

Implementing the ecosystem approach in ocean areas, with a particular view to open ocean and deep sea environments

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Building blocks of the ecosystem approach

Description

By putting human and their uses of space and resources at the heart of the decision-making process, the ecosystem approach recognizes humans' responsibility and provides us with management solutions based on the coordinated action of society, at different levels. Such solutions may imply trade-offs, but will benefit all in the longer term.

The ecosystem approach takes into account the interactions and interdependencies between all the compartments of the ecosystem.

Building blocks of the ecosystem approach

Types of ecosystem approach

- The CBD ecosystem approach
- The ecosystem approach to fisheries
- Integrated marine and coastal area management

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Building blocks of the ecosystem approach

Principles and guidance of the ecosystem approach

- Ecological relationships between harvested and associated species should be maintained; management measures should be compatible with the entire distribution of the resource (across jurisdictional and other boundaries), and management boundaries adaptive
- Multiple-use management is appropriate for most resource systems
- Multiple sector involvement is essential to sustainable use of resources
- A major emphasis of resource management should be to conserve common property resources, thus measures should encompass the effects of practices by all relevant stakeholders
- All levels of governance must be involved in management and planning, with decentralization at the lowest possible level
- The diversity of social and cultural factors affecting natural resource use should be recognized
- The precautionary approach should be applied because knowledge of ecological and also social systems is incomplete

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Enabling components of the ecosystem approach

“Who does what and where?”

Knowing who the stakeholders are and what their interests and expectations are is central to successful implementation of the ecosystem approach.

Stakeholders are:

- Groups affected by management decisions
- Groups concerned about management decisions
- Groups dependent on the resources to be managed
- Groups with 'claims' over the area or resources
- Groups with activities that impact on the area or resources
- Groups with special seasonal or geographic interest

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Enabling components of the ecosystem approach

“Who does what and where?”

Stakeholder analysis is based on the following main criteria:

- Relationship to the resources
- Existing rights to the resources
- Unique knowledge and skills for the management of the resources and the area utilized
- Economic and social reliance on the resources
- Present or potential impact of stakeholders' activities on the resource

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Enabling components of the ecosystem approach

“Who does what and where?”

Benefits of a stakeholder analysis are:

- Understanding of the human influence on the ecosystem and its management
- Discovering existing patterns of interaction
- Examining the compatibility and/or conflicts of multiple use objectives

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Enabling components of the ecosystem approach



In the open ocean and deep sea environments two stakeholders are dominating: those involved in shipping/marine transportation and those involved in fisheries.

Others are:

- telecommunications industry
- oil and gas industry
- scientific community
- military
- pharmaceuticals and biotechnology sector
- non-governmental organizations
- traditional and indigenous communities

Overall, the implementation of the ecosystem approach in open ocean and deep sea environments has been minimal.

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Enabling components of the ecosystem approach

The importance of 'mapping' stakeholders for implementing the ecosystem approach

- Mapping stakeholders will allow identifying interests, interest in joining the agenda, difficulties/incentives
- Experience in coastal and even in terrestrial areas shows that it is important to work with individual sectors first
- Integration among sectoral policies can be complementary to the reinforcement of individual sectors

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Making the transition to ecosystem approaches to oceans from current practices

For ocean areas, the challenges lie in:

- Integrating the various management approaches into a comprehensive and cohesive plan with the ecosystem approach as its central framework, for example through ocean policies, which could eventually be extended into the high seas
- Management of oceans would need to be supported by information systems that integrate spatially referenced environmental data, stakeholder uses and jurisdictional boundaries
- There is a need to reveal individuals, groups or organizations who are in one way or another interested, involved or affected (positively or negatively) by a particular project or action towards space and resource use

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“Conscious that the problems of ocean space are closely interrelated and need to be considered as a whole.”

(UNCLOS, Preamble)

THANK YOU

[Slide 1] Good afternoon. In my talk, I will address the issue of **Implementing the ecosystem approach, with a particular view to open ocean and deep sea environments** and the need for stakeholder analysis in this respect.

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[Slide 2] **Building blocks of the ecosystem approach**

Description

The culture and attitudes of humans are the most important factors in our aim for sustainable development. **By putting human and their uses of space and resources at the heart of the decision-making process, the ecosystem approach recognizes humans' responsibility and provides us with** the opportunity to look comprehensively at all dimensions of the problem and for finding **management solutions based on the coordinated action of society, at different levels. Such solutions may imply trade-offs, but will benefit all in the longer term.**

At the same time, **the ecosystem approach takes into account the interactions and interdependencies between all the compartments of the ecosystem**, as management concerns marine life and the marine environment as much as humans.

[Slide 3] Types of ecosystem approach

There is no one “correct” way to implement the ecosystem approach

There are many different “ecosystem approaches”, including:

- **The CBD ecosystem approach**, which aims at achieving conservation and sustainable use of biodiversity and the equitable sharing of benefits derived from its use
- **The ecosystem approach to fisheries**, which focuses on sustainable use of fisheries and is conscious of the structure and function of ecosystems and their components, as well as the needs and desires of societies
- **Integrated marine and coastal area management**, which is a multidisciplinary process providing for integration of sectors, levels of government and communities in the protection and sustainable development of coastal resources and environments; and also the oldest integrated management approach applied in the marine environment, and therefore the most widely practiced (– for more than 40 years now)

[Slide 4] Principles and guidance of the ecosystem approach

Each of these ecosystem approaches are implemented in accordance with a definition, a set of principles, guidance and/or guidelines. An analysis of principles and guidance

related to the CBD EA, the EAF and IMCAM shows that there is good consistency between these three ecosystem approaches.

But, which are these principles and guidance? They are, in essence:

1. Ecological relationships between harvested and associated species should be maintained; management measures should be compatible with the entire distribution of the resource (across jurisdictional and other boundaries), and management boundaries adaptive
2. Multiple-use management is appropriate for most resource systems
3. Multiple sector involvement is essential to sustainable use of resources; in this regard:
 - a. special forms of economic and social benefit evaluation should be used
 - b. the impact of sectoral activities on ecosystems should be assessed
 - c. increased intersectoral communication and cooperation should be ensured
4. A major emphasis of resource management should be to conserve common property resources, thus measures should encompass the effects of practices by all relevant stakeholders
5. All levels of governance must be involved in management and planning, with decentralization at the lowest possible level
6. The diversity of social and cultural factors affecting natural resource use should be recognized; in this regard, benefit-sharing should be provided and traditional resource management taken into due account
7. The precautionary approach should be applied because knowledge of ecological and also social systems is incomplete

These principles and guidance are not limited to coastal areas but also apply to open ocean and deep sea environments. In fact, the ecosystem approach is not bound by jurisdictional limits but is rather informed by a mixture of ecological boundaries, spatial and temporal information on stakeholder uses, jurisdictional limitations, and a range of special management measures.

[Slide 5] Enabling components of the ecosystem approach

A key enabling component of the ecosystem approach is to know

“Who does what and where?”

with regard to use of ocean space and resources – in other words, **assessing the nature and scale of activities**. This information can be obtained through the method of stakeholder analysis and participatory research. **Knowing who the stakeholders are and what their interests and expectations are is central to successful implementation of the ecosystem approach.**

Stakeholders are:

- Groups affected by management decisions
- Groups concerned about management decisions

- Groups dependent on the resources to be managed
- Groups with 'claims' over the area or resources
- Groups with activities that impact on the area or resources
- Groups with special seasonal or geographic interest

[Slide 6] Stakeholder analysis is based on the following main criteria:

- Relationship to the resources
- Existing rights to the resources
- Unique knowledge and skills for the management of the resources and the area utilized
- Economic and social reliance on the resources
- Present or potential impact of stakeholders' activities on the resource

[Slide 7] The benefits of a stakeholder analysis are:

- Understanding of the human influence on the ecosystem and its management
- Discovering existing patterns of interaction
- Examining the compatibility and/or conflicts of multiple use objectives

[Slide 8] Stakeholder analysis in the open ocean and deep sea environments

We have identified, analyzed and preliminarily weighed stakeholders' interests in open ocean and deep sea environments. This has been done in the context of a project implemented by the United Nations University-Institute of Advanced Studies, with the collaboration of UNESCO. A report co-written by Marjo Vierros, Fanny Douvere and I has been published and will be launched at a side event to UNICPOLOS 7 on Wednesday afternoon. You are all invited to attend.

Our research has shown that **in the open ocean and deep sea environments two stakeholders are dominating: those involved in shipping/marine transportation and those involved in fisheries**. However, many others are also present and show interest in ocean space and resources, possess unique knowledge or skills for the management of those resources, have a historical and cultural relationship to the resource and rely on the resource for their economic subsistence. These stakeholders are the **telecommunications industry, the oil and gas industry, the scientific community, the military, the pharmaceuticals and biotechnology sector, non-governmental organizations, and traditional and indigenous communities**. The activities by these stakeholders do have an environmental impact, at various degrees, they are poorly coordinated with each other, and generally the sharing of benefits derived from the utilization of the resource in question is not foreseen. **Overall, the implementation of the ecosystem approach in open ocean and deep sea environments has been minimal.**

[Slide 9] The importance of 'mapping' stakeholders for implementing the ecosystem approach

- **Mapping stakeholders** is an important reality check towards implementing the ecosystem approach: **mapping stakeholders will allow identifying interests, interest in joining the agenda, difficulties/incentives**
- Experience in coastal and even in terrestrial areas shows that it is important to work with individual sectors first and also that
- Integration among sectoral policies can be complementary to the reinforcement of individual sectors

[Slide 10] Making the transition to ecosystem approaches to oceans from current practices

In order to make the transition to ecosystem approaches to oceans from current practices, for ocean areas, the challenges lie in:

1. Integrating the various management approaches into a comprehensive and cohesive plan with the ecosystem approach as its central framework, for example through ocean policies, which could eventually be extended into the high seas
2. Management of oceans would need to be supported by information systems that integrate spatially referenced environmental data, stakeholder uses and jurisdictional boundaries
3. Most importantly, there is a need to reveal individuals, groups or organizations who are in one way or another interested, involved or affected (positively or negatively) by a particular project or action towards space and resource use (which is particularly true for open ocean and deep sea environments, due to the out of reach nature of these environments)

[Slide 11] It is clear that the ecosystem approach needs to be implemented holistically for ocean areas – as stated in the preamble of UNCLOS, which reads:

“Conscious that the problems of ocean space are closely interrelated and need to be considered as a whole.” (UNCLOS, Preamble)

THANK YOU