ENI SEIS II South workshop

Horizon 2020/NAP Water Cluster

9-10 July 2019, Marseilles

This project is funded by the European Union

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Progress on implementation of ENI SEIS II South Support Mechanism and H2020 RM programme of work

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Cecile Roddier-Quefelec,
Project coordinator ENI SEIS II South
European neighbourhood policy activities – Mediterranean
Area cooperation

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Mediterranean cooperation

EEA and ENI SEIS II South project coverage

EEA member countries
ENI SEIS II South
EEA cooperating countries

The map does not imply any opinion from EEA concerning the legal status of any country or territory, its area of authority or the delination of its frontiers and boundaries.

* Collaboration is temporally suspended

EU funded regional project – supporting a long-term engagement to EU policies and external policy framework aligning to the Union for the Mediterranean and Barcelona Convention efforts on reducing marine pollution

EEA and UN environment / MAP
Co-chairs of the Review and Monitoring group of the H2020 Initiative for a cleaner Mediterranean
Joint implementation of ENI SEIS II South SM

Objective: To improve the availability and access to environmental information to the benefit of effective and knowledge-based policy-making

Indicator set, data flows **4 years (2016-2020) H2020**
indicator-based assessment **9 countries**
Reporting infrastructure **€4.2 M**

UN environment
United Nations Environment Programme
Mediterranean Action Plan
Barcelona Convention

European Environment Agency

Union for the Mediterranean (UfM) – Horizon 2020 Initiative for a cleaner Mediterranean

Joint effort to substantially reducing pollution by the year 2020 by tackling main sources of pollution affecting Mediterranean Sea: **municipal waste, urban waste water and industrial pollution**.

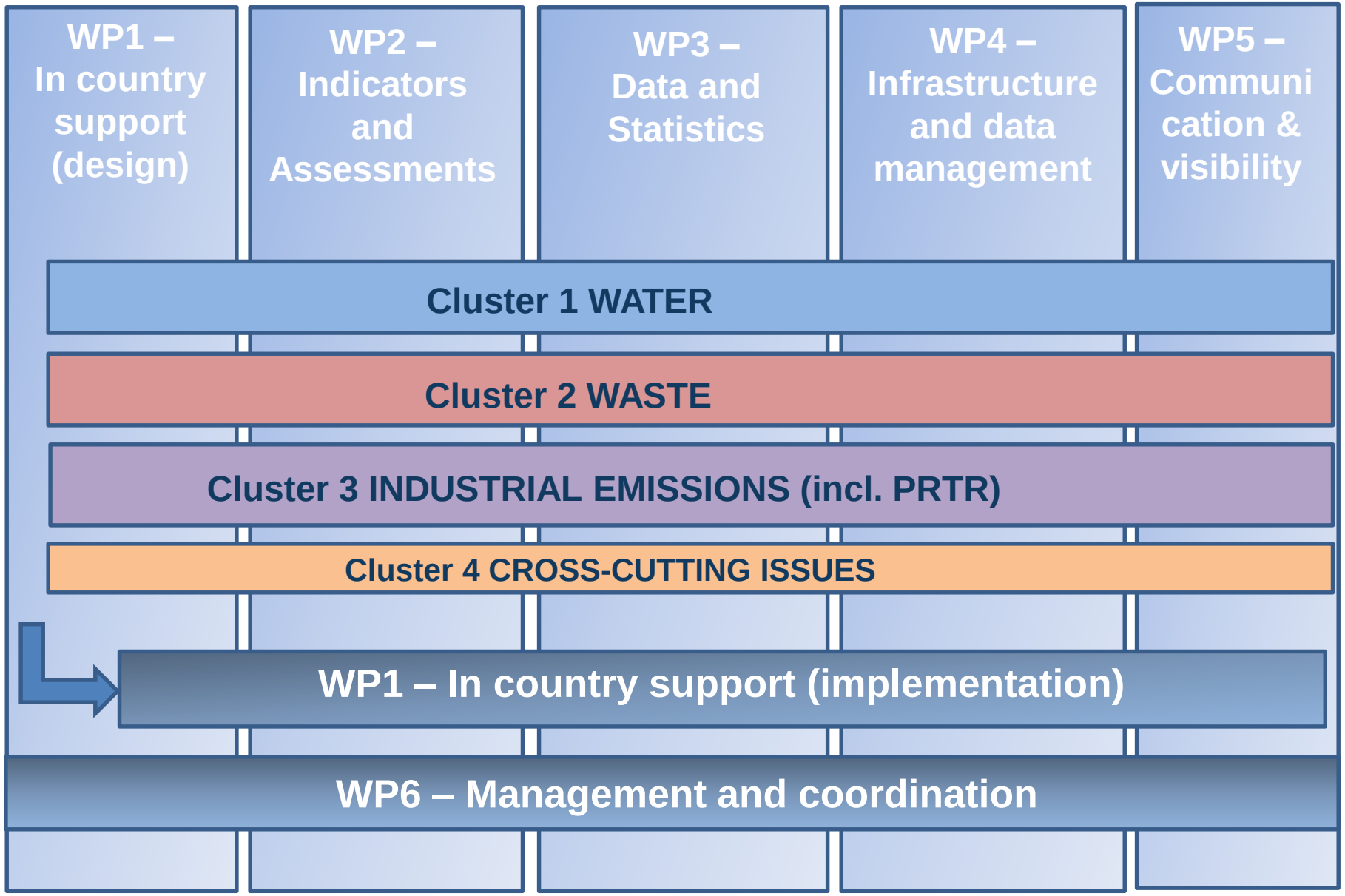
- Launched in November 2006 EuroMediterranean Environment Ministerial Conference held in Cairo
- Reaffirmed by the UfM Ministers at the Ministerial Meeting on Environment and Climate Change in May 2014 in Athens
- Key flagship initiative of the UfM since its launch in Paris in 2008, joint endeavor and commitment of all 43 UfM countries

Phase II 2014-2020:

- focus on pollution prevention and to emerging issues including **hazardous waste** and **marine litter**
- Commitment to **apply SEIS principles** in line with UNenvironment MAP Ecosystem Approach Decisions and other regional initiatives
- Commitment to initiate **reforms** at national level to create an attractive investment environment
- Commitment regarding **implementation and enforcement** of legislation

UN environment United Nations Environment Programme
Mediterranean Action Plan Barcelona Convention
European Environment Agency

Conceptual framework for the SEIS Support Mechanism - South



- EEA – overall coordination
  - Leads water cluster, cross-cutting
  - Leads design WP1
  - Leads WP 2&3
- UN environment MAP
  - Leads waste & industrial emissions clusters
  - Leads implementation WP1
  - Leads WP4

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Timeframe

H2020 initiative for a Cleaner Mediterranean ⟷ **UNEP/MAP Barcelona Convention**

Athens Declaration (May 2014)

- H2020 programme of work 2015-2020
- H2020 Indicators and assessment

Ecosystem approach, SEIS principles

- NAP implementation
- IMAP – set of common indicators
- MSSD

REGIONAL

NATIONAL

2017

Quality Status Report

IMAP InfoSystem

2018

Indicator management, data service

2019

2nd H2020 indicator based assessment

UNEPMAP SoED

2020/2021 Next reporting cycle

EU
Euro-MED
Global

Inception phase

- Establishment of national work plans

Anchoring the work in national setting

- National Team (mandate, objectives)
- National pilot/case
- National support
- Links to other initiatives

- H2020 Indicators
- Assessment framework

Results available

- Sharing of experiences among countries
- National achievements in regional setting

- Data quality
- H2020 Country Profile
- Endorsement of

"Evidence-based policy making"

- Country level assessments
- Contribution to H2020 report
- Reporting/availability of indicators
- Policy briefs

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ENI SEIS II South / H2020 RM group – latest developments

- Operational SEIS developments strongly anchor to political context for regional environmental cooperation (Barcelona Convention, UfM, EU, Arab and West Asia region);
- National situation better than 1 year ago : progress with the processes put in place towards building the information systems in the countries to populate selected set of indicators and support thematic analysis;
- Acknowledged delays in the implementation of the project - national activities behind schedule in particular as regard signature of bilateral agreements (Small Scale Funding Agreements) to operationalise the in-country support and implement SEIS national work plans
  - H2020/NAP Indicators
  - Methodological specifications developed
  - 6 country visits, 4 study tours, 4 SSFA signed
- Progress with developments of infrastructure for data reporting and agreement on the way forward to fulfil the mandate under H2020 roadmap
- Endorse work plan 2019-2020 and corresponding corrective measures
- Full engagement on the steps towards the next H2020 assessment and UfM post 2020 agenda

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Progress on InCountry support

- See Christy Bodouroglou presentation

H2020/NAP WATER indicators

INDICATORS	SUB-INDICATORS
IND 3. Access to Sanitation	3.1 Share of total, urban and rural population with access to an improved sanitation system (ISS)
	3.2 Proportion of population using safely managed sanitation services (SMSS)
IND 4. Municipal Wastewater Management	4.1 Municipal wastewater collected and wastewater treated
	4.2 Direct use of treated municipal wastewater
	4.3 Release of nutrients from municipal wastewater
IND 5. Coastal and Marine Water Quality	5.1 Nutrient concentrations in transitional, coastal and marine waters
	5.2 Bathing water quality

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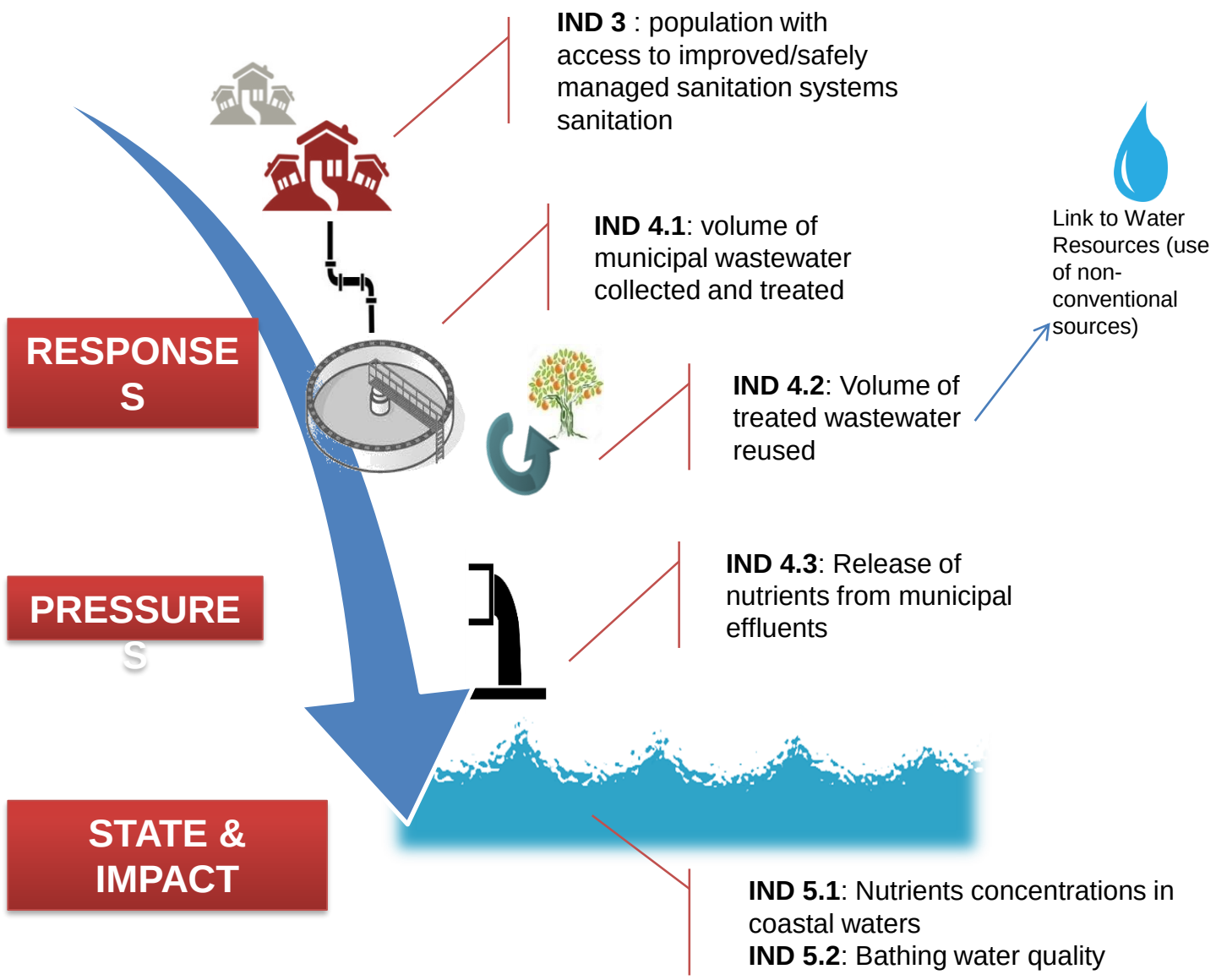
From Indicators to Assessment: Water Indicators as an example of assessing the whole chain from sources to pollution (Responses – Pressure – State – Impact) but also its link to water resources (Ind 4.2), coastal tourism (as driver and impacted sector – Ind 5.2) and human health (Ind 3)



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EEA Technical report | No 6/2014

Horizon 2020 Mediterranean report

Toward shared environmental information systems

EEA-UNEP/MAP joint report

ISSN 1725-2237

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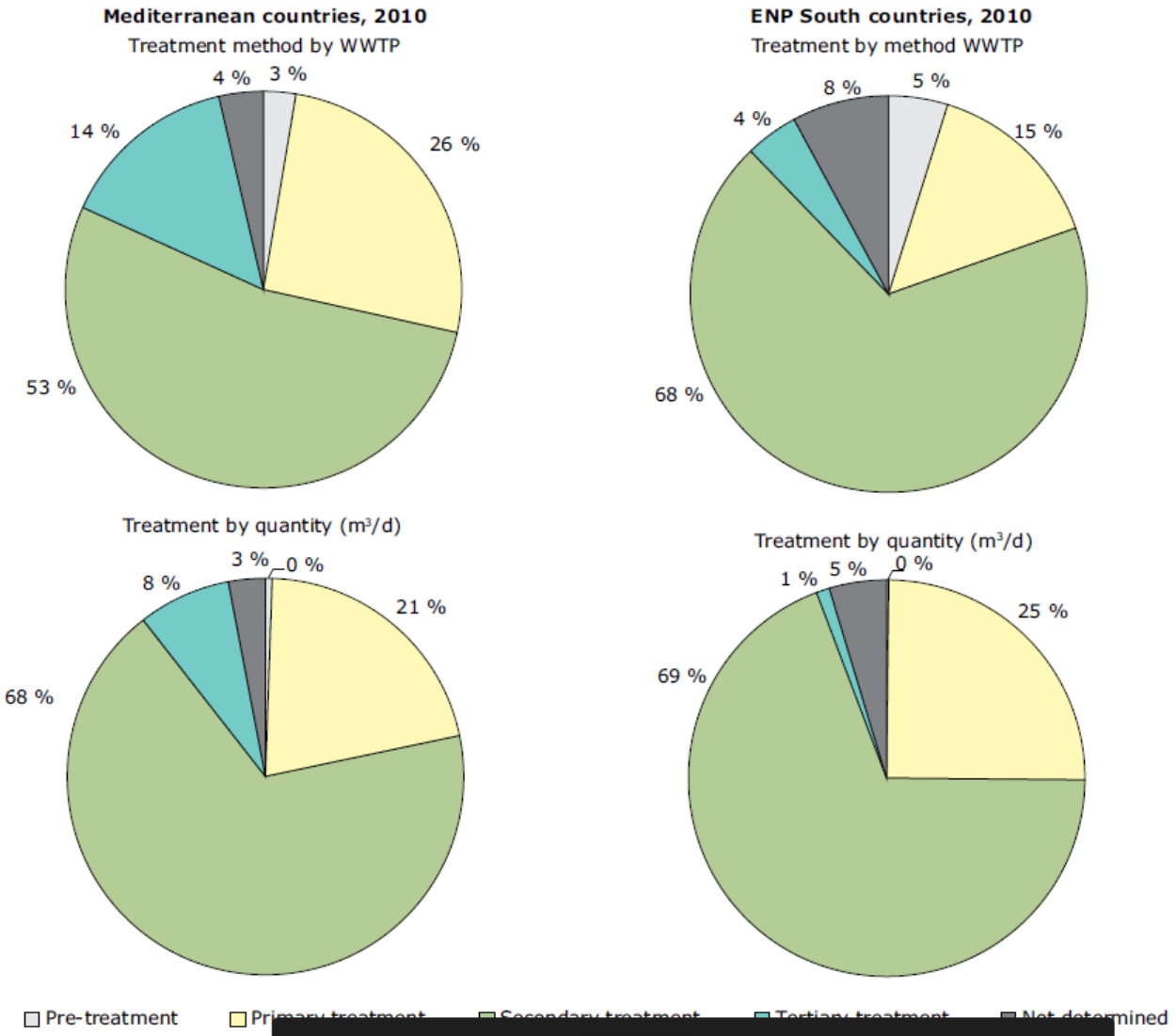
Figure 4.5 Percentage of rural population having access to improved

Figure 4.12 Distribution of treatment method by WWTP and by wastewater quantity for Mediterranean countries and ENP-South countries



Source: UNEP/MAP/MED P

100%

Broader scope: “Mapping” exercise

	Policy theme	H2020 Indicator	SDG	EU	LAS	MSSD	IMAP	SCP	NAPs
IND3	Access to sanitation	**3.1: Share of total, urban and rural population with access to an improved sanitation system (ISS)**	X			X			X
		3.2: Proportion of population using safely managed sanitation services (SMSS)	X			X			X
IND4	Municipal wastewater management	**4.1: Municipal wastewater collected and wastewater treated**	X	X	X	X		X	X
		Additional Information: - Type of Treatment -Annual design capacity and number of functional MWWTPs		X	X				X
		4.2: Direct use of treated municipal wastewater				X			
		4.3. Nutrients from Municipal effluents		X					X
IND5	Coastal and marine water quality	**5.1: Nutrient concentrations in transitional, coastal and marine waters**		X			X		X
		5.2: Bathing water quality		X			X		X

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Broader scope: “Mapping” exercise

			Global and regional policies and indicator processes			
	Policy theme	H2020 Indicator	Global	EU	MED	NAPs
IND3	Access to Sanitation	**3.1: Share of total, urban and rural population with access to an improved (ISS) sanitation system**	**MDG Target:** *By 2015* *Halve the number of inhabitants without access to sanitation* **MDG 7.9** and **SDG 6.2.1**: *Proportion of population using an improved sanitation facility* (old definition)	**Regional Sea Core Category:** ***WWT facilities****;* Possible indicator: *% of coastal urban populations connected to sewage facilities*	**Previous MSSD Target:** *By 2015* *Halve the number of inhabitants without access to sanitation* (MSSD 2005) **MSSD 2.14** **MSSD Indicator COA_P03**: *Proportion of the coastal urban population connected to a sanitation network* **IMAP EO5 (1)**	Common **operational targets** in the NAPs under EO5: *Provide XX% population with connection to sewage networks by [2019 to 2025]* **Algeria, Lebanon** **Core NAP Indicator (WW01)** Referenced 6x in updated NAPs
		3.2: Proportion of population using safely managed sanitation services (SMSS)	**SDG Target 6.2** **SDG 6.2.1 (new definition)**: *Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water*		**MSSD** will adopt the new definition	

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			Global and regional policies and indicator processes			
	Policy theme	H2020 Indicator	Global	EU	MED	NAPs
IND4	Municipal Wastewater Management	**4.1: Municipal wastewater collected and wastewater treated**	**SDG Target 6.3** Link to **SDG 6.3.1**: *Proportion of wastewater safely treated.*	**EU Urban Waste Water Treatment Directive (UWWTD) (91/271/EEC)** Some link to **RS Core Category: *WWT facilities;*** Possible indicator: *% of untreated wastewater*	**EO 5:** *Human-induced eutrophication is prevented (…)* **SAP-MED Target**: By 2025, disposal in conformity with the LBS Protocol for all cities and agglomerations **Regional Plan on Reduction of BOD_5**, under Article 15 of the LBS Protocol, which includes Emission Limit Values (Decision IG.19/7) **MSSD 2.5**: *Percentage of wastewater treated* **Proposed Core NAP Indicator under (2)**: *Volume of wastewater collected, of which volume of wastewater treated (in p.e.)* **Proposed Core NAP Indicator under EO5 (3)**: *Wastewater treated (in p.e.)*	Common **operational targets** in the NAPs under EO5: *Provide XX% of agglomerations in excess of 2000 inhabitants with wastewater collection and treatment by [2019 to 2025]* **Algeria, Egypt, Lebanon, Morocco, Tunisia** **Core NAP Indicator (WW02)** Referenced 4x in updated NAPs
		Additional Information: - Type of Treatment -Annual design capacity and number of functional MWWTPs			**Regional Plan on Reduction of BOD_5**, under Article 15 of the LBS Protocol, which includes Emission Limit Values (Decision IG.19/7) **MSSD Indicator** (WAT-C09: BOD_5)	Common **operational targets** in the NAPs under EO5: *Reduce by XX% nutrient input from agricultural activities discharged to water bodies by [2019 to 2020]* **Egypt, Lebanon** **Core NAP Indicator (WW05)** Total loads of BOD_5, N, P are referenced 5x in updated NAPs % of treatment is referenced 3x in updated NAPs
		4.2: Direct use of treated municipal wastewater	**Link to SDG Target 6.4** (on the use of non-conventional sources of water to increase substantially water-use efficiency by 2030)	**EU UWWTD** specifies that "*treated wastewater shall be reused whenever appropriate*".	UNEP/MAP Guidelines for Municipal Water Reuse in the Mediterranean Region, 2005	

			Global and regional policies and indicator processes			
	Policy theme	H2020 Indicator	Global	EU	MED	NAPs
IND5	Coastal and Marine Water Quality	**5.1: Nutrient concentrations in transitional, coastal and marine waters** Sub-indicators: - Total nitrogen concentration - Total phosphorus concentration - Nitrate concentration - Nitrite concentration - Ammonium concentration - Orthophosphate concentration		**MSFD EO5*: Eutrophication*** **Regional Sea Core Category:** *Total inputs of nitrogen and phosphorus from agriculture, sewage and atmospheric nitrogen.* Possible indicator: *Chlorophyll a concentration as an indicator of phytoplankton biomass*	**EO 5:** *Human-induced eutrophication is prevented (…)* **IMAP Common Indicator 13.** *Concentration of key nutrients in water column (EO5)*	**Core NAP Indicator (WW06)** Referenced 5x in updated NAPs Common **operational targets** in the NAPs under EO5: *Reduce by XX% nutrient input from agricultural activities discharged to water bodies by [2019 to 2020]* **Egypt, Lebanon**
		5.2: Bathing water quality Sub-indicators: % of bathing sites per category of qualification (“excellent”, “good”, “sufficient”, “poor”) based on concentration limits for Enterococci in samplings		**New Bathing Water Directive (2006/7/EC)** EEA bathing water quality indicator (EEA CSI 022)	UNEP/MAP Criteria and Standards for Microbial Water Quality (Decision IG.20/9) **IMAP Common Indicator 21.** *Percentage of intestinal enterococci concentration measurements within established standards (EO9);*	Share of bathing water categories is referenced 3x in updated NAPs

SDG 6: Ensure availability and sustainable management of water and sanitation for all

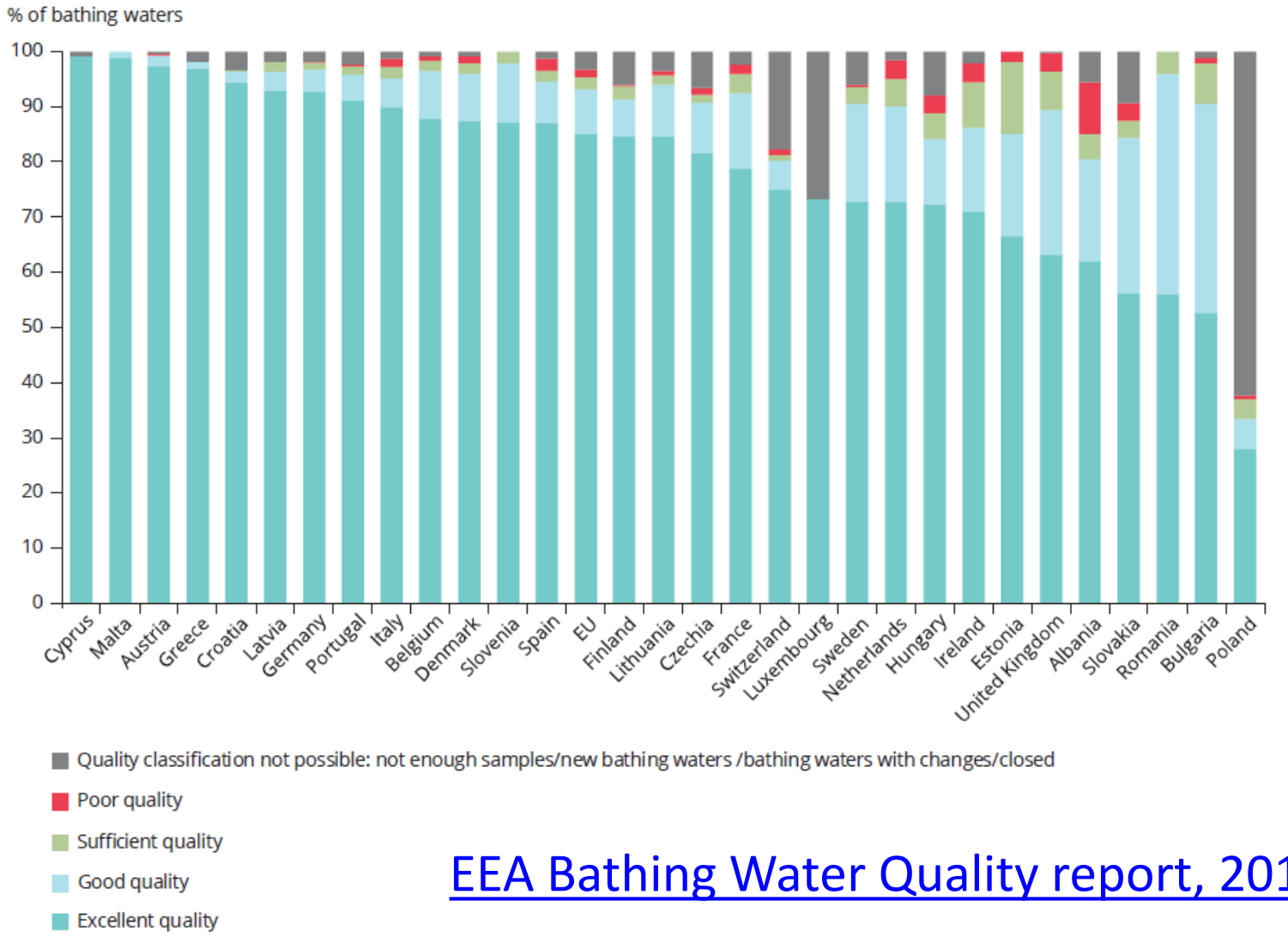
Target	Indicator
6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	6.2.1 Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water
6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	6.3.1 Proportion of wastewater safely treated

SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution	14.1.1 Index of coastal eutrophication and floating plastic debris density

EEA indicators

Figure 1.3 Bathing water quality in 2018 for the 28 EU Member States, Albania and Switzerland



[EEA Bathing Water Quality report, 2019]

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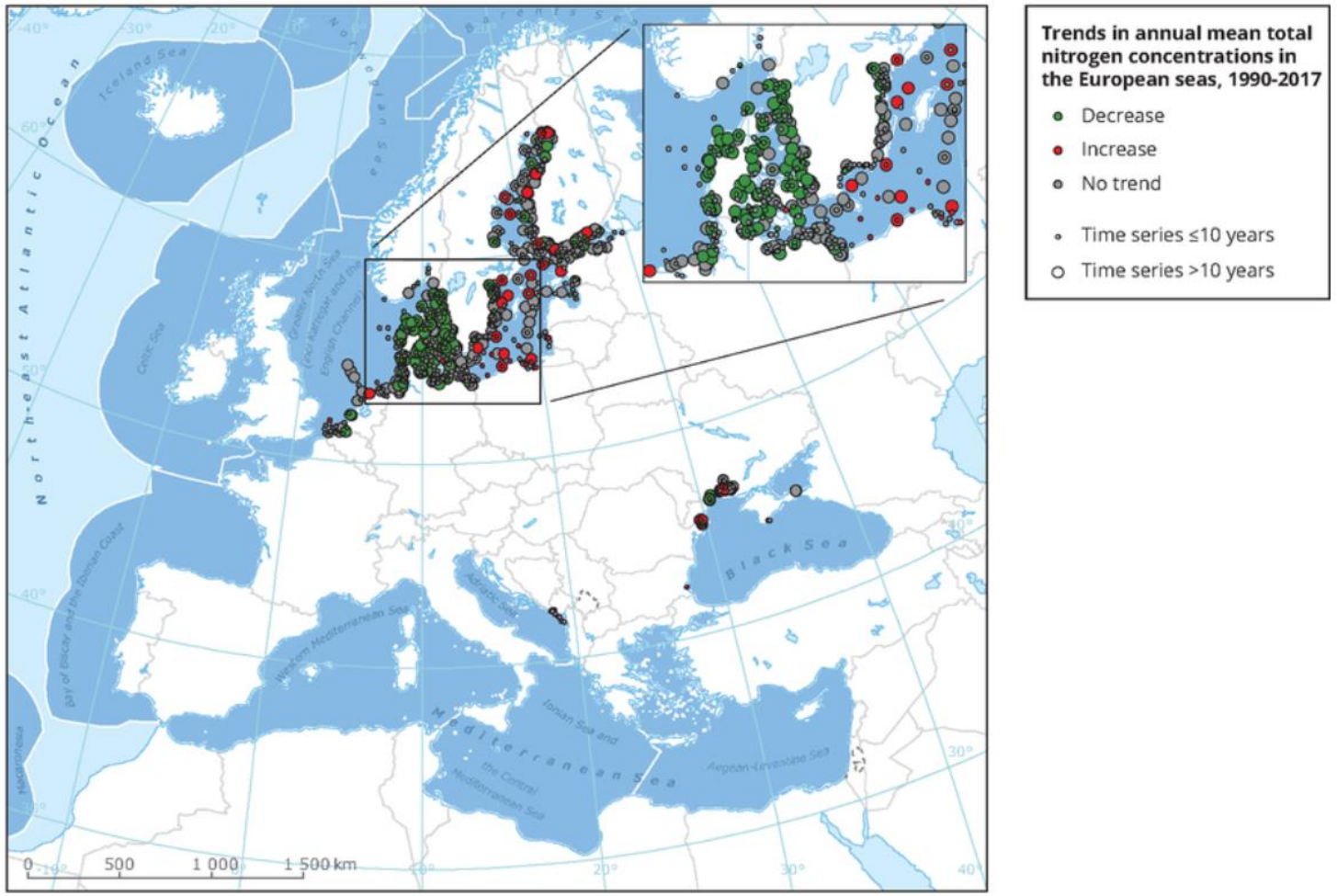
EEA indicators

Fig. 3: Trends in annual mean total nitrogen concentrations in European seas



- https://www.eea.europa.eu/data-and-maps/indicators/nutrients-in-transitional-coastal-and-4/assessment

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IMAP Common Indicator 13

Key messages (CI13)

Key messages

- The available data show that assessment is possible. Key nutrient concentrations are within characteristic ranges for coastal areas and in line with the main processes undergoing in concerned interested area.
- Criteria for reference condition and boundaries for key nutrients in the water column have to be built and harmonised through the Mediterranean region.

Knowledge gaps

- At the eutrophication hot spots in the Mediterranean Sea a comprehensive key nutrient concentrations in the water column trend analysis would be beneficial. Significant trends need to be detected from long time series that are able to capture nutrient concentrations changes in coastal waters as the analysis of short time series can erroneously lead to interpret some spatial patterns produced by random processes nutrients concentration trends. For that reason, data availability should be improved. A possible approach is to use data stored in other databases were some of the Mediterranean countries regularly contribute.
- Criteria for reference condition and thresholds/boundary values for key nutrients in the water column have to be built and harmonised through the Mediterranean region. Data availability have to be improved. A possible approach is to use data stored in other databases were some of the Mediterranean countries regularly contribute.

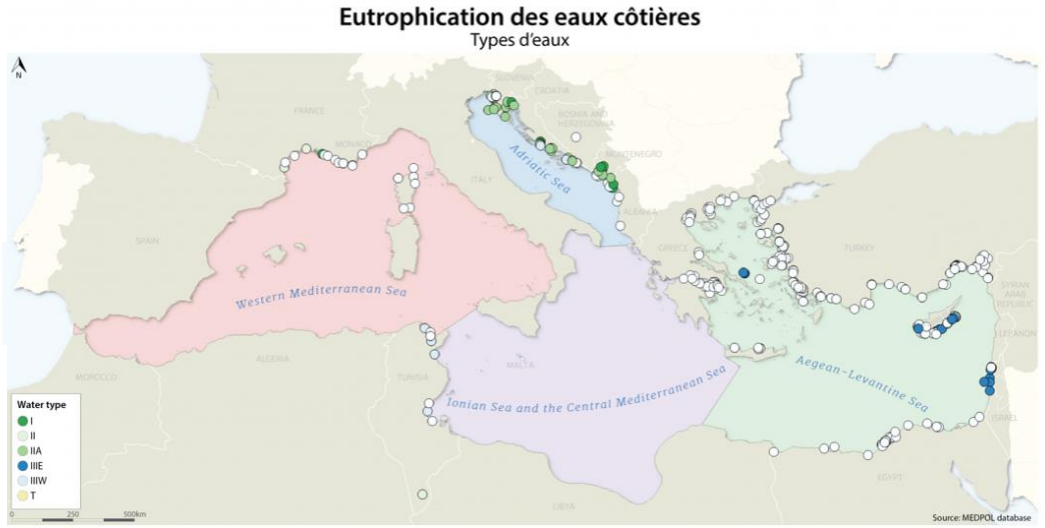

Figure 2: Stations in the Mediterranean region for which nutrient concentrations were sampled. Also are shown the water types (applicable for phytoplankton; IMAP, 2017) were minimal statistical requirements were satisfied (10 samples in the last 10 years and in the surface layer, <= 10 m)

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MSSD

UN environment
United Nations Environment Programme

Mediterranean Action Plan
Barcelona Convention

Plan Bleu

MSSD Theme	Indicator Nr/ Title		H2020 Indicator
Sea and coast	1.5	Proportion of the coastal urban population connected to a sanitation network	WATER Ind 3.1
Rural & Resources	2.5	Percentage of wastewater treated	WATER Ind 4.1
Rural & Resources	2.14	Share of population with access to an improved sanitation system (total, urban, rural)	WATER Ind 3.1
Rural & Resources		Percentage of wastewater reused by country	WATER Ind 4.2
Cities	3.6	Waste generated and treated by type of waste and treatment type	WASTE Ind 1.1

Share of population with access to an improved sanitation system (Rural and Urban) 2015

> "In 2015, the proportion of the population with access to an improved sanitation system is greater than 75% in all Mediterranean countries."

Definition:

This indicator represents the population with access to a basic sanitation system for disposal of human excrement of households or the immediate neighbourhood (public wastewater network, septic tanks, etc.). It is one of the Millennium Development Goals Indicators (n°31) and was proposed for the Horizon 2020 initiative.

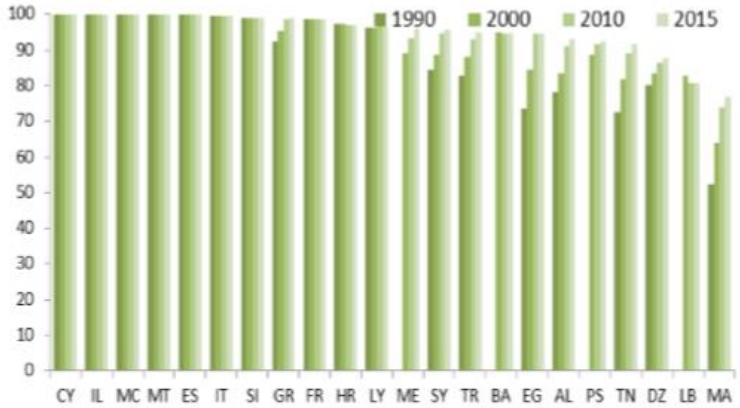
Precautions / Notes:

The fact that facilities are available does not mean that they are used. A town sanitation network should allow for the collection and evacuation of wastewater of all types (cess-water, household water, industrial water, etc.) while ensuring transporting it, the fastest way possible, to the place where it is treated (wastewater treatment plant).

Because of differences in the definition of urban population from one country to another, international comparisons can be biased. This indicator should be made more precise in the Mediterranean region in order to show the progress being made according to the type of wastewater collection (individual or collective) and the treatment methods.

Sources / References:
United Nations Statistics Division, The Millennium Indicators Database.
The Millennium Development Goals Report 2012, United Nations.
WHO/UNICEF Joint Monitoring Programme (JMP) for the water supply and sanitation

IS ACCESS TO SANITATION SYSTEM IMPROVING?



Share of population with access to an improved sanitation system, 1990 – 2015 (%)

Access to an improved sanitation system (not necessarily including waste water treatment) is important, especially in urban areas where the contact possibility of wastewater of the population is higher.

In the Mediterranean, about 27 million people do not have access to an adequate sanitation system.

In 2015, the proportion of the population with access to a sanitation system is about 77% in Morocco and 100% in most of the northern Mediterranean countries.

The percentage of the urban population with access to a sanitation system is higher than 90%, with the exception of Morocco (84%) and Lebanon (81%).

The disparities between urban and rural areas are still great and the access rate in rural areas can be lower than 80% (Morocco, Tunisia).

The rate of the access to an improved sanitation system in the south and east Mediterranean countries (95%) is higher than the world average (about 78%). It is the same situation for the access rate in urban (96%) and rural areas (88%).

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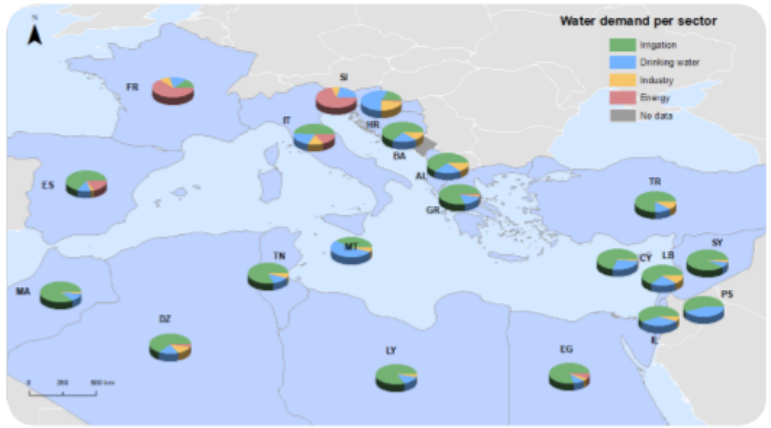
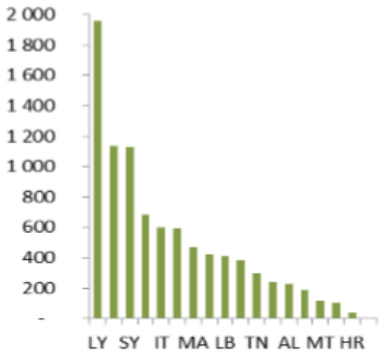
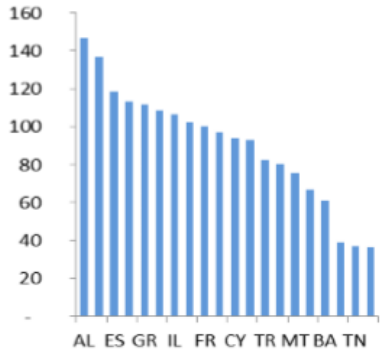


Water demand by sector (period 2005-2010)

IS WATER DEMAND BECOMING MORE MODERATE?



Water demand in agriculture / Added value in agriculture, 2005-2009 (m^3/ 1000 US$)



Drinking water demand per capita, 2005-2009 (m^3/year)

> " Overall, the evolution in water demand is alarming in the Mediterranean countries because this resource is often scarce. "

Definition:

Total water demand is defined as the sum of the volume of water mobilised 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:

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

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). But the water demand and the growth in GDP should also be decoupled by increasing the value added for per cubic metre of water used.

Better demand management also allows the decoupling of the rise in irrigated production and the rise in the use of water for irrigation.

Overall, the evolution in water demand is alarming in the Mediterranean countries because this resource is often scarce.

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 the Balkan countries and France where the precipitations allow practising a major rain-fed agriculture, the water demand for irrigation is low.

The volume of water used to produce 1000 dollars of agricultural value added goes from about 7 m^3 in Slovenia to more than 1000 m^3 in Syria and Egypt, and close to 2000 m^3 in

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Objectives of the workshop

This meeting aims:

- to review and provide guidance on assessment of the H2020/NAP water cluster indicators at national and regional level; and
- to make progress on the overall water thematic assessment of the H2020 indicator-based assessment report

In accordance with the ENI SEIS II South Support Mechanism Action Plan, and in support to the regional assessment of the Union for the Mediterranean H2020 Initiative for a cleaner Mediterranean

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Agenda

DAY 1	Tuesday, 9 July, 2019	
12.00-13.00	*Registration of participants*	
	Session 1. Setting the scene	
13:00-14:15	Opening and welcome by EEA and UN Environment MAP Tour du table of the participants State of play ENI SEIS II South project implementation 	Information and guidance
	Session 2. Assessment of H2020/NAP indicators on WATER	
14:15-15:30	a) Building on previous work, e.g. indicator specification sheets; data flow organization and structuring b) Status of population of indicators at national level c) Guidance on WATER indicator assessment d) Potential synergies with other ongoing assessment exercises (assessment of regional plans; SoED pollution chapter) Q&A session 	Information Discussion

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Agenda

DAY 1	Tuesday, 9 July, 2019	
	Session 3. Synergies with other ongoing initiatives	
15:45-17:00	a) UfM Secretariat (Skype) b) Assessment of regional plans and NAPs c) SoED d) EMWIS water info system e) ESCWA (Skype) f) SWIM/H2020 & WES g) OECD Water governance indicators 	Information Discussion
17:00-17:30	Conclusions from Day 1	

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