











The Ecosystem Approach to Fisheries **Management**

The Bay of Bengal Large Marine Ecosystem Project





Sustainable development

"Development which meets the needs of the present without compromising the ability of future generations to meet their own needs"

Brundtland report 1987

"Development" = improving human well-being (both social and economic)



The Ecosystem Approach to Fisheries (EAF) is a way of achieving sustainable development

Sustainable Development (EAF)

Ecological well-being

Human well-being

Governance - ability to achieve -

Earth Summit in Rio in 1992

Convention on Biological Diversity defined the ecosystem approach as:

"A strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way."

Integrated management to promote sustainable development



Ecosystem Approach to Fisheries

FAO definition (simplified)

"Integrated approach to fisheries to balance diverse societal objectives, within ecologically meaningful boundaries

Integrated management <u>of fisheries</u> to promote sustainable development



FAO Code of Conduct for Responsible Fisheries

Fishery resources

- Maintain resources for present and future generations
- Prevent overfishing and excess fishing capacity
 - Commensurate with productive capacity
- Base management on best social, economic and ecological information
 - Traditional knowledge
- Apply precautionary approach
 - Don't wait for perfect knowledge
- Right to just livelihood, particularly those engaged in artisanal small-scale fisheries



FAO Code of Conduct for Responsible Fisheries

Ecosystems

- Manage not only target species
 - also species belonging to same ecosystem
- Consultation and participation of all stakeholders
 - Not just the fishery sector
- Protect and rehabilitate critical habitats
- Ensure fishery interests are integrated into multiple use of coastal zones
- Others pollution/coastal development



CCRF - provides key operational principles of the EAF

- Apply the precautionary approach
- Ensure compatibility of management measures (across jurisdictions)
- Broaden stakeholder participation
- Use incentives
- Promote sectoral integration



What is ecosystem approach in the fisheries context?

- Integrated management system that promotes sustainable development
 - Balance between human well-being and ecological well-being
- Integrated management focus includes all important aspects of an ecosystem and different activities that impact
 - Humans
 - Habitats
 - Fisheries resources (both target spp and associated spp)
 - Vulnerable plants and animals
 - Harvesting, polluting, degrading habitats etc
- Many "approaches"
 - All developed in parallel by different groups but all have same aim



The many approaches to ecosystem management

- Integrated Coastal Management (ICM)
- Coastal Zone Management (CZM)
- Integrated coastal resource management (ICRM)
- Integrated Coastal Area Management (ICAM)
- Large Marine Ecosystem management (LME)
- Ecosystem-based management (EBFM)
- Wealth-based fisheries management (WBFM)
- Sustainable livelihoods approach (SLA)
- Ecosystem Approach to Fisheries (EAF)



Practical application of the Ecosystem Approach to Fisheries (EAF)

Sustainable Development (EAF)

Ecological well-being

Human well-being

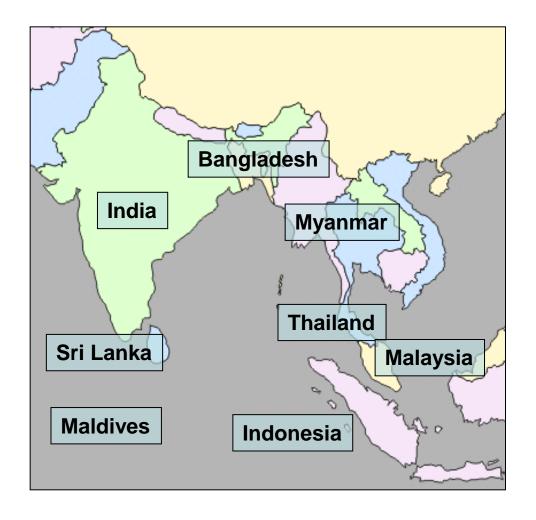
Governance - ability to achieve -



Linking EAF to the Bay of Bengal LME programme



"To establish a **Strategic Action Programme to protect** the health of the ecosystem and manage the living resources of the Bay of Bengal on a sustainable basis, to improve the food and livelihood security of the region's coastal population"



BOBLME Project has five components

Development of a SAP

Resource management

Understanding the environment

Ecosystem health

Communications



Ecological well-being

- Sustainability of major shared fisheries resource
- Critical habitats, MPA's
- Pollution reduction
- Understanding environment, health indicators



Human well-being

- Community-based fisheries and habitat management
- Alternative / sustainable Livelihoods



Governance

- ability to achieve -
- Institutions
 - National government
 - Fisheries agency
 - Environment agency
 - Regional collaboration
- Multi-sectoral involvement
- Policy harmonization



The BOBLME is your opportunity to implement the EAF in the Bay of Bengal!



Thank you

