



Brochure: 2013-19

Ecosystem Approach to Small Scale Tropical Marine Fisheries



Co-funded by
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WorldFish

Project Objectives

Throughout the world, poor fisheries management contributes to resource degradation, poverty, and food insecurity. This European Union project on an Ecosystem Approach to Small-scale Tropical Marine Fisheries is led by WorldFish and implemented in collaboration with national partners in Indonesia, the Philippines, the Solomon Islands and Tanzania. The overall objective is to use an ecosystem approach to fisheries management (EAFM) to improve governance of small-scale fisheries (SSF). The EAFM puts sustainability and equity at the forefront of fisheries governance which enhances their contribution to poverty reduction.

Specific objectives are to:

1. Assess existing institutional arrangements and identify opportunities for an EAFM to improve integrated SSF management;
2. Develop EAFM strategies and actions suitable for developing country contexts;
3. Strengthen the capacity of local fishery stakeholders and government agencies to collaborate and work within an EAFM.

The project is taking a participatory and gender sensitive approach, both core philosophies of WorldFish. Representatives of all relevant stakeholder groups are involved in this action research project.

An Ecosystem Approach to Fisheries Management

The EAFM aims to manage fisheries in a more holistic way. Historically, EAFM was developed to improve management for single species fisheries (e.g. tuna) by considering other aspects of the fishery (e.g. by-catch and habitat). Single species management is no longer the mainstream approach in many places, but an EAFM may help to improve current community-based management, co-management, and integrated coastal management efforts.

The Food and Agriculture Organization of the United Nations (FAO) states that *"...an ecosystem approach to fisheries (EAF) strives*

to balance diverse societal objectives by taking account of ... biotic, abiotic and human components of ecosystems and ... applying an integrated approach to fisheries within ecologically meaningful boundaries."

The approach focuses on all stakeholders within an ecosystem and all aspects of an ecosystem being managed. For instance, it considers all fisheries uses, all impacts on fish, habitat, and people, as well as the social aspects of fisheries, such as who participates and who benefits. It also considers non-fisheries issues.

If, for example, we take community-based fisheries management, the EAFM could expand the focus of management to include migrant fishers and migrant fish, inshore-offshore fishery interactions, land-sea connections, and community livelihood and wellbeing issues beyond those related directly to fishing. EAFM therefore involves both fishery and non-fishery stakeholders at many scales of administration.

Tanzania Context

In Tanzania, coastal SSF play a very important role in diet and income generation, but with the current pressure on fisheries from over-harvesting, destructive fishing gears, and coastal habitat change (e.g. mangrove cutting), the productivity and resilience of fisheries and marine habitats are in decline.

A healthy fishery and marine environment provides subsistence, income, employment, along with a number of other ecosystem services. It is important to protect and improve this supply of benefits from the natural environment.

Tanzanian fisheries are currently managed through a co-management policy using Beach Management Units but there is recognition that integrated approaches, such as the EAFM, could also bring benefits.

Bagamoyo district, north of Dar es Salaam, has been selected as a case-study site to apply and research the EAFM.

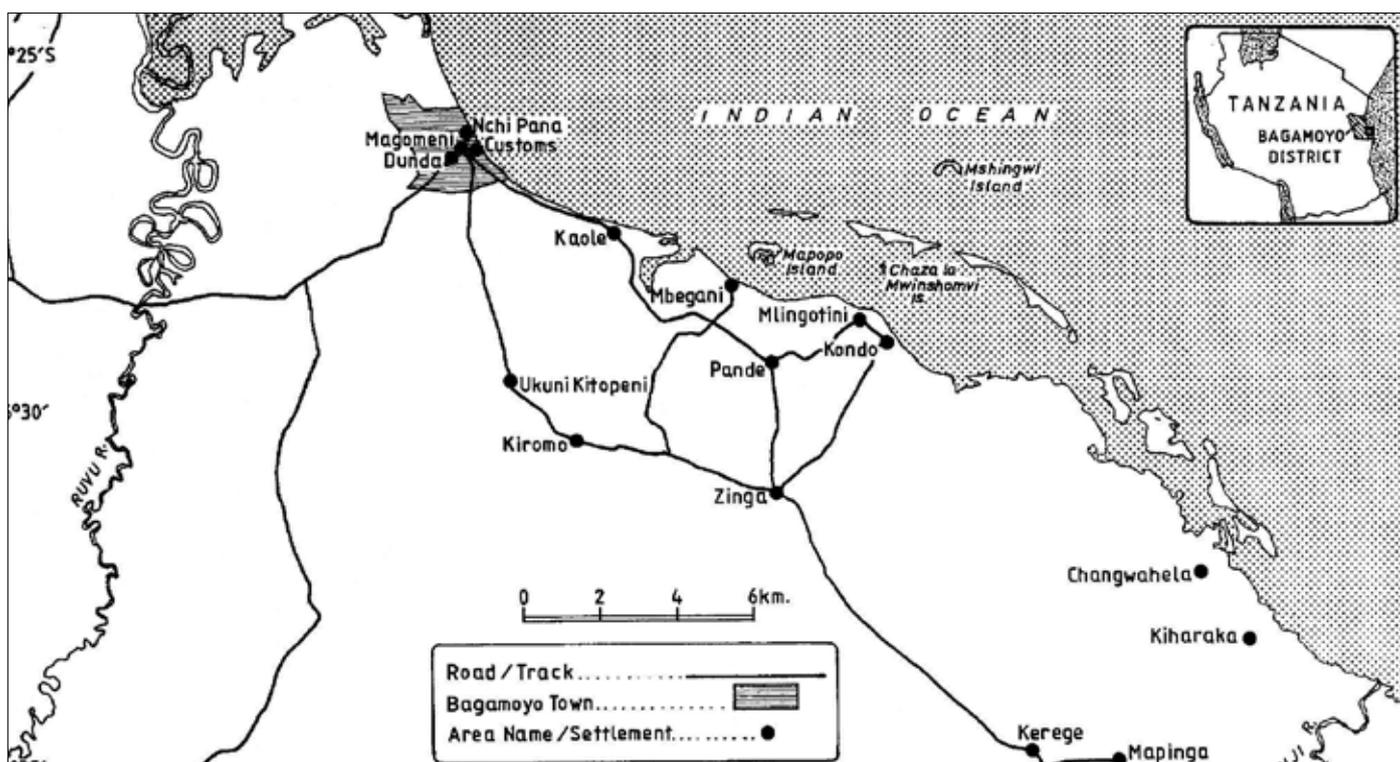


Figure 1. Bagamoyo District (Map courtesy of Tanzanian Coastal Management Partnership)



Project Activities

In 2012, the research team conducted participatory diagnosis activities with men's and women's groups in eight communities in Bagamoyo, and with national and district stakeholders. This involved:

- i) defining the fishery system;
- ii) identifying threats and opportunities characterizing the fishery;
- iii) prioritizing management activities.

Many important issues were discussed, including: population increase and immigration into the area; increased cost of living; land-use change; and climate change. Overall, four priority issues were identified: **fisheries decline, destruction of mangroves, poor governance, and threats to women's livelihoods.**

These issues were investigated further in a workshop to identify priority management actions. Two overriding priorities were identified: **targeted education and improved local governance.**

In 2013 the research team will take these two priority management actions forward. First, in-depth research will be conducted to identify:

1. The real and perceived knowledge gaps in environmental change, policy and institutions, and community rights and responsibilities.
2. The nature of local governance and the opportunities for empowerment.

This research will be followed by targeted interventions in 2014.

Research team

The research team includes: Professor Yunus Mgaya and Dr. Rose Mwaipopo from the University of Dar es Salaam; Dr. Tim Daw from the University of East Anglia (UK); Professor Kate Brown from the Environment and Sustainability Institute (UK); and Dr. Louisa Evans representing WorldFish.

Beneficiaries and stakeholders

The research team is working with the people of Bagamoyo and national fisheries, environment and development agencies with the intent of putting people's knowledge first and building on that knowledge. Lessons learned during this project will be shared widely and may inform efforts by other stakeholders in Tanzania to improve decentralized fisheries management and other policy objectives.

In the long term, the people of Bagamoyo will benefit from being able to manage their own fisheries resources, and having the skills, knowledge and support to sustain them into the future.

Who we are and what we do

WorldFish is an international non-profit research organization dedicated to reducing poverty and hunger by improving fisheries and aquaculture. WorldFish operates in 17 countries across the world and has a wide body of experience and expertise to draw on in the fisheries and aquaculture sectors.

Contact

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