

BLUE ECONOMY

Economic activities and sustainable development



TOWARDS A BLUE ECONOMY FOR A SUSTAINABLE MEDITERRANEAN

Indicators and recommendations

At the world level, the economy based on maritime sectors is considered a new frontier for economic development and its Gross Value Added (GVA) could double or even triple between 2010 and 2030. This trend could be similar in the Mediterranean region due to the importance of the economic sectors as tourism and maritime transport.

This growth will be strongest in sectors such as offshore energy (natural gas, oil, wind), maritime and coastal tourism, maritime and port equipment related to freight transport and the cruise industry (including ship building, repair and dismantling), raising environmental and social issues. Industrial and small-scale fishing and aquaculture provide numerous jobs but is endangered by over-exploitation. Development of deep-sea resources (bio-resources and mineral extraction) might generate few jobs and raise concerns on its environmental impacts and life patents issues.

The blue economy in the international and Mediterranean context

The international commitment to the blue economy in the Mediterranean dates back to 2012 and is rooted in the Conference of Parties (COP) 17 of the Barcelona Convention, the 2015 Ministerial Declaration of the Union for the Mediterranean (UfM), the 2015 revision of the United Nations (UN) Agenda for Sustainable Development ('2030 agenda'), with the International Conference on Financing for Development (Addis Abeba), the UN Sustainable Development Summit in New York (Sustainable Development Goals – SDGs), and the COP21 in Paris (Climate Agreement). The SDG 14 particularly seeks to “Conserve and sustainably use the oceans, seas and marine resources” for the purpose of sustainable and inclusive development. The Mediterranean Strategy for Sustainable Development (MSSD 2016-2025), adopted in 2016 by the COP19 of the Barcelona Convention, seeks to ensure “sustainable

development in marine and coastal areas” (Objective 1) and the “transition towards a green and blue economy” (Objective 5).

Governance organisations in the Mediterranean Region and/or its neighbouring countries use a variety of documents and commitments (strategies, action plans, investment programmes, budgets, projects), and tools (e.g. regulatory, economic, information tools) to achieve more sustainable and more inclusive development, including the sustainable use of Mediterranean maritime and coastal assets. Several initiatives have already been launched to promote this transition or changes (including the MSSD 2016-2025, the Sustainable Consumption and Production (SCP) Action Plan, the Ecosystem Approach (EcAp) Initiative and the Integrated Coastal Zone Management (ICZM) Protocol, UfM initiatives or the Marine Strategy Framework Directive (MSFD) and the European Union's Circular Economy Package. The ICZM Protocol is the legal instrument of the Barcelona Convention

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that specifies in Article 9 obligations for economic activities including maritime ones (such as fishing, ports, maritime activities) that have to ensure sustainable development in the sense of objectives of the blue economy.

In this context, the project “A blue economy for a healthy Mediterranean – Measuring, monitoring and promoting an environmentally sustainable economy in the Mediterranean region”, funded by the MAVA Foundation implemented by three Regional Activities Centres of the United Nations Environment Programme/Mediterranean Action Plan (Plan Bleu, Regional Activity Centre for Priority Actions Programme and Regional Activity Centre for Sustainable Consumption and Production) allowed to identify indicators, select tools and recommend policies to promote the “blue economy” in the Mediterranean region. The findings, definitions and recommendations below emerge from this project.

A blue economy definition adapted to the Mediterranean region

“Blue economy is a low polluting, resource-efficient and circular economy based on sustainable consumption and production patterns, enhancing human well-being and social equity, generating economic value and employment, and significantly reducing environmental risks and ecological scarcities.”

A blue economy allows preserving Mediterranean healthy marine and coastal ecosystems and ensures the continuous delivery of goods and services for present and future generations.

Progress towards a successful blue economy relies on the sustainable development of key socioeconomic activities: fisheries; aquaculture; tourism and recreational activities; maritime transport and port activities; bio-prospecting or exploitation of biological resources; exploitation of renewable energy sources. The blue economy, which is a declination of the green economy in marine and coastal areas, can and must contribute positively to inclusive sustainable development in the Mediterranean Region.

How to monitor the blue economy?

The blue economy dashboard consists in 22 proposed indicators aiming to complete the MSSD indicators dashboard mainly for the MSSD objectives 1 and 5. The resulting 22 indicators are deemed suited for measuring the status and trends of a blue economy in the Mediterranean. Data are at least partially available for most indicators. However, countries' support to data provision and statistics at national level will be necessary for some of them. It should be noted that some indicators, in particular in the energy sector, actually monitor the “brown” economy and should show a downward trend if blue economy is to succeed (See Table 1). The blue economy dashboard will include a nursery of indicators (to be developed further) and context economic indicators (such as foreign direct investment, international trade, aid, and selected prices, taxes and subsidies).

Some major trends

1.1. Fisheries and aquaculture

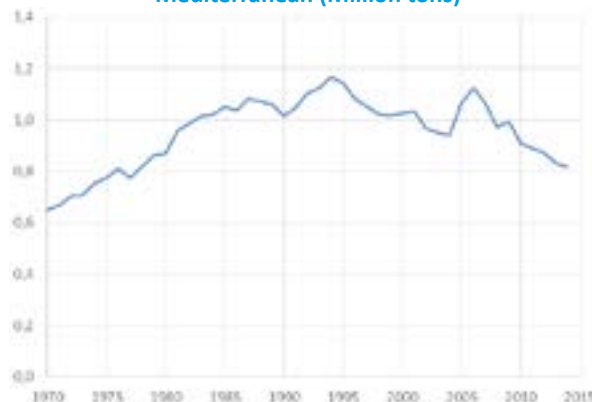
The available data on fish stocks exploited above sustainable levels show that the Mediterranean Sea is in a state of ecological crisis due to a long pattern of over-fishing, poor management policies and lack of monitoring and accountability.

In the Mediterranean, landings increased until 1994, reaching about 1.1 Mtons, and subsequently declined irregularly to about 0.8 Mtons in 2014 (Figure 1). Algeria, Greece, Italy, Spain, Tunisia and Turkey together account for slightly more than 80 percent of total landings in the Mediterranean.

Table 1: Core set of indicators for the Mediterranean blue economy dashboard

SECTOR	INDICATOR
ENERGY	1. Offshore wind capacity installed
	2. Offshore oil and gas production
	3. Offshore oil and gas gross value added
	4. Offshore oil and gas employees
	5. Number of oil and gas exploration drills
	6. Total amount of oil spilled
FISHERIES	1. Amount of fish caught (tons)
	2. Percentage of fish stock over-exploited
	3. Total value of fisheries production (landing value)
	4. Amount of fish caught by artisanal fisheries (tons)
	5. Number of fishers employed
	6. Number of small scale fisheries vessels
TOURISM	1. Economic value of tourism (GVA)
	2. Tourism employment (number of jobs)
	3. International tourism arrivals (per capita)
	4. Coastal and marine areas conserved (% total)
MARITIME TRANSPORT	1. Economic value of maritime transport (GVA)
	2. Employment in maritime transport
	3. Volume of passenger traffic
	4. Volume of port freight traffic
BIO-PROSPECTION	1. Number of bio-marine patents per country

Figure 1: Total fish catch 1970 – 2014 in the Mediterranean (Million tons)



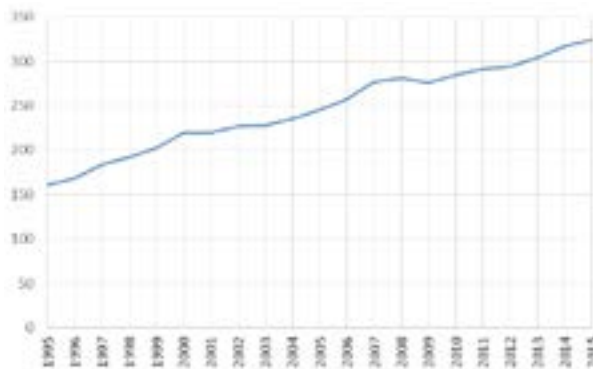
Source: FAO (Food and Agriculture Organization of the United Nations), Fishstat and GFCM (General Fisheries Commission for the Mediterranean)

1.2. Coastal and marine tourism

The tourism sector has long been a key player in Mediterranean countries, with great economic and social impacts. However, the current model of tourism is highly unsustainable. Future growth will further deteriorate the already critical environmental pressures it poses in coastal and marine ecosystems, and exacerbate the depletion of local resources. Therefore, a shift is needed towards a sustainable Mediterranean tourism which reduces its consumption of natural resources, strives on the protection and recuperation of coastal and marine environments, and respects local culture and social structures.

In the past 20 years the Gross Domestic Product (GDP) contribution of the tourism sector has steadily increased by 60% in Mediterranean countries¹. Mediterranean is the world's leading tourism destination in terms of both international and domestic tourism with more than 320 million international tourist arrivals representing 27% of total world tourists for 2015. International tourist arrivals have grown from 58 million in 1970 to nearly 324 million in 2015 (Figure 2), with a forecast of 500 million by 2030. About 50% of these arrivals occur in coastal areas.

Figure 2: International tourism arrivals in the Mediterranean (Million people)



Source: World Tourism Organization (UNWTO)

In addition, the Mediterranean Sea is among the most important cruise areas in the world: it reached 27 million passengers in 2013, with a sustained increase of around 5% per year. Cruise infrastructures remains located on the northern shore: 75% of Mediterranean ports are in Italy, Spain, France, Greece, Croatia and Slovenia, while 9% of ports are in Turkey and Cyprus; and 7% in Northern Africa (Plan Bleu 2017).



¹ All data regarding tourism correspond to the national level and does not distinguish tourism in Mediterranean coastal areas from elsewhere in the countries.

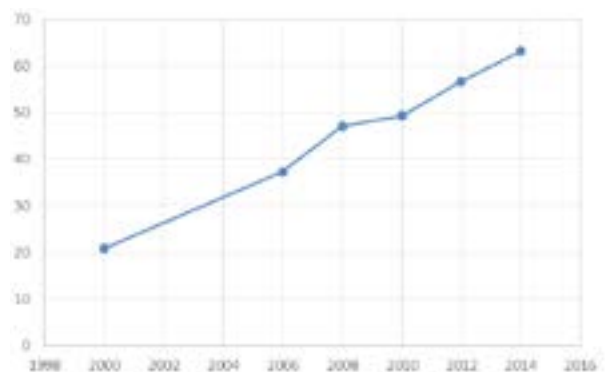
1.3. Maritime transport

The maritime transport sector presents a great challenge for a blue economy in the Mediterranean. The Mediterranean Sea is one of the busiest seas in the world, harvesting 20% of seaborne trade, 10% of world container throughput and over 200 million passengers. Furthermore, as maritime traffic is steadily increasing it adds environmental pressure, such as rising CO₂ emissions, pollution, marine litter, collisions with large cetaceans, underwater noise and the introduction of non-indigenous species².

Container port traffic development shows a clear trend of rapid growth of the sector, which undoubtedly increases the environmental pressure and strengthens the need for a transition to a sustainable maritime transport (Figure 3).



Figure 3: Mediterranean container port traffic (Million tons)



Source: Containerisation International Yearbook, World Bank

One of the main problems related to the growth of the sector is the rapid increase of its carbon footprint. There is no primary data on carbon emissions of the sector, therefore all data comes from estimations i.e. from bunkering data in Mediterranean ports. While data shows that there was a decrease in emissions following the 2008 economic crisis, emissions have rebounded in 2014.

² Piante C., Ody D., 2015, p.48

Recommendations for a blue economy in the Mediterranean

1. Enhancement of data availability and monitoring:

To capture the real status of the blue economy in the Mediterranean region, national data linked to the Mediterranean basin need to be provided according to common standards. As long it is not really clear how much offshore oil and gas is really extracted in the Mediterranean, or how much fish is really caught by artisanal fisheries for example, policy recommendations may not be as sound and reliable as they should be.

2. Implementation of adequate economic instruments:

Several key sub-sectors of the marine-based economy (fisheries, transport, tourism, etc.) are artificially supported by environmentally harmful subsidies that create market distortion, privatize economic benefits and externalize social and environmental damages. An exhaustive assessment of price signals in the blue economy sub-sectors needs to be undertaken to phase out “brown” incentives and instead promote greener tax and fiscal policy reforms.

3. Support for environmental and social innovation:

Through strong investment in green technologies, sharing of best practices and promotion of social entrepreneurship, the sub-sectors of the marine-based economy can reduce drastically their environmental impact while at the same time ensuring socio-economic benefits to the local communities, such as job creation, food security and poverty reduction.

4. Investment into green and blue economy:

To accelerate the development of a blue economy, massive investments need to be engaged to build resilient infrastructures, cleaner vessels, greener facilities, etc. Traditional and innovative financial instruments and tools provided by Multilateral Development Banks (MDB), private sectors and national financial institutions have to be environmentally oriented to promote sustainable economic activities.

5. Governance improvement and stakeholder's engagement:

Progress towards blue economy requires an enforcement of institutional frameworks and international agreements like the Barcelona Convention, UN Convention on the Laws of the Sea, Paris Agreement, UN Agenda 2030 (Sustainable Development Goals), among others. It also needs adequate regulations, laws and policies to be developed and implemented at national and sub-regional level. Stakeholders involvement, open dialogues and transparent decision-making processes are also necessary to engage and commit with economic actors, local and regional authorities as well as civil society representatives.

More information:

<http://www.mava-blue-economy.com/>

<http://planbleu.org/en/event/final-conference-blue-economy-healthy-mediterranean>



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