

Proposed indicators and structure for a Coastal Observatory

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PAP/RAC National Focal Points meeting
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PART I - Plan Bleu Regional Observatory at a glance

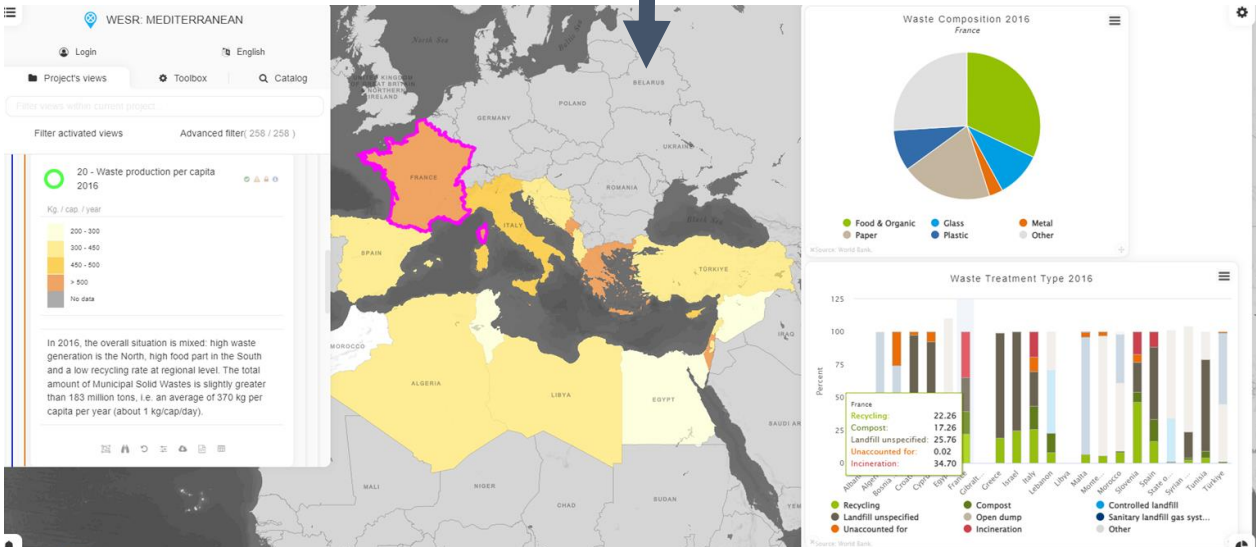
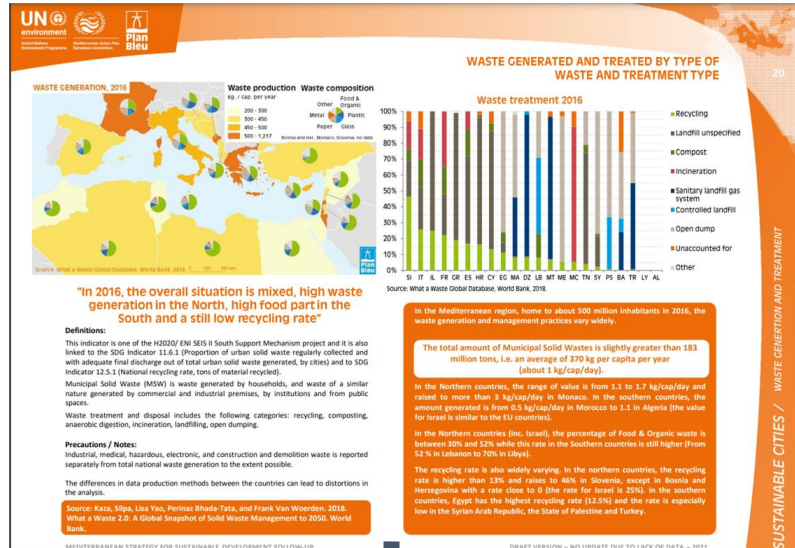


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Plan Bleu's role and mandate as regional observatory of Environment and Development

- Monitor indicators and statistics to measure the sustainability of human activities and the state of the environment via the MSSD to support decision-making
- Network-based observatory (NIS, national observatories, etc.)
- Strengthen governance by mobilizing collective expertise (institutional - the UNEP/MAP system); the Mediterranean partners & institutions (IUCN Med, WWF Med, FAO, etc.); non-governmental & academic sector.
- Since 2020: evolution towards an open source and digital data sharing tool to interactively visualize environmental geospatial information: <https://wesr.unep.org/med>



Mediterranean Strategy for Sustainable Development (MSSD)

The Observatory and the dashboard (28 indicators) make it possible to **measure progress, regression or stability in terms of sustainable development** according to the 7 themes of the MSSD.



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 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) *
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*



PART II -

Coastal governance indicators



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A 2 fold activity within the frame of the GEF MedProgramme and Child Project n° 2.1

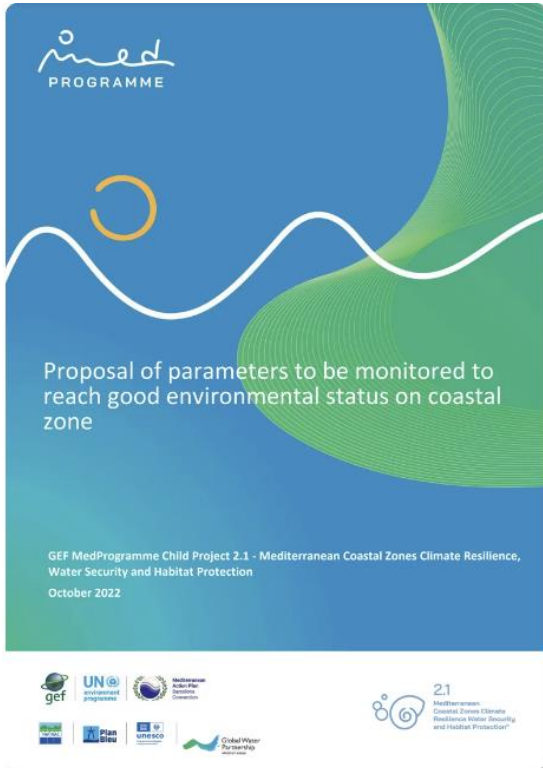
“Mediterranean Coastal Zones Climate Resilience, Water Security and Habitat Protection”

1. Proposal of indicators to be monitored to reach GES on coastal zone
1. Proposal of Mediterranean conceptual framework for coastal observation

References to:

- GES: which is related to IMAP and covers more/less ecological state only
- "monitoring the state and evolution of coastal zones" that is requirement of the ICZM Protocol (Art.16)

1. Proposal of parameters to be monitored to reach good environmental status on coastal zone



Objectives:

- Selection of coastal governance indicators that majority of the countries already monitor to measure the progress towards GES on coastal zone, especially dealing with the terrestrial part as the marine part is covered by the EcAp approach and IMAP Decision

Method:

the selection of the indicators was driven in a Science-Policy Interface (SPI) perspective, thanks to a scientific review (step 1) followed by a validation with a small community of experts (step 2) before and during a dedicated workshop (step 3) to ensure their relevance (RACER) for the endorsement by decision makers with regards to the implementation of IMAP.

A meeting held in July 2022: with country and PAP/RAC's representatives.

The list has been prepared based on an analysis performed at regional level.

12 indicators has been identified and gathered in 3 blocks:

- Natural capital (marine and coastal space)
- Technical capital (infrastructures and services)
- Institutional capital (laws and regulations)

2 lists are proposed coming from the RACER analysis: a priority one (7 indicators - top part of the table) and a second one (5 indicators)

As a next step (not yet planned): the Mediterranean Moroccan coastal zone, Bosnia & Herzegovina and Egypt expressed their wish to test the proposed set of indicators in checking:

- the possibility of use these indicators
- the scale(s) to be considered
- the institutional and/or non-institutional entities that would be involved/responsible for populating the proposed indicators.

	Indicators	Relevant	Accepted	Credible	Easy	Robust	Total
First priority list	Indicator 1 – Demand of property at the coast						
	Measurement of size, density of the population living in the coastal zone	4	4	4	4	4	20
	Indicator 2 – use for industrial land						
	Percentage of industrial lands on the coastal zones (established)	3	4	4	4	3	18
	Area converted from the non-converted to developed land use	3	4	4	4	3	18
	Indicator 3 – Area of built-up land						
	Percentage of built-up land by distance from the coastline	4	4	4	4	4	20
	Percentage of length of the coastline urbanized	4	4	4	4	4	20
	Indicator 4 - Coastal erosion						
	Proportion of the coastline affected by coastal erosion	4	4	4	4	4	20
	Indicator 5 - Allocated space for maritime infrastructure						
	Level of permanent occupation of the sea for maritime activities	3	4	4	4	4	19
Indicator 10 - Percentage of environmental taxes collected							
Indicator 11 - Application level of environmental legislation							
Existence of related Plans/frames	2	4	4	4	4	18	
Percentage of the marine zones covered by MSP legal tools	3	3	4	4	3	17	
Second priority list	Indicator 6 - Land take by intensive agriculture						
	Percentage of agricultural land farmed intensively	2	3	3	2	4	14
	Indicator 7- Demand for road travel at the coast						
	Volume of traffic on the motorways and major roads	2	2	2	1	4	11
	Indicator 8 - Pressure of coastal and marine recreation						
	Number of rings, mooring and dry-stack storage capacity for recreational boating	3	3	2	2	4	14
	Indicator 9 - Structures (Governance and frames)						
	Existence of dedicated governance structure for ICZM and MSP at national or subnational level	3	4	4	4	3	18
	Surface of protected areas in waters under national jurisdiction or on the coast	3	4	4	4	3	18
	Indicator 12 - Financing coastal protection and adaptation						
Financing risk reduction investment projects	3	4	4	3	3	17	
Financing protective measures	3	4	3	3	3	16	

PART III -

A conceptual framework for a coastal observatory



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2. Proposal of Mediterranean conceptual framework for coastal observation - WORK IN PROGRESS

Objectives:

- based on the **12 common indicators that all countries already monitor**, the conceptual framework should show an **optimum of “combined mechanisms” to exchange data and share methods & practices between RACs and Countries**
- this organization (combined mechanisms) should **serve for reporting on state and evolution of coastal zones according to Article 16** (Monitoring and observation mechanisms and networks) of the ICZM protocol

Scope:

- EcAp EOs 7 & 8
- IMAP indicators (COP 19 Decision IG.22/7) and coastal governance indicators presented above
- 2022-2027 UNEP/MAP Mid Term Strategy (MTS)
- MSSD 2016-2025 & SDGs

Method:

- literature review to identify of coastal governance indicators
- Inventory of current organisation for national observation & monitoring capacities: a targeted analysis (2021, Plan Bleu) updated in 2023
- consultant's own expertise

=> next steps: a meeting is planned for Q3 2023 with country and PAP/RAC's representatives to discuss the framework and publication of the report

Preliminary findings

- **No country has an organized / standardized system for monitoring coastal and hydrography parameters and no country has implemented such a framework / network to set up exchanges together**
.... but....
- **Some reporting schemes are in place in all the analyzed countries:** for e.g: national committee for SDG's monitoring (general or thematic/per SDG) exist
- **A specific case has been studied (in Algeria):**
 - the ICZM protocol hasn't been ratified yet but a lot of capacities exists to populate the governance coastal indicators core set.
 - the organizational scheme and governance structure are in place through institutions (ONEDD, CNL) and regulations (Coastal laws, ICZM strategy,..) that allow Algeria to report on IMAP indicators.
- to support the - various - current national systems (observation and monitoring, reporting & assessment) there is a **need for providing a framework in strengthening their efficiency by networking and federating actors, institutions and better targeting funds.**
- Tentative technical recommendations around **3 pillars** are proposed:
 1. formalize governance
 2. rely on regional regulations (UNEP/MAP's protocols and CoP decisions) and national ones (laws, plans, strategies)
 3. develop interoperable tools (data infrastructure, repository and visualization of data)
- A progressive / stepwise approach is proposed around **3 phases** depending on the **country's capacities** and **where countries stand compared to their level of achievement** of an “optimum” given by the conceptual framework for coastal observation.

Thank you!

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