

The Nairobi Convention 10TH GLOBAL MEETING OF THE REGIONAL SEAS CONVENTIONS AND ACTION PLANS

25-27TH NOVEMBER 2008

Training Workshop on Ecosystem Approaches to Coastal and Ocean Management: Focus on Ecosystem Based Management in Eastern Africa

- The 1985 Nairobi Convention and its Protocols:
- •CP 5/2. Protection of ecosystems and marine areas of the EA Region.

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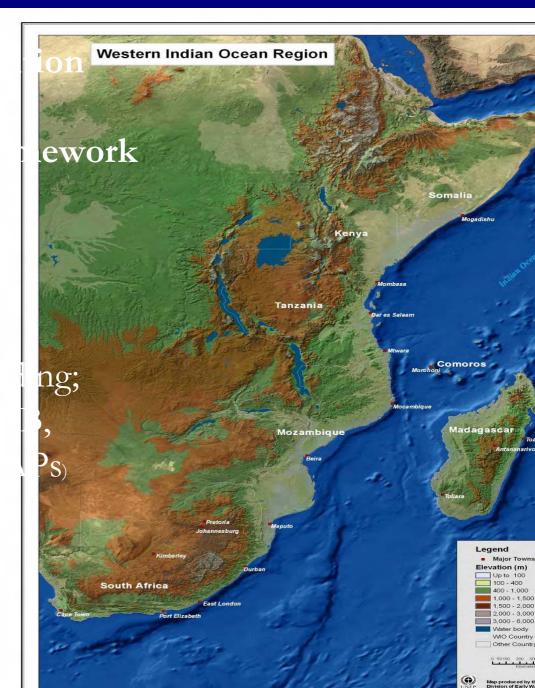
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1985-1996: **The Conve**

- •The agreement is legal fra for collaborative work
- •Ratification process
 1997-1999 and the Seychelles
 experiment;
- •2002-2004 Partnership bui
- •2005 the Future (WIO-L SWIOPF, ASLME and the S





Coastal and Ocean Management: Focus on Ecosystem-Based Management in Eastern Africa

- Organized by the Secretariat of the Nairobi Convention, in collaboration with support from the Division for Ocean Affairs and the Law of the Sea (Train-Sea-Coast Programme)
- United Nations Environment Programme (UNEP) Regional Seas Programme,
- Government of Israel, the Western Indian Ocean Marine Science Association (WIOMSA) and the Food and Agriculture Organization of the United Nations (FAO). The training workshop was held in Mombasa, Kenya, from 27 October to 1 November 2008.
- Objective, to provide government officials in East African coastal countries with the necessary skills and knowledge on how to develop and implement ecosystem approaches to the management of activities in the marine and coastal environment.



Context and relevance to the Convention work programme 2008- 2011

- CP 5/1. New Work Programme for 2008–2011
- Work Programme for 2008–2011
 - (a) Assessment of coastal and marine ecosystems;
- (b) MANAGEMENT AIMED AT IMPLEMENTATION OF PROGRAMMES AND ACTIVITIES THAT SEEK TO REDUCE OR PREVENT DEGRADATION OF THE COASTAL AND
- MARINE ECOSYSTEMS;
 - (c) Coordination and legal aspects (revision of the Nairobi Convention and its related Protocols)
 - (d) Information and education, focusing education, awareness raising, advocacy, community empowerment and capacity building; and
 - (e) Cross cutting and emerging issues, and cooperation with NGOs/ partners
- CP 5/2. Protection of ecosystems and endangered species
- To endorse and support the use of the eco-system based management approach, including the involvement of up stream countries, for the conservation of the coastal and marine areas of the Region.



Additional Elements of the Conventions work Programme 2008-2011 (Based on WIO-LaB SAP under development)

Problem areas

- Physical alteration and destruction of habitats
- IN EFFECTIVE management of MPAs 2. 3. 4. 5.
- Water and sediment quality degeneration due to pollution; and
- Alterations of freshwater flow and sediments from rivers
- Governance

Specific objectives for each area defined:

- Critical coastal habitats will be protected, restored and managed;
- management effectiveness of MPAS
- Water quality to meet international standards; and
- River flows wisely and sustainably managed and National freshwater and coastal zone management frameworks fully integrated.
- Strengthening governance structures and awareness raising

Institutional and operational objectives:

Strengthen the Nairobi convention partnerships to mainstreaming 1,2,3,4, into national government processes via Nairobi Convention.

Formal links between shared watercourse institutions and the Nairobi Convention

Presentations

- UNEPs overall approach to EA
- The 1985 Nairobi Convention and its Protocols: A regional legal
- and institutional framework for Ecosystem Approaches:
- Why Manage the Marine and Coastal resources in the WIO region
- Supports rich biodiversity and important fisheries
 - The WIO region supports more than 11,000 species of plants and animals. 15% of which are endemic to the region.
- •Industrial fishery landings of approximately 280,000 tons per year
 - Fisheries exports above \$940 million in 2002
 - Fishing industry provides a significant contribution of foreign exchange to the region.
 - 40-million people depend on the coastal and marine resources
- •Marine and Coastal goods and services are estimated to conservatively contribute an estimated USD 20 billion annually





Contn'd

- Addresses the interconnectedness between land-based activities, fresh water systems and coastal and marine environments
- Two major ecosystems Agulhas and Somalia Current Large Marine Ecosystems have important critical habitats
- GEF and Nairobi Convention States have embraced ecosystems approach and investing over \$US 78 million (2004-2012)
 - SWIOFP (\$35.67 million)
 - ASCLME (\$31.186 million)
 - WIO-LaB (\$11.413 million)



The necessity of adopting an ecosystem approach

- Basic concepts and approaches to ecosystems
- ✓ WHAT ARE ECOSYSTEMS
 - **DEFINITIONS:**
 - <u>UNEP</u>: "A dynamic complex of plant, animal, and microorganism communities and their non-living environment, interacting as a functional unit. Can be any size as long as organisms, physical environment and interactions can exist within it.
- FAO: An organizational unit consisting of an aggregation of plants, animals (including humans) and micro-organisms, along with the non-living components of the environment.

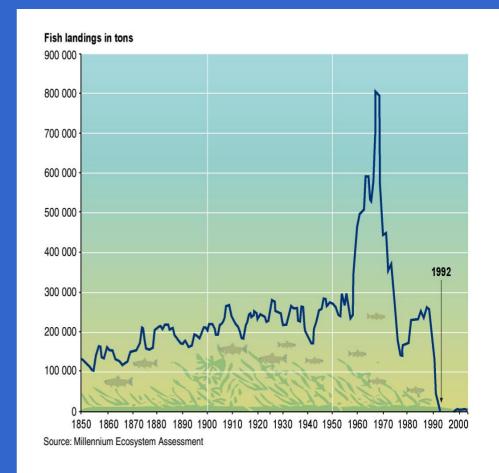




Institutions as basis for understanding responses to ecosystem change and management

2 hrs on the State of ecosystems and their services

- increasingly larger impacts on ecosystems and their services.
- 20% of the world's coral reefs lost and more than 20% degraded
- 35% of mangrove area has been lost in the last several decades.





Changes to the ecosystems and their services are caused by intense human activities.



What can we do about it?

•Responses:

- •legal, social and behavioral, economic, and technological interventions.
- •Starting place to understand responses is institutional frameworks as they define the 'rules of the game', which shape human action. Institutions moderate human behavior/action and thereby powerfully shape the nature of human interaction with nature.
- Scales (global, regional and sub-regional, etc).





Governance and Socio-Economic Aspects of Ecosystem Approaches

- Defining What is governance?
- governance may be defined as the formal and informal arrangements, institutions and practices that shape decisions and actions regarding social activities. With regards to ocean-related activities, governance will be concerned with;
- How resources or the environment are utilized
- How problems and opportunities are evaluated and analyzed
- What rules, incentives and sanctions are applied to affect the pattern of use?





The Ecosystem Approach to Fisheries An Introduction

- 1. Why did EAF come about
- > FAO CODE OF CONDUCT FOR RESPOSNIBLE FISHERIES

2. Concept development

- Increasing awareness of the importance of the interactions among fishery resources and between fishery resources and the ecosystem
- Advances in science (environmental effects on fishery resources and effects of fishing on non-target species and habitats, food-chain effects and biodiversity)

3. Principles

Maintaining ecosystem integrity, Improving human well-being and equity, Apply the precautionary approach.

4. Demystification

- Myth: The Ecosystem Approach to Fisheries is not well defined
- REALITY: EAF has been extensively defined both in terms of their purpose and characteristics

5. Comparisons of approaches

<u>Conventional approach:</u> Few objectives, Sectoral, Target / non target species etc. <u>Ecosystem approach:</u> Multiple objectives, Integrated, cross sectoral etc.



Example: The EAF Nansen Project: Strengthening the Knowledge Base for and Implementing an Ecosystem Approach to Marine Fisheries in Developing Countries (hereafter the EAF-Nansen project)".



Ecosystem- based Marine Spatial Planning & Management; Practice

The Concept of Ecosystem- Based spatial planning

- Taking into account essential habitats and ecosystem variability
- Marine spatial planning frameworks
- Marine protected areas as one tool in wider integrated marine management

MPA Management



Law Enforcement in MPAs



CHALLENGES IN THE IMPLEMENTATION OF AN EA

Science, Policy and Knowledge Gaps

- Role of Science
- Management and policy leads to more sustainable outcomes when Science informs policy
- However, scientists should not dictate policy and management outcomes
- Knowledge gaps
 - How much ecological processes are varying over time and what is causing the variation
 - How specific human activities affect ecosystem components and processes, and to what extent
 - What ARE THE observed trends in ecosystem components and processes
- UNEP
- Adaptive Management: acknowledging that knowledge will always be incomplete



SUSTAINABLE FINANCING

Sustainable Financing and challenges

- 1. Tax:
- 2. user charges, fees: This is a payment that one may be made to make in exchange of <u>direct</u> enjoyment of benefits
- Grants (external donors in particular)
- 4. Loans







IMPLEMENTING AN ECOSYSTEM APPROACH

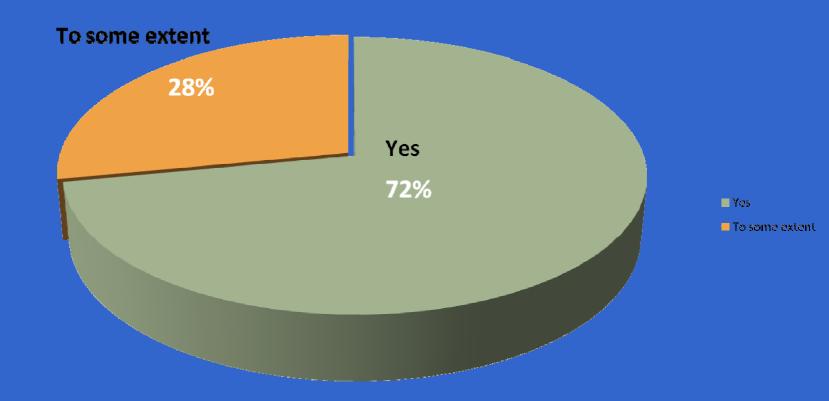
Making an Ecosystem Approach operational

- Step 1: Determine main stakeholders, define ecosystem area, and develop relationship between them;
- Step 2: Characterize structure and function of ecosystem, and set mechanisms to manage and monitor it;
- Step 3: Identify the important economic issues that will affect the ecosystem and its inhabitants;
- Step 4: Determine likely impact of the ecosystem on adjacent ecosystems;
- Step 5: Decide on long-term goals, and flexible ways of reaching them





Did the workshop give you a good understanding of the Ecosystems Approaches and ecosystem based management for Coastal and Ocean's Management?

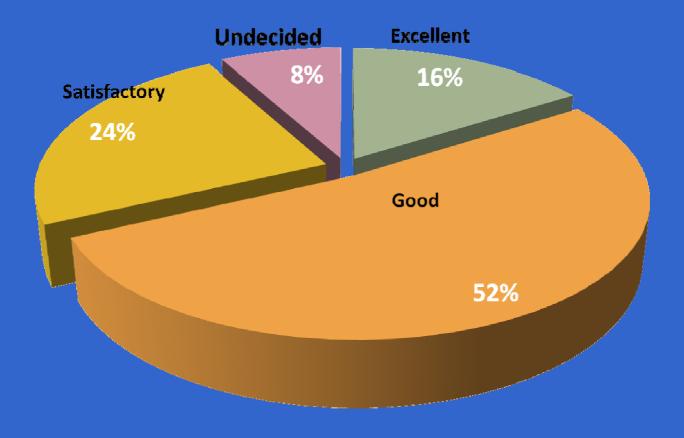






How would you rate the approaches and tools used?









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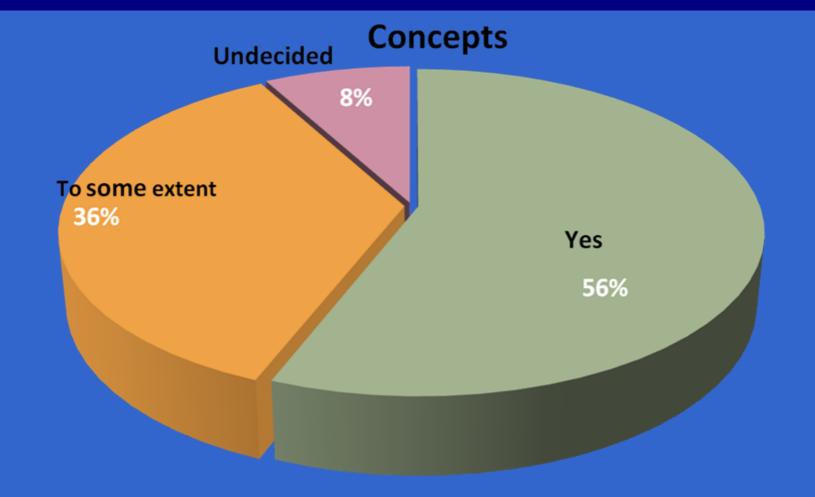
Approaches







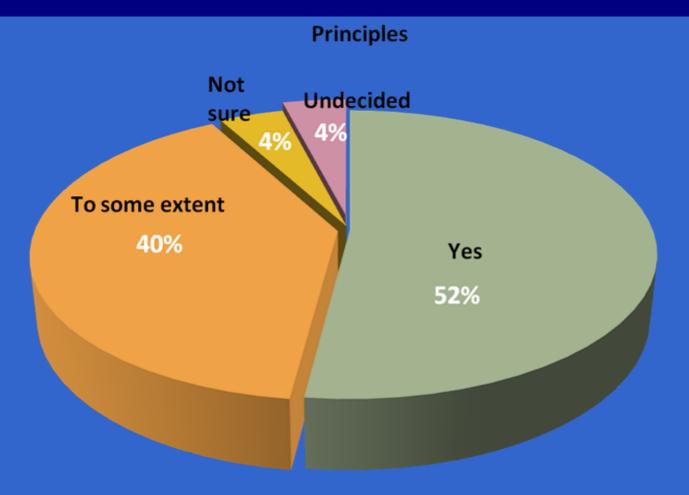
Were the concept and principles well understood?













Comments on the workshop

- Organize more workshops on Ecosystem Approaches to Coastal and Ocean Management
- There was a lot learnt from the presenters and experiences of other countries
- The draft manual should have been distributed beforehand to familiarize with the concepts
- It was not difficult to get through the training even though the concept was new.
- The presentations were a bit too theoretical and lengthy.
- The workshop should have been translated into French
- It was well organized and the workshop was an eye opener
- It HELPED us understand the concept of integration better.





Conclusion from Participants

- There is need for more Training on EBM
- The Manual DOALOS is useful but very bulky for use
- No regional examples
- ;Manual has not integrated the existing FAO EA to Fisheries
- One training not enough in the region
- EBM is on going in the region under ICM/or IRBM yet the relationships between ICM, MPAs and River basin management programmes has not been well defined
- Conclusion
 - There is need for regional specific, user friendly manual that takes into account EA to Fisheries management and other ongoing initiatives







Please visit www.unep.org/NairobiConvention



