Sustainable development

20 years of sustainable development in the Mediterranean: review and outlook

The stakes of sustainable development are key in the Mediterranean. The natural environment is subject to pressures from tourism, urban sprawl along its coasts, irrigated agriculture, unmanaged mountainous areas, overfishing, intercontinental maritime transport between Asia and Europe... These pressures are heavy on such limited and vulnerable resources as water, natural coastal zones and the marine environment.

The Mediterranean brings together countries with different development levels and patterns: there are still many areas with much poverty and limited access to basic services. This is why the concept of sustainable development appealed to the main stakeholders as early as the 1992 Rio Summit.

This brief outlines the founding acts of sustainable development co-operation in the Mediterranean region, the main processes over the past 20 years and the region's major sustainable development trends.



Founding Acts of Sustainable Development in the Mediterranean

The Stockholm UN Conference on the Human Environment (1972) introduced environmental issues in international discussions and gave birth to the UN Environment Program (UNEP). The Rio Summit (1992) brought together 182 States and a new dynamic process with a 10-year cycle of global sustainable development meetings.

The founding acts of sustainable development in the Mediterranean Basin greatly benefited from the impulse given by Stockholm and Rio. The graph hereby shows the regional dynamics of sustainable development within the context of the global one and of regional co-operation events.

At an international level, the sustainable development process was marked by the following reports:

► the Meadows Report of the Club of Rome "Limits to Growth" (1972);

► the Brundtland Report: "Our Common Future" (1987).



On a regional scale, two Plan Bleu reports contributed to establish the concept of sustainable development in the Mediterranean: "Futures Mediterranean for the Basin" (1989), and "A sustainable future for the Mediterranean: the Blue Plan's environment and development outlook" (2005).

The steps of sustainable development in the Mediterranean and Worldwide





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The regional strategic framework has evolved over time, under the influence of the international co-operation and legal frameworks.

➤ Within the context of the Mediterranean Action Plan (adopted in 1975) under the aegis of UNEP, the Barcelona Convention (signed in 1976, revised in 1995) became the platform for dialog and cooperation in the Mediterranean Basin.

➤ Further to the 1992 Rio Summit, the Contracting Parties to the Barcelona Convention and the EU devised in Tunis in 1994, a Mediterranean-specific version of Agenda 21, Med 21; this document is made of 41 chapters and establishes the strategic framework for the application of the global Agenda 21 recommendations at regional level. Although not formally adopted, this document contributed to the revision of the Barcelona Convention.

The 1995 revision of the Barcelona Convention not only endowed the Rio commitments with legal features through the inclusion of the main principles of the Rio Declaration in the corpus of the Convention, but also extended the scope of intervention of MAP to include sustainable development stakes.

In 1996, Mediterranean countries founded the Mediterranean Commission for Sustainable Development (MCSD). The MCSD is an advisory body, designed as a platform to support exchange, dialog and recommendations among the Contracting Parties and their partners. Beyond the Contracting Parties to the Barcelona Convention, the MCSD includes representatives of local authorities, socio-economic players and NGOs experienced in environment and sustainable development issues, for a total of 36 members. In 2001, the Contracting Parties mandated the MCSD to develop the Mediterranean Strategy for Sustainable Development (MSSD), adopted in 2005.

The pre and post-Rio years were rich with initiatives in favor of the development of Mediterranean cooperation with notably the creation of METAP, a technical assistance program designed by the World Bank, the UN Development Program (UNDP), the European Commission and the European Investment Bank (EIB), to encourage the development of national environmental policies in the region. During the same period, the International Union for Nature Conservation (IUCN) opened its Mediterranean bureau in Malaga.

The Barcelona process was launched in 1995 as an Euro-Mediterranean partnership; it did not include sustainable development among its priorities, but did propose a shortand medium-term program to develop environmental policies. Subsequently, Horizon 2020 was designed to support depollution activities in the Mediterranean, while the Union for the Mediterranean (UfM, launched in 2008) set among its goals the development of renewable energies in the region.

In the aftermath of Rio, there were many initiatives from civil society. This regional dynamic process over the past 20 years has resulted in an improved Mediterranean governance, but nevertheless fragmented as is the global process.

Integrating civil society within the MCSD from the outset was quite innovative. However the relationships of the MCSD with States and international stakeholders proved relatively weak. Regional co-operation would have benefited greatly from closer co-operation between the MCSD and other organizations operating in social and economic areas of sustainable development.

The main Mediterranean processes

Over the past 20 years, 6 different processes have had a major influence on sustainable development in the Mediterranean:

	Туре	Outcomes
1	Legal Frameworks	Barcelona Convention, Protocols
2	Strategic Frameworks & Approaches	Med 21, MSSD, Thematic Strategies, ECAP
3	Actions Plans	MED SAP, BIO SAP
4	Cooperation Initiatives	MedPartnership / Sustainable Med / H2020
5	Information & Assessment Tools	Sustainable development Indicators & Observatories Prospective Scenarios
6	Support Networks	MIO-ECSDE ASCAME Medcities / UCLG-MED

Acronyms are explained further in the text.

Legal Frameworks

After the Rio Conference, the Parties to the Barcelona Convention showed responsiveness by revising the Convention to align it with the principles adopted in Rio and to introduce such modern concepts as the effectiveness of the law and accountability. The existing protocols were updated to provide a more efficient framework for State action plans. As an example, the 1980 protocol on land-based pollution was revised in 1997 to include the commitments made as regards land-based pollution under the Washington Global Plan of Action (GPA). The SPA Protocol on protected marine areas and biodiversity was adopted in 1995, as the Mediterranean base to implement the Convention on Biological Diversity (CBD), introducing the concept of marine areas of Mediterranean interest, which is also applicable to the high seas

The Parties adopted the Offshore Protocol to deal with the exploration and exploitation of offshore mineral resources, including oil and gas.

The Integrated Coastal Zone Management Protocol (ICZM) was signed by 15 Contracting Parties in 2008 and entered into force in 2011 after ratification by 7 of them. The signature of this protocol is one of the highlights of the history of MAP, as the Mediterranean is the only regional sea worldwide having embedded integrated coastal zone management within a legal instrument.

Strategic Frameworks and Approaches

The Mediterranean Strategy for Sustainable Development (MSSD)

Drawn up by the MCSD, the MSSD was adopted in 2005 by all the Contracting Parties to the Barcelona Convention. This strategy is to provide a reference framework for the deployment of the sustainable development policies of riparian countries; it deals with four priority objectives, nine challenges and 34 sub-objectives. The MSSD also highlights the efforts made to respond to sustainable development challenges in this part of the world, and to coordinate them. Plan Bleu played a major role in conceiving and developing the MSSD.

Regional Framework Strategies

Global and European Framework strategies for most themes have inspired the Mediterranean Thematic Strategies. For example, the 2000 European Water Framework Directive (WFD), provided a major impulse for the integrated management of water resources. In 2006, six South Rim countries began to implement the access to water and sanitation initiative, launched by the Mediterranean component of the European Union. A new awareness in countries of water resource scarcity led in March 2010 to the technical validation of the **Mediterranean Water Strategy**, a regional expression of the WFD. However, the regional political context did not allow its formal endorsement by the UfM.

National Strategies for Sustainable Development (NSSD)

Since 1992, twelve Mediterranean countries have adopted NSSD (or equivalent) as recommended by the UN Commission for Sustainable Development. Most strategies cover at least one feature relating to the Mediterranean Sea (e.g. the sea itself, the sea front, the coastline, the Barcelona Convention) These "integrating factors" reveal the concrete and visible influence of MAP on riparian States in defining part of their NSSD.

Ecosystemic Approach

The ecosystemic approach expressed in the Environmental Compliance Assistance Program (ECAP) is to promote a sustainable use of the goods and services provided by the sea, while rehabilitating or preserving the ecological conditions of coastlines and the sea. The systemic approach was adopted by many conventions and action plans in favor of regional seas. It was adopted by the Contracting Parties to the Barcelona Convention in Almeria, in January 2008.

Action Plans

BIO SAP

Since 2001, relevant international and regional organizations have worked on the Strategic Action Plan for the Conservation of marine and coastal biological diversity in the Mediterranean, to facilitate the implementation of both the SPA Protocol on specially protected areas of the Barcelona Convention and the provisions of the Jakarta Mandate (CBD).

MED SAP

The Strategic Action Plan MED SAP is used as a baseline for the implementation of the LBS Protocol of the Barcelona Convention. On the initiative of MED POL program, its purpose is the identification of target categories of polluting substances and activities that Mediterranean countries are expected to eliminate or control by 2025, through specific national action plans (2005). The Horizon 2020 European initiative should support existing efforts and attract more national and international funding.

Co-operation Initiatives

MedPartnership

In 2006, twelve Mediterranean countries joined forces with MAP, the World Bank and other regional, international and non-governmental organizations to form the MedPartnership. Its purpose is to promote a coordinated and strategic approach to catalyze the required legal and institutional reforms and the necessary investments to reverse degradation trends of the marine ecosystem, its coastal habitats and biodiversity.

Sustainable Med

This World Bank Program supports Mediterranean countries in ensuring the sustainability of their resources. In its initial phase, the program focuses on water resources and ICZM. Plan Bleu acts as the implementation agency for the regional project "Governance and Knowledge Management", which is part of this program.

Horizon 2020

This European Commission program is built around three major pillars: pollution abatement and control, environmental information systems and capacity building.

Information and Assessment Tools

MAP, its Regional Activity Centers and more specifically Plan Bleu, have implemented or contributed to implement information and assessment tools to further the knowledge on the environment, encourage information feedback and assist the Parties in their decision-making processes.

National Observatories for the Environment and Sustainable Development (ONEDD)

Since 1995, with the support of Plan Bleu as the Mediterranean Observatory for the Environment and Sustainable Development, nine countries have established ONEDDs, most frequently as a service within the Information Departments of their Environment Ministries or equivalent administrations. ONEDDs have proved to be nationally catalysts on indicators work and have co-operated with national statistics institutes in developing environmental statistics.

Sustainable Development Indicators (SDI)

In a first phase of SDI development in the Mediterranean, 130 indicators were defined, as follow-up of Agenda MED 21 activities. In a second phase, 34 indicators were associated to the 2005 MSSD, which covers four Millennium Development Goals: access to water and sanitation, official development aid, primary education for all, reduction of gender disparities. Indicator information sheets are updated on the Plan Bleu website every two years, providing international trends and comparisons. To date, fifteen countries have produced national sets of indicators related to their NSSD.

Publication of Mediterranean Scenarios (1989, 2005)

In 1989, Plan Bleu published a first report on "Futures for the Mediterranean Basin", setting the foundations for a more environment-conscious approach to development, and contributing to Agenda MED 21. In 2005, the report "A sustainable Future for the Mediterranean: the Blue Plan's environment and development outlook" (450 pages) presented both a thematic status report, and proposals for an alternative scenario of an economically more sustainable development using precise data. This document benefited of Mediterranean-wide co-operation of over 300 experts.

Support Networks

The last two decades have witnessed the emergence of a more structured civil society, in particular through the MIO-ECSDE network (Mediterranean Information Office for Environment, Culture and Sustainable Development). This network is a federation of 121 Mediterranean NGOs from 26 countries. Since 1991, it has acted as a technical and political platform to support NGO initiatives in favor of environmental protection and the promotion of sustainable development in the Mediterranean.

The Association of the Mediterranean Chambers of Commerce and Industry (ASCAME) contributes to structuring private sector representations. Its North-South strategic approach to co-operation and integration proposes to boost regional economic co-operation throughout the Mediterranean.

As regards local collectivities, many different initiatives exist, such as:

► UCLG-Med: Interregional Commission of United Cities and local governments.

➤ Medcities: network of Mediterranean coastal cities to strengthen the environmental management capacity of local administrations.

The Mediterranean in the World

Renowned for its climate and its sea linking three continents, for its cultural heritage and natural landscapes, and for the strong feeling of belonging to the Mediterranean world shared by the populations on the three rims of the Mediterranean Sea, this eco-region is also one of the "hot spots" of the world's biodiversity. It is host to 10% of the known superior plant species (over only 1.6% of the planet's land area), and is also the preferred habitat of 7% of marine species, many endemic (over less than 0.8% of the world marine area). Hydric stress, droughts in the South, natural disasters, rare prairie lands and communication hurdles are stringent constraints. The Mediterranean is also a many-facetted mosaic, which requires constant attention to the scope and relevance of evaluations.

Overall, the 22 Mediterranean riparian countries and territories represent:

► 5.7% of the planet's land area, much of which is made of deserts and mountain ranges;

 \blacktriangleright 6.9% of the world's population with 473 million inhabitants;

> 11.5 % of global GDP (at 2005 purchasing power parities);

 \blacktriangleright 8.8 % of the urban population, with 307 million city dwellers;

► 29.5 % of tourist visits, with 278 million international tourists (25 % of international tourism receipts);

► 60 % of the world's "water-poor" populations;

> 7 % of CO₂ emissions (2008).

The Sea accounts for 30% of the international maritime freight transport and for 20 to 25% of tanker-transported oil products.

Mediterranean Sustainable Development Trends over the past 20 years

The issue of sustainable development is most acute in the Mediterranean region as it is:

➤ a precious and vulnerable "eco-region" where development is jeopardized by environmental degradation;

➤ one of the world's most important zones of contact, fracture and North-South interdependency;

Thematic Areas of initiatives for sustainable development in the Mediterranean, Europe and the world

Themes	Global and European levels	Mediterranean level
Marine pollution	Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities at national, regional and international levels (GPA, 1995) Marine Strategy Framework Directive (European Union, 2008)	LBS Protocol and SAP MED Off-shore Protocol Dumping Protocol Hazardous Wastes Protocol
Coastal zones	Chapter 17 of Agenda 21 (1992, Rio) Recommendation 2002/413/CE from the European Parliament and the Council on 30 May 2002 on the implementation of a strategy of Integrated Coastal Zone Management in Europe	White paper: Coastline zone management (2001, PAP/RAC) ICZM Protocol
Water	Water Framework Directive (WFD, European Union, 2000)	Mediterranean Water Strategy (2010, Union for the Mediterranean, not formally adopted)
Tourism	Worldwide Charter of sustainable tourism (1995) European Charter for Sustainable Tourism in Protected Areas (1998)	Project of Mediterranean Charter for Sustainable Tourism (Plan Bleu, 2012)
Forest / Biodiversity	Convention on Biological Diversity (1992) Convention to Combat Desertification (1994))	Forest Action Plan for the Mediterranean (MED-FAP, 1993) SAP BIO
Climate change	United Nations Framework Convention on Climate Change (1992) and Kyoto Protocol (1997)	Tunis Action Plan for Climate Change Adaptation in Africa and the Mediterranean Region (2007) Regional Adaptation Framework to Climate Change in the Mediterranean (MCSD, 2011)

Mediterranean Basin



 \blacktriangleright a group of countries and a region whose stability and prosperity depend on their capacity to implement the co-operation required for development policies and methodologies covering the environmental, social and economic issues.

Demographic and Socio-economic Challenges

Between 1990 and 2010, the Mediterranean population has grown at an average annual rate of 1.16 %, from 374 million to 473 million inhabitants.

Today, 25% of the Mediterranean population is under 15 years of age and 25% of the 15 to 24-year olds are unemployed. As demonstrated in the recent events of the Arab spring, the construction of a sustainable future for the Mediterranean's young population is one of tomorrow's major challenges.

The **urbanization rate** in Mediterranean countries has increased from 61% to 66% in 20 years, i.e. 86 million additional urban inhabitants.

The **Mediterranean population** is concentrated along coastal zones. Over one third lives in coastal administrative regions, i.e. on less than 12% of the total area of Mediterranean countries. The population leaving in coastal areas has increased from 95 million in 1970 to over 150 million in 2008.

In the Mediterranean, the **human development index (HDI)** has grown consistently since 1990 and averages at 0.734 in 2010, placing the region above the world's average.

The **Gross Domestic Product (GDP)** shows 2.2% growth on a yearly basis, but the share of the Mediterranean GDP in global GDP has declined over 20 years, from 13.5% in 1990 to 11.1% in 2010.

In 2010, the **GDP per capita in the Mediterranean** is approximately USD 15 800 dollars, above the world average (at USD 9 800) but with slower growth: 23% vs. 45% between 1990 and 2010. Disparities are still significant:

the average per capita income in Southern and Eastern Mediterranean countries (USD 8 000) is 3.3 times lower than the average income in the seven Northern Mediterranean countries.

For 20 years, the **average unemployment rate** in the Mediterranean impacted approximately 11.5% of the working population and the number of unemployed has grown by an additional 6 million people, to reach 21 million in 2010.

The share of those under 15 years of age has dropped from 32% in 1990 to 24% in 2010 but this population, who will join the employment market in

the next two decades, remains stable at circa 111 million. The **unemployment rate among the young** has increased steadily to now cover nearly 25% of the 15 to 24 year old population.

A recent study by FEMISE for the World Bank reveals that 30 to 40 million jobs will need to be created in the Southern and Eastern Mediterranean countries over the next 20 years to maintain the unemployment rate at its current level. The study also indicates that 10% of these jobs could be generated by the development of the green economy.

In countries where this information is available, the share of the population living under the poverty level has declined but remains between 10 and 20%. The rate for rural populations is between 15 and 40%.

Since 1990, the **education for girls** in the Mediterranean countries has improved: the **parity index between girls and boys in secondary education** is on average above 1 in 2009. Only two countries show an index under 0.9 vs. 6 countries in 1991.





Internet access has become more readily available in the Mediterranean: the connected population increased from over 15% in 2000 to over 25% in 2010.

The amount of public R&D expenditures has increased over the past 15 years in the Mediterranean but remains globally low when expressed as a percentage of GDP: under 1% in ten countries, between 1 and 2.5% in six countries and above 4% in one country only.

Environmental Challenges

The Global Footprint Network states that the Mediterranean environmental capital is spent faster than it can be regenerated. In 2007, the global ecological footprint of the Mediterranean countries reached 1.5 billion global hectares (gha), representing nearly 8.4% of the global footprint. At 1.16 billion global hectares in 1990, the current ecological footprint of Mediterranean countries (3.3 gha/capita) exceeds the global average footprint of 2.7 gha/capita.

Water pollution and resources

The LBS Protocol is applied to combat land-based pollution in the Mediterranean as one of the priority targets of the MSSD: to reduce by 50% by 2015 the number of coastal zone inhabitants deprived of access to **sanitation networks**. Among the Mediterranean coastal cities with over 2 000 inhabitants, 673 out of 1699 (40%), i.e. 14 million people, are not equipped with waste treatment plants.

As regards pollution, the heavy metal content in seawater remains globally low and the situation seems to be improving. Although eutrophication from fertilizers has worsened over the past 20 years, it seems to be restricted to the North Adriatic Sea, the Gulf of Lion and the Nile Delta. On the other hand, local marine pollution from city waste, industrial discharges and tourist resorts is significant and the increasing presence of macro-waste has been observed on beaches and high seas.

The efficient use of water, the ratio of quantities actually consumed versus demand, (demand including losses) was between 40 and 82% in the Mediterranean countries between 2005 and 2010. The changes in water demand are globally of concern in the region due to the scarcity of water resources.

Pressures resources remain globally significant, in the South and East, but situations vary greatly.

In the Mediterranean, 20 million people are deprived of sustainable access to improved sources of water, with 96% of the population having access in 2008, versus 93% in 1990. In urban areas, almost all inhabitants have access to water, versus only 92% of the rural populations (85% in 1990).

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Energy resources

Between 1990 and 2008,

energy intensity, a measure of the energy efficiency of an economy calculated as the ratio of energy consumption vs. GDP, is improving very slowly in the Mediterranean, dropping from 137 to 124 kilograms oil equivalent per thousand dollars. This trend jeopardizes the achievement of the MSSD objective of -1 to -2% improvement per year. Total energy consumption and per capita consumption continued to increase, by 42% and 16% respectively since 1990.





The share of renewable energies in the commercial primary energy has grown from 2% to 6% of total primary energy supply in the Mediterranean. Renewable energies (excluding hydroelectricity) have grown on average by 2,7% per year between 1990 and 2009, above the growth of total primary energy supply (1.8%). Solar energy and wind farms now account for 3.2% and 5.7% respectively of renewable energies.

CO, emissions from fossil fuels have increased from 1 600 million tons in 1990 to 2 200 million tons in 2008 (40% more) while CO₂ emissions vs GDP are slightly down since 2003 and in 2008 reach 290g of CO, per dollar (i.e. 60% of global value). Concerning the population, CO_2 emissions per capita have been dropping steadily since 1998 (-12% from 1990), down to 4.76 tons per capita in 2008 (a figure identical to the global average value).



Total CO_2 emissions per capita and per GDP dollar in the Mediterranean (index 100 in 1990)

Extend of protected areas

An assessment conducted in 1995 identified 122 specially protected areas representing over 17 670 km². Today, 750 specially protected areas fall under the auspices of the Barcelona Convention, for a total of 144 000 km² (including the Pelagos Sanctuary which covers 87 500 km²), 2/3 of which are marine surfaces. The marine areas alone account for 128 700 km² of all protected areas, representing 5.1% of the total surface of the Mediterranean Sea. It is clear that the CBD related target (protecting 10% of the Mediterranean coastal and marine environment by 2010) was not reached, although results are more satisfactory in this region than for the planet's other oceans and seas.

Fishery Resources

The gradual decline affecting catches of fish resources in the Mediterranean is confirmed by scientific assessments which do alert resource managers about the impact of a thirtyyear-old trend concerning of the generalized exploitation of demersal stock. Many groundfish are captured before reaching spawning age. There is also the overexploitation of spawning adults, leading to far more dire consequences for stock survival. The situation is such that half the assessed stocks are being exploited beyond the limits of biological safety.

While exploitation is reported to be more moderate in the case of small pelagic according to the latest evaluations conducted by the **General Fisheries Commission for the Mediterranean (GFCM)**, more stringent control must be applied to factor in the variations in stock quantities due to changing environmental conditions.

Large pelagic, and in particular the blue-fin tuna, are in a critical situation. Several evaluations reveal that the stock of blue-fin tuna spawning adults is facing a serious risk of depletion. Swordfish are also subjected to large captures of juveniles, and prompt action is required to control this fishing practice.

In 2008, national **fish farms** in riparian countries of the Mediterranean produced nearly 1.7 million tons, i.e. an increase of 89% vs. 1995. National marine fish farming production grew from 233 000 tons in 1995 to 376 000 tons in 2008, i.e. an increase of 61%.

Land resources

The **arable land surface per capita** in the Mediterranean stands at 0.2 hectares, down 25% from 1990 (down 50% from 1970). Despite the conquest of new farmlands, the total surface has been reduced by 7% since 1990. The loss of farmland can be explained by natural erosion, loss of soil fertility, urban sprawl... Such losses can be irreversible.

Irrigated surfaces have increased from 17 million hectares in 1990 to 20.5 million in 2009. On average, irrigated surfaces only account for 20% of all arable and permanent crop land (100% in Egypt). Mediterranean agriculture is essentially rainfed and many rural areas (mountains, arid plateaus) are used for sylvo-pastoral activities.

The trend towards maximizing per hectare production, through specialized and intensive agricultural practices, translates into increased fertilizer consumption. However, the consumption of fertilizers per hectare in the Mediterranean has recently decreased to 105kg/ha on average. In countries such as Egypt, Cyprus, Tunisia and Turkey, the loss of arable land is not a deterrent to increased fertilizer consumption.

During the same period, there has been a 10% reduction in cultivated cereal land while the yield of cereal production has increased by 20%.

Changes in planted surfaces and cereal production in the Mediterranean (index 100 in 1990)



Oil Pollution

370 million tons of oil are transported annually through Mediterranean. Since 1990, REMPEC, a MAP Regional Activity Center, has recorded 568 oil spills in the Mediterranean, about 25 per year. However, over the last 35 years, the quantity of oil spilled at sea due to an accident or incident has decreased steadily; between the periods 1977-1984 and 2004-2007, the number of spills was reduced by a factor of 10.

The same does not apply to deliberate marine pollution: one million tons of oil waste are discharged in the Mediterranean yearly during degassing and ballast tank flushing operations.

Conclusion

The assessment of 20 years of sustainable development in the Mediterranean sheds light on positive trends, particularly as regards civil society: less insalubrious housing, higher adult literacy rates, higher school attendance for girls, growth of the HDI. The assessment is contrasted as regards the environment: although sea pollution peaks are significantly less frequent, CO_2 emissions are increasing in most Mediterranean countries, and pressures on the environment remain high. The region posted an ecological deficit in 2007 and its resources are spent 2.6 times faster than they can be regenerated (1.5 for the planet).

This situation jeopardizes the capacity of the Mediterranean countries to pursue their development. To preserve this capacity, Mediterranean countries will have the opportunity to rely on the outcomes of the Rio+20 Conference and to revise the MSSD, with emphasis on green economy and adaptation to climate change.

References

- Benoit G. (ed.), Comeau A. (ed.) (2005). A sustainable future for the Mediterranean: the Blue Plan's environment and development outlook. Earthscan, Plan Bleu.
- CMI (Center for Mediterranean Integration) (2012). Toward Green Growth in Mediterranean Countries: Implementing Policies to Enhance the Productivity of Natural Assets. Marseille, CMI.
- European Commission. Environment and sustainable development in the Mediterranean. Ten years of cooperation: 1995-2005. Luxembourg, Office for Official Publications of the European Union.
- Sacchi J. (2011). Analysis of economic activities in the Mediterranean: fishery and aquaculture sectors. Sophia Antipolis, Plan Bleu.
- SPA-RAC (2010). Specially protected areas in the Mediterranean: assessment and perspectives. Tunis, SPA-RAC.
- SPA-RAC (2010). Specially Protected Areas of Mediterranean Importance: SPAMIs. Tunis, SPA-RAC.
- UNDP (2011). Human Development Report.
- UNEP-MAP (2005). Mediterranean strategy for sustainable development. A framework for environmental sustainability and shared prosperity. Athens, MAP.
- UNEP-MAP (2005). Review and assessment of national strategies for sustainable development in the Mediterranean region. Athens, MAP. (MAP Technical Reports Series, n°162).
- UNEP-MAP, MCSD (Mediterranean Commission on Sustainable Development) (2001). *Strategic review for sustainable development in the Mediterranean region*. Athens, MAP.
- UNEP-MAP, MCSD (Mediterranean Commission on Sustainable Development) (2003). Vers le développement durable en région méditerranéenne. Athens, MAP.
- UNEP-MAP, MIO-ECSDE, MED Forum (2002). Public participation and civil society in the Mediterranean for environment and sustainable development. Athens.
- UNEP-MAP-Plan Bleu (2008). *The Blue Plan's sustainable development outlook for the Mediterranean*. Sophia Antipolis, Plan Bleu.
- UNEP-MAP-Plan Bleu (2009). *State of the environment and development in the Mediterranean 2009*. Athens, MAP.
- WWF, GFN, Zoological Society of London (2010). Living Planet Report 2010.

Blue Plan Notes



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