



The Economic and Social Analysis of the uses of the coastal and marine waters in the Mediterranean.

Characterization and impacts of Fisheries, Aquaculture, Tourism and recreational activities, Maritime transport and Offshore extraction of oil and gas

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Blue Economy
Project founded by the MAVA foundation

1st Advisory Board Meeting

Sophia-Antipolis 7-8 July 2015

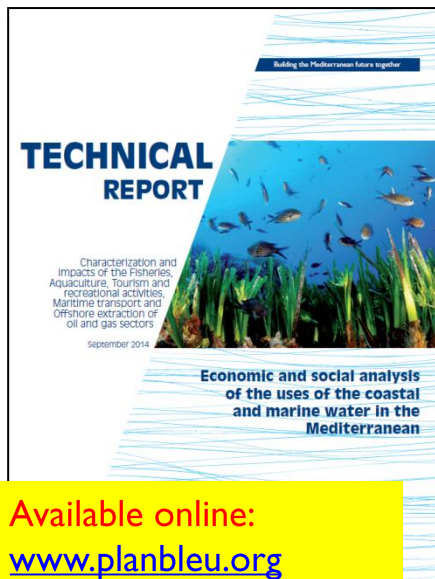


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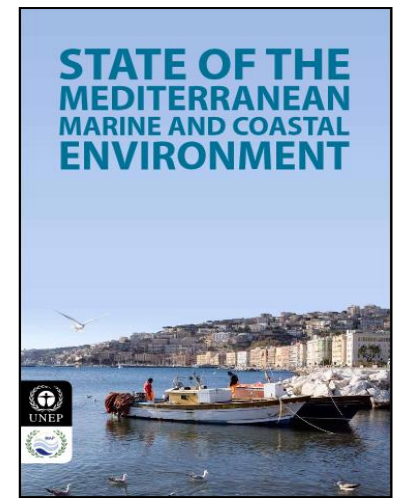


The Economic and Social Analysis (ESA) in the Mediterranean region

Plan Bleu (2014) Economic and social analysis of the uses of the coastal and marine waters in the Mediterranean.



- Developed in the frame of the MAP's Ecosystem Approach Initiative (EcAp)
- Complementary to EcAp's Environmental Assessment
- Integration of **environmental and economic** aspects to better understand and link the impacts that human activities have on natural systems
- ESA as a key action for the definition of the program of measures (reasonable targets and management measures at regional, sub-regional and national levels) needed to achieve EcAp objectives.



- First step towards a **Blue Economy** in the Mediterranean!

The Economic and Social Analysis (ESA) in the Mediterranean Region

➤ Characterization of **5 key human activities** in the Mediterranean:

Fisheries, Aquaculture, Tourism & recreation, Maritime transport, Offshore extraction of oil & gas



Spatial scope:

- Regional analysis
- Sub-regional analysis:
 - Western Mediterranean,
 - Adriatic Sea,
 - Ionian Sea & Central Mediterranean,
 - Aegean-Levantine Sea.

The Economic and Social Analysis (ESA) in the Mediterranean Region

➤ **Characterization and impacts of 5 key human activities in the Mediterranean:**

Fisheries, Aquaculture, Tourism and recreational activities, Maritime transport, Offshore extraction of oil and gas

Structure of the analyses

- Introduction to the sector's general context
- Regional analysis: sector and socioeconomic indicators
- Sub-regional analysis: sector and socioeconomic indicators
- Future trends
- Environmental impacts



Overall ESA results – Mediterranean Region

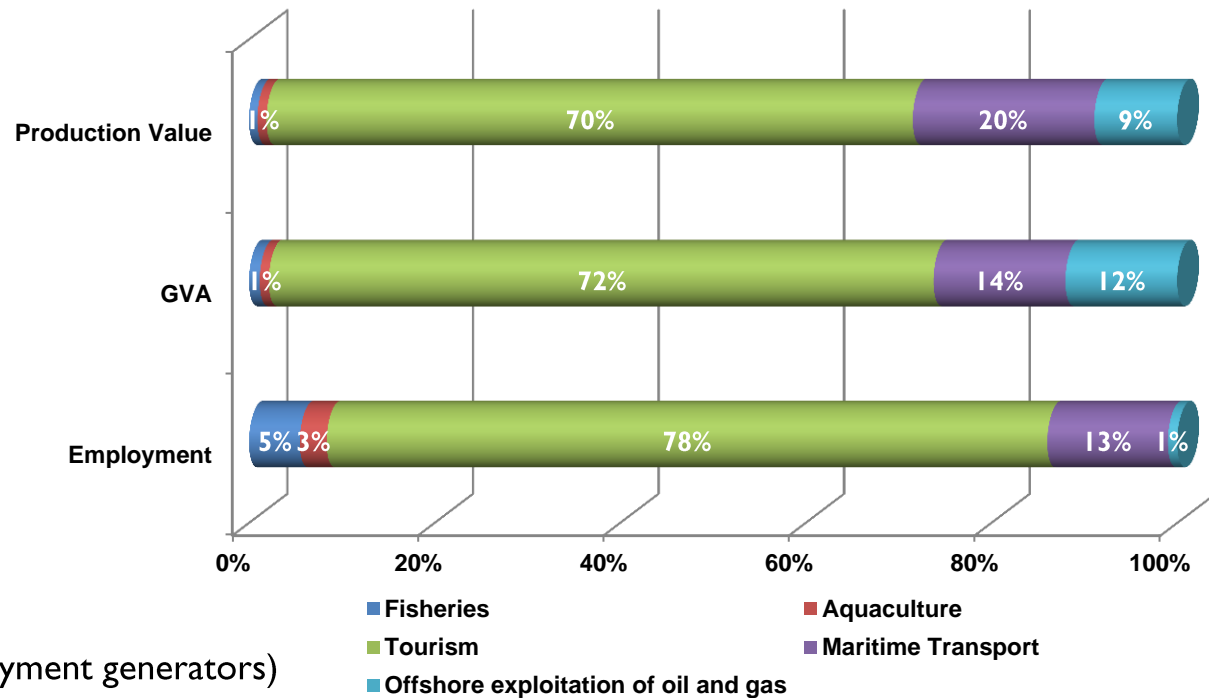
Maritime Sectors in the Mediterranean region:

Fisheries, Aquaculture, Tourism & recreation, Maritime transport and Offshore extraction of oil & gas:

Total revenues: 360 billion Euros

Total GVA: 190 billion Euros

Total jobs: 4,2 million jobs.



➤ Coastal Tourism

High economic and social impacts

➤ Fishing, Aquaculture

Relatively high social impacts (employment generators)

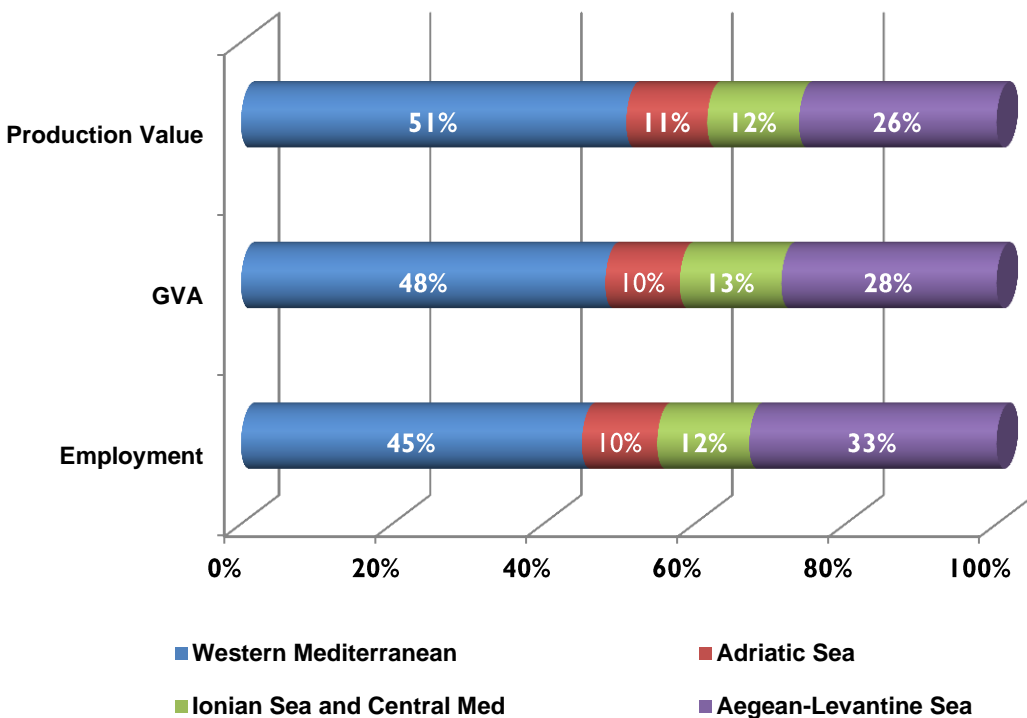
➤ Offshore Oil and Gas Industry and Maritime Transport

High economic impacts, lower contribution to employment

Overall ESA results– The Mediterranean sub-regions

Maritime Sectors in the Mediterranean sub-regions:

Fisheries, Aquaculture, Tourism & recreation, Maritime transport and Offshore extraction of oil & gas:



Economic and Social impacts:

- Western Mediterranean:
The 5 economic sectors generate more value than employment.
- Aegean-Levantine Sea:
Largest share of employment. Maritime activities generate more employment than value.
- Adriatic Sea and Ionian Sea & Central Med:
Value and employment are well-balanced.

ESA Results: Socioeconomic Trends in the Mediterranean

| Human activities | | Future trends | | | | |
|------------------------|-------------------------|---------------|---------|----------|-----------------|-----------|
| | | Mediterranean | Western | Adriatic | Ionian –Central | Levantine |
| Fisheries | Fisheries production | - | 0 / - | 0 / - | 0 / - | 0 / - |
| Aquaculture | Aquaculture production | + | 0 / + | + | + | + |
| Tourism and recreation | Mass tourism demand | + | 0 / + | + | 0 / (+) | + |
| Maritime transport | Expansion of port areas | + / ++ | + | + | + | ++ |
| | Maritime transportation | ++ | ++ | ++ | + | + |
| Hydrocarbon extraction | Exploration | + / ++ | + | + | ++ | ++ |
| | New reserves exploited | + | 0 / + | - | 0 / + | 0 / ++ |

ESA Results: Assessment of Environmental Pressures

| EcAp Initiative Ecological Objectives (EOs) | | Fisheries | Aquaculture | Tourism & Recreation | Maritime transport | Offshore extraction of oil & gas |
|---|---------------------------------|---|-------------|---|--------------------|--|
| | | Fishing activity, by-catches & discards | | Coastal develop., Construction of infrastructure & Recreation | | Presence of structures and operations & Marine pollution |
| EO1 | Biological diversity | X | X | X | X | X |
| EO2 | Non-indigenous species | X | X | | X | X |
| EO3 | Commercial species | X | X | X | | |
| EO4 | Food webs | X | | | | |
| EO5 | Eutrophication | | X | X | X | |
| EO6 | Sea - floor | X | X | X | X | X |
| EO7 | Hydrographic conditions | X | X | X | | X |
| EO8 | Coastal areas' natural dynamics | | | X | | X |
| EO9 | Contaminants | X | X | X | X | X |
| EO10 | Marine Litter | X | X | X | X | X |
| EO11 | Noise | X | | X | X | X |

The ReGoKo Project: National experiences of ESA in the Mediterranean

➤ **ReGoKo Project: The Regional – Governance and Knowledge generation Project**

- ❖ **Objective:** Fostering the integration of environmental issues into sectoral and development policies of the Beneficiaries
- ❖ A demand-oriented project with 5 main pillars: observation, evaluation, regulation, participation and green economy.

➤ **National pilot cases for a socioeconomic evaluation of Mediterranean maritime activities**

Analyzing maritime economic activities regarding:

- Their present situation and perspectives concerning their socio-economic and environmental characteristics;
- Ecosystem services supporting them and the pressures/ impacts they exert on marine ecosystems and human welfare;
- The cost of degradation linked to the bad state of the marine/ coastal environment;
- Indications on their sustainability and development; and
- Recommendations for public policies and methodological guidance for similar ESA in the MED

3 pilot countries:

LB, MA, TN

Implementation:

07/2013 - 06/2014

Outputs:

3 national reports; synthesis report with methodological guidance; national and regional workshops

The Mediterranean ESA experience: Key Issues

I. Selection of most appropriate indicators?

Sector indicators

Fisheries:

Fishing effort
Landing statistics
Exports and imports

Aquaculture

Production
Number of Farms

Tourism and recreational activities

International arrivals

Maritime Transport

Ports
Nb vessels
Deadweigh tonnage
Transport of goods & passengers

Offshore extraction of oil and gas

Oil production
Gas production
Active and projected fields

Economic indicators

Production Value

GVA

Social indicators

**Contribution to
Employment**

- Most common indicators to assess socioeconomic performances of human activities
- Based on available data sources and information :
 - International and regional databases,
 - Industrial statistics,
 - Specialized press and studies,
 - National and regional reports,
 - *National Statistical Services (rarely)*

➤ Limitations

- E.g. How well can “employment” by itself explain all social dimensions of activities?

The Mediterranean ESA experience: Key Issues

2. Data (availability, sources, comparability) and assumptions

Sector indicators

Fisheries:

Fishing effort
Landing statistics
Exports and imports

Aquaculture

Production
Number of Farms

Tourism and recreational activities

International arrivals

Maritime Transport

Ports
Nb vessels
Deadweigh tonnage
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Offshore extraction of oil and gas

Oil production
Gas production
Active and projected fields

Economic indicators

Production Value

GVA

Social indicators

Contribution to
Employment

➤ Data sources:

- International and regional databases,
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**Assumptions
Approximations**

➤ Unavailable information

- Estimates of GVA (rarely available)
- Calculation of Mediterranean share
- Calculation of activities's coastal shares

The Mediterranean ESA experience: Key Issues

3. Existence / Availability of data at the suitable scale?



Multiple maritime façades:

➤ Regional analysis:
Egypt, Israel, Morocco, Spain, Turkey

➤ Sub-regional analysis:
Italy, Greece, Libya, Tunisia.

➤ Coastal / inland / offshore activities ?
E.g. Tourism & recreation, Aquaculture, Fisheries, Hydrocarbon exploitation...

➤ Distribution of activities taking place on different maritime façades ?

How this report and the lessons learnt can be used in the “Blue economy project”

➤ SCOPE

- Economic sectors and issues.
- Geographical scope.

➤ INDICATORS

- How to focus on issues and related indicators ?

➤ EXISTENCE AND AVAILABILITY OF DATA

- Use of estimates ?
- How to improve the estimates ?



Thank you for your attention

Available online:
www.planbleu.org

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