreach programmes by EAME. The judges' workshop was held in Dar Es Salaam from 18-21 August 2009. This year's competition featured a special East African Marine prize of $7,500 which has been awarded to Samwel B. Bikkens of Kenya's Moi University for his device known as "The Selector." The invention makes use of fish responses to light and water movement to address a by catch problem in Lake Victoria, the largest lake in East Africa and an important fishery in the region. This is the second year that WWF has offered a special regional prize to encourage inventions that address issues in areas of critical concern. See http://www.smartgear.org/ for more information about the competition and this year's winners.

WWF, in partnership with industry leaders, scientists and fishers, launched Smart Gear in 2004 aiming to promote sustainable fisheries management and reduce by-catch. Smart Gear is a call for innovative ideas that seek 'smart' fishing solutions and have practical applications for increasing selectivity for target fish species and reducing by-catch. Simple and cheap innovations have proven effective in many fisheries and some of the best solutions to date have come from fishers themselves. Improving fishing gear is a key step in reducing by-catch. Gear modifications can increase the chances of escape for non-target species or reduce the quantity of by-catch. Eligible candidates for the competition included fishermen, academicians, researchers, students, gear technologists, engineers, chemists, fisheries experts etc. Entries were evaluated based on effectiveness at reducing by-catch, innovation, practicality, cost-effectiveness, maintenance of target catch levels and impact on conservation.

Facilitate the process for establishment of Mtwara-Quirimbas marine Trans-frontier Conservation Area.

The process of developing a trans-boundary management plan for the Mtwara-Quirimbas complex commenced during this reporting period. WWF's project, Community Development and Sustainable Management of Marine Resources in the Mnazi Bay and Ruvuma Estuary Marine Park (MBREMP) is being implemented by WWF-Tanzania with the support of WWF-Denmark and WWF-EAME coordinating the implementation of regional activities.

EAME did not use GCP funds to support specific studies since it was determined that these studies were already in place through a different initiative known as the TRANSMAP Project. Instead, EAME focused on supporting the process towards establishment of transboundary management. EAME gathered information vital for developing a trans-boundary management plan and also helped catalyze the process of creating a Trans-frontier Conservation Area (TFCA) between Tanzania and Mozambique. A field visit was made to the site where informal consultations were conducted with relevant senior government officers, development partners, existing cross-border initiatives, and representatives of communities. WWF, in collaboration with the Mtwara regional government, spearheaded the establishment of a Working Group on Environment and Conservation as provided for under the September 2004 MOU signed by the governments of Tanzania and Mozambique. There is great interest among local key players/stakeholders in developing a trans-boundary management plan, though previous efforts were not well coordinated. The Environment and Conservation Working Group will identify environmental conservation and tourism issues that are trans-boundary in nature and take the lead in coordinating relevant stakeholders to develop innovative solutions and interventions.

EAME supported the Working Group to develop a road map (action plan) for producing the trans-boundary management plan, including coastal and marine areas on the Tanzania side. Some members of the group conducted a fact finding mission and lesson learning tour to Mozambique in April 2009, and held a consultative meeting with the Marine Park Unit in June 2009. The terms of reference, governance structures, and action plan have since been developed.

Build the capacity of Civil Society Organizations (CSOs) to engage in oil- and gas-related environmental issues.

Capacity building needs assessment for CSOs

One of EAME's main objectives is to strengthen the capacity of Civil Society Organizations (CSOs) to influence policy and decision making in the oil and gas sector in the region. During FY09, EAME supported an assessment of capacity building needs for environmental CSOs to be able to engage in oil and gas related environmental issues in Kenya, Tanzania, and Mozambique.

In Tanzania, CSOs are working with communities in a number of activities related to natural resources and environmental management. They are especially active in advocacy for sustainable fisheries and integrated coastal management, planting and management of

mangrove forests, management of reefs and reef fisheries, protection of important marine resources and endangered species. They have been actively involved in the formulation of various environmental management related by-laws and action plans adopted by relevant authorities at district and village levels. However, the majority of CSOs in Tanzania lack experience in dealing with environmental issues related to the new industry of oil and gas development. Their capacity to influence policy decisions and hold the government accountable is still weak. They also lack human resources and facilities, mainly because of inadequate financing.

Of the more than 200 CSOs registered currently in Kenya, relatively few have remained consistently active over the last few years. Capacity building needs here include more exposure to the subject of oil and gas exploration and extraction, more detailed knowledge on the negative impacts and expected effects, awareness of the legal framework relating to environmental requirements and the rights of the people, membership mobilization and organization of their representation to develop visibility of these groups in oil and gas matters, and improved capacity for organizational management. Further capacity is needed in efficient communication, case preparation and presentation, proper maintenance of records and information - all key elements for advocacy work.

Working with CSOs in Oil and Gas advocacy and awareness programs

EAME worked with credible CSOs to undertake awareness raising on oil and gas issues in Kenya, Tanzania and Mozambique. EAME issued a sub-grant to the Center for Energy, Environment, Science and Technology (CEEST) Foundation to implement this activity in Tanzania with support from NORAD. Similarly, EAME engaged the East Africa Wildlife Society (EAWLS), an NGO in Kenya, and Lawyers' Environmental Action Team (LEAT) of Tanzania were engaged by EAME to undertake advocacy and lobbying activities on oil and gas issues in their respective countries. The objectives were to ensure that environmental concerns are integrated in oil and gas countries development plans. Specific objectives were to:

- Influence governments to engage in the process of developing Strategic Environmental Assessments (SEAs) for the Oil and Gas Sector; sensitivity mapping and spatial planning; environmental health and safety (EHS) guidelines, and internationally accepted best practices related to oil and gas development.
- Sensitize members of parliament, media and communities from local to national levels on potential environmental and social impacts associated with oil and gas development.
- Catalyze the process towards endorsement of Extractive Industry Transparency Initiatives (EITI).
- Induce a process to review the existing legal and policy framework for oil and gas development to accommodate responses to the emerging challenges associated with the petroleum sector.

The focus is on environmental and social issues related to offshore oil and gas developments. The purpose is to influence the governments through the Ministries of Energy and Mineral

Resources and the Ministries responsible for Environment to engage in a process of developing appropriate frameworks for sustainable development of oil and gas resources.

Reports are due by November 2009 and expected results include awareness raising and high level engagement with governments and the private sector oil companies.

Oil and Gas information sharing between WWF and local partners

During this fiscal year, EAME established a national Oil and Gas committee in Tanzania, part of the Tanzania National Committee for EAME. The Oil and Gas committee developed its terms of reference for subsequent approval by the EAME National Committee. The main task of the Oil and Gas committee will be to spearhead a dialogue related to oil and gas development in the country. The committee has 9 members; of these, 2 are from key petroleum institutions and the rest are members of the EAME National Committee. The Oil and Gas committee is coordinated by the National Environmental Management Council (NEMC), which is the EAME focal institution in Tanzania. Similar committees are expected to be set up in Kenya and Mozambique.

Oil and Gas Sensitivity Mapping

EAME is collaborating with UNEP-WCMC to update information on the WCMC data base in Cambridge and to combine that data with new data collected by EAME during FY09 for the production of oil and gas sensitivity maps for Kenya and Tanzania. Sensitivity maps demarcate the go and no-go areas for oil exploration and production to avoid areas of high biodiversity and protected areas. The results are expected by the end of 2009.

Support national marine turtle working groups in Kenya, Tanzania and Mozambique

The East African coast hosts five species of marine turtle including the green (*Chelonia mydas*), olive ridley (*Lepidochelys olivacea*), loggerhead (*Caretta caretta*), hawksbill (*Eretmochelys imbricata*) and leatherback turtles (*Dermochelys coriacea*). Despite legislative protection, marine turtles are under increasing threats from the human population and development activities. EAME strategic objectives for marine turtle conservation include: building national and regional capacity for marine turtle conservation and management through the support of national marine turtle committees; addressing information needs for marine turtle management; strengthening networking and collaboration amongst regional sea turtle practitioners and decision makers; and supporting implementation of priority actions for marine turtle management.

During FY09 EAME continued to facilitate the national marine turtle working groups in Kenya, Tanzania and Mozambique in implementing various activities to promote protection of marine turtles. Activities included reviewing the current status of marine turtles and conservation activities, providing feedback on the IOSEA-MoU signed by EAME states, and drafting of the

work program for the national Marine Turtle Task Force (MTTF) within the framework of the WIO-MTTF work program for 2008-2010. EAME proposed that the national MTTF be officially established by the governments and priority issues be identified to fast track activities in line with the national action plans and WIO-MTTF 2008-2011 work program to further the implementation of the IOSEA Conservation and Management Plan. Institutions hosting the national marine turtle working groups include the Fisheries Divisions in Tanzania Mainland and Zanzibar, Kenya Wildlife Services (KWS) in Kenya and the Ministry of Environment (MICOA) in Mozambique.

Populations of turtles and marine mammals worldwide are at risk due to mortality caused by by-catch (incidental capture) in marine fisheries. Kenya and Mozambique have legislated the use of Turtle Excluder Devices (TEDS) in all trawl fisheries though compliance seems to be an issue that requires attention. The FAO meeting held in November 2007 in Madagascar recommended that Eastern African coastal states, specifically Tanzania, should undertake trials and test the use of TEDs in the prawn fishing industry. On the basis of this recommendation and others from different forums, EAME has been working closely with Tanzania on participatory trials and testing of TEDs (note that TEDs regulations are mandatory in Kenya and Mozambique and being considered in Tanzania). By-catch assessments have been undertaken in partnership with the Tanzania Fisheries Research Institute (TAFIRI). Trials and testing for TEDs commenced in May 2009 with EAME and MACEMP funding. TAFIRI and the Fisheries Division are taking the lead on this.

In Mozambique, EAME secured funding from WWF International to support a participatory by-catch assessment in the deep water prawn fishery, conduct trials to test the use of TEDs to reduce by-catch in the shrimp trawl fishery, as well as facilitate the development of a deep sea prawn fishery management plan. In May 2009, WWF-Mozambique spearheaded a stakeholder process which led to the establishment of a taskforce to oversee the implementation and use of TEDs in the prawn trawl fishery in Mozambique.

Activity 1.2: Monitoring and analysis of results and communication of key lessons from the GCP2 cooperative agreement

Consolidate and analyze available information, and document conservation impacts and lessons achieved in the EAME ecoregion between 2005 and 2009 through interventions funded by GCP2 and other leveraged resources.

The production of the EAME State of the Environment Report is being coordinated by Kenya, Tanzania and Mozambique's National Committees and will be submitted to AMCEN (African Ministerial Conference on the Environment) through the UNEP process. To date, Kenya and Tanzania have produced draft reports that are currently being reviewed by UNEP. These reports will be a part of the AMCEN Africa Report.

A consultant was hired to analyze all the available information and EAME reports produced over the years - including newsletters, numerous technical documents by WWF and partners, and several evaluations of the EAME program - in order to publish and disseminate the key results and lessons learned. The consultant is currently working to produce a final report that will be completed by November 2009, in order to include all of the lessons learned up to the last quarter of the GCP grant. The lessons will be disseminated to local, national, and international audiences through the existing EAME communications system for sharing published materials and through regional and international forums and media. This document will be sent to USAID as soon as it is finalized.

In addition, during FY09, the following documents were produced:

- Three published *EAME Newsletters* (*Vol. 5. Issue 1: January – March 2009, Vol. 5 Issue 2: April- June 2009 and Vol. 5 Issue 3: July-September 2009*). The first two are annexed to this report while the third is still being finalized.
- *A policy brief on oil and gas* completed in June 2009, included in the annex.
- *Oil and Gas Book* - Technical editing is in progress; publication will be completed in the first quarter of FY10.
- *WIO By-catch Status Book* - Internal editing has commenced. Plans are at an advanced stage to have the report published for wider distribution by December 2009.
- An MPA lessons learned document is under preparation and will cover the experiences from the 3 MPAs of Kiunga, Quirimbas and Mafia Island Marine Reserve. This will be printed by December 2009, after finalizing technical editing.

Objective 2: Promote effective management of Kiunga Marine National Reserve (KMNR) through collaborative management structures

Threats to fisheries, such as unsustainable artisanal fishing practices, have been identified as the key threat to long-term conservation in KMNR. Actions have been taken to strengthen collaborative management structures and institutional mechanisms at the local level. In the past year, there have been several key achievements in the move to establish sustainable fisheries management in KMNR. Beach Management Units (BMU) have been supported to prepare community based fisheries management plans within which no take zones will be identified and protected. Fishers have also been engaged in wide ranging discussions over the issue of phasing out beach seines. It was agreed that each BMU develop a phase out plan after consulting with its respective fisher assembly. In FY09, the project also managed to share with fishers analyzed results of the fish catch data. The data provided gave an impression of the sites and fisheries affected by overfishing and unsustainable gear use. Below are specifics of the results achieved with USAID/GCP2 funding in FY09.

Activity 2.1: Strengthen management frameworks, operations, personnel and infrastructure for sustainable and adaptive reserve and resource management.

Train key Joint Management Team (JMT) members (KWS, KFS, Tourism Department, LCC, Provincial Administration, the community, and WWF) in proposal formulation and leadership to build their capacity to make key decisions and become a functional and autonomous unit.

BMUs were trained on their roles and responsibilities in fisheries management. They were also trained on proposal write up and fundraising. Fisheries department staff were facilitated to train the executive members of fisheries cooperatives in developing partnerships to open up funding and business opportunities. The executive committees for both BMUs and fisher co-operative societies were trained in leadership protocols with a strong emphasis on accountability and democracy. Sixty (60) youths were also trained in proposal writing, specifically for the newly launched government youth funds targeting youth groups engaged in sustainable development initiatives.

The Joint Management Team (JMT) played a key role in collecting community feedback during the drafting of the new KMNR 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 controlled resource use within the reserve such as mangroves for non-commercial purposes by communities.

In cooperation with key government agencies, assist key village based management structures in KMNR, including all BMUs within KMNR and its catchment area, to increase their capacity to implement sustainable fishing methods and gear exchange, community enforced and managed fishing sanctuaries, sustainable utilization of mangroves, and enhanced community policing.

During this reporting period, the 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 WWF project provided mooring buoys for fishers to mark fish sanctuaries as agreed in the draft fisheries management plan. This was meant to ease enforcement, which has improved over the year. All migrant fishermen using potentially harmful fishing techniques were reported by each BMU and apprehended by the fishing authorities.

The KMNR community has been reporting all cases of commercial mangrove cutting within the protected area. They are jealously guarding against the destruction after being granted authority through the JMT to harvest for non-commercial use.

Through the BMUs, fishers have reported infringements at sea to KWS and the Fisheries Department. A marked improvement in community policing for fisheries was observed after a participatory mapping of fishing sites. Closer collaboration was also reported through information sharing between BMU officials and government agencies personnel in fisheries and wildlife protection. Joint patrols were conducted involving communities, KWS and Fisheries Department with WWF being an observer.

Conduct joint coral reef monitoring with community fishermen, KWS Research department, KMFRI, FID, Cordio.

Project staff collected the fishers' needs for information and research and shared previous ecological monitoring reports with the fishers. Fishers appreciated the feedback process and used the information to map out their fishery in their management plans. Sea conditions did not allow for underwater monitoring during this reporting period.

WWF worked with WCS and CORDIO on their assessment of Kiunga's coral reef resilience during FY09. The publication of these findings will be finalized by December 2009.

Continue data collection on community-identified fish no-take zones to allow for regeneration and demarcation. In addition, joint marine scientific surveys with fishers and WWF will be conducted in six areas adjacent to the reserve, during the onset of the North East Monsoon winds for a comparative analysis of the results from last year's surveys.

WWF project officers worked closely with FiD and fishermen to identify fishing sites during both South East and North East monsoon winds. This information was used in developing closed seasons for specific target species (parrots, wrasses, emperors, snappers for the *kusi* or Southeast monsoon season; and the king fish, dorado, and tuna for the *kaskazi*, Northeast monsoon) in particular sites. Joint marine surveys were conducted with fishers and WWF in Faza, Kizingitini, Kiunga, Mkokoni, Rubu and Mwambore fishing areas. During these surveys, the groups mapped fishing sites, types of fishery, trends and seasonality of fishing grounds. Out of these surveys, draft community fisheries management plans were developed and are being reviewed by the Fisheries Department, pending approval.

Initial data on turtle foraging grounds was also mapped out and shared with stakeholders. Fishers also participated in identifying dugong breeding and foraging areas.

Monitor fishery resources (catch landings, effort, gear & species targeted) jointly with FiD

and BMUs.

In order to enhance the capacity of BMUs and co-operative societies to accurately collate and collect fisheries data, a data collectors' workshop was conducted. All BMUs and fisher groups within the Lamu archipelago were trained on data collection techniques and needs with emphasis on ways of collecting fisheries data in a co-management set up. The achievements of the data collectors training include: setting up of mechanisms to ensure accurate and valid data collections systems; development of data collection and sampling approaches; addressing of methodological and operational problems associated with data collection; promotion of interaction between different data collectors, analysts and recipients; and a data dissemination exercise. BMU members appreciated the value of fisheries catch data, collected at the landing sites, both to determine the health of a fishery and to monitor the fishers' contribution to cooperative society. Three BMUs employed fisheries data collectors.

Database management training mainly focused on fish catch data collection at the landing sites to support BMUs in fisheries management. Twelve (12) Fisheries Department staff were trained in data collection and database management, to learn stock assessment methodologies. All ten (10) KWS rangers were similarly trained in database management for turtle conservation. KWS rangers were continuously engaged in data collection and management for all turtle breeding sites. The project also continued with cowrie shell data collection to determine the potential effects on the ecosystem.

Quarterly and annual reports have been shared with key stakeholders and are being used in guiding decision makers such as BMUs for fisheries management, and KWS and Fisheries Department to control development that would interfere with turtle nesting sites, etc.

WWF has effectively created strong working relations between KWS and FiD at the field level. However negotiations at the national level have been delayed by pending institutional reforms likely to affect the status of both government agencies.

Improve the scuba diving skills of the coral reef and fish monitoring team, including KWS, WWF, and community members from local villages and their catchments to enable closer involvement of local communities in resource monitoring.

A total of fifteen community members and KWS rangers were trained in fish and other marine species identification in preparation for under water ecological monitoring. They were also trained to report variations in sea conditions.

Due to increased cost, the scuba training was postponed. More funds were leveraged from other donors to allow for the important capacity building initiative.

Conduct censuses to monitor fish and invertebrates, coral species diversity, benthic health,

coral disease prevalence and drivers, sea grass cover and species diversity, sea cucumber census and species diversity, and sea urchin census and spatial distribution in KMNR fishing grounds.

WWF's annual coral survey, planned for September - December 2008 during the *kaskazi* period, or Northeast monsoon, did not occur this year due to the fact that the GCP funds did not arrive in time to WWF EARPO. However, during this period, WWF worked with WCS and CORDIO on their assessment of Kiunga's coral reef resilience.

In 2010, it is expected that the RACCCoM (Raising Community Capacity for Coastal Management) program supported by NORAD will fund the coral survey.

Produce GIS and thematic maps to support KMNR resource management, survey, and management planning.

Three GIS maps were produced covering turtle nesting beaches, Lamu administrative boundaries, and the mangrove forests (included in the annex). These maps will guide lead agencies in natural resource management, such as the National Environment Management Authority (NEMA), KWS and FiD, in approving development projects in the area. Community and other stakeholders are also better equipped with information that can be used to stop any new developments that are likely to interfere with ecosystem integrity and, simultaneously, their livelihood.

Work with local partners and BMUs to manage the gear exchange revolving fund by establishing a functional micro credit/finance system to assist fishermen acquire legal and sustainable gear.

BMUs in the project area reported a 40% compliance with the gear exchange repayment plan agreed by the beneficiaries. This enabled continuity and ownership of the programme by the fishers. The project was able to leverage some funds to support two staff members involved in running fisher co-operatives societies to be trained in micro enterprise management. The cooperative societies in Kizingitini and Kiunga were formed during this reporting period, and the project facilitated sharing of experiences with the Faza Fishermen Cooperative Society, the best performing in Lamu.

Strengthen the operational capacity of the KMNR management team by ensuring that the boats, vehicles, computers, power generators, and diving equipment are maintained and in good working order.

All project installations run smoothly with frequent servicing and repairs. The radio signal strength was improved by installing a base radio at the Mongo Sharif turtle monitoring outpost.

In addition, efficiency was improved by acquisition of solar and wind power for project operations. In March 2009, a total of 19.5 kW of wind and solar power was installed in 5 sites within the KMNR project area: the WWF/KWS Camp has an 8 kW capacity; the Fisheries, Beach Management Unit and a WWF office in Kiunga now have 7 kW of power; while the Mongo Sharif Turtle Monitoring Camp has 1.5 kW. Other government and community partners have also benefited - the Kiunga Health Center and the Mkokoni Dispensary each have 2 kW capacity, supporting freezers for vaccine storage. This US$70,000 'greening' project was made possible by Southwest Windpower and David Calley, in collaboration with WWF-US and the WWF Kiunga Project.

It is envisioned that WWF KMNR partners (KWS) will be able to absorb operational costs after GCP2 closeout, as part of overall KMNR management.

Activity 2.2: Strengthen capacity of the local community to undertake and participate in conservation management programs in the reserve.

Facilitate the establishment of small business groups to develop sustainable alternative income activities, such as youth-driven community ecotourism projects in turtle conservation and eco-friendly handicraft production.

The project was able to create partnerships between tour guides in Lamu and youth ecotourism groups in KMNR to market their attractions. This resulted in an increased number of visitors to the groups in Mkokoni, Kiwayu and Chandani and increased income and employment as well for the local youth groups.

New markets were sought for the women's eco-friendly handicrafts by sending their products to the popular International Agricultural Show of Kenya in Mombasa. Several contacts were made with new buyers and two have ordered samples.

Assist women's health groups to promote environmental health and awareness at the household level.

Leaders of the community resource use groups were trained in leadership, group dynamics and management. These groups have been established in all villages and are now equipped with the means to operate and to develop work plans, communication strategies and goals.

Work with existing groups, including resource use groups comprised of community members, which lack capacity and may need to be reconstituted, to discuss and establish strategies to ensure sustainable natural resource use.

All six BMUs were evaluated by FiD officials with facilitation by WWF. Two of them were reconstituted after mismanagement issues were raised by fishermen and other members. This has enabled all concerned to carefully manage the group operations.

Improve its monthly catch monitoring by extending data collection to the villages of Rubu and Kiwaiyu in addition to the monitoring locations, i.e. Mkokoni, Kiunga and Kizingitini.

In Kiwaiyu there is a community data collector who is collecting data from the fish landing sites on monthly catch of pelagics and lobster.

The project observed increased sense of ownership by fishers. They actively participated in demarcation of fishing sites for the fisheries management plan exercise. BMUs and Fisher Cooperatives have been able to engage youths to collect fish catch data in three villages. The cost of engaging these youths are covered by fisher contributions to the Cooperative society. An improved standardized fish data collection form was developed by FiD and WWF in consultation with all stakeholders.

The Fisheries Department and WWF has made available resource use data and information to various partners such as the Kenya Marine Fisheries Research Institute (KEMFRI), Kenya Wildlife Service (KWS), National Environment Management Authority (NEMA), and the local community (through the 6 BMUs). This data is utilized for understanding fishery utilization trends, planning, and livelihood assessment, to guide new development and interventions, and to provide education and empower the resource users.

An updated fisheries fact sheet describing the KMNR fisheries resources will be produced by December 2009 and disseminated to all stakeholders.

Co-ordinate, conduct and facilitate ecological monitoring in KMNR while empowering relevant government agencies' ability to undertake ecological monitoring independently, not singly but as a team.

An annual marine resource report was finalized by FiD, WWF, CORDIO and KEMFRI. The data also informed other management initiatives including the introduction of MSC Certification for the Lobster fishery in Kiunga, Lamu. The information was shared in different forums including WIOMSA.

WWF/CORDIO/IUCN/KWS completed joint analysis of coral reef data collected (fish census, invertebrates, coral recruitment, coral diseases, and benthic status) in KMNR, produced a publication on the findings, and disseminated it to all stakeholders, including regional bodies such as Western Indian Ocean Marine Scientific Association.

Copies of the annual marine resource report shared at WIOMSA can be found in the annex.

Enhance the capacity of Beach Management Units so that they may develop and implement financial and development plans, practice fiscal management and transparency for the long-term management of fishery resources.

BMUs were invited to participate in all planning meetings affecting communities due to their key role in securing the primary source of livelihood for the communities. This recognition has improved relations and collaboration between fishermen and government agencies, an important aspect in conservation and development.

Hold workshops and meetings, and create documents, mapping, and joint management to create an open dialogue and provide feedback to communities to improve their understanding of the marine ecosystem and its status and promote sustainable fishing methods.

The project organized site-based feedback meetings with BMU members to disseminate research findings. A total of one thousand five hundred fishers (1,500 men; 0 women) were reached in their respective BMU assemblies over the six sites. The fishers engaged technical staff from WWF and FID to help them understand the information shared, this collaboration was attributed mainly to the fishers' participation in data collection during research expeditions.

Translate and summarize publications and reports for community viewing, including brochures on sustainable management and the reserve.

Translated (from English to Swahili) copies of BMU regulations were distributed to all BMU executive committees in all villages so the fishers can read and understand. Brochures were drafted to promote ecotourism attractions in the project area as part of the marketing support for youth groups. The targets for the brochures are tourists visiting the area.

Communication and information exchange on strategies for promoting sustainable community resource use.

Discussions with fishermen and other groups of resource users were successfully undertaken to increase their awareness of the importance or sustainable development and appreciation for the emerging challenges such as climate change. The results were further shared with a wide audience of MPA managers in the forums (including the National Fisheries Task Force, the Coral Conservation Task Group) where WWF participated, and key contributions were made for the National Conservation Turtle Strategy.

Objective 3: Promote effective management of Quirimbas National Park through collaborative management structures

During FY09, with GCP2 support, WWF continued working to reduce the threats from artisanal fishing through: the establishment of new community managed fish-replenishment zones, both in the park and the buffer zone; the improved enforcement and strengthening of park rules and regulations, and further strengthening the co-management of park activities.

The cooperation between the Ministry of Fisheries, the QNP, and WWF was consolidated during this year by the signing of an MOU between the QNP and the Provincial Fisheries Department, which covers many of the contentious issues of licensing, law enforcement, research, and co-management. This is a huge success after all the difficulties that have existed in the past between the Park and the Fisheries Ministry.

These institutions also continued to work with the community based Fisheries Co-management Committees (CCPs) throughout the QNP. These committees were created using fisheries legislation and are the government of Mozambique (GoM)-approved mechanism for fishing communities to exercise use and management rights over their own waters and resources. The following results were achieved using GCP2 funding in FY09.

Activity 3.1: To address resource exhaustion, to protect vulnerable habitats, and to create a source for both fish and larval dispersal, the QNP will consolidate its existing sanctuaries and rotating harvest zones.

Monitor the catches in the oyster harvest zones, including catches and the financial implications of these catches for the fishing groups.

The Sanctuary zones within the park were remarked during the year as necessary due to the loss/theft of buoys from the positions. During the year the 8 sanctuary zones were all 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.

Training was carried out for the CCPs to increase their capacity to meaningfully manage their own resources and fishing areas. Two fish processing groups were given training in methods and approaches to improve quality and keeping potential of their catches. All of the oyster processing groups were given further training in processing, presentation and marketing, and a start was made on the awareness raising, formation and training of communities on Quirimba island for sustainable harvesting of cowries.

Formally launch and monitor the Zala Bank sanctuary in cooperation with the local government and the fisheries ministry

The Zala Bank sanctuary was formally opened in August 2008 and recognized by COMDEQ (QNP Development Committee). This sanctuary has been recognized and accepted by the Fisheries Ministry, as a part of the MOU between the QNP and the Provincial Fisheries Department. During the year the sanctuary zone was replotted using GPS and these positions have been plotted in GIS for management and monitoring purposes.

Documentation of existing sanctuaries and rotating harvest zones

The Quirimba Island controlled fishing zone will again be opened in September of 2009, and it is expected that a good harvest will result. It is the intention to mobilize local (provincial) fish marketing agents for the period of the opening to optimize the potential returns for the community. This will be in addition to those other institutions which were mobilized last year (especially the media). The concept is serving as an excellent example and motivator for fisheries management for the leaders of neighboring islands, and coastal communities many of whom will be invited to the opening of this closed zone. Production of a short film about the Quirimba closed zone was broadcast on national TV during the opening of the sanctuary.

As of FY 08, a full-time marine biologist was contracted for QNP as part of the WWF Marine program with funds leveraged from other sources based on the GCP support. Besides being the lead person on both the expansion of the marine studies and the implementation of the marine conservation programme in the Park, he also heads up the Research Department of the QNP and is responsible for supervising the key studies on the terrestrial side.
Marine studies either completed or on-going include:

- Coral Monitoring (annual, on-going);
- Sanctuary monitoring (Catch per unit effort sampling, ongoing) and research (to balance the current socio-economic basis of the sanctuaries more closely with the biological requirements);
- Establishment of a database and collection system for monitoring fish captures (ongoing);
- Introduction of Fisheries Co-management bodies in most of the coastal villages of the park - 13 CCPs currently, 4 monitored, sensitized and given further training during the year;
- Elaboration of a macro level zoning plan.

Activity 3.2: Improve overall compliance with park and national fisheries regulations.

Train QNP rangers in various aspects of marine patrolling, with particular emphasis on small boat seamanship and, due to several incidents of turtle poaching, marine turtle monitoring and protection.

In this reporting period staff training was carried out in the following areas:

> In October the Gorongosa National Ranger Training School led a one month patrol leader course that significantly increased the level of our 35 participating rangers. Although this training was primarily aimed at the terrestrial patrol effort, it was also beneficial for the marine and coastal ranger force.
>
> Marine patrolling was also carried out regularly during the year in a joint exercise between the relevant park rangers and the Mozambique Naval detachment based on Ibo Island. The marine patrolling was largely in the near-shore environment as this is where the highest concentration of artisanal fishing pressures are concentrated. Fuel and other costs of off-shore patrolling are proportionately high, and the relative potential for successful policing interventions in this zone is significantly lower. However, this should not detract from the importance of patrolling efforts for the Saint Lazarus Banks.
>
> 46 rangers were re-trained in animal counting techniques, prior to the ground count in November 2009.

Conduct marine turtle monitoring and protection of nesting sites and feeding sites that have been identified during the last two years.

The patrolling and monitoring of the intertidal areas (including turtle nesting sites) have been incorporated into the MOMS program, and both theoretical and practical training were carried out with the responsible staff members. During the turtle nesting season effort was focused on the known potential nesting beaches. Turtle nesting sites were mapped in GIS during this reporting period.

Train the fisheries co-management committees to know and apply the fisheries legislation and park management plan in their communities.

Support and training for the 13 CCPs (Fisheries Co-management Committees) in the park continued during FY09. Thirteen committees have been created in the QNP to date, though several of these are still in their fledgling stages and have been given the necessary ongoing assistance and training. Sensitization and training was done in Arimba and on Situ Island and Namau; communities yet pending to receive the same are Guludo and Olumboa.

The Research Department of the Park through the fisheries monitoring section conducted a series of focused training and awareness raising workshop sessions with all of the 13 CCPs during the year. Certain aspects of the artisanal fishing activity were highlighted. The basic fisheries regulations and the restrictions outlined in the QNP management plan were again emphasized,

and the continued use of certain unsustainable gears such as seine nets with undersize mesh bags were also addressed with the background of the biological pros and cons of such activities.

The CCPs were also again given refresher training on their specific roles and their designated powers in terms of the various legislations.

List of CCPs functioning in the QNP (Quirimbas National Park).

	CCP and its location	**Year of creation**	**Created by***
1	Arimba	2007	QNP
2 (a&b)	Matemo (x2) (Palussança and Muanacombo)	2005, 2006	AMA
3	Ibo	2006	AMA/QNP support
4	Guludo	June 2008	PNQ
5	Darumba	Developed (2004) but became dysfunctional; Revived by the PNQ in 2007	IDPPE
6	Tandanhangue	Developed (2004) but became dysfunctional; Revived by the PNQ in 2007	IDPPE and under QNP support
7	Namau/Situ	April 2007	QNP
8	Mefunvu	May 2007	QNP
9	Mahate	Developed (2004) but became dysfunctional; Revived by the PNQ in 2007	IDPPE and under QNP support
10	Quissanga Praia	2007	IDPPE and under QNP support
10	Olumboa	June 2008	
12	Nanhoma	June 2009	QNP/IDPPE

Note: There are in total 13 CCPs in the Park. Note that in the * column, QNP means the CCP was promoted and formed by the park. AMA stands for Association for Our Environment, a local NGO partner, and IDPPE stands for Institute of Development of Small Scale Fisheries, a para-statal institution.

In terms of park management, during FY09 the QNP has continued with the distribution of the 20% of park receipts to an additional two communities (Muaguide and Mucujo) to date and 4 more by the end of the year (Metuge, Acuabe, Ibo and Quissanga), through the community natural resource management committees that were created at the Administrative Post level to

assist in the process of decentralization. The initial disbursements to each of these Community committees is in the value of 50,000 MZN (an estimated US$1,800). While this aspect of park management was not supported with GCP funds, this progress towards community application of park management is notable.

Together with the park, continue to engage in training activities and joint patrols begun in FY05 with the Navy and local communities, to build capacity and to coach the participants through pilot patrols and practical implementation.

Our cooperation with the Ministry of Defense continues, with 20 soldiers deployed in the park. Most of these are based on Ibo at the naval base there, but 8 have also been placed in the park on the terrestrial side to strengthen law enforcement. These soldiers collaborate with the rangers on patrols and other activities. As residents' compliance, especially voluntary compliance, with fishing regulations continues to improve, the focus has begun to shift to the issue of fishing pressure from outside QNP. This includes industrial tuna boats, illegal buyers of live prawns, and small scale operators illegally cutting mangrove inside the Park for sale in Pemba. To counteract this, the QNP has enlisted the support of the Ministry of Defense to assist community guards and rangers in executing their duties.

In the area of law enforcement, the park made some good progress during FY09, continuing to monitor for illegal fishers from outside the park, in cooperation with the Mozambican Navy. After contracting Roberto Zolho, the Mozambican expert in this area, we have developed a new Law Enforcement Strategy, which should help us to improve this critical area of the park. We have also significantly improved our collection of fines, thanks in large part to the more active involvement of the financial authorities, who are now collecting older fines in installments. This is a key point in controlling illegalities. The one sticking point is the change in Ministry regulations, which has made it more difficult to pay the 50% stipulated by law to the people involved in the active apprehension of illegalities.

Progress Table

Benchmark Number	Benchmark/Output	Status*
1 EAME Program		
1.1	Maintain overall project management and constructive working partnerships between WWF, donor agencies, field staff, focal Institutions and communities. Facilitate effective management of existing MPAs and help expand/establish marine protected area network(s) in EAME	Successfully implemented Successfully implemented
1.2	Implementation of an adaptive management framework from ecoregion to site scales.	on track
2 Kiunga MNR		
2.1	Strengthen management frameworks, operations, personnel and infrastructure for sustainable and adaptive reserve and	on track

	resource management.	
2.2	Strengthen capacity of the local community to undertake and participate in conservation management programs in the reserve	on track
2.3	Improve livelihoods and conservation roles of local resource users living in and around KMNR.	on track
3 Quirimbas NP		
3.1	Address resource exhaustion, to protect vulnerable habitats, and to create a source for both fish and larval dispersal.	Successfully completed
3.2	Improve overall compliance with park and national fisheries regulations.	on track
3.3	Prove and make visible the fisheries and habitat conservation results of the park; and monitor, evaluate, and communicate the results of QNP ecological management activities.	Successfully completed

* Status may include activities that are completed, on-track, delayed, mixed performance, or cancelled.

NEXT STEPS

Since the GCP funding has ended, WWF will implement the following list of next steps for EAME through the WWF Coastal East Africa Network Initiative (CEA NI) and the Partnership Fund for Sustainable Development in Sub-Saharan African countries.

The aim of the Coast of East Africa Network Initiative (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 program:

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.

EAME, through the WWF CEA NI will need to:

- Maintain and build strategic partnerships with global and regional institutions, agreements, and initiatives.
- Continue to influence the establishment of new MPAs and Trans Frontier Conservation programs in the Tanzania-Mozambique and Tanzania-Kenya borders.
- Continue lobbying for the development and adoption of a regional protocol for management of transboundary fisheries resources and issues related to IUU, by-catch and FAAs.
- Continue discussions with donors and other institutions including the WB, GAAs, and FAO through SWIOFC and IOTC, to support efforts to address by-catch, IUU, and stock assessment for WIO countries.
- Continue to support national marine turtle working groups in Kenya, Tanzania and Mozambique. Support implementation of TED legislation in Kenya, Tanzania and Mozambique.
- Continue to build capacity for the EAME states' governments to develop oil and gas strategies. Governments need immediate support to build capacity on EIA, SEA for addressing oil and gas and related emerging issues.
- Continue engaging in the process for EAME states to sign a Regional Fisheries Accord for management of transboundary tuna resources and addressing issues related to FAAs, IUU, and by-catch.

EAME in partnership with FAO/AU/WB under the Partnership Fund for Sustainable Development in Sub-Saharan African countries, is establishing 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.

Kiunga:

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. Going forward, WWF's Kiunga project will need to:

- Build on the achievements in natural resource management by increasing community capacity to independently manage their resources. BMUs will be targeted in capacity building to develop fisheries management and business plans for the KMNR fishery. This can be achieved through partnership with other organizations and leveraging funding from other programs.

- Focus on guiding community groups to effectively and sustainably tap livelihood opportunities without interfering with the ecological integrity of KMNR. Partners in livelihood and enterprise development will be brought on board to expand ecotourism product development and exploit value addition among other market ventures.
- Conduct an economic analysis of marine resources for communities in KMNR to use as a reference guide for negotiating with potential investors in the tourism industry. This information can also be used to argue against any potentially harmful projects on the ecosystems and community livelihoods.
- Conduct research on climate resilience and adaptation mechanisms both for communities and the ecosystem, sharing lessons among MPA networks and influencing policy shifts to proactively address global warming questions.

Quirimbas:

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. Going forward, WWF's Quirimbas project will need to:

- Expand the area of vulnerable habitats under improved protection to create sources for both fish and larval dispersal to address resource exhaustion and protect vulnerable habitats.
- Continue the provision of technical assistance to the communities who are responsible for the management of all the sanctuary areas and rotating zones created within the park and the buffer zone during the previous phases of the project. Considerable emphasis to be placed on the MOMS (Management Oriented Monitoring System) approach to monitoring and the adaptive management of these areas and their specific important utilizable resources. The new marine sanctuary in the Zala Banks, as well as the rotating oyster harvest zones in Ibo and Mussemuco and the closed zone in Quirimba, need to receive more technical assistance in order to reach their full potential through proper management and monitoring, as well as documentation of the results using MOMS. Training in processing of the new resources will also be carried out so that the bivalves now being sustainably harvested can be sold at a higher market value.
- Continue support to groups who are processing bivalves, fish and other products for the resale market, as a means of optimizing the returns by adding value and ensuring quality and longer shelf life.
- Continue support to the newly established mud crab fattening group in Massemuco and replicate this activity to other suitably placed communities in the park area.
- Continue the monitoring of catches and harvest returns from the various harvesting and rotational zones to gain a measure of the sustainability of the harvesting regimes and the rates of replenishment to surrounding areas.
- Continue the training of the QNP marine rangers and fish monitors which took place in the previous phases of this program through refresher actions to ensure continued high levels of enthusiasm and efficiency.

- Continue the concentrated efforts of turtle monitoring and the protection of the nesting sites during the peak breeding seasons of these species to ensure high levels of nesting and hatching success are maintained.
- Train the fisheries co-management committees to know and apply the fisheries legislation and park management plan in their communities. Continue with on-going refresher inputs and updates as the legislation and regulations require. Continue support to the technical capacity of these committees to enable them to continue the effective management of their fishing grounds and their resources.
- All marine patrolling efforts are continually conducted under the joint operational system between the QNP, the Navy and the local CBOs to ensure ownership and control.

SUCCESS STORIES

EAME program:

Protocol agreed for protection of coastal and marine environment in WIO region from land based sources of pollution:
In June 2009, WIO Countries agreed on legally binding Draft Protocol for protection of coastal and marine environment from land based sources and activities. This is a major milestone in implementation of the Nairobi Convention that first came into force in 1985. The final protocol will be signed during the next NC-COP in November 2009. With GCP funds, EAME helped to make this happen through lobbying and advocacy while participating in regional meetings and the EAME leader's participation as a member of various committees of regional WIO programs.

Approval of Kenyan Fisheries Policies:
The Kenya National Oceans and Fisheries Policy was formally launched and approved by the government for implementation in March 2009. EAME worked closely with the newly established Ministry of Fisheries Development towards the finalization and adoption of the national fisheries policy in addition to providing technical input. In addition, EAME provided support to the Kenya government towards a participatory and consultative process for the development of a prawn fishery management plan in Kenya which led to a finalized management plan following stakeholder meetings.

Progress made towards Trans-boundary Ecosystems Management:
The process of developing a trans-boundary management plan for the Mtwara-Quirimbas complex was revitalized by supporting the operationalization of government led provincial committees along the Tanzania-Mozambique border. A number of meetings and bilateral discussions were held between Tanzania and Mozambique teams. A working group to oversee the work on the part of Tanzania was formed and several meetings were conducted. Terms of Reference and work plan for the working group were developed and a learning tour to

Mozambique was undertaken. While there was no collaboration across the boundary in the beginning of this process, GCP-supported actions led to developing this collaboration.

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.

Kiunga:

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.

Positive Results for Turtle Conservation Program

Turtle team members patrolled all KMNR turtle nesting beaches. Night patrols teams managed to tag eleven nesting females over the six month reporting period. Volunteers also conducted day patrols to monitor, verify and protect nests. One hundred and seventy four (174) nests were reported with 61% of the total reported by community members. Over eight thousand (8000) hatchlings emerged and successfully swam to the sea during this period. Seven (7) sea turtles (*Chelonia mydas*) tagged in previous years ranging from 2001 to 2005 returned to nest in 2008. A GIS map of turtle nesting beaches and foraging grounds was developed.

With funding from USAID a total of eight satellite transmitters were launched onto the backs of green turtles. This is the outcome of the USAID-funded Kenya Integrated Sea Turtle Conservation (KIST-Con) Program, that is working to strengthen on-going efforts in community based protection of turtle nests and their habitats by providing relevant ecological information on turtles in the area.

Turtle Tourism Project Initiated that will employ local youth

WWF linked turtle conservation youth groups with tour guide associations in Lamu to create a marine tourism package that would have a key focus on community based turtle conservation initiatives in KMNR. This is expected to employ over fifty youths from the area who will be providing different services. KWS offered training in visitor handling while WWF focused on maintaining turtle handling protocols during visits.

Operational Capacity of KMNR increased

Efficiency was improved by acquisition of solar and wind power for project operations - a total of 19.5 kW of wind and solar power was installed in 5 sites within the KMNR project area: the WWF/KWS Camp, the Fisheries, Beach Management Unit and a WWF office in Kiunga, the Mongo Sharif Turtle Monitoring Camp, the Kiunga Health Center and the Mkokoni Dispensary. This US$70,000 'greening' project was made possible by Southwest Windpower and David Calley, in collaboration with WWF-US and the WWF Kiunga Project.

Quirimbas:

Local Exchange Visit to Tanzania Resulted in Development of a New Income-generating activity for QNP Community

A recent exchange visit of local fishers and NGO partners from QNP to the Tanga region in Tanzania, resulted in the introduction of a fledgling mud crab fattening project in the Mussemuco village in the QNP. The group has already completed the first fattening cycle and marketed their produce to the tourist operators on Ibo island who have offered to continue taking the produce for the immediate future.

Higher Yields from Fish Sanctuaries

According to fishermen and project staff, both the fish and oyster sanctuaries created a few years ago now reflect higher seasonal yields, in size, biomass, and in biodiversity, in the fish sanctuary at Quirimba island. This demonstrates that the local communities have acquired a good understanding of the benefits of the sanctuaries increasing the probability of their future support for and participation in the creation and management of these sanctuaries.

Coordination Committee Proves Key to QNP Management

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.

CHALLENGES AND LESSONS LEARNED

EAME program:

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 FAAs. 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 on what WWF intends to support, does build rapport and confirms transparency.
- While planning and ecoregional vision is 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 new areas such as oil and gas, energy, EIAs etc.
- Developing and managing effective and strategic partnerships is crucial to EAME's future programme implementation. There is a need to develop a partnership strategy.
- Securing political will and support and addressing the governance issues (corruption) are the hardest part, 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 CEA NI.
- The concept of the 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:

Incidental catch is still the highest cause of turtle mortality in KMNR. The WWF By-catch Initiative is testing promising interventions such as the Smart Gear competition with components that specifically target artisanal fisheries to develop long term solutions to by-catch concerns.

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 started 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.

Fishers have to be economically empowered through the creation of micro-credit and other financial and saving 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.

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:

According to both the fishers and project staff, 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.

QNP's lack of senior management staff was partially addressed during the year by the employment of the Marine Biologist as Head of the Research Department. This has gone a long way toward addressing the previous situation regarding delays and the accumulation of essential strategic and analytical tasks. However, staffing in general in the QNP remains low, and there is still a need to implement a strategy of sector based management with Sector Heads (Section Rangers) to decentralize the overall management functions of the Park. This exercise will be phased in over time as the financial resources required will increase significantly (in terms of mid-management level staff, infrastructure and equipment including vehicles). There will be 7 management sectors to cover the total park area of 7,500 km².

The real possibility of oil and gas exploration adjacent to the QNP continues. During FY09, further detailed seismic surveys in the area just north of the park and its Buffer Zone on both the terrestrial and the marine side were conducted. Depending on the strength of the results of these surveys exploratory drilling will commence in FY10. WWF's requests not to conduct any seismic surveys in the buffer zone of the QNP in the first phase was complied with.

While QNP has, as in past, been allotted a reasonable amount of government financing for this and the coming FY, the park and the GoM must still develop the mechanisms to guarantee that the park receives these funds for the indefinite future. The current level of Government funding is way below the minimum needed to sustain a viable level of management in the Park. Therefore, an innovative suite of funding options still needs to be developed. This is a massive challenge but essential for the long term future of the park. There has been an improvement in the return to the park of revenues from entrance and concession fees, but there are still some problems with the timing and routing of this funding.

SUBGRANTEES

EAME Secretariat had no GCP-funded sub-grantees in FY09, other than the EAME focal institutions (EAWLS, NEMC and MICO) that received support to coordinate EAME activities at country level.

ANNEXES

- *EAME Newsletter, Vol. 5. Issue 1: January – March 2009,*

- *EAME Newsletter, Vol. 5 Issue 2: April- June 2009*.
- Oil and Gas policy brief, June 2009
- Map of KMNR Turtle Beaches
- Map of Lamu: Mangrove Forests
- Map of Lamu: Administrative Boundaries
- Marine resources report presented at WIOMSA