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Athens, Greece, 10-13 September 2019

Agenda Item 5: Specific Matters for Consideration and Action by the Meeting, including Draft Decisions

Mediterranean Sustainable Development Dashboard

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18th Meeting of the Mediterranean Commission on Sustainable Development (MCSD)

Budva, Montenegro, 11-13 June 2019

Agenda item 5: MSSD Follow-up – Good Practices, Exchange of Experiences and Challenges

c) Mediterranean Sustainability Dashboard

Mediterranean Sustainability Dashboard: Timeline, Updated List of Indicators, Proposals and Recommendations

Note by the Secretariat

At its 17th Meeting (Athens, Greece, July 2017), the MCSD reviewed the list of proposed indicators of the Mediterranean Sustainability Dashboard for submission to COP 20. The MCSD considered the list of proposed indicators as a living document to be periodically assessed and updated, in synergy with the on-going work for the development of SDG indicators and implementation at national level.

At COP 20 (Tirana, Albania, December 2017), the Contracting Parties took note of the list of indicators, as included in Annex I of Decision IG.23/04, as a basis for further work. The MCSD Steering Committee was mandated to coordinate the work on ensuring full consistency and synergy between the Mediterranean Sustainability Dashboard and the work on SDG Indicators, the main objective being to better align the dashboard with SDG Indicators.

Following the 19th and 20th Meetings of the MCSD Steering Committee, the Secretariat (Plan Bleu) (i) finalized the update of the Mediterranean Sustainability Dashboard, with the list of indicators as included in Annex I, (ii) prepared a revised version of the analytical factsheets (document UNEP/MED WG.469/Inf.4), and (iii) drafted proposals and recommendations, as included in this document, for improving the process, based on challenges and lessons learned, including a proposal for populating regularly the dashboard. The timeline related to the dashboard, as agreed by the 20th Meeting of the MCSD Steering Committee, is included in Annex II of the present document.

The updated Mediterranean Sustainability Dashboard and related deliverables will be submitted, after discussions at the 18th Meeting of the MCSD, to the Meeting of the MAP Focal Points (Athens, Greece, 10-13 September 2019) and COP 21 (Naples, Italy, 2-5 December 2019).

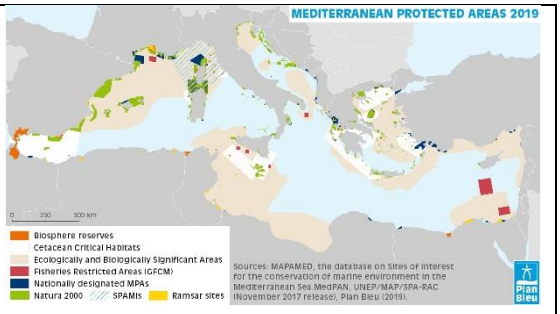
Mediterranean Sustainability Dashboard:

Timeline, Updated List of Indicators, Proposals and Recommendations

I. Methodological Considerations: Geographical Scope

1. Most indicators of the dashboard are conceived for the specific geographical scale of the national or country level. However, some indicators need also or exclusively to be calculated either for smaller geographical units (watersheds, coastal region, coastal strip, spot) or for specific units (marine zones).

The national level corresponds to the whole national territory. The non-Mediterranean extra-metropolitan territories are not considered. This geographical scope is mainly used for general socio-economic and environmental indicators.	 Source: Environmental Systems Research Institute
The watershed level corresponds to the major Mediterranean watersheds. The Mediterranean watershed can be either each watershed or the aggregation of the watersheds for one country. This geographical scope is mainly used for water and land-based pollution indicators.	 Source: Plan Bleu
The coastal region level corresponds to the administrative regions equivalent to the level 3 of the EU Nomenclature of the Statistical Territorial Units (NUTS 3) bordering the Mediterranean Sea. The Mediterranean coastal region can be either each NUT3 or the aggregation of the NUT3 for one country. This geographical scope is mainly used for coastal issues, e.g. Blue Economy indicators.	 Source: Plan Bleu
The FAO-General Fisheries Commission for the Mediterranean (GFCM) Geographic Sub-areas are mainly used for fisheries related indicators.	 Source: FAO/GFCM

The whole Mediterranean basin is a suitable geographical scope for marine biodiversity indicators, such as location of Marine Protected Areas (MPAs).	 Source: MEDPAN, SPA/RAC (2017), Plan Bleu (2019)

II. Methodological Considerations: SDG Indicators

2. The Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development – SDG Indicators[1] was developed by the Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs) and agreed upon, including refinements on several indicators, at the 48th session of the UN Statistical Commission (March 2017). The global indicator framework was adopted by the UN General Assembly on 6 July 2017; the list includes 232 Indicators[2].

3. The purpose of SDG Indicators is twofold. First and foremost, an indicator should be a management tool, to help countries develop evidence-based implementation strategies for achieving the SDGs. Second, an indicator is a monitoring tool, to measure progress towards achieving a target and ensure accountability to the broad range of stakeholders.

4. SDG Indicators are classified by the IAEG-SDGs into three tiers based on their level of methodological development and the availability of data at the global level, with the following Tier Classification Criteria/Definitions:

- *Tier I: Indicator is conceptually clear, has an internationally established methodology and standards are available, and data are regularly produced by countries for at least 50 per cent of countries and of the population in every region where the indicator is relevant.*
- *Tier II: Indicator is conceptually clear, has an internationally established methodology and standards are available, but data are not regularly produced by countries.*
- *Tier III: No internationally established methodology or standards are yet available for the indicator, but methodology/standards are being (or will be) developed or tested.*

5. As of 4 April 2019, the updated tier classification[3] contains 101 Tier I indicators, 91 Tier II indicators, and 34 Tier III indicators. There are six indicators that have multiple tiers; different components of the indicator are classified into different tiers.

III. Critical Analysis of the Mediterranean Sustainability Dashboard Indicators

6. 27 indicators out of 28 have been documented with available data: see Analytical Factsheets in document UNEP/MED WG.469/Inf.4. An assessment has been conducted for each indicator, as presented below, analyzing the updating period and current status, as well as data gaps.

[1] https://unstats.un.org/sdgs/indicators/indicators-list/
[2] Resolution adopted by the General Assembly on Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development (A/RES/71/313)
[3] https://unstats.un.org/sdgs/iaeg-sdgs/tier-classification/

7. **1. Ecological footprint**: Developed by Global Footprint Network, this indicator is based on a robust methodology, despite a few biases, and allows to communicate key messages. The 2018 Living Planet Report[4] used data as of 2014.

8. **2. Human Development Index (HDI)**: This index was launched in 1990 by the Human Development Report Office of the United Nations Development Programme (UNDP). It is one of the most well-known composite indicators on human development components, i.e. education, health, and economy. Data are available for most Mediterranean countries and regularly updated.

9. **3. Annual growth rate of real GDP per capita** (SDG Indicator 8.1.1 – Tier I): This indicator is managed by the UN Statistics Division. Annual data from 1970 to 2016 are available.

10. **4. Youth literacy rate**: Linked with SDG Indicator 4.6.1 *Proportion of youth and adults with functional literacy and numeracy skills* (Tier II), this indicator is managed by UNESCO and data come from national surveys. Available data are not covering all Mediterranean countries.

11. **5. Girl/Boy primary, secondary and tertiary school registration ratio**: Linked with SDG Indicator 4.5.1 *Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated* (Tier I, II and III, depending on indices), this indicator is managed by UNESCO and data come from national surveys. Available data are not covering all Mediterranean countries.

12. **6. Number of ratifications and level of compliance as reported by the Contracting Parties to the Barcelona Convention**: This indicator shows the progress of the Barcelona Convention and its protocols ratifications by the Contracting Parties. Data is compiled by MAP Coordination Unit.

13. **7. Coverage of protected areas in relation to marine territorial waters** (SDG Indicator 14.5.1 – Tier I): At the global level, the information is managed by UN Environment World Conservation Monitoring Centre (UNEP-WCMC) in the World Database on Protected Areas (WDPA). For the Mediterranean, data are provided by SPA/RAC and MEDPAN. This indicator is complex because there are several types of marine protected areas (MPAs). Data have to be processed for considering only the Mediterranean MPAs in relation to the Mediterranean marine territorial waters.

14. **8. Proportion of fish stocks within biologically sustainable levels** (SDG Indicator 14.4.1 – Tier I): Managed by FAO-GFCM in the Mediterranean, this SDG indicator is difficult to desegregate for each fisheries subarea and even more to report at the national level. SDG Indicator 14.4.1 is classified Tier I, but data are available only at the global level in the SDG database.

15. **9. Number of protected areas participating in the Green List initiative**: This indicator is related to the IUCN Green List of Protected and Conserved Areas programme, which is also a MSSD Flagship Initiative under its Objective 2. has been launched recently. So far, only a few Mediterranean countries and protected areas are concerned by the IUCN Green List.

16. **10. Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems** (SDG Indicator 15.a.1 – Tier I and III): This SDG indicator is managed by OECD and data are available with a two years delay. Available data do not allow to focus on funding associated with biodiversity conservation and sustainable use of ecosystems in the Mediterranean.

[4] https://www.worldwildlife.org/pages/living-planet-report-2018

17. **11. Global Food Security Index**: This indicator is annually published by the Economist Intelligence Unit. As a lot of official data is missing for the most recent year, the Economist Intelligence Unit uses its own estimates.

18. **12. Level of water stress: freshwater withdrawal as a proportion of available freshwater resources** (SDG Indicator 6.4.2 – Tier I): This SDG indicator is managed by FAO and data are available in the FAO/Aquastat database with a four years delay. This indicator needs to be refined for the Mediterranean watersheds of Mediterranean countries, with support from national water institutions and companies. Moreover, non-official withdrawals especially for agriculture that could represent a large part of the total withdrawals are not considered.

19. **13. Water demand, total and by sector, compared to GDP**: For this indicator, water withdrawals are used as a proxy of water demand. Data available in the FAO/Aquastat database is very sparse. This indicator could be refined with the non-conventional production (desalination, water reuse, etc.) and water balance (imports less exports). This indicator needs to be refined for the Mediterranean watersheds of Mediterranean countries, with support from national water institutions and companies.

20. **14. Proportion of population using safely managed drinking water service** (SDG Indicator 6.1.1 – Tier II): Managed by WHO/UNICEF Joint Monitoring Program, this SDG indicator corresponds to an improvement of the Millennium Development Goal Indicator *Proportion of population using an improved drinking water source*. Data are drawn from a variety of national data sources including: nationally representative household surveys, population and housing censuses, administrative data (such as regulatory agencies) and service provider data within an extensive country consultation. Data collection is to be enhanced through households' surveys. This is also a SEIS II Indicator that should be populated and assessed for the coastal regions of the Southern Mediterranean countries.

21. **15. Share of population with access to an improved sanitation system (total, urban, rural)**: This indicator is similar to the SDG Indicator 6.2.1.a *Proportion of population using (a) safely managed sanitation services* (Tier II). Managed by WHO/UNICEF Joint Monitoring Program, this SDG indicator corresponds to an improvement of the Millennium Development Goal Indicator *Proportion of population using an improved sanitation facility*. Data are drawn from a variety of national data sources including: nationally representative household surveys, population and housing censuses, administrative data (such as regulatory agencies) and service provider data within an extensive country consultation. Data collection is to be enhanced through households' surveys. This is also a SEIS II Indicator that should be populated and assessed for the coastal regions of the Southern Mediterranean countries.

22. **16. Proportion of agriculture quality products and/or Share of the agricultural land area used by organic farming**: This indicator and the related information and analysis are annually published by the Research Institute of Organic Agriculture (FiBL) and IFOAM – Organics International. Statistics are available on https://statistics.fibl.org/. The time series covering 20 years to 2017 allow to show trends for most Mediterranean countries. IFOAM – Organics International adopted the following definition: *Organic Agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic Agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved.* The EU legal definition is based on the same principles (Council Regulation (EEC) No2092/91 on organic production). As organic agriculture is considered as

a key asset to reduce agricultural land-based pollution, it would be useful to geographically refine data for the Mediterranean watersheds or coastal regions, with support from relevant national institutions.

23. **17. Red List Index (IUCN)** (SDG Indicator 15.5.1 – Tier I): This SDG indicator managed by IUCN aims at showing if biodiversity losses are halted. It is based on the assessment of extinction risk across groups of species (not for the taxonomy groups). As for all indexes, the analysis of this indicator provides a general view of biodiversity extinction risk in the countries and needs to be detailed for some Mediterranean species. The data is annually updated; last available year is 2018.

24. **18. Proportion of urban population living in slums, informal settlements, or inadequate housing** (SDG Indicator 11.1.1 – Tier I): This SDG indicator is managed by UN-Habitat. Data are available only for the "population living in slums" in a few Mediterranean countries and the last year available is 2014 (World Cities Report 2016). The follow-up of this indicator could be improved with the support from relevant national institutions (data from households' surveys). Focus could be made at the level of specific Mediterranean cities.

25. **19. Status of UNESCO world heritage sites**: This indicator is based on the list of the UNESCO world heritage sites available online; a list of world heritage in danger is also available[5]. Data is processed by Plan Bleu to provide a picture of the situation in the Mediterranean countries. This indicator could be refined by focusing on sites located in the coastal zones. The indicator does not provide any information on the status of specific sites. UNESCO is also documenting SDG Indicator 11.4.1 *Total expenditure (public and private) per capita spent on the preservation, protection and conservation of all cultural and natural heritage, by type of heritage (cultural, natural, mixed and World Heritage Centre designation), level of government (national, regional and local/municipal), type of expenditure (operating expenditure/investment) and type of private funding (donations in kind, private non-profit sector and sponsorship)* (Tier III).

26. **20. Waste generated and treated by type of waste and treatment type**: This indicator is linked with SDG Indicator 12.5.1 *National recycling rate, tons of material recycled* (Tier III), with 2016-data available in *What a Waste Global database* (World Bank, 2018) and some projections for 2030 and 2050. This indicator is one of the SEIS II indicators and should be populated and assessed for the coastal regions of the Southern Mediterranean countries. It could also be refined for the major Mediterranean coastal cities.

27. **21. Green House Gas (GHG) emissions (related to GDP)**: This indicator is a proxy of the SDG Indicator 9.41.1 *CO_2 emission per unit of value added* (Tier I), managed by the International Energy Agency (IEA) and UN Industrial Development Organization (UNIDO). The IEA estimates CO_2 emissions based on country data and on the IPCC Guidelines for GHG inventories, producing internationally comparable CO_2 emissions data for over 150 countries and regions. UNFCCC is also dealing with GHG emissions, mainly for Annex I Parties. The dataset used for this indicator comes from the Carbon Dioxide Information Analysis Center (CDIAC) via the World Bank (World Development Indicators), with 2014 as the last year documented. This indicator could be improved by using UNFCCC data until 2015-2016 and EIA database.

28. **22. Energy intensity measured in terms of primary energy and GDP** (SDG Indicator 7.3.1 – Tier I) and/or **Renewable energy share in the total final energy consumption** (SDG Indicator 7.2.1 – Tier I): Between the various existing data sources, primarily the IEA Energy Balances and the UN Energy Statistics Database, annual total and renewable energy consumption for every country and area can be collected. The data is collected in the UNSD SDG database and is available until 2015.

[5] https://whc.unesco.org/en/list/; https://whc.unesco.org/en/danger/

More recent data should be available in the IEA databases (Not freely accessible). SDG Indicators 7.3.1 and 7.2.1 are classified Tier I.

29. **23. Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP** (SDG Indicator 12.2.2 – Tier I): This SDG Indicator is managed by UN Environment. The Global Material Flows Databas" covers each country individually, over a time period of 47 years (1970-2017).

30. **24. Number of National Strategies for Sustainable Development adopted or updated [and number of updates since first edition]**: This indicator has been populated using the report *Towards a Green Economy in the Mediterranean* (Eco-union, MIO-ESCDE and GEC, 2016). The status of the National Strategies for Sustainable Development adopted or updated has to be updated with the information directly provided by the countries.

31. **25. Proportion of bank credit allocated to the private sector – Existence of alternative financing systems using bank credit**: This indicator is linked to SDG Indicator 9.3.2 *Proportion of small-scale industries with a loan or line of credit* (Tier II). Data are available in World Development Indicators (World Bank) from various sources: International Monetary Fund, International Financial Statistics and data files, and World Bank and OECD GDP estimates. The last year available is 2017.

32. **26. Research and development expenditure as a proportion of GDP** (SDG Indicator 9.5.1 Tier I): This SDG Indicator is managed by UNESCO. Data are available until 2016 in the SDG database or in the UNESCO Institute for Statistics database. This indicator is documented only in a few Mediterranean countries at present time; documentation is expected to be further developed.

33. **27. Number of countries that have clear mechanisms in place for ensuring public participation and guarantying public access to environmental information**: This indicator is linked to SDG Indicator 16.10.2 *Number of countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information* (Tier II). Some data are available in the SDG database from UNESCO World Trends in Freedom of Expression and Media Development and Global Right to Information Rating. The use of this indicator has to be clarified.

34. **28. Number of countries that have National Strategies/Action Plans on Education for Sustainable Development (ESD) in place**: This indicator is linked to SDG Indicator 4.7.1 *Extent to which (i) global citizenship education and (ii) education for sustainable development (ESD), including gender equality and human rights, are mainstreamed at all levels in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment* (Tier III). Data on the current situation in the Mediterranean countries have been provided by MIO-ESCDE, taking advantage of the 2nd Meeting of Mediterranean ESD Committee – Regional Workshop on ESD (Heraklion, Greece, 24-26 June 2019).

IV. Recommendations

35. The Secretariat (Plan Bleu) is raising the following points as minimal conditions of success to update and populate regularly the Mediterranean Sustainability Dashboard:

- The implementation of the data sharing principle, as included the MAP Data Management Policy under development, as well as a better coordination among the various indicator's initiatives at the global and regional level should allow to avoid duplication of works and to meet simultaneously several requests, avoiding new reporting burden.

- The MAP involvement in the ENI SEIS II South Support Mechanism project, which aims to contribute to the reduction of marine pollution in the Mediterranean by developing a Shared

Environmental Information System (SEIS) supporting the regular production and sharing of quality assessed environmental data, indicators and information, should support the monitoring of the MSSD implementation.

- The operation of the Mediterranean Sustainability Dashboard should be enhanced by the ownership of the indicators core set and data sharing principles by the relevant stakeholders, including the Contacting Parties, the international and regional organizations, and the scientific institutions.

- A list of indicators is neither final, nor exhaustive; it should evolve as knowledge and data availability improve.

36. As the list of indicators of the dashboard is a living document, the MSSD indicators can get even closer to the SDG ones in the future, as methodological aspects and data availability progress internationally, keeping in mind Mediterranean specificities and the MSSD objectives.

37. The list of indicators needs also to be reviewed regularly to better cover all MSSD issues in a balanced way and considering in priority marine and coastal issues.

38. Finally, there is a need to define and to develop a regional process for an effective monitoring of the MSSD implementation with the involvement of relevant regional and national stakeholders and partners, in cooperation with information producers from global to local levels. This process, to be based on data and information sharing principles, should be developed in synergy with existing processes and programmes, such as the proposed development of a MAP Data Management Policy and SEIS. The internal cooperation between the MAP components and the involvement of the national bodies are essential for the success of this process. This process could be completed by new data production and sharing tools for a real-time monitoring such as the use of big data for SDG monitoring.

Annex I

Mediterranean Sustainability Dashboard – Updated List of Indicators

(as agreed by the MCSD Steering Committee in April 2019)

Annex I: Mediterranean Sustainability Dashboard – Updated List of Indicators (as agreed by the MCSD Steering Committee in April 2019)

No.	MSSD Objective	Indicator
1	Global	Ecological footprint (*)
2	Global	Human Development Index
3	Global	Annual growth rate of real GDP per capita (*) (SDG Indicator 8.1.1), Gross Domestic Product (*), Gross Domestic Product per capita (*)
4	Global	Youth literacy rate (*)
5	Global	Girl/Boy primary, secondary and tertiary school registration ratio (*)
6	1	Number of ratifications and level of compliance as reported by the Contracting Parties of the Barcelona Convention
7	1	Coverage of protected areas in relation to marine territorial waters (*)
8	1	Proportion of fish stocks within biologically sustainable levels (*) (SDG Indicator 14.4.1)
9	2	Number of protected areas participating in the Green List initiative (*)
10	2	Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems (*) (SDG Indicator 15.a.1)
11	2	Global Food Security Index
12	2	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources (*) (SDG Indicator 6.4.2)
13	2	Water demand, total and by sector, compared to GDP (*)
14	2	Proportion of population using safely managed drinking water service (*) (SDG Indicator 6.1.1) (**)
15	2	Share of population with access to an improved sanitation system (total, urban, rural) (*) (**)
16	2	Proportion of agriculture quality products (*) and/or Share of the agricultural land area used by organic farming (*)
17	2	Red List Index (IUCN) (*) (SDG Indicator 15.5.1)
18	3	Proportion of urban population living in slums, informal settlements, or inadequate housing (*) (SDG Indicator 11.1.1)
19	3	Status of UNESCO world heritage sites (*)
20	3	Waste generated and treated by type of waste and treatment type (*) (**)
21	4	Green House Gas emissions (related to GDP)
22	4	Energy intensity measured in terms of primary energy and GDP (*) (SDG Indicator 7.3.1) and/or Renewable energy share in the total final energy consumption (*) (SDG Indicator 7.2.1)
23	5	Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP (*) (SDG Indicator 12.2.2)
24	6	Number of National Strategies for Sustainable Development adopted or updated [and number of updates since first edition] (*)
25	6	Proportion of bank credit allocated to the private sector – Existence of alternative financing systems using bank credit
26	6	Research and development expenditure as a proportion of GDP (*) (SDG Indicator 9.5.1)
27	6	Number of countries that have clear mechanisms in place for ensuring public participation and guarantying public access to environmental information (*)
28	6	Number of countries that have National Strategies/Action Plans on Education for Sustainable Development in place

(*) Corresponding/linked to SDG Indicators, (**) linked to SEIS II / Horizon 2020 Indicators

Annex II

Timeline of the Mediterranean Sustainability Dashboard

(January 2019 – April 2020)

Annex IV: Timeline of the Mediterranean Sustainability Dashboard (January 2019 – April 2020)

What	Who	When
Discussion on the Mediterranean Sustainability Dashboard and its update	MCSD Steering Committee, Secretariat (Plan Bleu)	January 2019 (20th Meeting of the MCSD Steering Committee)
Information by the Secretariat (Plan Bleu) regarding the three pending indicators (methodological aspects and data availability), and feedback from the Members of the MCSD Steering Committee	Secretariat (Plan Bleu)	February 2019
Data collection and analysis, and work on the updated dashboard for populating it, following comments from the MCSD Steering Committee and taking into account updates of international databases	Secretariat (Plan Bleu)	February-March 2019
Updated Mediterranean Sustainability Dashboard populated (draft) and related Analytical Factsheets issued	Secretariat (Plan Bleu)	March 2019
Proposals and recommendations for improving the process related to the Mediterranean Sustainability Dashboard, based on challenges and lessons learned	Secretariat (Plan Bleu)	April 2019
Discussion and recommendations on the updated Mediterranean Sustainability Dashboard and related Analytical Factsheets	MCSD Plan Bleu Focal Points Secretariat (Plan Bleu)	May-June 2019 (18th Meeting of the MCSD and Meeting of the Plan Bleu Focal Points)
Fine-tuning of the updated Mediterranean Sustainability Dashboard in view of submission to the MAP Focal Point Meeting to be held on 10-13 September 2019 in Athens, Greece	Secretariat (Plan Bleu)	June-July 2019
Finalization of the updated Mediterranean Sustainability Dashboard and related Analytical Factsheets, in view of submission to COP 21 to be held on 2-5 December 2019 in Naples, Italy	Secretariat (Plan Bleu)	September-October 2019
Data collection and analysis following COP 21 requests and taking into account updates of international databases	Secretariat (Plan Bleu)	January-March 2020
Publication	Secretariat (Plan Bleu)	April 2020

Annex III

MONITORING THE IMPLEMENTATION OF THE MEDITERRANEAN STRATEGY FOR SUSTAINABLE DEVELOPMENT 2016-2025

MEDITERRANEAN SUSTAINABILITY DASHBOARD: 2019 UPDATE (Draft)

UN environment
United Nations Environment Programme

MAP
Mediterranean Action Plan
Barcelona Convention

Plan Bleu

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These factsheets concern 22 countries or entities bordering the Mediterranean Sea:

ISO2 Code	Country or entity	Regions
AL	Albania	NMC
BA	Bosnia-Herzegovina	NMC
CY	Cyprus	NMC
DZ	Algeria	SEMC
EG	Egypt	SEMC
ES	Spain	NMC
FR	France	NMC
GR	Greece	NMC
HR	Croatia	NMC
IL	Israel	SEMC
IT	Italy	NMC
LB	Lebanon	SEMC
LY	Libya	SEMC
MA	Morocco	SEMC
MC	Monaco	NMC
ME	Montenegro	NMC
MT	Malta	NMC
PS	Palestine	SEMC
SI	Slovenia	NMC
SY	Syria	SEMC
TN	Tunisia	SEMC
TR	Turkey	SEMC

The analysis can consider the groups of countries usually utilized by Plan Bleu:

- **The Northern Mediterranean Countries (NMC) gather twelve countries or entities: AL, BA, CY, ES, FR, GR, HR, IT, MC, ME, MT and SI**
- **The Southern and Eastern Mediterranean Countries (SEMC) gather ten countries or entities: DZ, EG, IL, LB, LY, MA, PS, SY, TN and TR.**

The "indicator" factsheets, developed in the framework of the monitoring of the implementation of the Mediterranean Strategy for Sustainable Development (MSSD), are intended to provide a first answer to the question:

ARE THE MEDITERRANEAN COUNTRIES PROGRESSING TOWARDS SUSTAINABLE DEVELOPMENT?

The objectives of these factsheets are to have the MSSD 2016-2025 implementation monitored and evaluated on periodic basis through this agreed set of indicators in line with Sustainable Development Goals and to be presented as a Mediterranean Sustainability dashboard to be adopted by the Barcelona convention COP 21 by the end of 2019.

This document includes 27 indicators factsheets out of the 28 indicators selected to monitor the progress made by the Mediterranean countries regarding the 6 objectives of the MSSD 2016- 2025, in line as much as possible with the SDGs:

1. **Ensuring sustainable development in marine and coastal areas**
2. **Promoting resource management, food production and food security through sustainable forms of rural development**
3. **Planning and managing sustainable Mediterranean cities**
4. **Addressing climate change as a priority issue for the Mediterranean**
5. **Transition towards a green and blue economy**
6. **Improving governance in support of sustainable Development**

This document includes also some well-known composite indicators such Human Development Index (HDI) and Ecological Footprint to show the overall progress observed in terms of sustainable development.

The indicators shown in these factsheets are those with sufficient amount of data available mainly from international sources. The Indicator 8 are still pending due to the difficulties to synthetize the available data in one page.

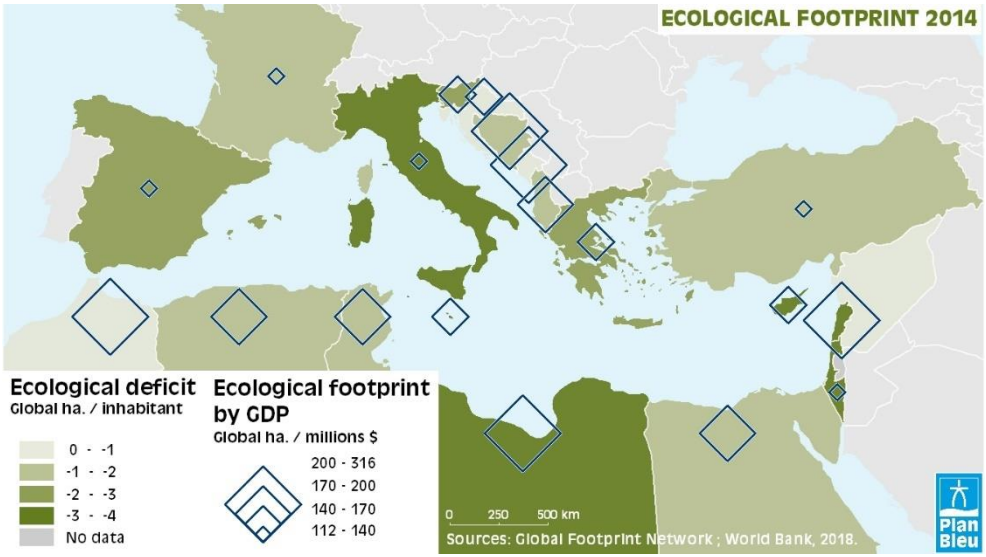
The indicators for the follow-up of the MSSD 2005-2015 were presented in similar factsheets updated and published every 2 years from 2005 to 2013. Some of them were also selected for the MSSD 2016-2025.

Note: The boundaries, colors, denominations, and other information shown on any maps and charts in this document do not imply any judgment on the part of Plan Bleu concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

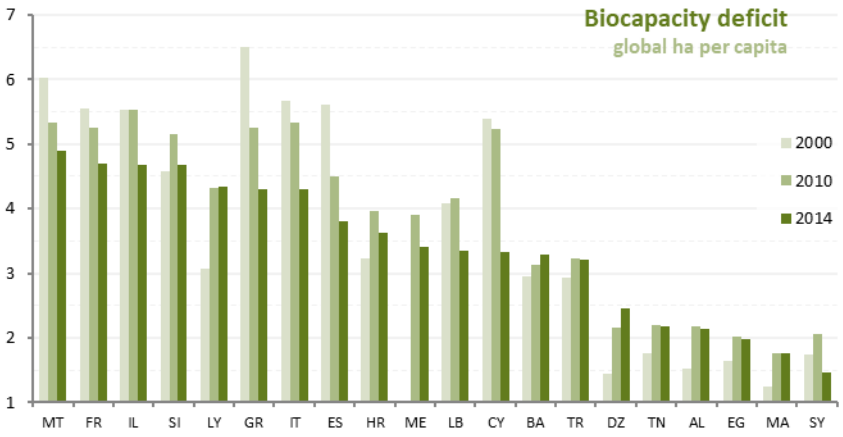
N°	GOAL	INDICATOR
1	General indicators	Ecological footprint *
2	General indicators	Human Development Index
3	General indicators	Annual growth rate of real GDP per capita (SDG Indicator 8.1.1) *
4	General indicators	Youth literacy rate *
5	General indicators	Girl/Boy primary, secondary and tertiary school registration ratio *
6	1 - Sea and coast	Number of ratifications and level of compliance as reported by Barcelona Convention Contracting Parties
7	1 - Sea and coast	Coverage of protected areas in relation to marine territorial waters (SDG Indicator 14.5.1) *
8	1 - Sea and coast	Proportion of fish stocks within biologically sustainable levels (SDG Indicator 14.4.1) *
9	2 - Rural & Resources	Number of protected areas participating in the Green List initiative *
10	2 - Rural & Resources	Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems (SDG Indicator 15.a.1) *
11	2 - Rural & Resources	Global Food Security Index
12	2 - Rural & Resources	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources (SDG Indicator 6.4.2) *
13	2 - Rural & Resources	Water demand, total and by sector, compared to GDP *
14	2 - Rural & Resources	Proportion of population using safely managed drinking water service (SDG Indicator 6.1.1) *
15	2 - Rural & Resources	Proportion of population using (a) safely managed sanitation services (SDG Indicator 6.2.1) *, **
16	2 - Rural & Resources	Proportion of agriculture quality products and Share of the agricultural land area used by organic farming *
17	2 - Rural & Resources	Red List Index. (SDG Indicator 15.5.1) *

N°	GOAL	INDICATOR
18	3 - Cities	Proportion of urban population living in slums, informal settlements, or inadequate housing (SDG Indicator 11.1.1) *
19	3 - Cities	Status of UNESCO world heritage sites*
20	3 - Cities	Waste generated and treated by type of waste and treatment type *, **
21	4 - Climate change	Green House Gas emissions (related to GDP)*
22	4 - Climate change	Energy intensity measured in terms of primary energy and GDP (SDG Indicator 7.3.1)*, Renewable energy share in the total final energy consumption (SDG Indicator 7.2.1) *
23	5 – Green/blue economy	Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP (SDG Indicator 12.2.2) *
24	6 - Governance	Number of National Strategies for Sustainable Development adopted or updated [and number of updates since first edition] *
25	6 - Governance	Proportion of bank credit allocated to the private sector – Existence of alternative financing systems using bank credit
26	6 - Governance	Research and development expenditure as a proportion of GDP (*) (SDG Indicator 9.5.1)
27	6 - Governance	Number of countries that have clear mechanisms in place for ensuring public participation and guarantying public access to environmental information*
28	6 - Governance	Number of countries that have National Strategies/Action Plans on Education for Sustainable Development in place*

* Similar or linked to SDG indicators, ** Similar or linked to SEIS / Horizon 2020 indicators



WHAT IS THE IMPACT OF HUMAN ACTIVITIES ON THE ENVIRONMENT?



Sources: GlobalFootprint Network, World Bank Database, 2018.

"All the Mediterranean countries had an Ecological Deficit in 2014. This means that the environmental capacity of the region is used up faster than it is renewed."

Definition:

- **Ecological Footprint:** Amount of biologically productive land and water a country requires to produce all the resources it consumes and to absorb the carbon dioxide emissions it generates.
- **Biocapacity:** Capacity of ecosystems to produce useful biological materials used by the economy and to absorb carbon dioxide generated by human.
- **Ecological deficit / reserve:** The difference between the Biocapacity and Ecological Footprint of a region or country.

Ecological Footprint and Biocapacity are expressed in units of global hectares(gha) .

Precautions / Notes:

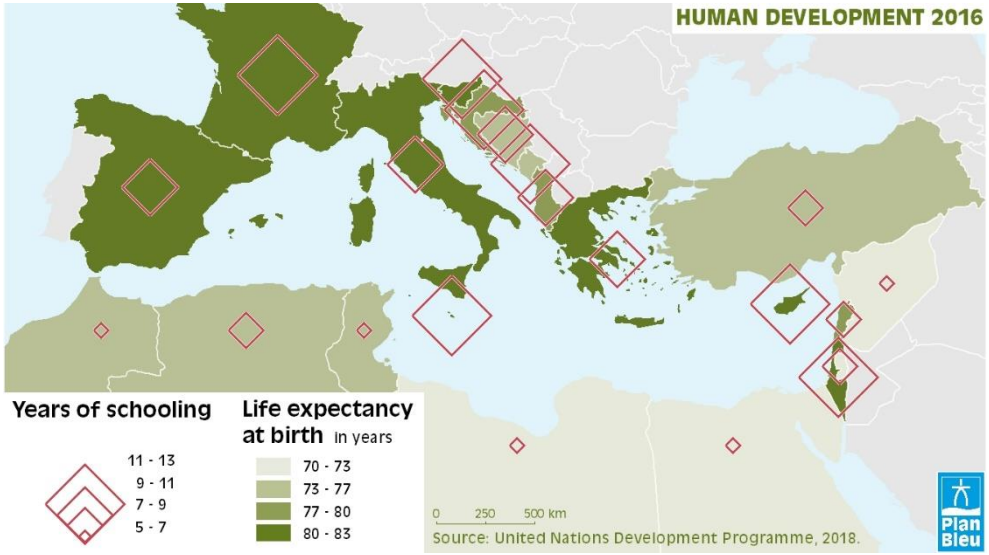
- Ecological Footprint: It only measures one aspect of sustainability, that is whether human societies are able to live within their annual biocapacity budget. It therefore deals with only the environmental pillar of sustainability and, even for this pillar, important environmental parameters are not considered (pollution due to GHGs other than CO_2, impact of nuclear energy, etc.).

Sources / References: Global Footprint Network 2018. National Footprint Accounts, 2018 Edition.

The Ecological Footprint is used to assess the level of the consumption of available resources connected to the human activities. Compared to the Biocapacity, this indicator offers the possibility to calculate the Ecological Deficit or Reserve in a region or country.

From 2010 to 2014, the Ecological Footprint per capita decreased in most of Mediterranean countries.

- Thus, the Mediterranean Ecological Footprint (3.2 gha/cap) is higher than the planet's Ecological Footprint (2.8 gha/cap).
- The Mediterranean's Ecological Deficit (2.02 gha/cap) is two times greater than the world's Ecological Deficit (1.1 gha/cap).
- The Ecological Footprint of the northern Mediterranean countries decrease since few years (from 5 gha/cap in 2010 to 4.2 gha/cap in 2014). This is mostly due to the effects of the economic crisis, which slowed down resource consumption and, primarily, CO_2 emissions
- The Ecological Footprint per unit of GDP is less than 160 gha per million dollars in most of northern countries except in the Balkan countries (316 in Bosnia-Herzegovina). In the southern countries the maximum values are for Libya (254 gha per million of dollars) and Lebanon (231).



The index of human development constantly progressed in most Mediterranean countries since 1990

Definition:

The Human Development Index (HDI) is a composite index, developed by the UNDP, that measures the evolution of a country according to three basic criteria:

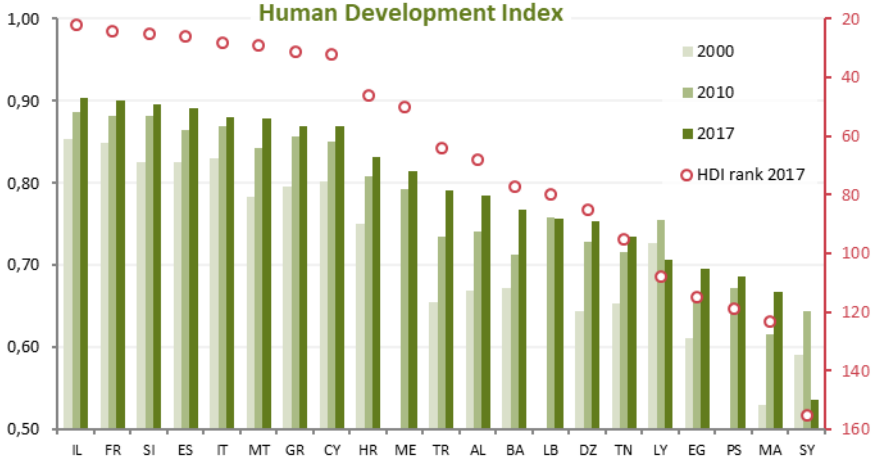
- **Health and longevity**, measured by life expectancy at birth.
- **Knowledge and education**, measured by the mean years of schooling and the expected years of schooling.
- **Standard of living**, indicated by the GNI per Capita (PPP US dollars).

The HDI is standardized and used to classify countries by values between 0 and 1.

Precautions / Notes:

An HDI value greater than 0.8 is generally considered high. A value below 0.55 is considered low. The new methodology used in 2013 need to recalculate the time series and had the effect of decreasing the values of HDI (with a small impact on country rankings).

Sources / References: UNDP Human Development Report 2018



Source: United Nations Development Programme Database, 2018.

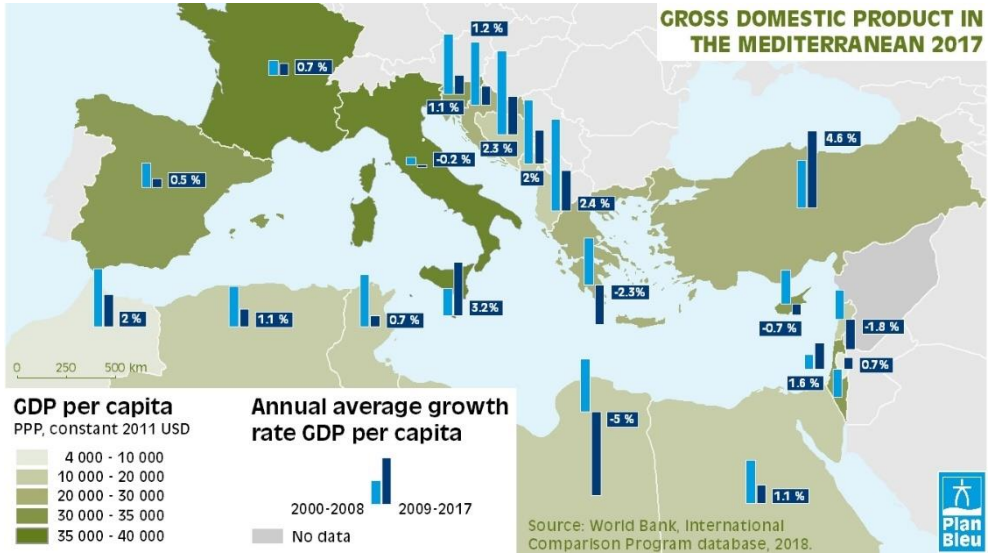
The human development index (HDI) with its three components (health, education and income) enables us to identify and understand the social component of sustainable development.

With an average HDI of 0.786 in 2017, the Mediterranean region was above the world value of 0.728.

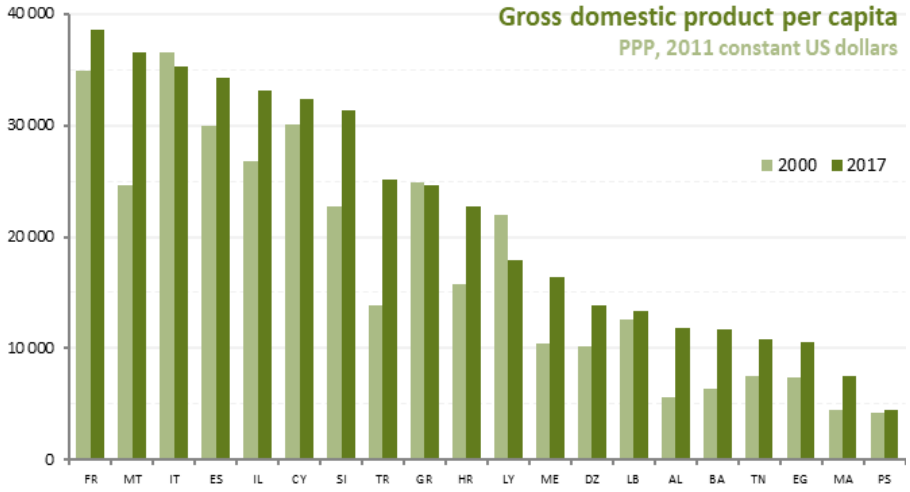
However, there are great differences between countries:

- 10 countries have high HDI, greater than 0.8: Israel (ranked 22nd out of 189 worldwide), France, Slovenia, Spain, Italy, Malta, Greece, Cyprus, Croatia and Montenegro (50th worldwide).
- 7 countries have HDI between 0.7 and 0.8: Turkey, Albania, Bosnia-Herzegovina, Lebanon, Algeria, Tunisia and Libya (108th worldwide).
- 4 countries have HDI lower than 0.7: Egypt, Palestine, Morocco and Syria with 0.536 (155th worldwide).

The life expectancy at birth, which accounts for one third of the HDI, shows a gap of 12 years between Syria (71) and Israel (83).



ARE THE INCOME GAPS BETWEEN THE SOUTH AND NORTH COUNTRIES GETTING SMALLER?



Source: World Bank, International Comparison Program database, 2018.

"The EU Mediterranean countries count for 60% of the Mediterranean GDP."

Definition:

SDG Indicator 8.1.1: Annual growth rate of real GDP per capita

- The Gross Domestic Product (GDP) is the value of all the goods and services produced in a country in a year. The GDP can be calculated by adding up all the items of income – salaries, interests, profits and rents – or by calculating the expenditure – consumption, investment, public purchases, net exports, (exports less imports) – of an economy.
- Annual growth rate of real Gross Domestic Product (GDP) per capita is calculated as the percentage change in the real GDP per capita between two consecutive years. Real GDP per capita is calculated by dividing GDP at constant prices by the population of a country or area. The data for real GDP is measured in constant US dollars to facilitate the calculation of regional and global aggregates.
- Purchasing power parity (PPP): A conversion factor that indicates the number of units of a country's currency required to buy in the local market what one dollar could buy in the USA.

Precautions / Notes:

By using PPP rather than the exchange rate, the GDP per capita of a country, calculated in units of national currency, can be converted into GDP per capita in dollars, while taking into account the differences in domestic prices for the items being considered (PPP gives the value of a typical basket of goods in different countries).

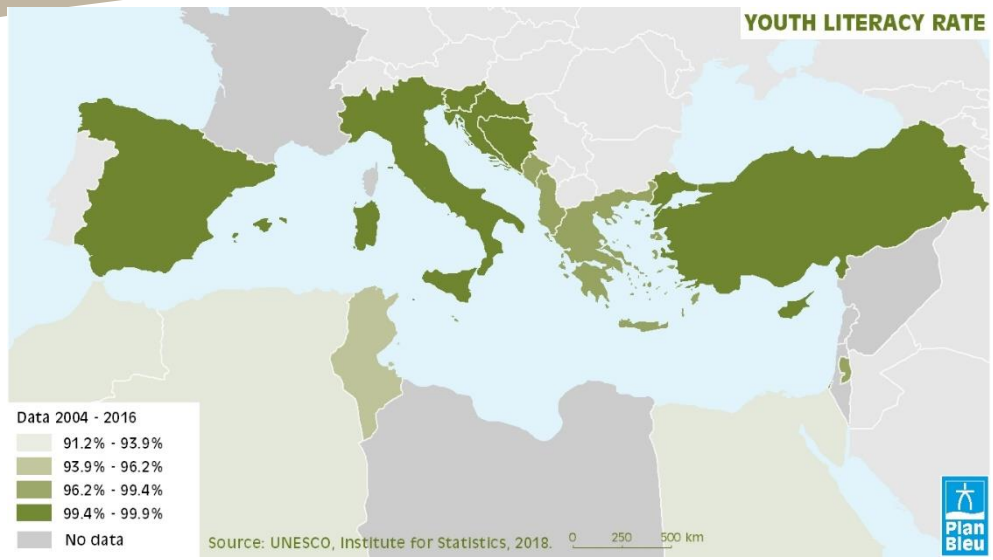
Sources / References: World Bank, World Development Indicators (WDI).

Although insufficient to measure the development level of the countries, the GDP per capita remains an unavoidable indicator for comparing economic situations in terms of income.

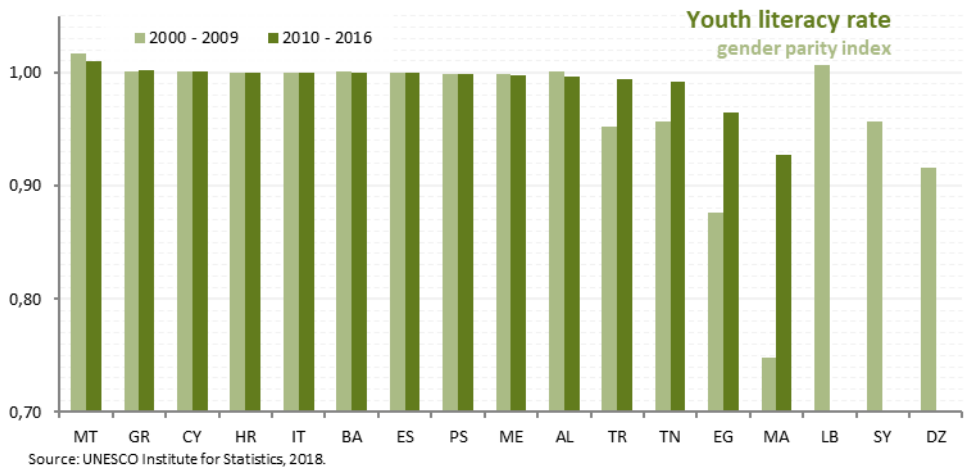
The GDP growth rate in the south and east Mediterranean countries are higher than those of the EU Mediterranean countries. However, they are considered low when compared to the population growth rates, as the demographic growth is still high in the southern Mediterranean countries.

In 2017, the average income per capita in the South and East Mediterranean countries is 3 times lower than the average income in the EU Mediterranean countries.

The share of the Mediterranean GDP in the world GDP is decreasing: from 12.9% in 2000 to 11% in 2010 and 9.8% in 2017. Meanwhile, the share of the Mediterranean population remains constant in the world population (about 7%).



IS THE LITERACY RATE OF YOUNG ADULTS IMPROVING?



"literacy rate of young adults: The Mediterranean average (98%) falls above the world average (91%)."

Definition:

Literacy rate between ages 15 to 24 is presented as a percentage of the total population of this age group. People are considered as literate when they can read, write, and understand a short simple article concerning their daily life (Millennium Indicator n°8). This indicator is linked to the SDG Indicator 4.6.1: Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex

Precautions / Notes:

Across Measurement of literacy can vary from a simple question "Can you read and write?" to various evaluation tests to assess the levels of literacy. In some cases, literacy is roughly measured in censuses with self-report or by estimating the population not attending school or uneducated.

The definitions of literacy used in the national surveys often differ from that of UNESCO. The types of survey carried out in different countries to estimate the literacy rate are also different from one another and from year to year.

The data resulting from these surveys should, therefore, be considered with caution.

Sources / References: UNESCO, Institute for Statistics.

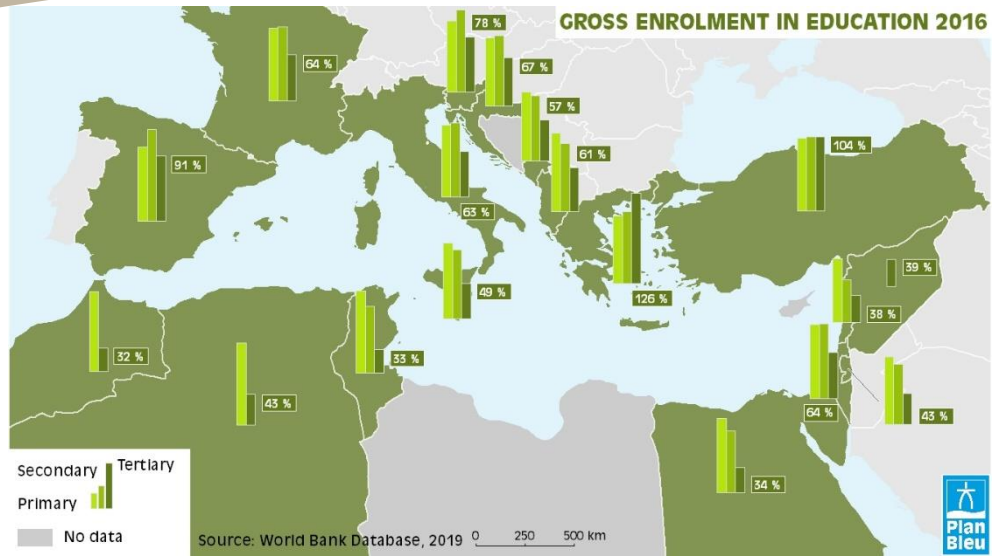
Access to primary education is a key issue for the UNESCO « Education for All » programme as well for the Sustainable Development Goals 6.

The literacy rate of young adults reflects the primary education received in the previous decade.

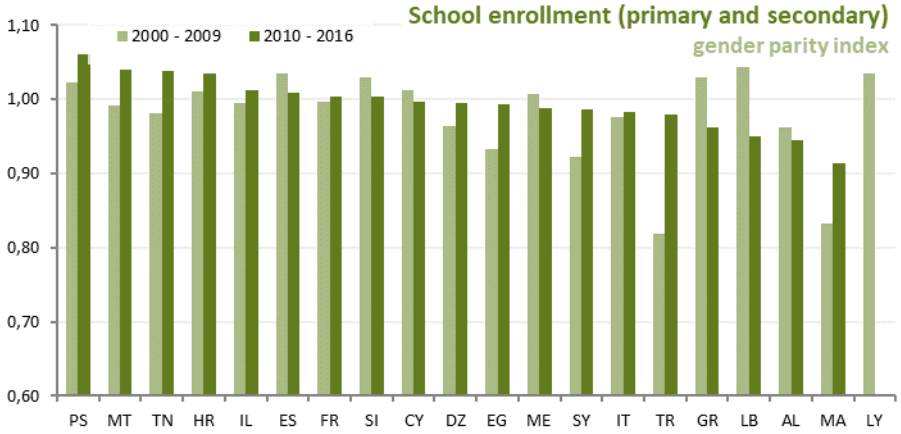
This objective has been has taken up in the MSSD for all the youngadults, by stressing its importance in rural areas and for girls in order to reduce the disparities yet significant in the Mediterranean.

Since 1990, the literacy rate of young adults has increased significantly in all of the southern and eastern Mediterranean countries and is satisfactory in most of the northern Mediterranean countries.

The ratio of the literacy rate of girls compared to boys less than 1 indicates a lack of education for girls. The rate is less than 0.97 in Algeria, Egypt, Morocco and Syria



ARE WE GOING IN THE DIRECTION OF ACHIEVING GENDER PARITY AT ALL LEVELS OF EDUCATION?



Girls' education has improved: the parity index for the gross combined enrolment rate is over 0.98 in 15 Mediterranean countries.

Definition:

This indicator is the parity index between girls and boys for the gross enrolment rate (primary, secondary and combined) defined by UNESCO. It refers to the number of girls enrolled in primary and secondary schools, in public and private schools compared to the number of boys.

The gross enrolment rate is the ratio of the number of students enrolled in schools at different grade levels (such as elementary, middle school and high school), regardless their age, and is expressed as a percentage of the population in the official age group corresponding to this level of education.

Precautions / Notes:

This indicator is not an accurate measurement of school access for girls because the improvements of the report may reflect an increase enrolment of girls receiving education or a decrease in the case of boys. The gross enrolment rate could be over 100% because of late admission and/or because of repletions.

Sources / References: UNESCO, https://en.unesco.org/gem-report/allreports

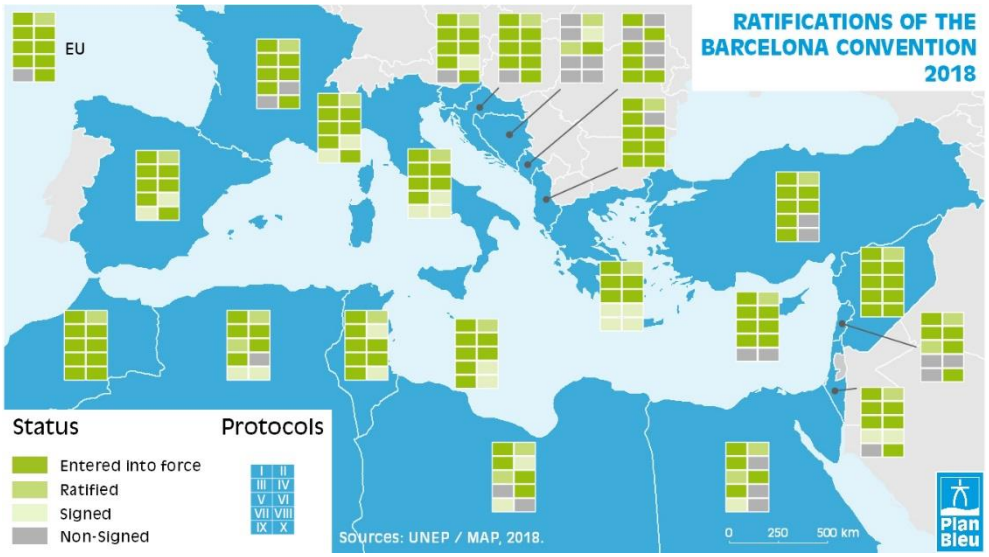
Education and gender equality are central concerns in the new sustainable development agenda.

The Education 2030 Framework for Action, agreed by the global education community in November 2015 to accompany the SDG agenda, recognizes that gender equality is inextricably linked to the right to education for all, and that achieving gender equality requires an approach that « ensures that girls and boys, women and men not only gain access to and complete education cycles, but are empowered equally in and though education ».

"Worldwide some 64 million children of primary school age, or 9%, were out of school in 2017, as were 61 million adolescents of lower secondary school age (16%) and 138 million youth of upper secondary school age (36%)" (UNESCO. 2018. Global Education Monitoring Report Summary 2019)

The enrolment rate in primary education is over 95% in most of Mediterranean countries except in Lebanon, Montenegro, Palestine and Syria.

For the secondary education the gross enrolment rate is over 95% in 11 countries.



In the Contacting Parties, 7 to 21 Barcelona Convention protocols are entered into force.

Definition:

The signature qualifies the signatory state to proceed to ratification, acceptance or approval. It also creates an obligation to refrain, in good faith, from acts that would defeat the object and the purpose of the convention.

Ratification defines the international act whereby a state indicates its consent to be bound to a convention if the parties intended to show their consent by such an act.

Entered into force: An international convention enters into force at a time when it becomes legally binding on the parties. The parties have to decide to apply the convention.

Precautions / Notes:

This indicator is very complex and this factsheet provide only an overview of the status. All the details can be found in the official documents of the Convention.

A country can implement a protocol without signature and it can take more protective measures.

Sources / References: UNEP/MAP, http://www.unepmap.org/

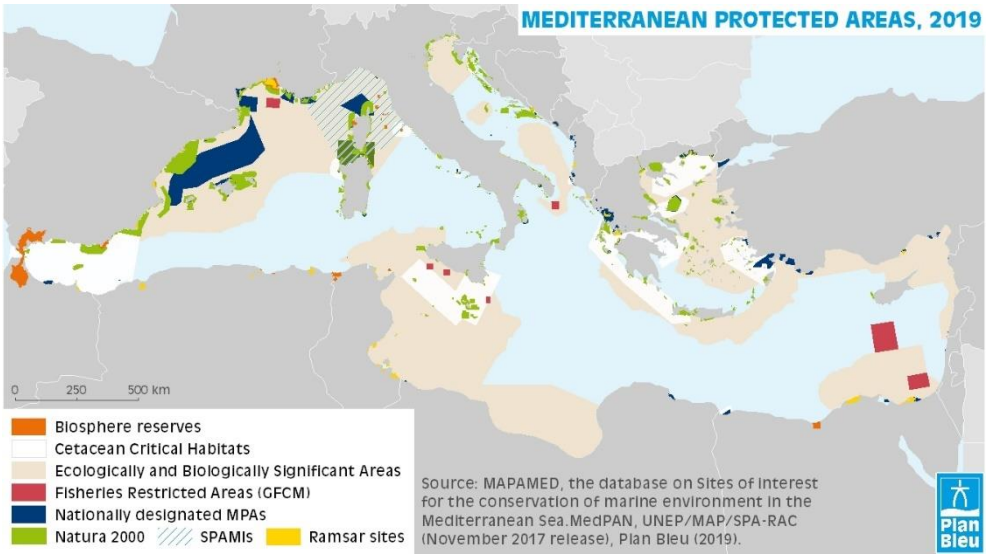
WHAT IS THE LEVEL OF IMPLEMENTATION OF THE BARCELONA CONVENTION? (To be updated with the status in September 2018)

Number	Protocols
I	Prevention and Emergency Protocol - 1976
II	Prevention and Emergency Protocol - 2002
III	Protocol on Land-Based Source (LBS) - 1980
IV	Specially Protected Areas (SPA) Protocol - 1982
V	SPA Protocol and SPA & Biodiversity Protocol - 1995
VI	Offshore Protocol - 1994
VII	Hazardous Wastes Protocol - 1996
VIII	Protocole « Integrated Coastal Zone management » (ICZM) - 2008

The Convention for the Protection of the Mediterranean Sea Against Pollution was adopted on 16 February 1976 then has entered into force on 12 February 1978. The original Convention has been modified by amendments and the "Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean" was adopted on 10 June 1995 then has entered into force on 9 July 2004.

Major dates and Number of parties where the Barcelona Convention and its protocols are entered in force

Legal instruments	Date of Adoption	Entry into force date	Number of parties
Barcelona Convention	1976 (1995)	1978 (2004)	21
Dumping Protocol	1976	1978	16
Emergency Protocol	1976	1978	21
Prevention and Emergency Protocol	2002	2004	15
LBS Protocol	1980	1983	17
SPA Protocol and SPA & Biodiversity Protocol	1982 (1995)	1999	21 and 18
Offshore Protocol	1994	2011	7
Hazardous Wastes Protocol	1996	2008	8
ICZM Protocol	2008	2011	9



"Trends in the creation of MPAs that contain no-go, no-take or no-fishing zone(s) have slowed down since the late 1990s"

Definition:

Indicator 14.5.1: Coverage of protected areas in relation to marine areas shows temporal trends in the mean percentage of each important site for marine biodiversity (i.e., those that contribute significantly to the global persistence of biodiversity) that is covered by designated protected areas.

In the Mediterranean, "Marine Protected Area" (MPA) is understood as any marine and/or coastal area (including lagoons that are permanently linked to the sea) that has been put under protection generally by legal means for the conservation of natural habitats, species or specific natural features as its prime purpose. It thus includes a wide range of areas, established under various designations, at various levels (subnational, national, regional or even international), and providing various degrees of protection.

"Other Effective area-based Conservation Measures" (OECMs), it originates from the CBD to also indicate protection designations, although there is no clear international guidance as to how it applies.

Precautions / Notes:

The indicator is used to track progress towards the 2011–2020 Strategic Plan for Biodiversity 2014, and was used as an indicator towards the Convention on Biological Diversity's 2010.

Some discrepancies could be due to the numerous types of protected areas and their overlapping.

Sources/References: MedPAN et. al. 2016. The 2016 status of Marine Protected Areas in the Mediterranean: Main findings. Brochure, MedPAN & UN Environment/MAP - SPA/RAC MAPAMED (Marine Protected Areas in the Mediterranean) database and Mediterranean Platform on Biodiversity http://data.medchm.net/en/home MedPAN & SPA/RAC World Database on Protected Areas (IUCN & UNEP-WCMC 2017)

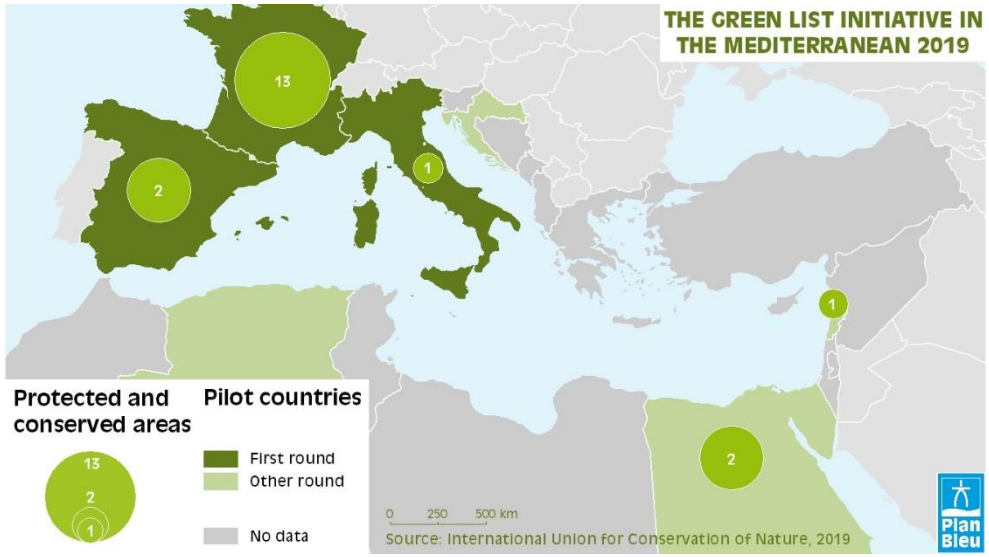
There are 186 protected sites designated at national level which cover 1.6% or 40,327 km2 of the Mediterranean Sea (covering 2,516,900 km2) . The surface covered by nationally designated sites has close to double since 2012, with the creation of 6 new sites, some of which being very large (more than 1,000 km²). Of these nationally designated sites, 76 have at least one no-go, no-take or no-fishing zone that are known of. These cover 0.04% of the Mediterranean Sea (976 km2).

Compared with 2012, MPA & OECMs still cover a wider surface of waters within the 12 nautical mile zone1, with 95,418 km² or 14.7%, compared to beyond (84,381 km² or 4.5%). Waters. 90% of the total surface covered by MPAs and OECMs are found in EU waters.

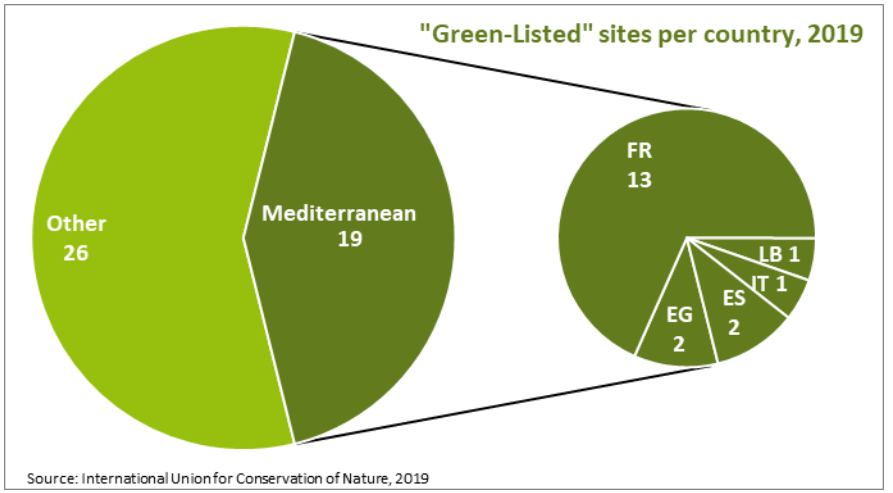
The 1,233 MPAs and OECMs now cover 7.1 % of the Mediterranean through a large variety of conservation designations. Over 73% of the surface covered is located in the Western Mediterranean. Designations cover 9.8% of European waters mostly due to the Natura 2000 at sea network which rarely affords strict restrictive measures.

To reach the 10% quantitative part of the Aichi Target, an additional 71,900 km2 (2.9 % of the Mediterranean) would need to be placed under strong protection designations that also target currently under-represented features

N.B. These comments don't take into account the "Mediterranean Cetacean Corridor" (46,263 km2) declared 'Marine Protected Area' by the Government of Spain in June 2018.



WHAT EXPECTATIONS FOR IUCN GREEN LIST OF PROTECTED AND CONSERVED AREAS?



The development of IUCN Green List should provide an accurate framework for protected areas' management.

Definition:

The IUCN Green List is one of the flagship initiatives included in the MSSD to measure the effectiveness of the protected areas management in the Mediterranean region

The IUCN 'Green List of Protected and Conserved Areas' (GLPCA) is a global programme to encourage, achieve and promote effective, equitable and successful protected and conserved areas. To be added to the Green List, protected and conserved areas have to show that they meet the indicators of the GLPCA Standard by means of an independent evaluation.

Precautions / Notes:

At the moment, only a few Mediterranean countries are concerned by the IUCN Green List Programme, which has been launched recently (2013)

The map and graph summarize the situation of all Green List sites of the Mediterranean countries (except 2 overseas French sites). The analysis should be focused on Mediterranean sites but there are only few at the moment

Sources / References: https://www.iucn.org/fr/node/17069

The Green List of Protected and Conserved Areas has been recognized as a Flagship Initiative under the Mediterranean Strategy for Sustainable Development 2016-2025, adopted during the 19th meeting of the Contracting Parties to the Barcelona Convention.

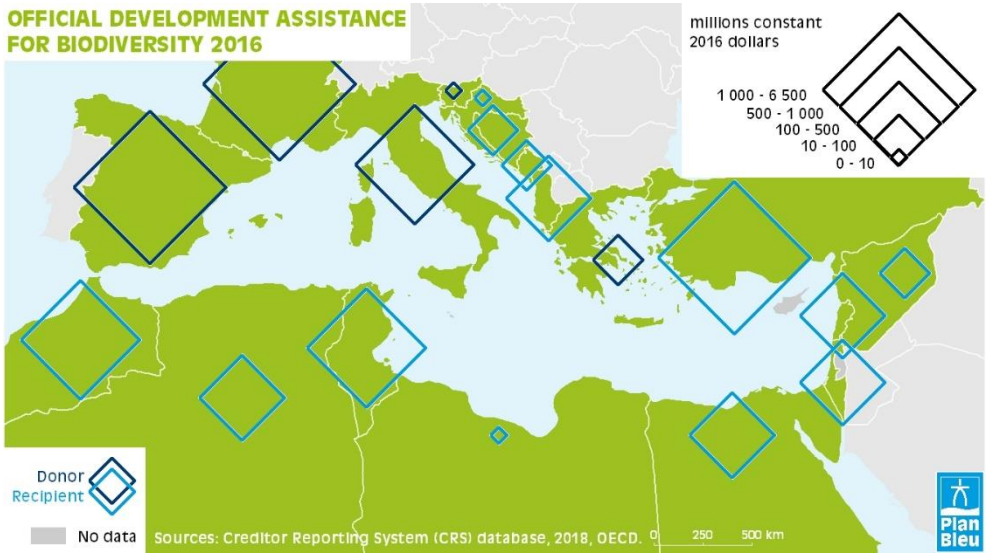
To integrate the Green List, sites have to demonstrate fair and transparent sharing of the costs and benefits of conservation, effective management and long-lasting conservation outcomes.

The pilot phase of the Green List Programme began in 2013, to test the Green List in 10 countries including France, Italy and Spain. The last IUCN World Park Congress took place in Sydney in November 2014.

24 of the tested sites obtained a GLPCA award, 8 of which were located in 3 Mediterranean countries, but only 1 site is on the Mediterranean coast.

The second phase of the Programme, called « Development phase » began in mid-2015.

In 2019, out of the 45 sites worldwide, 19 are in the Mediterranean region, 6 sites are located with the 100-km coastal strip and only 1 site is located on the Mediterranean coast (Marine natural reserve of Cerbère - Banyuls, France)



Mediterranean countries lack sustainable and regular funding for biodiversity and ecosystem protection

Definition:

This SDG Indicator 15.a.1 deals with official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems. The goal is to mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems.

Precautions / Notes:

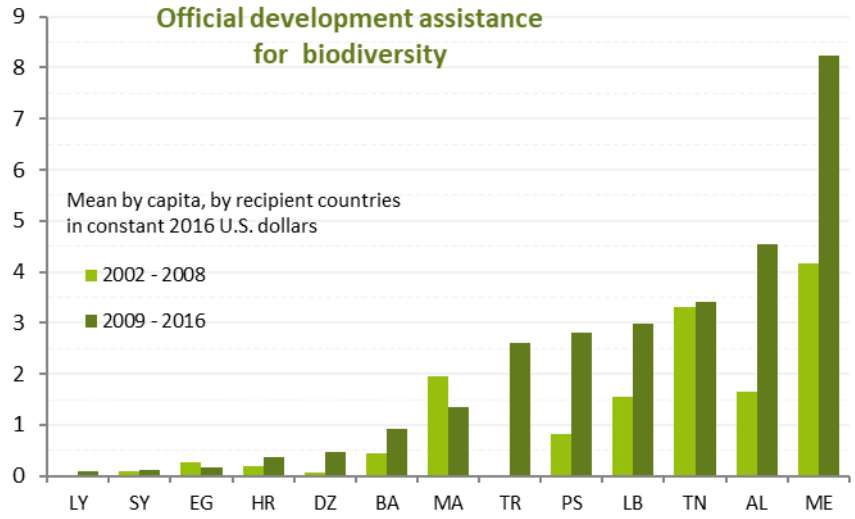
This indicator is available for recipient countries and for donor countries. The information shown in the factsheet refers to the "Total official development assistance for biodiversity".

The official development assistance for biodiversity is covered by irregular time series and needs to be analyzed for a period of time.

The current data does also not allow to make an assessment of the spatial distribution of funds in comparison to the spatial distribution of pressures on biodiversity and ecosystems (are the funds allocated at the right places?).

Sources / References: OECD
Extracted from: http://unstats.un.org/sdgs/indicators/database/?indicator=15.a.1

FINANCIAL RESOURCES FOR BIODIVERSITY PROTECTION IN THE MEDITERRANEAN



Source: Creditor Reporting System database, 2018, OECD.

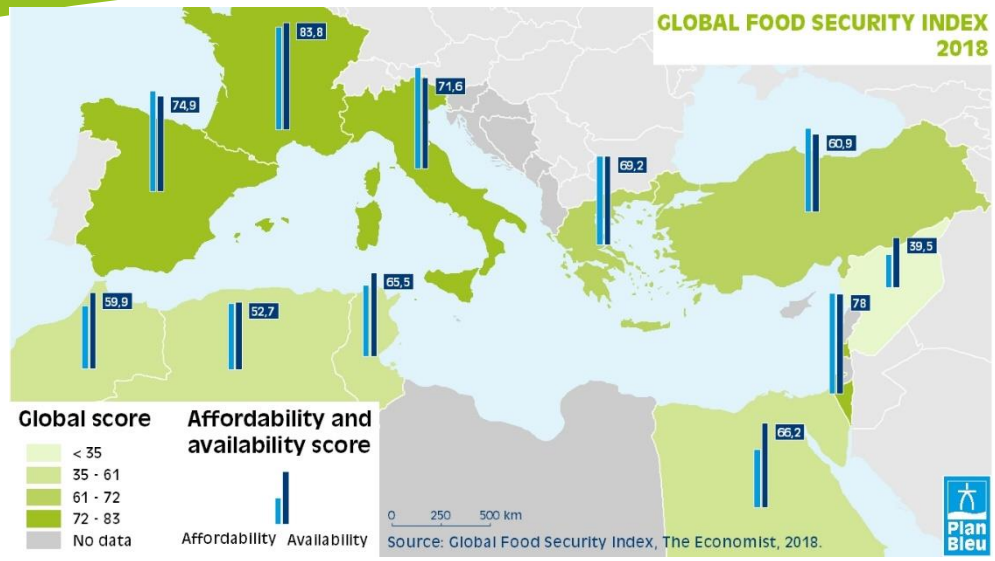
Development assistance and public expenditure for biodiversity and ecosystem protection vary largely across time and space. These variations can be explained by the fact that funding is made available mostly on a project basis which is limited in time. Thus, large budgets can be available for a country during a limited period of time but are usually not sustainable in the long term.

Total official development assistance for biodiversity in the Mediterranean region (13 countries) was about 371 million of constant 2016 United States dollars (average 2009-2016) equivalent to 1.3 dollars per capita.

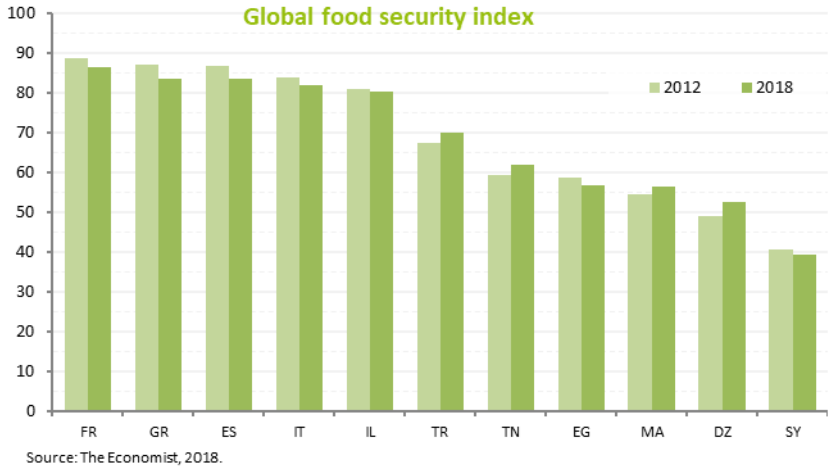
Turkey received more than half of this amount (200 million of dollars) and Montenegro received about 5 million dollars, equivalent to 8 dollars per capita.

5 EU Mediterranean countries are donors for 850 million of dollars (average 2009-2016) and the amount for France count for 83 % (706 million dollars)

This indicator should be further explored and improved with additional information in order to allow deducting indications about the effectiveness of the funds (what level of protection is achieved with the available amounts?) and to be able to assess the capacity of the available funding to safeguard Mediterranean ecosystems and biodiversity (are the amounts sufficient?).



WHAT OPPORTUNITIES IN THE MEDITERRANEAN REGION FOR FOOD SECURITY?



"Global food security is improving in the Southern and Eastern countries"

Definition:

The 1996's World Food Summit defined food security as the state in which « all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life ».

- Affordability measures « the ability of consumers to purchase food »,
- Availability measures « the sufficiency of the national food supply»,
- Quality and safety measures « the variety and nutritional quality of average diets, as well as the safety of food ».

Precautions / Notes:

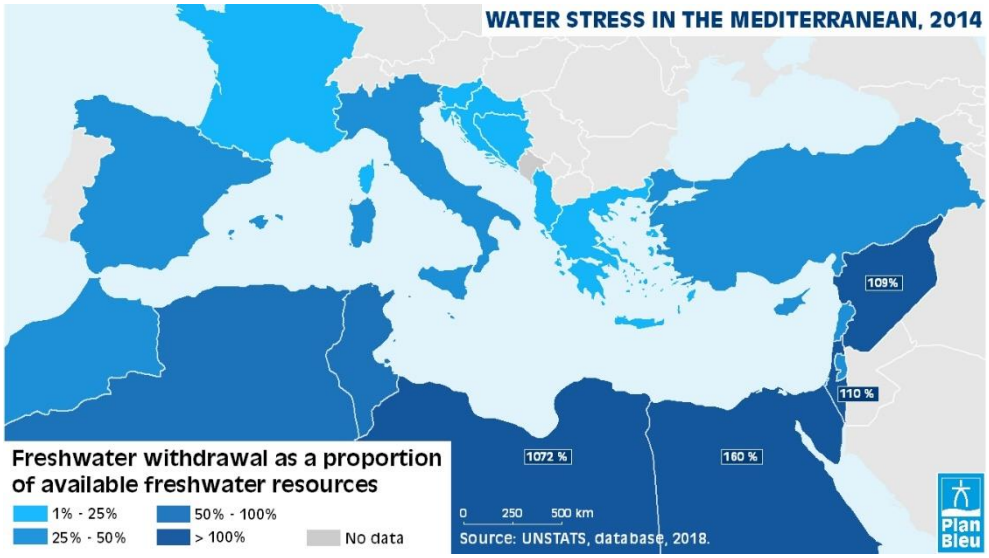
Across all indicators used for the construction of the Global Food Security Index, where the data have missing values, the Economist Intelligence Unit has estimated the scores.

Sources / References: The Economist Intelligence Unit Limited 2018

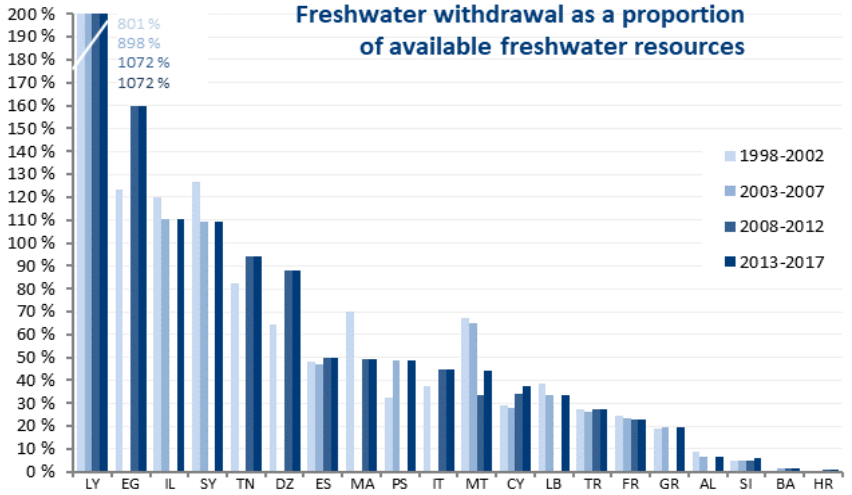
The experts of the Economist Intelligence Unit built the Global Food Security Index (GFSI) in order to measure food security considering 3 core issues: affordability, availability and quality of food.

Physical access to food products depends on their availability as well as their affordability. However physical access is not sufficient to guaranty food security, which also depends on the quality of people's diet.

- **The state of good food security has been reached in many Northern Mediterranean countries, Turkey and Israel. However, data is missing to evaluate food security rates in the Balkans, Cyprus, Lebanon, Libya, Malta and Palestine.**
- **In most of Mediterranean countries food affordability and availability rates are very close.**
- **Improving food production and farmer's income, especially in Southern and Eastern Mediterranean countries, is necessary for a better food security.**
- **On the contrary, in Egypt, food affordability is lower, meaning that improving employment and income in the country should have a positive effect on food security.**
- **Food quality is also an issue in the Mediterranean area, due to several factors, such as poor access to potable water, low diet diversification or lack of nutrients in people's diet.**



IS WATER STRESS INCREASING IN THE MEDITERRANEAN?



Source: FAO-AQUASTAT, UNSTATS, 2018.

"Water stress will continue to increase"

Definition:

SDG Indicator 6.42: The level of water stress: freshwater withdrawal as a proportion of available freshwater resources is the ratio between total freshwater withdrawn by all major sectors and total renewable freshwater resources, after taking into account environmental water requirements.

Main sectors, as defined by International Standard Industrial Classification (ISIC) standards, include agriculture; forestry and fishing; manufacturing; electricity industry; and services. This indicator is also known as water withdrawal intensity.

Precautions / Notes:

Sources of discrepancies: Differences might occur due to the following, amongst others: For national estimates incoming water is counted as being part of the country's available water resources, while global estimates can only be done by adding up the internal renewable water resources (water generated within the country) of all countries in order to avoid double counting.

Non official withdrawals especially for agriculture use which could represent a large part of the total withdrawals are not considered.

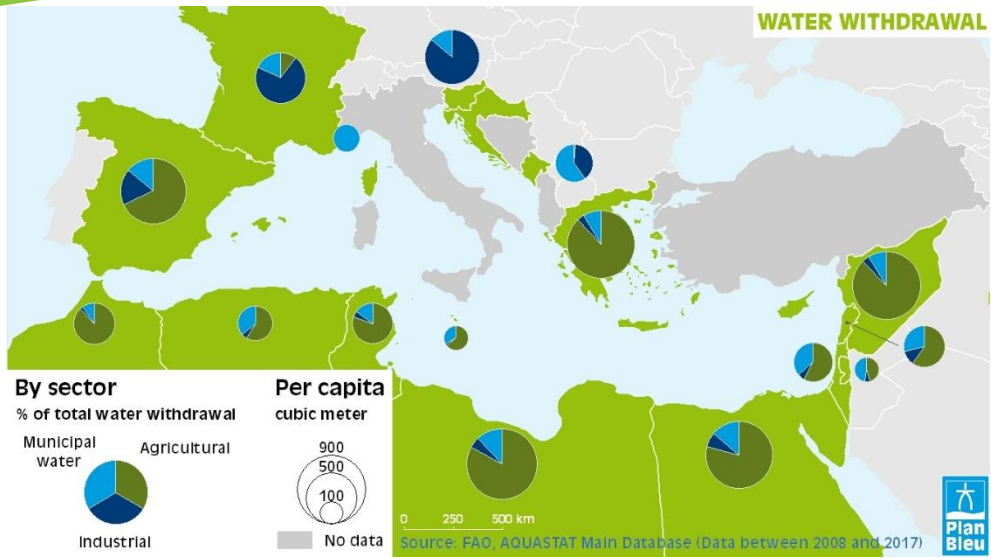
Sources / References: FAO-Aquastat, https://unstats.un.org/sdgs/indicators/database/

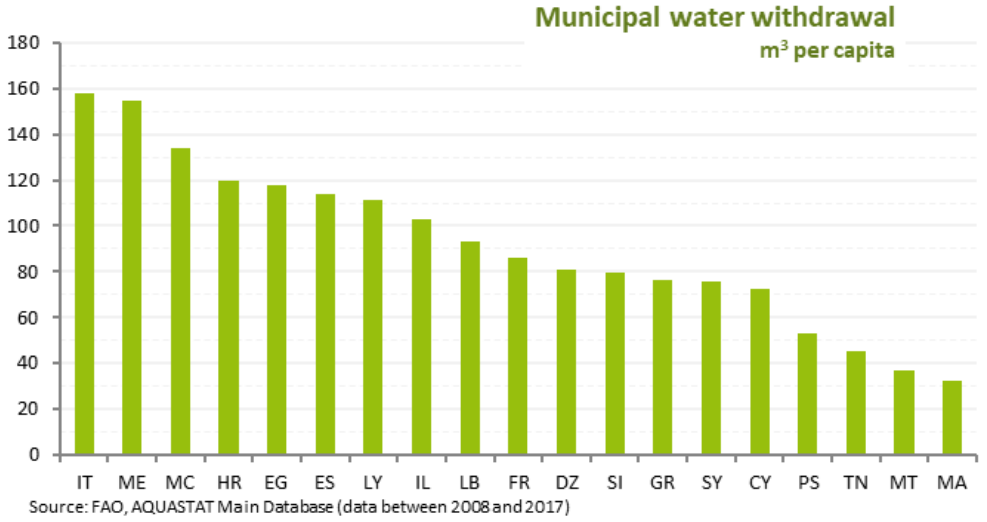
SDG Target 6.4: By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

The total renewable water resources in the Mediterranean region amount to 1,030.44 Km3 (Aquastat database. FAO, 2016). The distribution and availability of this freshwater resources are uneven between the sub-regions of the Mediterranean, as 67% is located in the Northern sub-region, 10% in the South, and 23% in the East part of the Mediterranean, of which, 20.5% in Turkey alone.

The range of the water stress in the Mediterranean countries is very wide: from less than 10% in the Balkans countries to 100% and more in the Southern countries. In Libya, the water stress is higher than 1000% (10 times the available resources).

The situations within the countries are also very diverse and it is essential to provide a clear picture for the Mediterranean watersheds and therefore obtain the necessary data from national institutions





"Overall, the evolution in water demand is alarming in the Mediterranean countries due to the scarcity of the resource"

Definition:

Total water demand is defined as the sum of the volume of water mobilized to meet the various uses, including the quantities lost in production, transport and use of water. It corresponds to the sum of the water withdrawals, of non-conventional production (desalination, reuse of water, etc.) and of imports less exports.

Water demand in relation to GDP of each activity sector corresponds to the demand for water used divided by the value added in the same sector (agriculture, industry).

Precautions / Notes:

In this factsheet, the water withdrawals are used as estimates of the water demand which is not available in the international sources. To get information on water demand needs to relaunch data collection/sharing with the national institutions dealing with water. That will allow to refine the indicator for the Mediterranean Watersheds.

For agriculture, the indicator could be refined by calculating the ratio between irrigation water demand and the value added of the irrigated production.

UN-WATER: UN World Water Development Report 2019: Leaving No One Behind

Better water demand management, especially for agriculture, is one of the priority actions recommended by the Mediterranean Strategy for Sustainable Development.

This means stabilizing water demand (decrease in the north and a controlled increase in the south and the east). Moreover, the water demand and the growth in GDP should also be decoupled by increasing the value added for per cubic meter of water used.

The share of water for agriculture remains high, often higher than 50% in most of the countries and is even close to 90% in Syria and Morocco. In some Balkan countries and in France the water demand for agriculture is low.

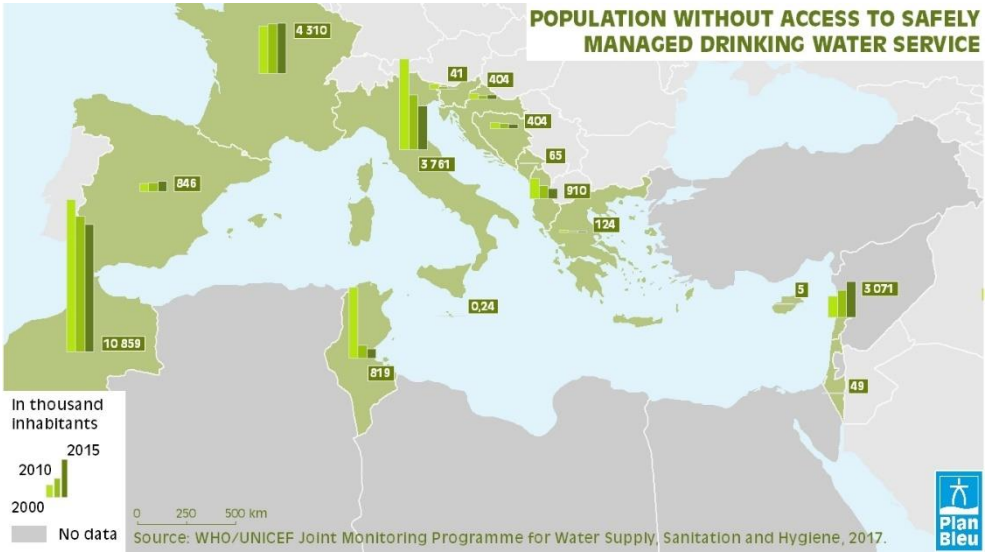
The volume of water used to produce 1000 dollars of agricultural added value goes from about 74 m3 in France to close to 1000 m3 in Greece.

The share of water for industry stays low, less than 20% in most countries except in France with 70% (mainly for cooling water).

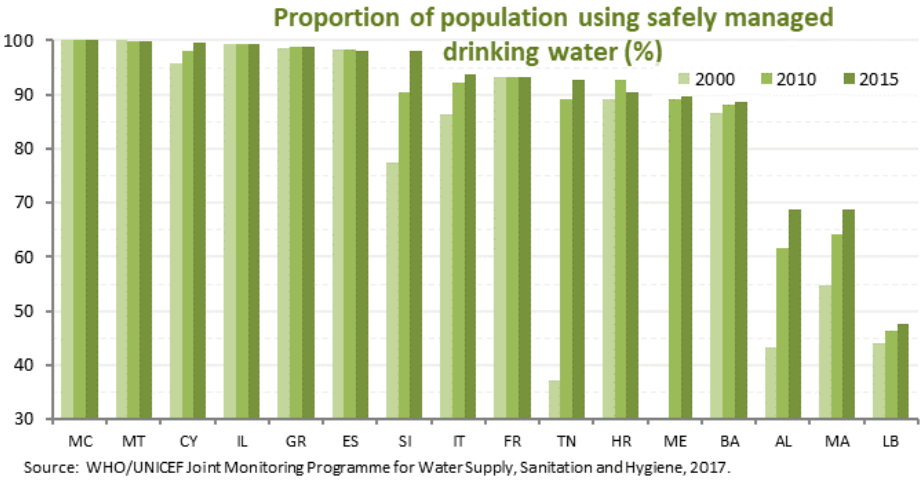
Drinking water demand per capita is widely varying across the Mediterranean region: from 33 m³/cap/year (88 litres/cap/day) in Morocco to about 158 m³/cap/year (430 liters/cap/day) in Italia.

Water use has been increasing worldwide by about 1% per year since the 1980s and Agriculture (including irrigation, livestock and aquaculture) is by far the largest water consumer, accounting for 69% of annual water withdrawals globally. Industry (including power generation) accounts for 19% and households for 12% (AQUASTAT, n.d.).

The lack of data in the Mediterranean region is a big issue for this indicator.



IS ACCESS TO SAFE DRINKING WATER INCREASING?



In 2015, the proportion of population using safely managed drinking water services was over 90% in most Mediterranean countries (with available data).

Definition:

SDG Indicator 6.1.1: Proportion of population using safely managed drinking water services is currently being measured by the proportion of population using an improved basic drinking water source which is located on premises, available when needed and free of fecal (and priority chemical) contamination. 'Improved' drinking water sources include: piped water into dwelling, yard or plot; public taps or standpipes; boreholes or tubewells; protected dug wells; protected springs; packaged water; delivered water and rainwater.

Precautions / Notes:

In order to meet the standard for safely managed drinking water, a household must use an improved source type that meets three criteria:

1. the facility should be accessible on premises (located within the dwelling, yard or plot);
2. Water should be available when needed (sufficient water in the last week or available for at least 12 hours per day);
3. Water supplied should be free from contamination (compliant with standards for fecal and priority chemical contamination).

Joint Monitoring Programme (JMP) updates have also highlighted inequalities between rural and urban areas, between rich and poor, and between other groups and the general population

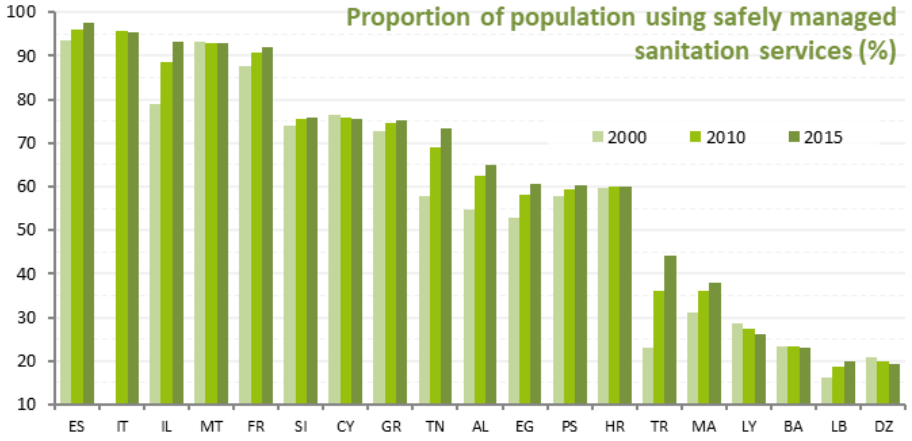
Sources / References: SDG database, JMP website (www.washdata.org).

- **SDG Target 6.1: By 2030, achieve universal and equitable access to safe and affordable drinking water for all.**
- **The WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply, Sanitation and Hygiene is in charge of the data compilation for this indicator in continuation of the MDGs**
- **In 2015, 71 per cent of the global population (5.2 billion people) used a safely managed drinking water service; that is, one located on premises, available when needed and free from contamination.**
- **Estimates for the proportion of population using safely managed drinking water are available for 96 countries (representing 35 per cent of the global population).**

Estimates are available only for 16 countries in the Mediterranean region and there is no data for most of the Southern countries. According to available data, the population without safely managed drinking decreased from 37 million in 2000 to 25.7 million in 2015.

POPULATION WITHOUT ACCESS TO SAFELY MANAGED SANITATION SERVICE

IS ACCESS TO SAFELY MANAGED SANITATION SERVICES IMPROVING?



Source: WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene, 2017.

"In 2015, the proportion of the population using safely managed sanitation services is up to 90 % and less than 50 % in 5 countries."

"

Definition:

SDG Indicator 6.2.1: The Proportion of population using safely managed sanitation services is currently being measured by the proportion of the population using a basic sanitation facility which is not shared with other households and where excreta is safely disposed in situ or treated off-site. 'Improved' sanitation facilities include: flush or pour flush toilets to sewer systems, septic tanks or pit latrines, ventilated improved pit latrines, pit latrines with a slab, and composting toilets.

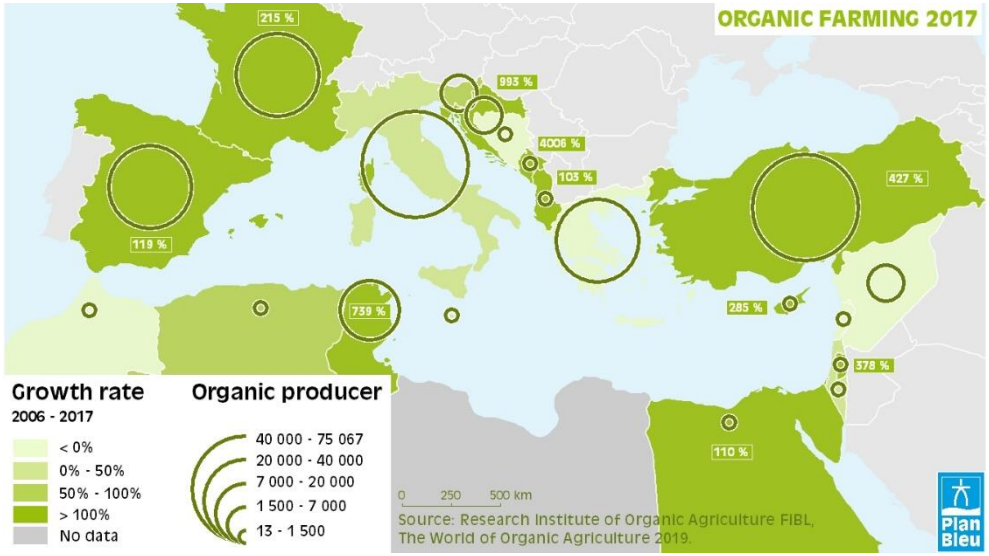
Precautions / Notes:

These data, however, may reflect installed treatment technology rather than actual performance, overestimating safe management. Furthermore, not all excreta from households with sewer connections actually connect with a sewer line and reach a wastewater treatment plant.

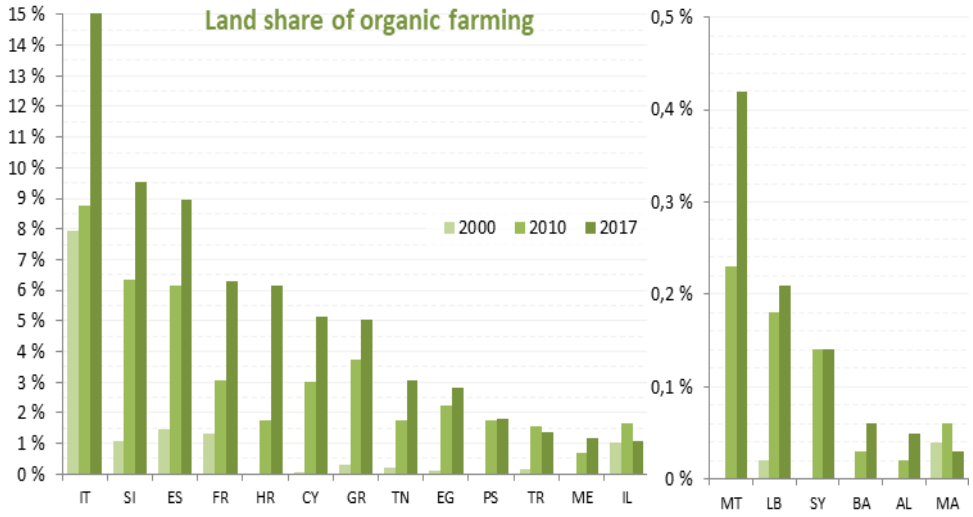
Sources / References: Sources / References: JMP website (www.washdata.org).

- **SDG Target 6.2: By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations**
- **The WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene is in charge of the compilation of this indicator in the continuation of the MDGs. JMP will continue to track the proportion of the population with access to a basic sanitation system for disposal of human excrement of households or the immediate neighborhood (public wastewater network, septic tanks, etc.).**
- **In the JMP 2017 report estimates for basic sanitation services were available for nearly all countries and estimates for safely managed sanitation services were made for 96 countries at national level.**
- **Worldwide, 39 per cent of the global population (2.9 billion people) used a safely managed sanitation service and 2.3 billion people still lacked even a basic sanitation service**
- **In 2015, the population using safely managed sanitation services is lesser than 50% in Algeria, Lebanon, Bosnia-Herzegovina, Libya.**

Estimates are available for 19 countries in the Mediterranean region, the population without safely managed sanitation services increase from 162 million in 2000 to 167 million in 2015 (The proportion decreased from 40%to 35%)



WHAT IS THE SITUATION OF ORGANIC FARMING IN THE MEDITERRANEAN REGION?



"Organic farming area is unprecedently booming (x 4 since 2000) but still only covers 4% of the agricultural land in 2017"

Definition:

This indicator measures the evolution of the number of organic farms in the Mediterranean countries, as well as the share of agricultural land used by organic farming. Organic areas: certified organic land/areas that are fully converted as well as land under conversion.

"Organic Agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic Agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved." (IFOAM)

Precautions / Notes:

The number of producers is probably higher than the published number because the number of small producers is not reported by some countries.

In European countries, the data on high quality products is available because the European Union has created protection and valorisation systems for agricultural products and foodstuffs.

Sources / References: FiBL & IFOAM (2019): The World of Organic Agriculture, 2019

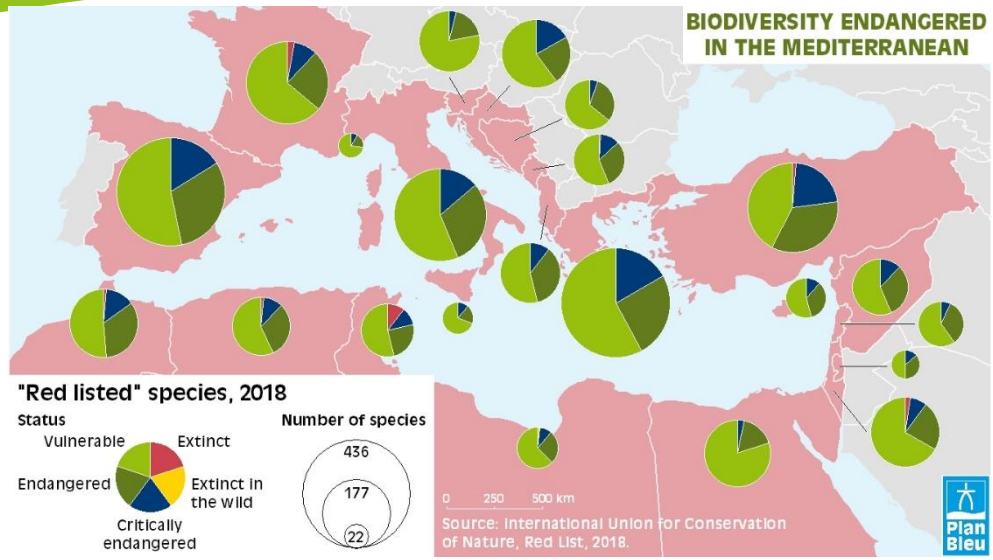
The rise in agricultural added value from the development, acknowledgement and marketing of top-quality Mediterranean products is a real challenge for agriculture in the region. The agriculture quality product is not sufficiently referenced in the Mediterranean countries, but the proportion of agricultural land used by organic farming is at least an indicator of the high-quality development production.

the share of agricultural land used by organic farming is rising in most of the Mediterranean countries. In Italy, this share reached up to 15% in 2017 while it is lower than 3% in 12 countries.

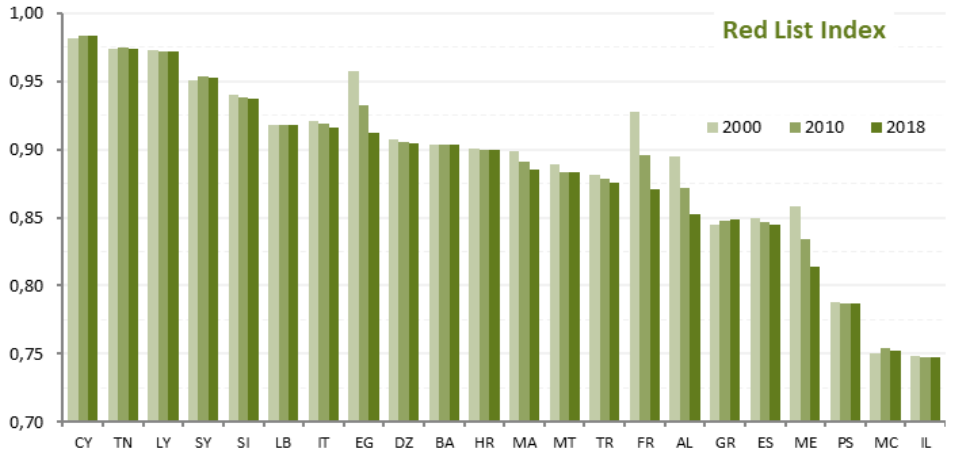
Besides, organic farming has become one of the most dynamic agricultural sectors in the European Union, with 12.8 million hectares in 2016, i.e. 7.2% of agricultural land and almost 300 000 organic producers.

Italy, Slovenia and Spain are in the first positions in the Mediterranean region for their share of organic farming, and ranked respectively 7th, 15th and 16th worldwide in terms of proportion of agricultural land used for organic farming. France, Tunisia and Italy are in the worldwide top ten countries with the highest increase of organic land in 2017.

The number of organic farms has been multiplied by 2 from 2006 to 2017, reaching 260 thousand producers. Turkey and Italy with 55% of the Mediterranean producers are in the worldwide top ten countries



ARE BIODIVERSITY LOSSES HALTED?



The Mediterranean region is the second largest of 34 biodiversity hotspots in the world

Definition:

SDG Indicator 15.5.1 Red List Index: It measures change in aggregate extinction risk across groups of species. It is based on genuine changes in the number of species in each category of extinction risk on The IUCN Red List of Threatened Species (IUCN 2015). It is expressed as changes in an index ranging from 0 to 1. A Red List Index value of 1 would indicate that biodiversity loss has been halted.

Precautions / Notes:

The main limitation of the Red List Index is related to the fact that the Red List Categories are relatively broad measures of status, and thus the Red List Index for any individual taxonomic group can practically be updated at intervals of at least four years. As the overall index is aggregated across multiple taxonomic groups, it can be updated typically annually. In addition, the Red List Index does not capture particularly well the deteriorating status of common species that remain abundant and widespread but are declining slowly.

Sources / References:
International Union for Conservation of Nature (IUCN), http://www.iucn.org/
BirdLife International (BLI), http://www.birdlife.org/
https://unstats.un.org/sdgs/indicators/database/

SDG Target 15.5: Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species

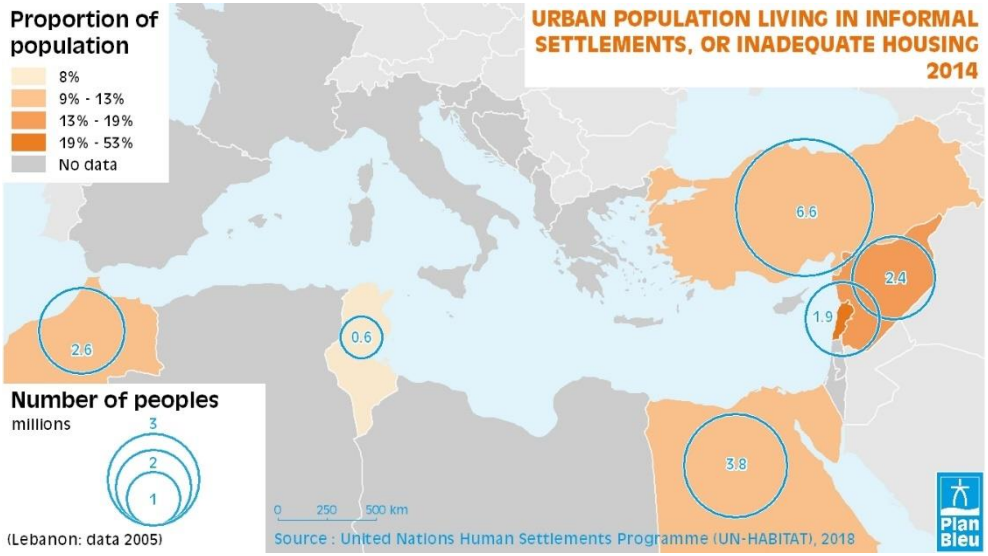
The Red List Index represents an index of aggregate survival probability (the inverse of extinction risk) for all birds, mammals, amphibians, corals and cycads occurring within the region, weighted by the fraction of each species' distribution occurring within the region. It shows how adequately species are conserved or not in the region relative to its potential contribution to global species conservation.

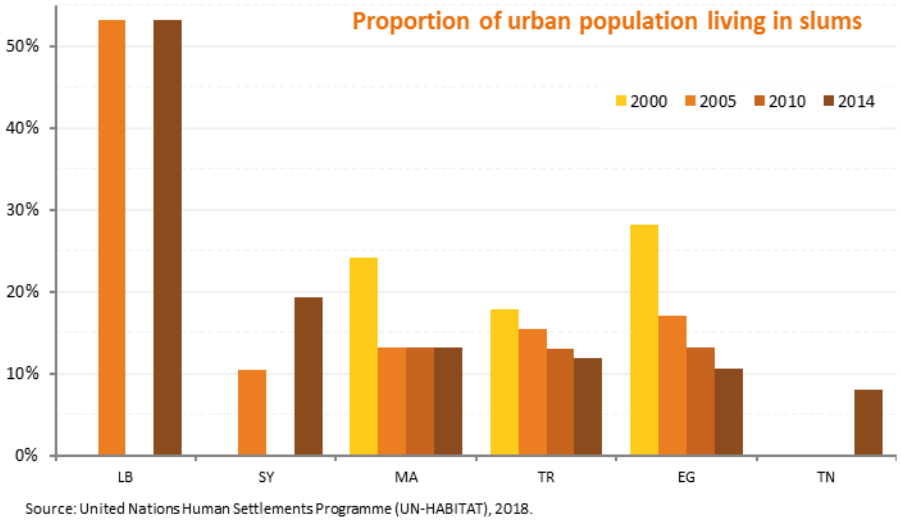
The value of the Red List Index in the Mediterranean countries is above the world value 0.73717. The Red List Index is above 0.9 in 11 Mediterranean countries.

From 2010 to 2018, the Red List Index is decreasing mainly in 4 countries: Egypt, France, Albania and Montenegro.

A specific Red List Index could be developed for the Mediterranean species and Mediterranean area.

IS ACCESS TO DECENT DWELLING IMPROVING?





In most countries with data available, the proportion urban population living in slums is decreasing

Definition:

SDG Indicator 11.1.1: Proportion of urban population living in slums, informal settlements, or inadequate housing. This indicator measures the proportion of urban population living in informal settlements and deprived housing conditions (lack of access to improved water, access to improved sanitation, sufficient living area, and durability of housing). It takes into account slums, informal settlements and inadequate housing. It is a key indicator measuring the adequacy of the basic human need for shelter (housing). An increase of this indicator is sign for deteriorating living conditions in urban areas.

Precautions / Notes:

The Information needed for the computation of this indicator is not currently available for all Mediterranean countries. This indicator is approximated by the proportion of urban population living in slums. The data is collected in the framework of the United Nations Human Settlements Programme.

Sources / References: World Cities Report 2016, UN HABITAT

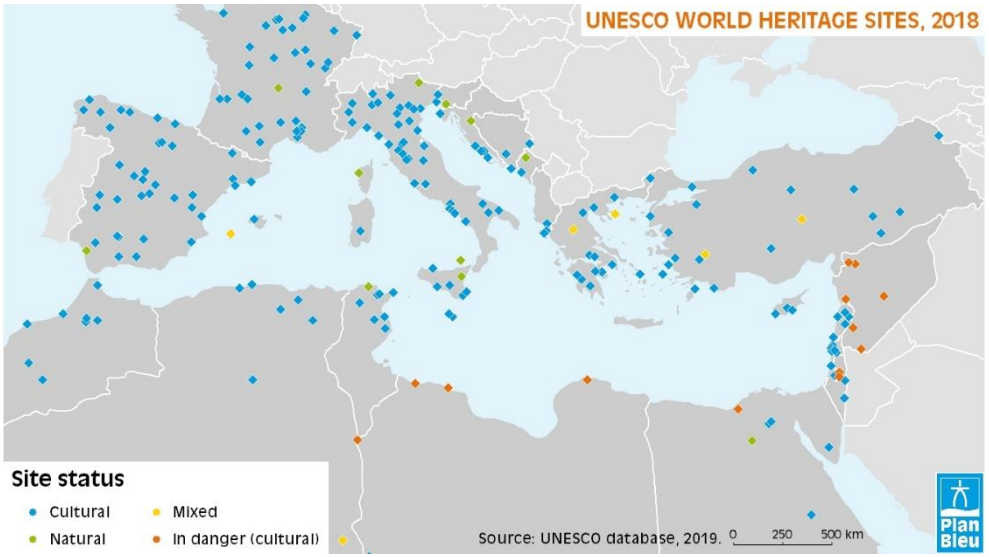
SDG Target 11.1 is about Adequate housing: By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums

The proportion of slum dwellers in urban areas across all developing regions has reduced since 1990, but the numbers have increased gradually.

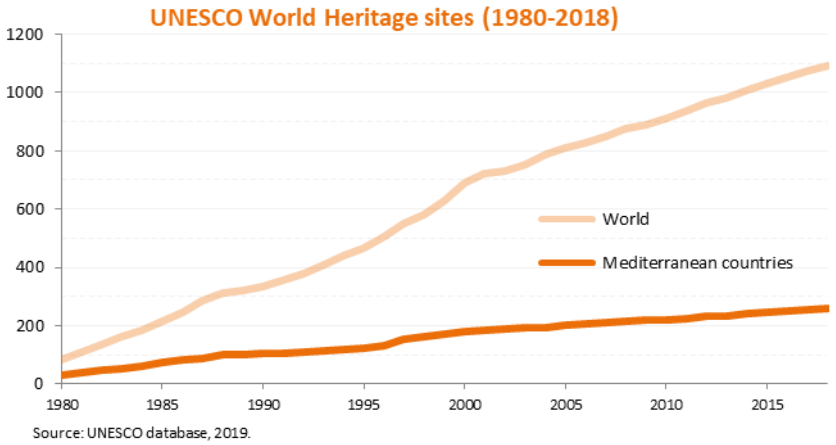
The proportion of the urban population living in slums in the developing countries decreased from 46.2 per cent in 1990 to 29.7 per cent in 2014. Meanwhile the number of slum dwellers in the developing countries is increasing and reached over 880 million inhabitants in 2014 compared 689 million in 1990.

Some national programs of social housing allowed to reduce the part of the population having no access to an adequate dwelling and living in districts without essential services: e.g. this part fell from 12,6% to 3,8% in Egypt between 1990 and 2014 (8.8 million persons concerned). In Turkey, the population living in slums in 2014 is approximately 6.6 million (11.9%), compared to 7.7 million in 1990 (23.4%).

Data needs to be completed in several countries including some EU countries.



UNESCO WORLD HERITAGE SITES: SITUATION IN MEDITERRANEAN COUNTRIES



"23% of the sites inscribed on the List of World Heritage are located in Mediterranean countries and 15 sites are in danger".

Definitions:

The 1972 World Heritage Convention links together in a single document the concepts of nature conservation and the preservation of cultural properties. The Convention recognizes the way in which people interact with nature, and the fundamental need to preserve the balance between the two. The World Heritage Committee defined the criteria on the basis of which a property belonging to the cultural or natural heritage may be included in either of the lists:

- The World Heritage List: a list of properties forming part of the cultural heritage and natural heritage which it considers as having outstanding universal value.
- The List of World Heritage in Danger: the list may include only such property forming part of the cultural and natural heritage as is threatened by serious and specific danger.

Precautions / Notes:

The Committee may decide to remove a site from the World Heritage List and the List of World Heritage in Danger.

Sources / References: http://whc.unesco.org/fr/list

The heritage conservation is one of the objectives of UNESCO.
"Based on a strong appeal from national and local stakeholders, the 2030 Agenda adopted by the UN General Assembly integrates, for the first time, the role of culture, through cultural heritage and creativity, as an enabler of sustainable development across the Sustainable Development Goals" (UNESCO)

The List of World Heritage constantly progressed in the Mediterranean countries. The number of sites inscribed has increased from 29 in 1980 to 258 in 2018 (including 11 transboundary sites).

More than half of these 258 sites (139 sites) are located on the Mediterranean coast (within 100 km of the coastline)

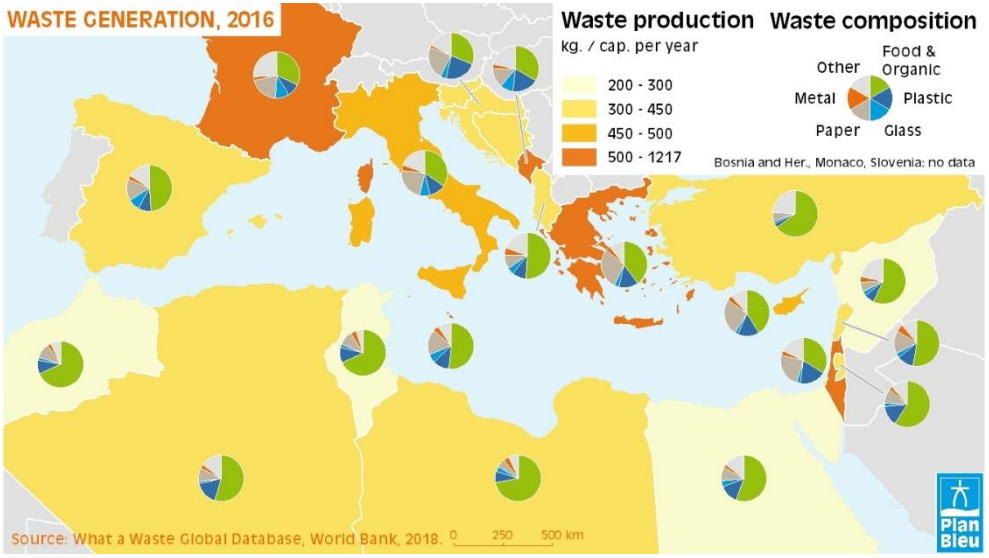
In Mediterranean Countries: 91 % are cultural sites, 7 % are natural sites 3 % are mixed sites.

However, there are great differences among countries:

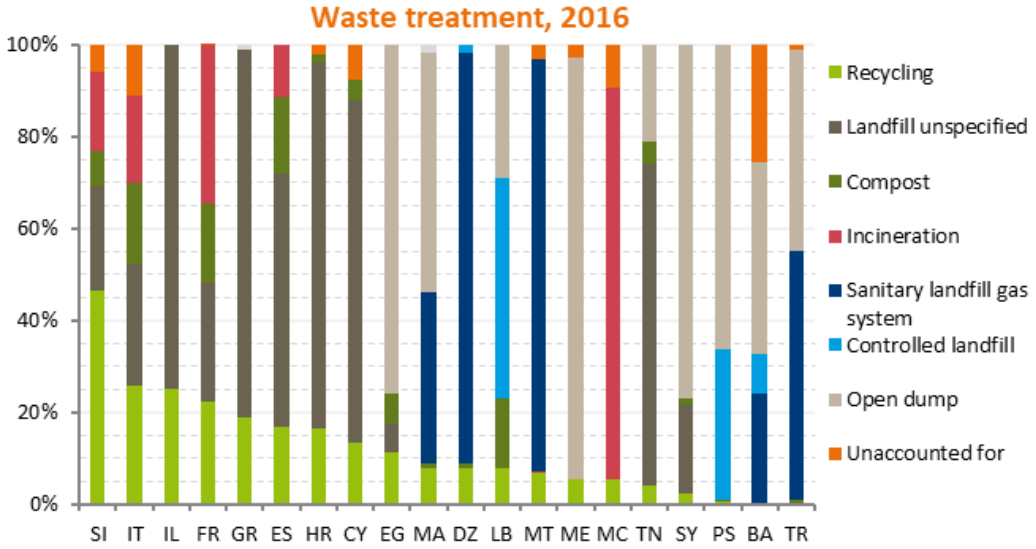
- **3 countries have many sites: Italy (48), Spain (43) and France (40). Greece and Turkey are lagging far behind with 18 sites each.**
- **7 countries have less than 3 sites each.**

In the world, 54 sites are in danger and 28% of these sites are in Mediterranean countries.

All the sites located in Syria, Libya and Palestine are inscribed on the List of World Heritage in Danger.



WASTE GENERATED AND TREATED BY TYPE OF WASTE AND TREATMENT TYPE



Source: What a Waste Global Database, World Bank, 2018.

"In 2016, the overall situation is mixed, high waste generation in the North, high food part in the South and a still low recycling rate"

Definition:

This indicator is one of the H2020/ ENI SEIS II South Support Mechanism project and it is also linked to the SDG Indicator 11.6.1: Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities and to SDG Indicator 12.5.1: National recycling rate, tons of material recycled

Municipal Solid Wastes (MSW) are wastes generated by households, and wastes of a similar nature generated by commercial and industrial premises, by institutions and from public spaces.

Waste treatment and disposal includes the following categories: recycling, composting, anaerobic digestion, incineration, landfilling, open dumping.

Precautions / Notes:

Industrial, medical, hazardous, electronic, and construction and demolition waste are reported separately from total national waste generation to the extent possible. It is not the case for the countries.

The differences in data production methods the countries can lead to distortions in the analysis

Sources/References: Kaza, Silpa, Lisa Yao, Perinaz Bhada-Tata, and Frank Van Woerden. 2018. What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050. World Bank

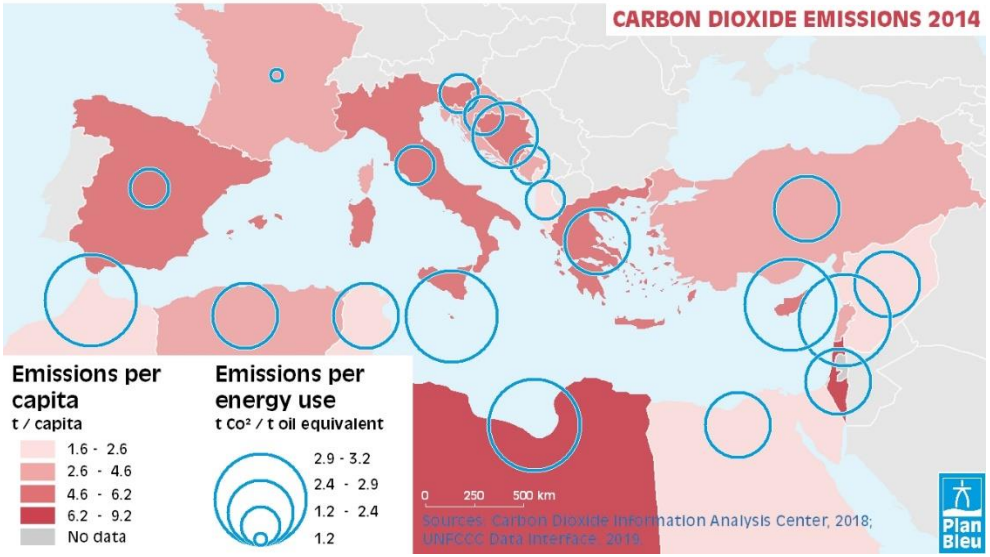
In the Mediterranean region home for about 500 million inhabitants in 2016, the waste generation and management practices vary widely.

The total amount of Municipal Solid Wastes is slightly greater than 18 million of tons, i.e. an average of 370 kg per capita per year (about 1 kg/cap/day).

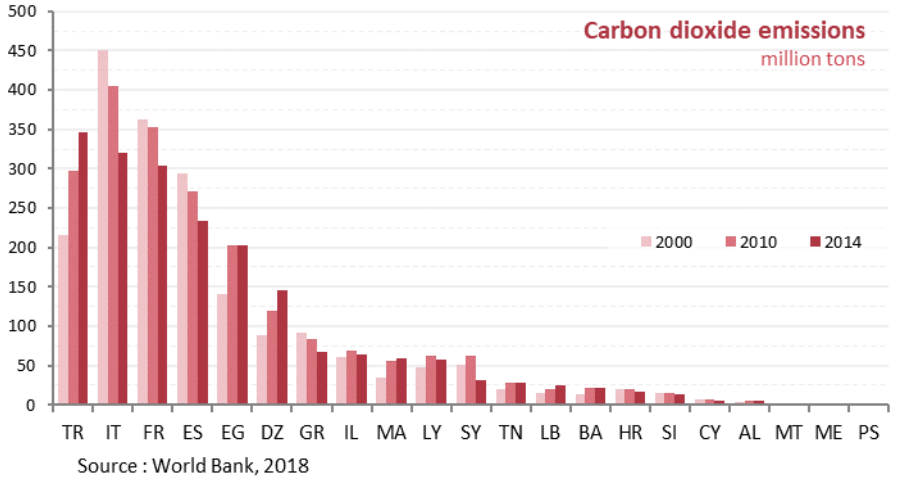
In the Northern countries, the range of value is from 1.1 to 1.7 kg/cap/day and raised to more than 3 kg/cap/day in Monaco. In the southern countries, the amount generated is from 0.5 kg/cap/day in Morocco to 1.1 in Algeria (the value for Israel is similar to the EU countries).

In the Northern countries (inc. Israel), the percentage of Food & Organic waste is between 30% and 52% while this rate in the Southern countries is still higher (From 52 % in Lebanon to 70% in Libya)

The recycling is also widely varying. In the northern countries, the recycling rate is higher than 13% and raises to 46% in Slovenia, except in Bosnia-Herzegovina with a rate close to 0 (the rate for Israel is 25%). In the southern countries, Egypt has the higher recycling rate (12.5%) and the rate is especially low in Syria, Palestine and Turkey.



ARE THE MEDITERRANEAN COUNTRIES CONTROLLING THEIR CO_2 EMISSIONS?



"CO_2 emissions from fossil fuel continue to rise in most Mediterranean countries."

Definition:

This indicator corresponds to the aggregate annual national emissions of human origin of the main greenhouse gases: Carbon dioxide (CO_2), Nitrogen dioxide (N_2O), Methane (CH_4), Hydrofluorocarbons (HFC), Fluorocarbon (PFC) and Sulfur hexafluoride (SF_6).

Precautions / Notes:

In this factsheet, only CO_2 emissions from solid fuels, cement and the gas flaring are taken into account. On average, they count for 80% of the emissions of human origin greenhouse gases.

Sources / References:
CAIT Climate Data Explorer. Washington, DC: World Resources Institut. Available online at: http://cait.wri.org

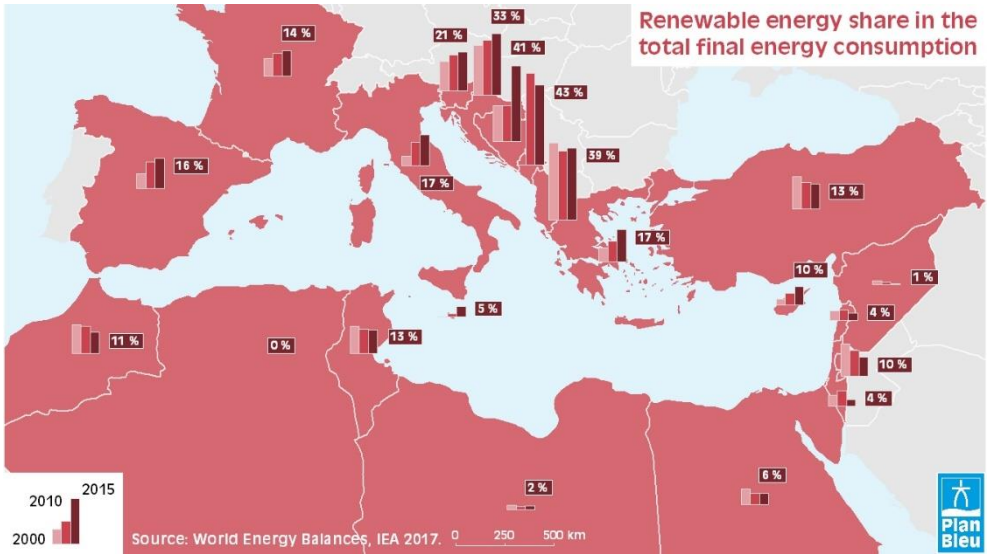
Only 7 countries have made commitments under the Kyoto Protocol. These 7 countries are officially committed to reduce or control their emissions by 2020/ compared to 1990 emissions: Croatia, Monaco and Slovenia (-8%), Italy (-6.5%), France (stabilisation), Spain (+15%) and Greece (+25%). The EU-27 committed to reduce 20%/30% of its CO_2 emissions by 2020.

The Mediterranean countries with no quantified commitment under the Kyoto Protocol nevertheless committed themselves to control their GHG emissions with respect to the Climate Convention and Kyoto Protocol.

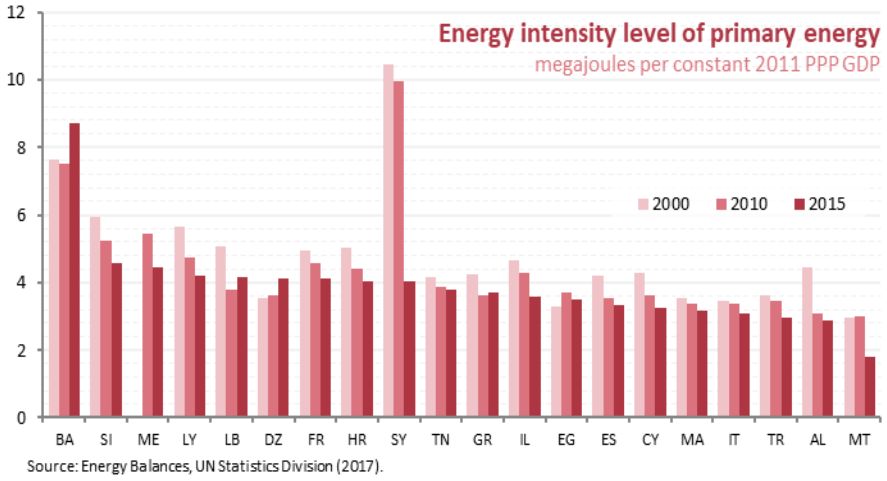
The rise in CO_2 emissions from 1990 to 2014 was higher than the national objectives in most the countries except in France. From 2000 to 2014, CO_2 emissions from energy have decreased mainly in Italy, France and Spain and increased in Turkey, Egypt, Algeria and Morocco.

In 2014, one Mediterranean citizen emitted an average of 4 tons of CO_2 per year: 4/5 of the World average (5 tons), 2/3 of EU (6.4 tons) and 4 times less than in USA (16.3 tons).

In the North, the CO_2 emissions per capita are extremely diverse: from 2 tons per capita in Albania to above 6 in the Balkans countries in 2014. The differences in CO_2 emissions per capita are also significant in the southern and eastern Mediterranean countries: from 1.7 tons in Morocco to 9.2 tons in Libya.



HAS PROGRESS BEEN MADE IN ENERGY USE?



In most Mediterranean countries, the energy intensity and the share of renewable energy are improving.

Definition

SDG 7.3.1 Indicator: Energy intensity is defined as the energy supplied to the economy pet unit value of economic output.

Total energy supply, as defined by the International Recommendations for Energy Statistics (IRES), as made up of production plus net imports minus international marine and aviation bunkers plus-stock changes.

SDG 7.2.1 Indicator: The renewable energy share in total final consumption is the percentage of final consumption of energy that is derived from renewable resources.

Renewable energy consumption includes consumption of energy derived from: hydro, solid biofuels, wind, solar, liquid biofuels, biogas, geothermal, marine and waste. Total final energy consumption is calculated from national balances and statistics as total final consumption minus non-energy use.

Precautions / Notes:

The very high values should be interpreted with caution for the countries in economic crisis (with low GDP). PPP: Purchasing Power Parity. Koe: kilo oil equivalent.

Sources / References: https://unstats.un.org/unsd/energy/ires/, https://unstats.un.org/sdgs/indicators/database/

SDG Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for SDG all:

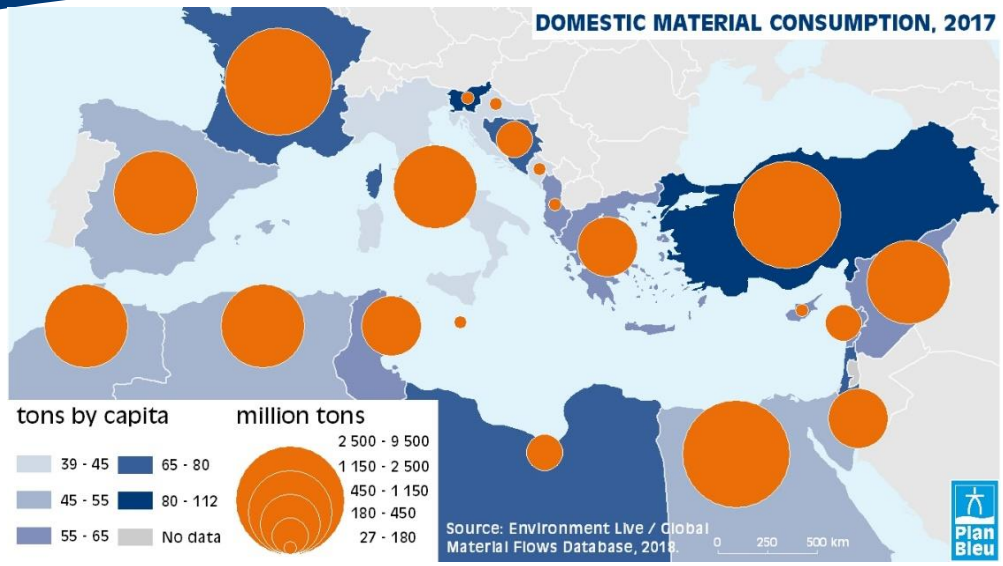
SDG Target 7.3: By 2030, double the global rate of improvement in energy efficiency

SDG Target 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix

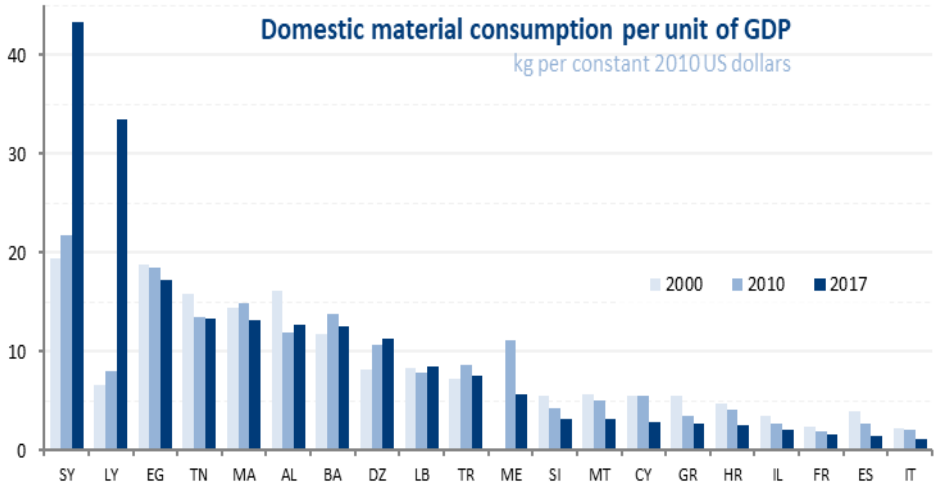
In 2015, the energy intensity of the Mediterranean countries (84 koe/1000 dollars) was higher than the European average (110) and below the world average (125).

However, disparities among countries remain significant, even among countries with equivalent income levels. Energy intensity in Bosnia- Herzegovina, Slovenia and Montenegro is over 100 koe/1000 dollars while it is lower than 50 in Malta.

In the Mediterranean countries, the share of renewable energy in total final consumption covers a wide range: from 0,06 % in Algeria to 43% in Montenegro. In the Balkans countries, the share is above 20% while it is low in the Southern countries, especially in the Oil & Gas producing countries



DECOUPLING ECONOMIC GROWTH FROM MATERIAL CONSUMPTION IN THE MEDITERRANEAN REGION?



Source: Global Material Flows Database, 2018.

Despite the diversity of their DMC, the Mediterranean countries start a decoupling of their economic growth

Definition:

SDG 7.3.1 Indicator: Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP.

Domestic Material Consumption (DMC) is a standard material flow accounting (MFA) indicator and reports the apparent consumption of materials in a national economy. It is measured for several types of materials.

In this factsheet, the DMC is shown for raw materials. The DMC is measured in kg per constant 2010 US dollars.

Precautions / Notes:

The indicator does not take into account the consequences of outsourced material-intensive extraction and production which dislocates environmental pressures. Water and air consumption are, apart from the water content of materials, not included. DMC cannot be disaggregated to economic sectors which limits its potential to become a satellite account to the System of National Accounts (SNA).

The UN Environment International Resource Panel Global Material Flows and Resource Productivity working group compiles data from countries and from other sources.

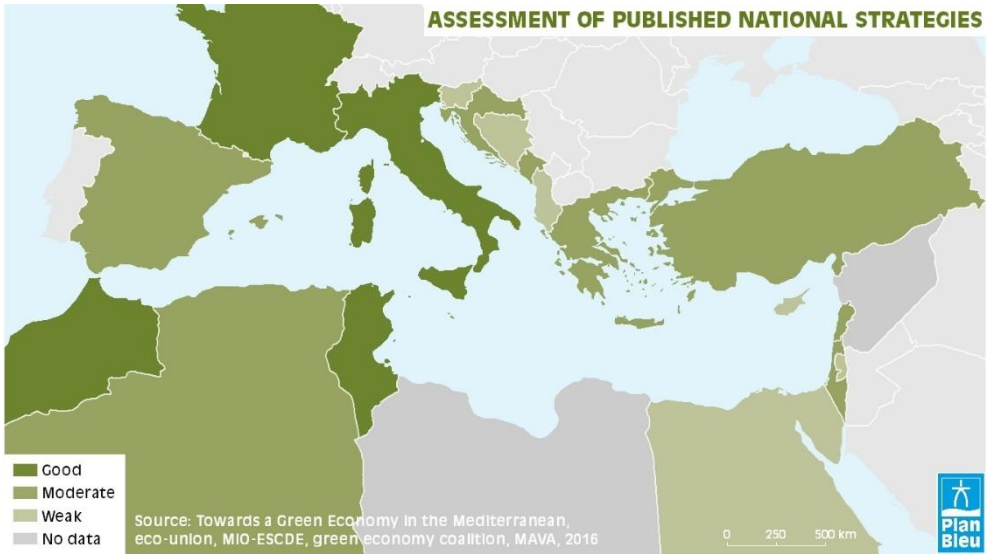
Sources / References: Global Material Flows Database.
Available at: www.materialflows.net

The comparison of material consumption with economic performance provides an insight in trends of material intensity and material productivity (the reciprocal value of material intensity) as well as of decoupling of the global economic system over time. For instance, in the EU Roadmap to a Resource-Efficient Europe the main indicator used is GDP divided by Direct Material Consumption (DMC). Despite the decline in domestic material consumption since 2007, GDP has nevertheless continued to grow.

In the period 2000–2017, the Mediterranean economy achieved a "relative decoupling" of economic growth from resource use (fossil fuels, metal ores, industrial and construction minerals, biomass): income or GDP of most Mediterranean countries increased faster than the amount of used materials.

In the EU Med countries in 2017, the DMC per constant 2010 US dollars is lower than 6. It is between 7 and 17 is most of Southern countries and reached 33 and 43 respectively in Libya and Syria.

HOW MANY COUNTRIES HAVE GREEN ECONOMY AND SUSTAINABLE DEVELOPMENT STRATEGIES?



This assessment needs to be updated with information from countries

Countries	Strategies
Albania	Several plans and strategies
Algeria	NSSD
Bosnia-Herzegovina	Several plans and strategies
Croatia	NSSD
Cyprus	NSSD
Egypt	Several plans and strategies
France	NSSD
Greece	Several plans and strategies
Israel	SCP
Italy	Green Economy
Lebanon	SCP
Malta	Green Economy
Montenegro	NSSD
Morocco	NSSD
Palestine	Several plans and strategies
Slovenia	CC
Spain	NSSD
Tunisia	NSSD
Turkey	CC

Definition:

The proposed indicator is "Number of National Strategies for Sustainable Development adopted or updated [and number of updates since first edition]"

Waiting for updated data directly provided by the national institutions, this factsheet shows an Assessment of National Green Economy (GE) and Sustainable Development (SD) Strategies published in Mediterranean Countries issued from the report referenced hereafter

Precautions / Notes:

This report includes data up till June 2016, published by national governments and available through public search. It reviews only written documents, not the implementation of it. Updated information needs to be provided by the countries.

Sources / References: report "Towards a Green Economy in the Mediterranean" (eco-union, MIO-ESCDE & GEC, 2016)
http://www.medgreeneconomy.org/assets/downloads/greeneconomy-med-web.pdf

The large majority of the countries have outdated or incomplete national GE/SD strategies. Often, they are vague, not giving clear definitions, objectives, budgets or indicators.

Only four countries (France, Italy, Morocco and Tunisia) can claim to have good, up to- date and detailed strategies with concrete roadmap, or – in the case of Italy – supporting legislation in place.

Seven countries (Albania, Bosnia-Herzegovina, Cyprus, Egypt, Palestine, Slovenia and Spain) have outdated GE/SD strategies or none at all.

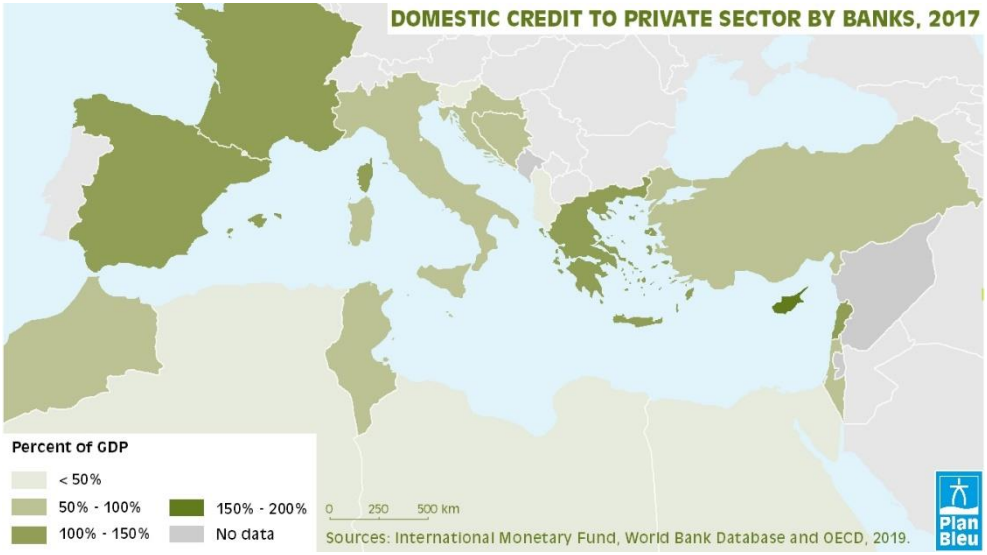
The rest of the Mediterranean countries (Algeria, Croatia, Greece, Israel, Lebanon, Malta, Montenegro and Turkey) are somewhere in between these two groups of countries.

Some recommendations to catalyze and to support GE/SD:

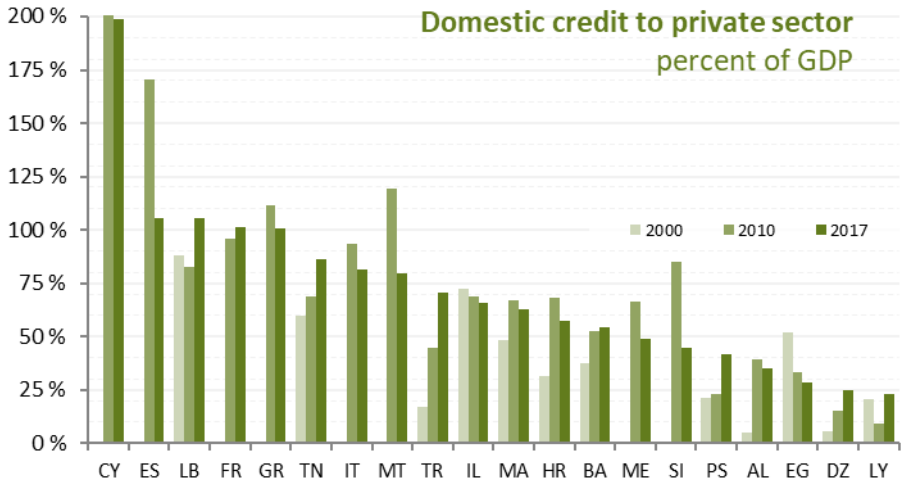
Design ambitious, coherent and consistent national Strategies that mainstream Sustainability concepts; formulate clear objectives, actions and indicators; and integrate new international commitments (Paris Agreements, SDGs, etc.)

Improve awareness, commitment and involvement of all stakeholders through awareness raising campaigns; dialogues with key actors; and support to local or sectorial initiatives

Phase out Brown Economy incentives, commit the financial sector and enhance GE/SD implementation through regional cooperation and peer learning activities.



CAN PRIVATE ENTERPRISES BENEFIT FROM CREDIT TO FINANCE THEIR INVESTMENTS?



Sources: International Monetary Fund, World Bank Database and OECD, 2019.

"The domestic credit allocated to the private sector in percentage of GDP is varying across time and countries without any obvious trend."

Definition:

Multiple indicator:

- Share of bank credit allocated to the private sector
- Existence of alternative credit systems other than bank credit

Domestic credit for the private sector refers to the financial resources provided for the private sector, such as credits, purchase of non-participating securities, trade credits and other accounts that establish a repayment obligation. Public credit is included in some countries.

The alternative finance systems of bank credit may concern investments in venture capital and micro-credit allocated to those that are excluded from the conventional banking system.

Precautions / Notes:

Alternative finance is not well defined and it could be financing from external sources other than banks or stock and bond markets. It can include fundraising via online platforms.

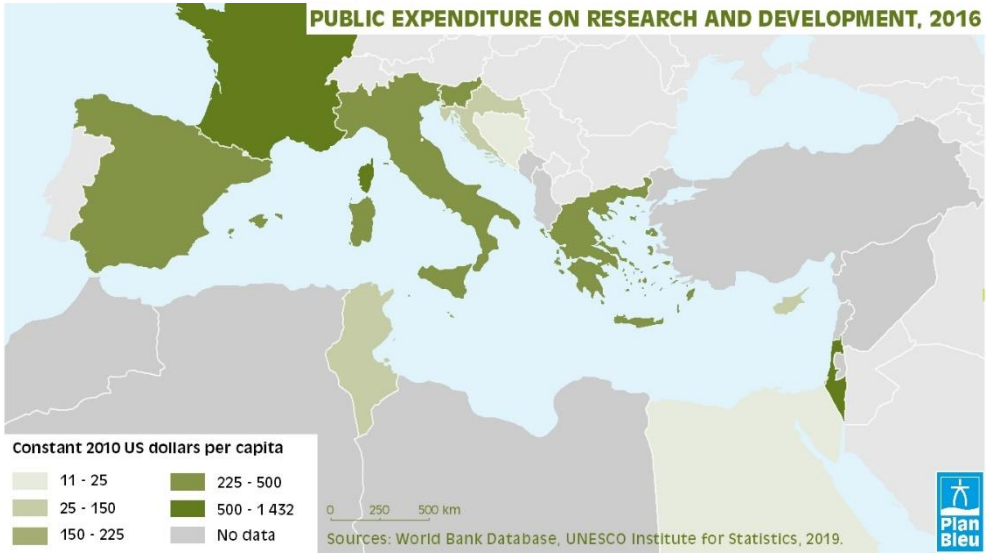
Sources / References: World Bank, World Development Indicators. International Finance Statistics, Global Findex database.

The development of Small and Medium Enterprises finance systems for productive and innovative activities (micro-credit, venture capital, incentives, etc.) is one of the objectives for setting up efficient banking services.

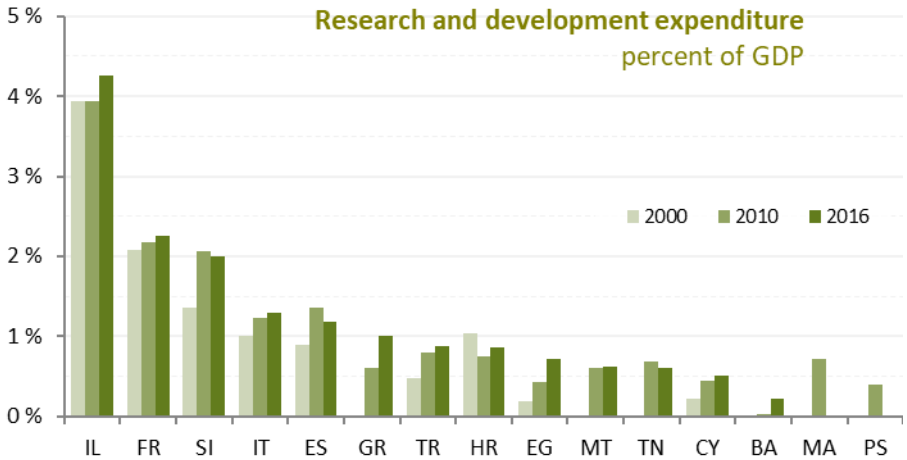
In the Mediterranean region, the share of domestic credit allocated to the private sector in 2017 varied a lot across the countries, from 23 % in Libya to 106% in Spain and reaches about 200% in Cyprus. Trends over time are differ across countries.

In the Mediterranean Southern countries, an average of 39% of the adult population have a formal bank account in a financial institution or used a credit card and 30% of women have a such account (Global Findex database). An average of 9 % of the adult population had a credit in the past years from financial institution or used a credit card.

PUBLIC EXPENDITURE ON RESEARCH AND DEVELOPMENT, 2016



IS THE FINANCIAL EFFORT FOR RESEARCH AND DEVELOPMENT IMPROVING?



Source: UNESCO Institute for Statistics

The amount of national public expenditures on R&D expressed as a percentage of GDP is increasing

Definition:

SDG Indicator 9.5.1: Research and development expenditure as a proportion of GDP.

Research and development expenditures include the operating expenditures and investments (including overheads) for creative and system-based activities dedicated to increase knowledge. This amount includes both fundamental and applied research as well as experimental development work leading to new devices, products or processes

Precaution/Notes:

Research and development expenditures are not necessarily oriented to the sectors supporting sustainable development or contributing to SDG and MSSD goals.

This indicator could be refined in focusing on the sustainable development aspects and with the resources mobilization by the private sectors for Research and development and innovation.

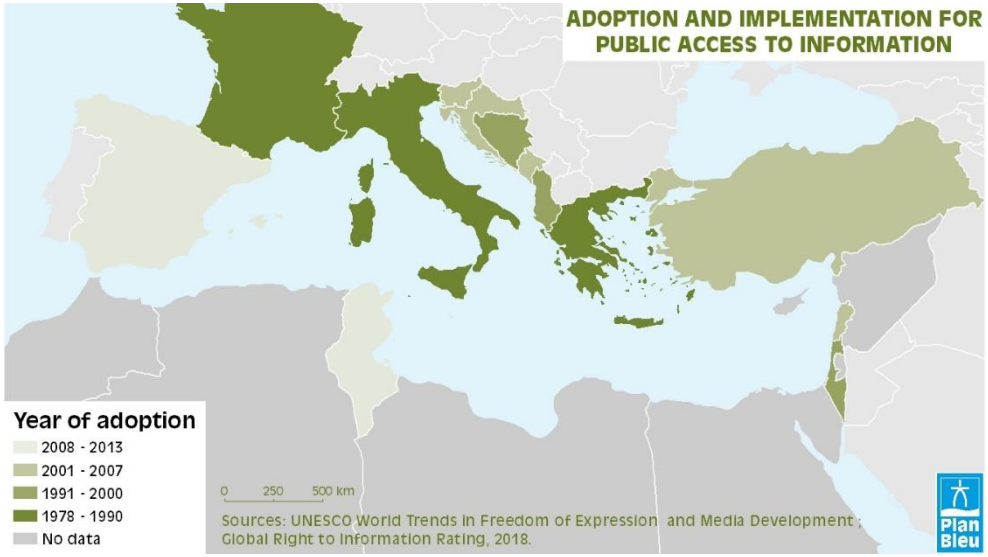
Sources / References: UNESCO, UNDP

SDG Target 9.5: Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending

The Mediterranean Strategy for Sustainable Development 2016-2025 promotes education and research for sustainable development (strategic direction 6.4) and in particular to strengthen research capabilities in the area of sustainable development, as well as the science - policy interface.

In average, Mediterranean countries spend 1.25% of their GDP on research and development (R&D) in 2016 and these expenditures are increasing. The expenditure in EU-27 countries is stabilized around 2% of the GDP.

Except in Israel where Research and development expenditure is 4,25% of GDP in 2016, this percentage is between 1 and 2,3% in Greece, Spain, Italy, Slovenia, and France and less than 1% in the other Mediterranean countries.



THE ACCESS TO THE INFORMATION, A STAKE IN THE MEDITERRANEAN REGION?

- **SDG Target 16.10: Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements.**
- **UNESCO's reports to the UN on global monitoring of 16.10.2 have accordingly been compiled and submitted by the IPDC secretariat**
- **According to UNESCO's preliminary assessment, Indicator 16.10.2 seeks to establish the state of public access to information in terms of three key variables:**
  1. **Whether a country (or at the global level, the number of countries) has constitutional, statutory and/or policy guarantees for public access to information.**
  2. **The extent to which such national guarantees reflect 'international agreements' (such as the Universal Declaration of Human Rights).**
  3. **The implementation mechanisms in place for such guarantees, including the following variables:**
     - **Government efforts to publicly promote the right to information.**
     - **The capacity of public bodies to provide information upon request by the public**

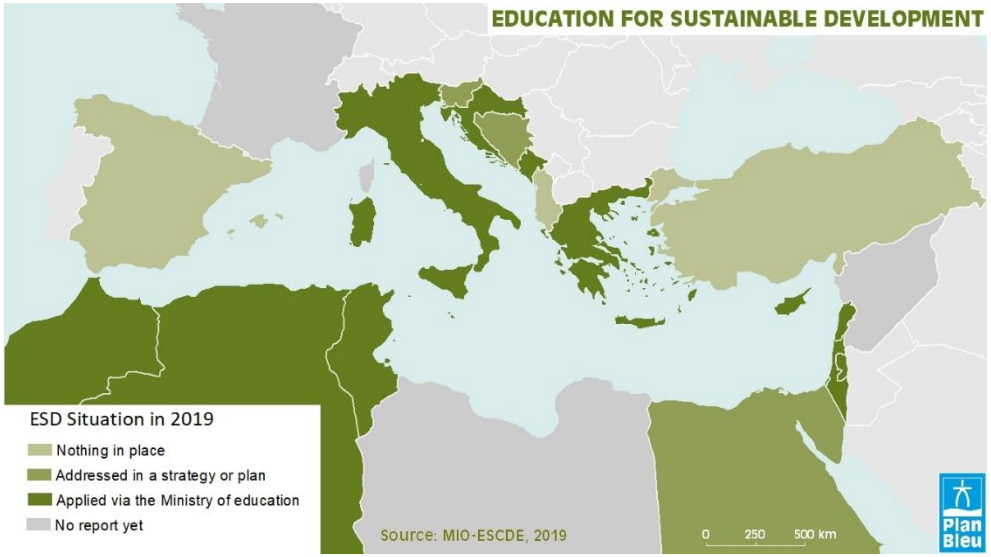
Definition:

SDG Indicator 16.10.2. Number of countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information. The focus of this indicator is thus on the status of adoption and implementation of constitutional, statutory and/or policy guarantees for public access to information. The definition relates directly to "public access to information", which is wider than, but is also very much based upon, the established fundamental freedoms of expression and association. Conversely, these freedoms also both impact on the environment for public access to information.

Precaution / Notes:

This indicator does not assess the totality of "public access to information" component of the full SDG Target 16.10. Nevertheless, it focusses on a key determinant of the wider information environment.
This indicator is still classified as Tier II Indicator: conceptually clear, has an internationally established methodology and standards are available, but data are not regularly produced by countries.

Sources / References: UNESCO - International Programme for the Development of Communication: https://en.unesco.org/programme/ipdc
https://www.law-democracy.org/live/wp-content/uploads/2018/11/SDG-Parallel-CS-Report.18.09.20.final_.pdf



IS THE EDUCATION FOR SUSTAINABLE DEVELOPMENT IN PLACE IN THE MEDITERRANEAN?

In June 2019, 15 Mediterranean countries (68%) have a legal framework for Education for Sustainable Development in place

Definition:

Number of countries that have National Strategies/Action Plans on Education for Sustainable Development in place.
The Mediterranean Strategy on Education for Sustainable Development (MSESD) was unanimously endorsed on 13 May 2014 by the UfM Ministers of Environment & Climate Change and accepted as an integral part of the "Mediterranean Strategy for Sustainable Development" (2016-2025) in the Barcelona Convention's COP19 (Athens, February 2016). Then, the Action Plan of the MSESD was developed, and endorsed in December by Mediterranean Ministers of Education, in Cyprus. The overall aim is to encourage the countries to develop and incorporate ESD into formal, non-formal and informal education.

Precaution / Notes:

The existence of a strategy or a plan doesn't prevail of the efficiency of the Education for Sustainable Development in the country.
Some other indicators are necessary to monitor the Education for Sustainable Development

Sources / References: Mediterranean Information Office for Environment, Culture and Sustainable Development, (MIO-ECSDE), http://mio-ecsde.org/ and Mediterranean Education Initiative for Environment and Sustainability (MEdIES), 2019
Unesco, https://en.unesco.org/themes/education-sustainable-development

- **UNESCO's reports to the UN on global monitoring of SDG 4 indicators**
- **SDG Target 4.7: "By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.**
- **The global indicator proposed for monitoring this Target: Indicator 4.7.1: Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment**
- **No data for this indicator is currently available and its methodology is still under development (Tier III)**
- **Most of the countries have already or are in the process of elaborating National Strategies or Plans on ESD in accordance to the provisions of the AP/MSESD**

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