

#### Ho Chi Minh City University of Natural Resources and Environment



# MARINE RESOURCES AND ENVIRONMENT MANAGEMENT

Topic 2 - MARINE RESOURCES 2.4 Assessment method of resource benefit







#### **MATERIALS**

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#### **CONTENT**

Overview of sea and island management

Steps to analyze resources



# Overview of sea and island management



- □Objects in the management of sea and islands
- □Contents, principles, mechanisms and tools of state management of seas and islands







- **❖** The concept of "position":
  - In the broadest sense, "position is the comparative correlation of location (foothold) in social nice in nature of a person, a community, an administrative unit, a country, an alliance, or of a space (territory) of different sizes"



• "Position is advantage compare in terms of geography, ability to exploit NS immaterial and material values of a certain territory" [NC ", 2005];



#### 1. Objects in the management of sea and islands



- \* For the management of seas and islands:
  - **Space position** within the framework of "comparative correlation in terms of geographical (natural) position of a certain space (territory) that can be exploited for environmental, economic, political, including the challenges faced by that territory.
  - Positional resources of the sea: The main subjects are marine space and coastal zones, the water surface and seabed, channels, bays, wharfs, coastal lands, peninsulas and seas. islands, sandy beaches, rocky shelves, cliffs, caves.
  - One Bay water deep, private poor talent original transmission system, but due to stay one taste wisdom geography physical Mandarin important Yes price treat history use Fort one port water deep Carry again NS profit useful terrible economic big.



#### 1. Objects in the management of sea and islan



- For the management of seas and islands:
- Marine position resources are not only of natural origin, but also related to historical, archaeological, cultural, community structures, etc.
- Marine position resources are also related to both biotic and abiotic factors, renewable and nonrenewable, forming the shape and position in space of the subject.
- Positional resources in current Vietnamese management documents often refer to the values brought by a space related to its geographical position in relation to political-economic centers and focal points. regions, with key economic zones, economic belts, corridors, etc.



#### 1. Objects in the management of sea and islan



- \* Resources are all forms of matter, knowledge used to create material wealth, or create new use values of people.
  - Resources are objects of human production. As human society develops, the number of types of resources and the amount of each type of resource exploited by humans is increasing.
- ❖ Natural resources are material possessions available in nature that humans can exploit, process, use, and serve human life (forests, rare animals and plants, mineral deposits, water, oil, gas...). Natural resources are an essential part of the environment and closely related to the environment..



#### 1. Objects in the management of sea and islan



#### 1.2Natural resources of Vietnam's sea and islands

Types of resources of the sea and islands:

Position Resources

Biological resourcesNon-living resources

Energy resources

Transportation resources

Travel resources

## Contents of general management of marine and island resources

- 1. Formulating and promulgating legal documents on general management of marine and island resources.
- 2. Making planning on the use of sea and island resources.
- 3. To uniformly manage activities of basic investigation, exploitation and use of sea and island resources.
- 4. International cooperation in the field of general management of marine and island resources.



## 1.2. Instrumental mechanism of state man sea and islands



#### Specific management mechanism:

- The mechanism for formulating, promulgating and organizing the implementation of master plans and plans on the use of seas and islands.
- The mechanism for appraisal, allocation or lease of sea and island areas to organizations and individuals for exploitation and use.
- The mechanism for coordination in inspection, supervision and handling of violations of the law on sea use.
- Dispute settlement mechanism in management, exploitation and use of seas and islands.
- The mechanism for organizing and managing basic investigation activities, keeping and sharing information and documents on sea and islands.
- Coordination mechanism in international cooperation, training and marine scientific research.



### 2: Resource benefit assessment



- 2.1. Single-sector management
- 2.2. Multi-disciplinary, multi-purpose management
- 2.3. Steps to analyze resources



#### 2.1. Single-sector management



Concept is management at all levels such as a central, provincial, and district. However, there is a lack of coordination in both vertical structures (central to grassroots) and horizontal structures (between sectors in the same area).

Effective coastal zone management must be based on sound science, taking into account the limitations of coastal resource systems in a context that is balanced and consistent with the development needs of different sectors. Sustainable coastal management can be understood in different ways:

Maintain environmental quality and preserve the function of coastal resource systems.

Realize the economy effectively, ensuring long-term benefits. Ensuring the rights of generations to enjoy coastal resources. Ensure adaptability to the natural and social environment.





#### 2.2. Multidisciplinary management, goals

#### Purpose

Accept multidisciplinary development.

Minimizing antagonisms of interests, harms and irreversible losses in choosing development for the future.

Preserve ecosystem function.

Optimize the multi-target utilization of coastal resource systems





#### Approach

- Integrated management approaches to adjust the traditional options in planning and management of coastal areas. In other words, it combines and integrates management plans with development plans in the following three combinations:
- System integration: this form involves the integration of coastal resource systems with biological resource systems and socio-economic systems.
- Coordination of tasks: related to the coastal management plan, based on which, management plans are proposed to address specific issues, by the purposes and objectives of the development plan.
- Policy coordination: related to government, local and sectoral policies on development.



#### 2.3. Steps to analyze resources



#### **B1.** Choose boundaries

It is necessary to choose the appropriate boundaries for the research of coastal functions and approach to assessment of their resources before conducting detailed research surveys.

The selection of suitable boundaries for coastal research and then planning and managing them requires the synthesis of 3 factors:

- Basic environmental processes;
- *Administrative units;*
- Activities that affect or depend on the resources of the coastal area.



#### 2.3. Steps to analyze resources



#### **B2.** Review benefits

The objective of the resource evaluation is:

- Assess the current status of goods and services including supply and demand.
- Identify basic management parameters affecting existing methods.
- Building a comprehensive list of ability to use and identify basic management measures, such as control of the intensity of using resources, the needs of using them sustainably.
- Identify risks associated with increased use of resources.







#### **B3.** Evaluate development opportunities

- The process of collecting and comparing information and evaluating benefits helps assess potential resources. The development of this potential depends on factors such as skills, investment capital of private or collective needed for effective and sustainable use of these potential opportunities.
- Analysis of these factors will determine the enforcement ability of the coastal use and management plan, and determine what the ministries and the community need to do to facilitate sustainable development.







#### **B3.** Evaluate development opportunities

Issues that need periodic inspection are:

- Potential and current status of domestic and international markets for products obtained from coastal areas;
- Availability of people with technical and managerial expertise;
- The required level of collective investment and necessary institutional support, such as extension services, for the sustainable development of existing or new resources;
- Measures may be needed to overcome coastal management problems. For example, relocation or discontinuance of activities beyond sustainable use;
- Existing local skills and experience can contribute to the management process.



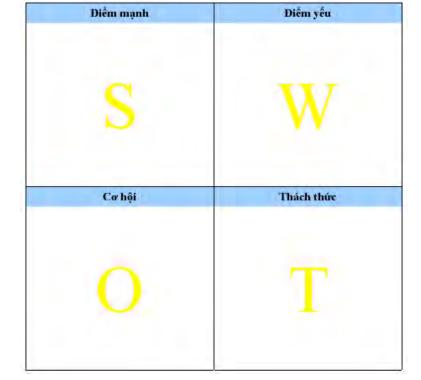




#### **B4.** Evaluation of compatibility

- The reason for conducting a compatibility assessment is to identify compatible resource uses and potentially conflicting practices.
- Multi-use management can be either area oriented or resource oriented. In each case, multiple uses involve complementary or competing relationships between current and potential uses.







One of the most commonly used methods in multidisciplinary management of integrated management is the SWOT analysis method

In analyzing the development of an industry or a field, the SWOT analysis method (Strength - Weakness - Opportunity - Threaten) can give an overview of the industry and then find methods to promote the advantages. strengths, minimizing weaknesses, seizing opportunities and eliminating threats





#### SWOT ANALYSIS METHODS

To build a SWOT analysis model, it is necessary to carry out 8 steps as follows:

Step 1: List the opportunities.

Step 2: List challenges

Step 3: List the strengths inside

Step 4: List internal weaknesses

Step 5: Combine internal strengths with external opportunities to create SO strategies.



### SWOT ANALYSIS METHODS

To build a SWOT analysis model, it is necessary to carry out 8 steps as follows:

Step 6: Combine internal weaknesses with external opportunities to create WO strategies;

Step 7: Combine strengths with challenges to create an ST strategy;

Step 8: Combine Weaknesses with Challenges to create a WT strategy.







## The tools of the integrated and unified state management of seas and islands include?

- A. Law of the sea, Law of the environment, Law of environment and marine resources
- B. Legal tools, economic tools, technical tools
- C. Constitution, related laws, directives, decrees, decisions...
- D. Different legal documents are used depending on the province and city.



# What group of tools does the information system and database on seas and islands belong to?

- A. Legal tools
- B. Economic tools
- C. Technical tools
- D. All of the above answers are incorrect





#### The steps in resource analysis include?

- A. Boundary definition → Resource assessment →
   Compatibility assessment → Growth opportunity assessment.
- B. Boundary definition → Compatibility assessment
   → Growth opportunity assessment → Resource assessment
- C. Boundary definition → Resource assessment →
   Growth opportunity assessment → Compatibility assessment.
- D. Resource assessment → Boundary definition →
   Development opportunity assessment →
   Compatibility assessment.





# What is the reason for conducting a compatibility assessment?

- A. Determining the feasibility of the coastal zone management and use option
- B. Identify compatible resource uses and potential conflicts
- C. Identify what government ministries and communities need to do to facilitate their sustainable development
- D. All 3 answers above are correct





#### The goals of a resource assessment are:

- A. Identify key management parameters affecting existing usage patterns.
- B. Develop a comprehensive list of possible uses and identify basic management measures, such as controlling the intensity of resource use, the need for sustainable use of them.
- C. Identify the risks associated with increased resource use.
- D. All 3 answers above are correct