

# Mediterranean Forum For Applied Ecosystem-Based Management



## THE EBM APPROACH FOR THE INTEGRATED MANAGEMENT OF MARINE-COASTAL ZONES

12-13 May 2022 - Sibari Cassano allo Ionio | Live streaming

**Ecosystem Based Management (EBM)**

**Integrated Coastal Zone Management (ICZM)**

**Nature Based Solutions (NBS)**

# EBM, ICZM AND NBS: ALTERNATIVE, COMPLEMENTARY OR INTEGRATED?

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## EBM, ICZM AND NBS: DEFINITION

### ECOSYSTEM BASED MANAGEMENT

(and similar terms, such as ecosystem-based approach or ecosystem approach)

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

### INTEGRATED COASTAL ZONE MANAGEMENT

**ICZM seeks, over the long-term, to balance environmental, economic, social, cultural and recreational objectives, all within the limits set by natural dynamics.**

### NATURE BASED SOLUTIONS

**Solutions that are inspired and supported by nature, which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience.**

#### UN Convention on Biological Diversity ([Ecosystem Approach \(cbd.int\)](https://www.cbd.int/))

The ecosystem approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. Application of the ecosystem approach will help to reach a balance of the three objectives of the Convention. It is based on the application of appropriate scientific methodologies focused on levels of biological organization which encompass the essential processes, functions and interactions among organisms and their environment. It recognizes that humans, with their cultural diversity, are an integral component of ecosystems.

#### European Environment Agency ([integrated coastal zone management — European Environment Agency \(europa.eu\)](https://www.eea.europa.eu/))

Integrated coastal zone management (ICZM) is a dynamic, multidisciplinary and iterative process to promote sustainable management of coastal zones. It covers the full cycle of information collection, planning (in its broadest sense), decision making, management and monitoring of implementation. ICZM uses the informed participation and cooperation of all stakeholders to assess the societal goals in a given coastal area, and to take actions towards meeting these objectives. ICZM seeks, over the long-term, to balance environmental, economic, social, cultural and recreational objectives, all within the limits set by natural dynamics. 'Integrated' in ICZM refers to the integration of objectives and also to the integration of the many instruments needed to meet these objectives. It means integration of all relevant policy areas, sectors, and levels of administration. It means integration of the terrestrial and marine components of the target territory, in both time and space.

#### European Commission ([Nature-based solutions research policy | European Commission \(europa.eu\)](https://ec.europa.eu/nature/nature-based-solutions-research-policy/))

Solutions that are inspired and supported by nature, which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience. Such solutions bring more, and more diverse, nature and natural features and processes into cities, landscapes and seascapes, through locally adapted, resource-efficient and systemic interventions". Nature-based solutions support major EU policy priorities, in particular the European Green Deal, biodiversity strategy and climate adaptation strategy, as a way to foster biodiversity and make Europe more climate-resilient.

## EBM, ICZM AND NBS: ALTERNATIVE?

### SHARE THE SAME OBJECTIVES

All pursue human development and environment conservation balancing environmental, economic, social, cultural and recreational objectives.

### ADOPT SIMILAR METHODOLOGIES

All call for cross-sector integration and require to understand and manage complex interactions between the environmental, social and economic dynamics of land and sea management.

### ARE ALL MULTI-STAKEHOLDERS PROCESSES

All requires active participation of a wide array of stakeholders.

**EBM, ICZM and NBS  
are not different  
management models  
to pursue  
Sustainable  
Development in the  
given land and/or  
sea domain.**

## EBM, ICZM AND NBS: COMPLEMENTARY?

### ECOSYSTEM BASED MANAGEMENT

Key focus of the integration methodology is on all levels of biological organization encompassing the essential processes, functions and interactions among organisms and their environment.

### INTEGRATED COASTAL ZONE MANAGEMENT

Emphasis is on integrating both terrestrial and marine components of the target spatial domain across all relevant policy areas, sectors, and levels of administration.

### NATURE BASED SOLUTIONS

Specific target to implement ad hoc management solutions that bring natural features and processes into cities, landscapes and seascapes.

**EBM, ICZM and NBS  
can effectively  
complement each  
other in land and  
sea management.**

## EBM, ICZM AND NBS: INTEGRATED?

### ECOSYSTEM BASED MANAGEMENT

How effective would be the analysis of biological organization and the integration of processes, functions and interactions among organisms and their environment if land and sea components are considered separately?

### INTEGRATED COASTAL ZONE MANAGEMENT

Interaction between terrestrial and marine components is governed by ecological processes and socio-economic dynamics which pertains to different policy areas and sectors and are managed by a wide array of administrations. ICZM cannot therefore be effective if it doesn't account for ecosystem processes, functions and interactions.

### NATURE BASED SOLUTIONS

Natural dynamics are governed by ecosystem processes, functions and interactions.

**The EBM, ICZM and NBS can better complement each other if they are integrated within a coherent management framework.**



## TAKEAWAYS

We are now 30 years after the *United Nations Conference on Environment and Development* in Rio de Janeiro and almost halfway of the *2030 Agenda for Sustainable Development*.

A wide array of policy frameworks and management approaches to pursue Sustainable Development have been developed and are available to steer the conservation of land and sea while fostering human development.

The comparison between EBM, ICZM and NBS previously illustrated provides an example of how available policy frameworks and management approaches may not be alternative but rather complementary tools to be simultaneously applied within a coherent management vision.

Governmental investments, scientific research and efforts of civil society may therefore be better focused on the effective application and spreading of the said tools rather than conceptualising new ones.

**The Forum for Applied Ecosystem Based Management focuses applicative tools and the implementation of on-the-ground EBM solutions.**