Synthesis Report SDG 6 Water and Sanitation 6.3, 6.4 and 6.6

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Based on the work of UN-Water Task Force and MANY other contributors

Members of Taskforce include: CEO Water Mandate, FAO, ILO, UNDP, UNECE, UNEP, UNESCO (WWAP, coordinator), UN-HABITAT, UNICEF, UNU, UN-Water TAU, WHO, WMO and World Bank

Workshop on Synthesis Report SDG 6

2 May 2018, New York, USA

UN WATER

SDG 6.3 Improve water quality, wastewater treatment and safe reuse

Main Message

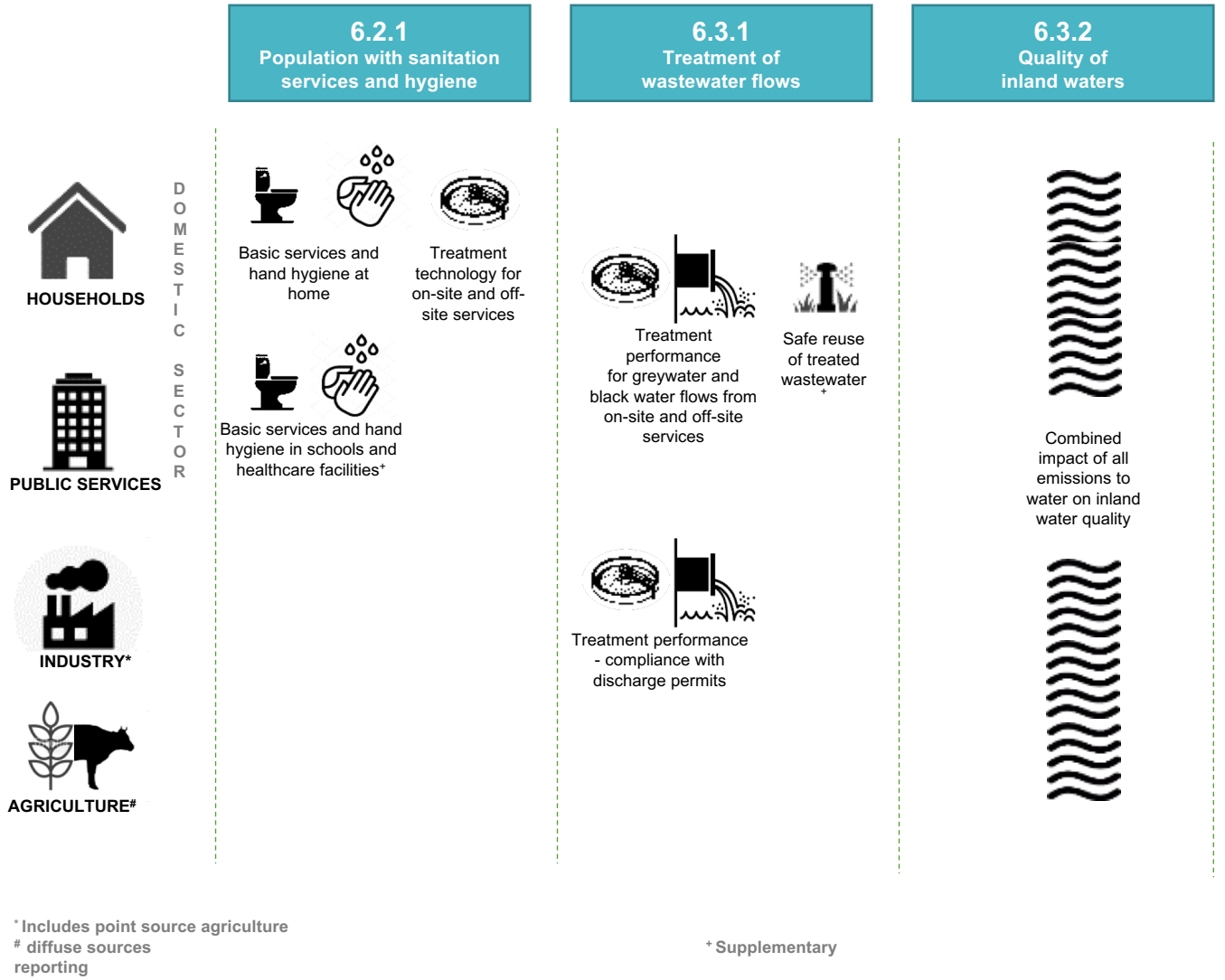
Improving water quality can increase water availability

Worsening water pollution must be tackled at source and treated to protect public health and the environment and increase water availability.

SDG 6.3 Improve water quality, wastewater treatment and safe reuse

"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"

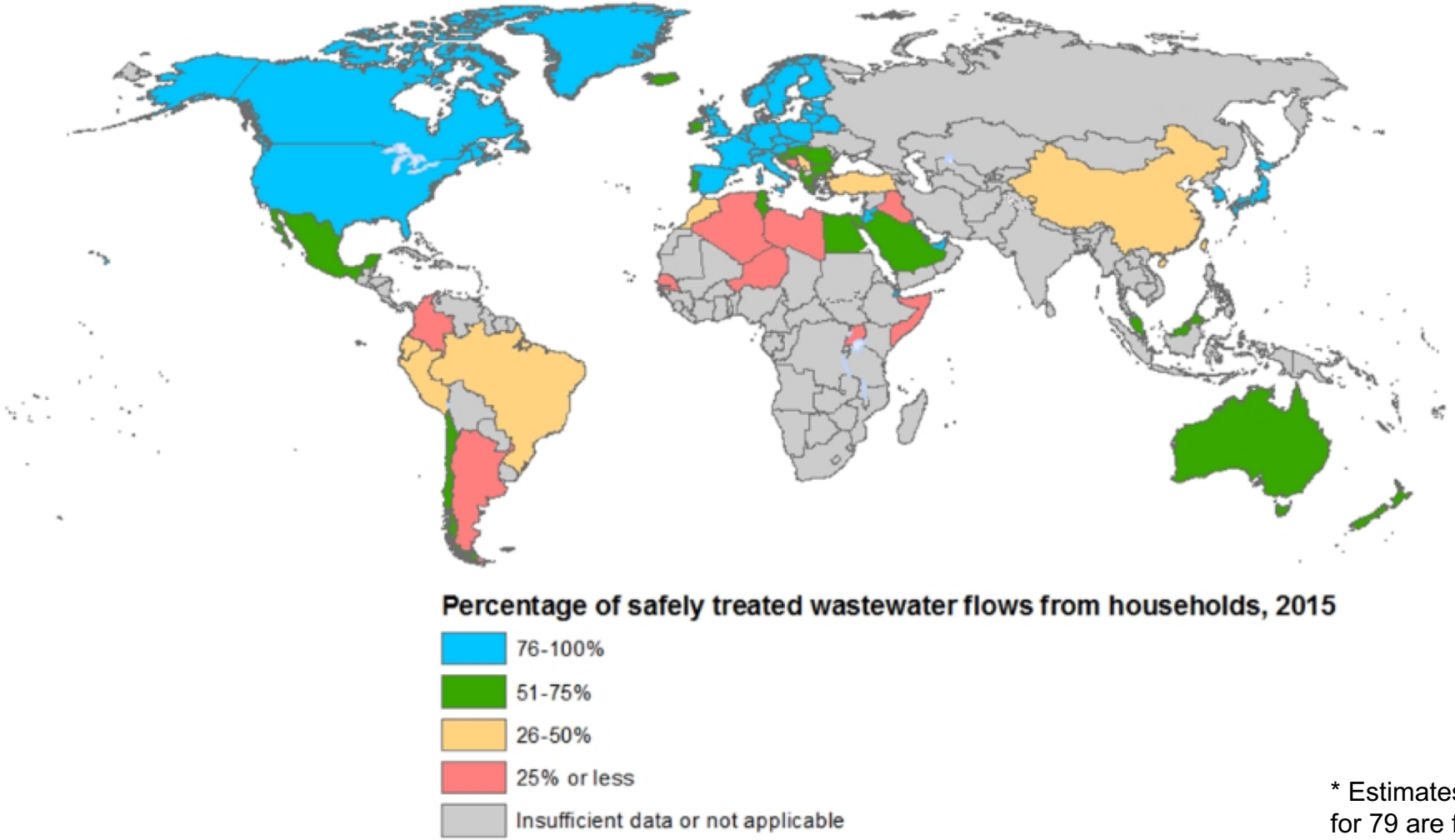
The extent of industrial pollution is not known, as discharges are poorly monitored and seldom aggregated at national level



* Includes point source agriculture
# diffuse sources reporting

+ Supplementary

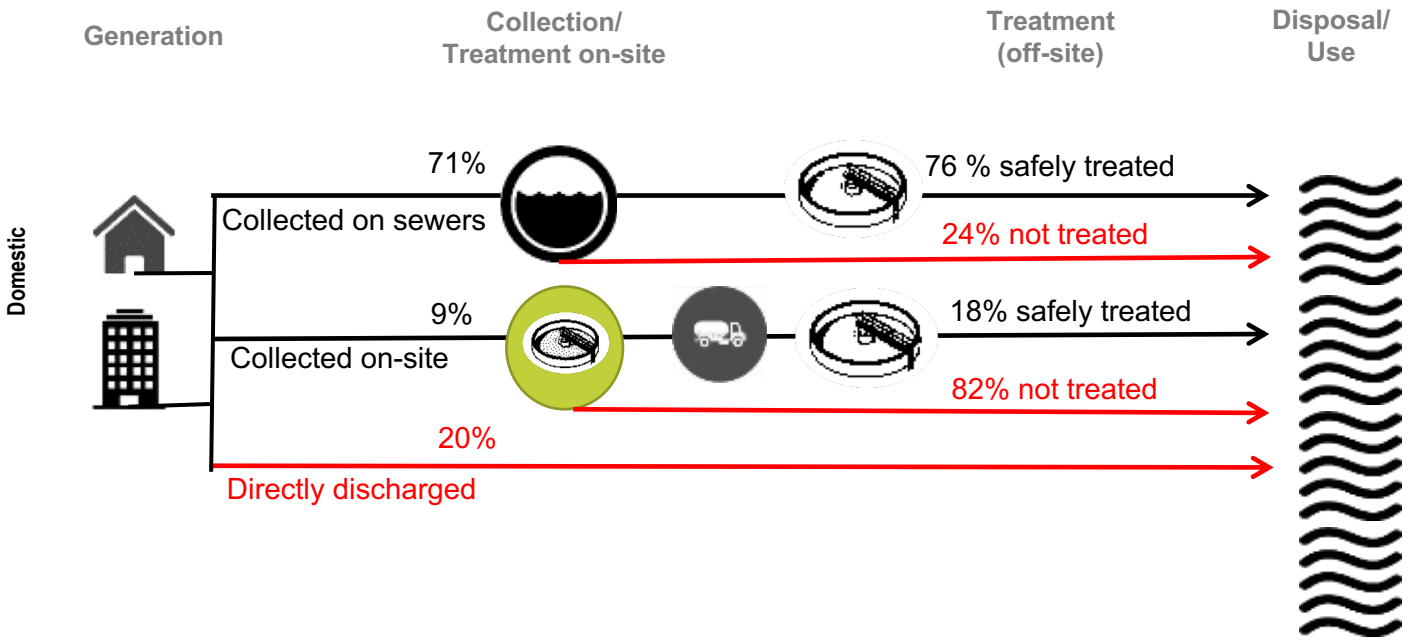
SDG 6.3.1 Proportion of wastewater safely treated*



* Estimates for domestic wastewater have been made for 79 are from mainly high and high-middle income countries and exclude most of Africa and Asia

Data sources: WHO – UN-HABITAT, 2018

SDG 6.3.1 Proportion of wastewater safely treated*



More than 40 % is discharged untreated

This is NOT a global estimate as:

(i) it does not cover both 50% of the population and 50% of countries

(ii) it is only for domestic wastewater nothing else

Wastewater is an undervalued source of water, energy, nutrients and other recoverable by-products

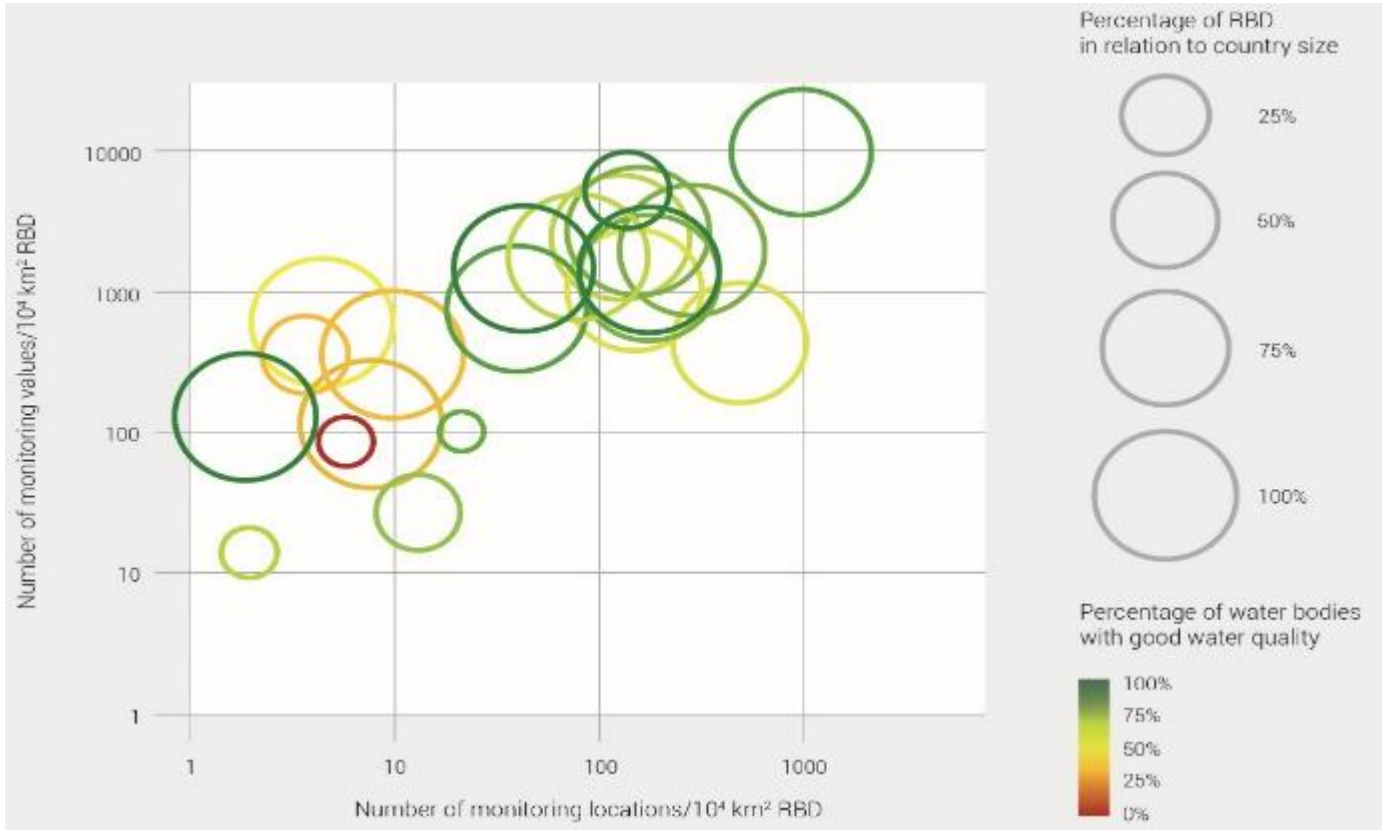
Tackle pollution at its source and treat wastewater:

- ✓ protects public health and the environment,
- ✓ mitigates the costly impact of pollution and;
- ✓ increases the availability of water resources.

* Estimates for domestic wastewater have been made for 79 are from mainly high and high-middle income countries and exclude most of Africa and Asia

Data sources: WHO – UN-HABITAT, 2018

SDG 6.3.2 Proportion of bodies of water with good ambient water quality



Summary of baseline of indicator 6.3.2 submissions

Notes: RBD is reporting basin district. The circle size relates to the proportion of the individual country covered. The location of the circle indicates the number of monitoring stations and monitoring values used in the indicator calculation in the individual country.

Indicator 6.3.2 calls for available in-situ data derived from national monitoring systems to be combined into a water quality index.

Status of baseline reporting

- 48 countries reported (31 on open water bodies, 36 on rivers, 26 on groundwater and 23 on all three)

Many challenges faced

- Solutions to improve / achieve reporting
- Greater support needed
- Monitoring programme resourcing
- Importance of quality-assured data

Source: International Centre for Water Resources and Global Change (ICWRGC)

SDG 6.3 Improve water quality, wastewater treatment and safe reuse

Modelling analysis of organic pollution and hotspots in southern hemisphere surface waters

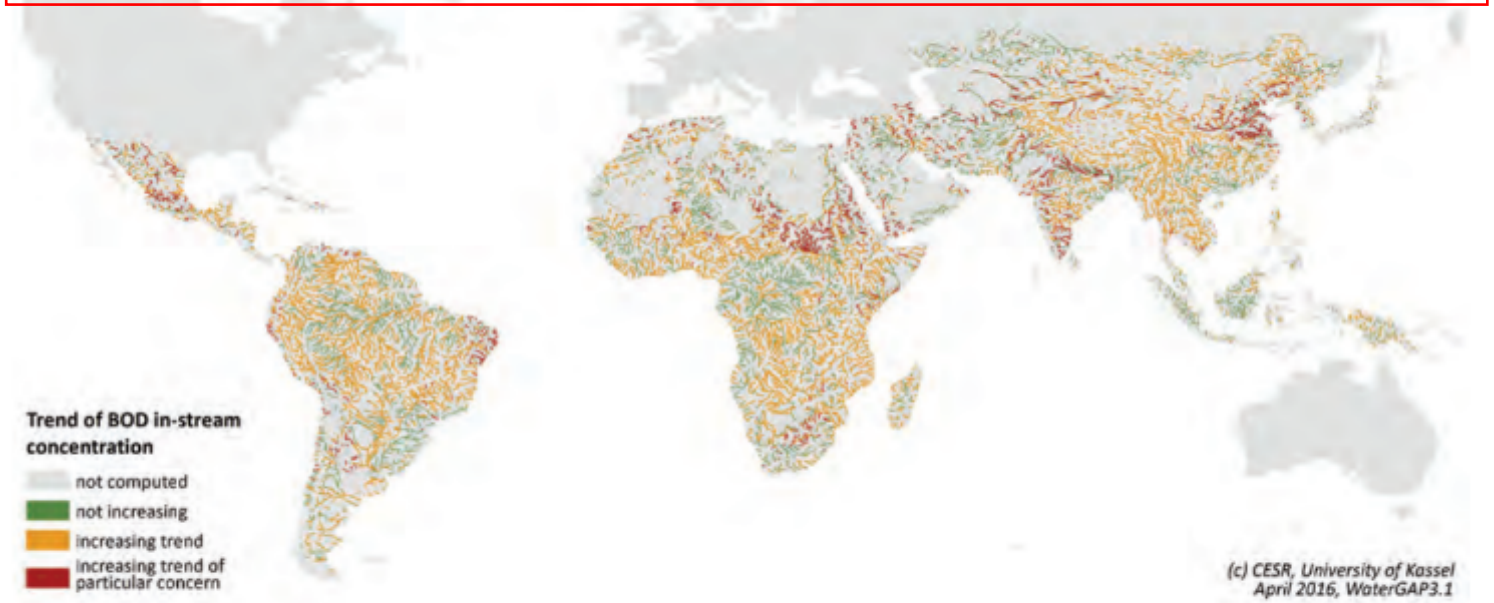


Figure 3.15: Trend in BOD concentrations in rivers between 1990–1992 and 2008–2010. River stretches marked with orange or red have increasing concentrations between these two periods. River stretches marked with red have an "increasing trend of particular concern" meaning that in these stretches the pollution level increased into the severe pollution category in 2008–2010, or that they were already in the severe pollution category in 1990–1992 and further increased in concentration by 2008–2010.

Ambient freshwater quality is at risk globally.
Modelling analysis shows:
Freshwater pollution is prevalent and increasing in many parts of Latin America, Africa and Asia.

Monitoring and assessment are essential for an exact global estimate of water pollution. Yet the current **lack of water quality monitoring, data coverage and accessibility** does not provide a comprehensive picture.

Monitoring programmes can be perceived as expensive, but costs are minimal compared to the relative value of the water resources and the savings made by scientific decision-making.

SDG 6.4 Increase water-use efficiency and ensure freshwater supplies

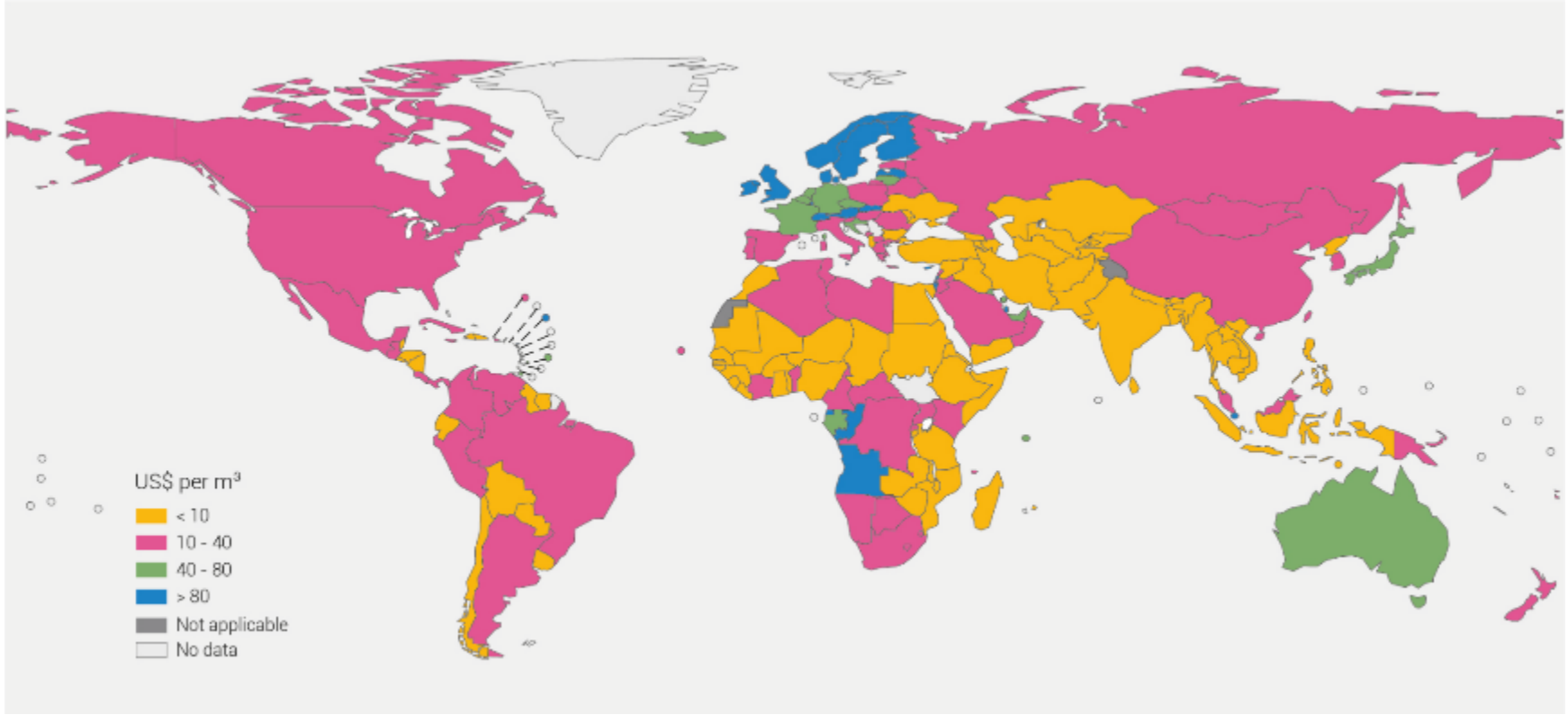
Main Message

Agriculture offers opportunities for significant water savings.

The agricultural sector accounts for nearly 70 per cent of global freshwater withdrawals. Saving just a fraction of this would significantly alleviate water stress in other sectors.

SDG 6.4.1 Change in water-use efficiency over time

Water-use efficiency is defined as the gross value added per unit of water used, expressed in US$/m3.



Water-use efficiency (US$/m3)

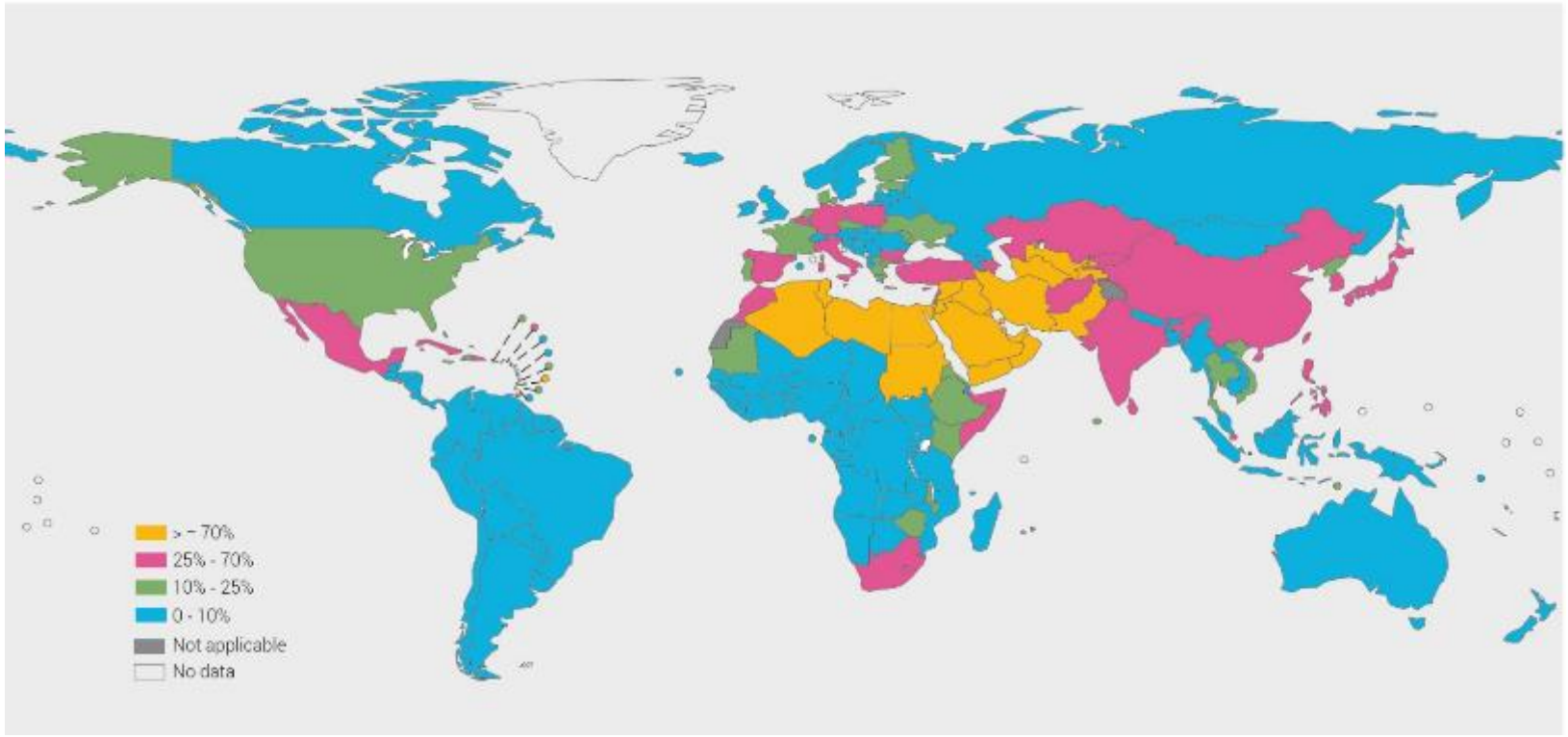
Countries at a different level of general development have comparable values of water-use efficiency.

Increasing water-use efficiency means using less water while carrying out society's economic activities.

This can be done by increasing agricultural water productivity and reducing water losses, such as tackling leakage in municipal distribution networks.

Data sources: FAO, 2016

SDG 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources



Level of water stress

More than 2 billion people live in countries experiencing high water stress. The situation will likely worsen as populations and the demand for water grow, and as the effects of climate change intensify.

Average Global Water Stress is 11 %

Highest water stress are Northern Africa and Western Asia (79%) and Central and Southern Asia (66%).

Sub-Saharan Africa, has a low level of water stress at 3%, but this hides the large differences between the wetter north and drier south.

Data sources: FAO, 2016

SDG 6.6 Protect and restore water-related ecosystems

Main Message

Sustaining water-related ecosystems is crucial to societies and economies

70% of natural wetlands was lost over the last century.
Sustaining and recovering water-related ecosystems are vital for societal well-being and economic growth.

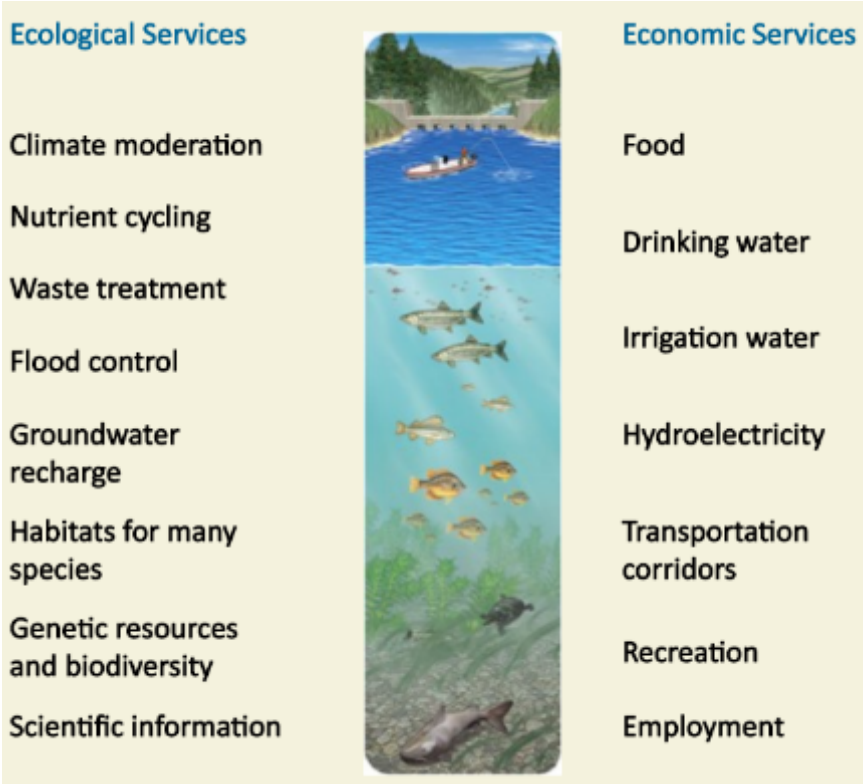
SDG 6.6 Protect and restore water-related ecosystems

Target 6.6 focuses on the protection and restoration of water-related ecosystems to ensure they continue to provide sustainable services to society.

Status of monitoring in 2018:

38 countries have reported data for indicator 6.6.1 (20 % of the 193 Member States).

Of these 38 countries, 82% submitted data on all three of the subindicators: spatial extent, quantity and quality.



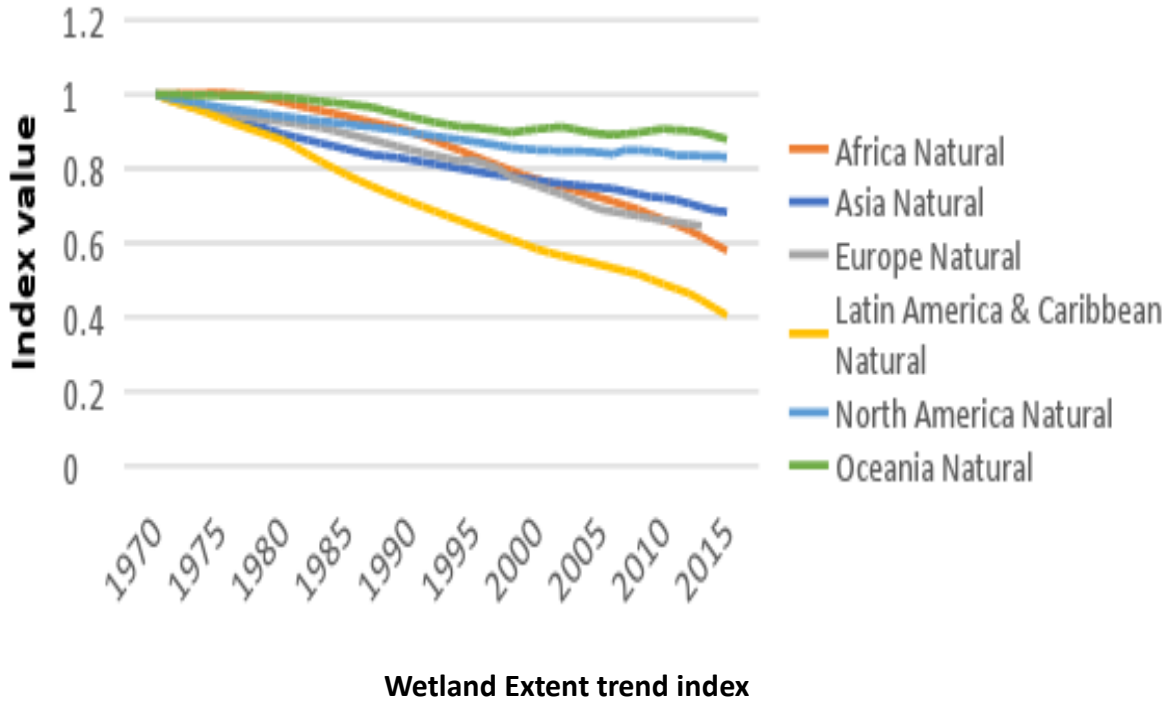
Ecological and economic services provided by freshwater ecosystems
Source: Miller and Spoolman (2009).

SDG 6.6 Protect and restore water-related ecosystems

There are currently insufficient data to adequately measure progress towards SDG target 6.6.

However, monitoring changes to water-related ecosystems can be supported using Earth observations.

The concurrent loss in natural wetlands indicates that there may be significant conversion to artificial wetlands or other land-use types such as agriculture.



Wetland Extent trend index

The JRC data do not differentiate between types of surface water and do not capture some of the major areas of vegetated wetland, so they are complemented by the wetland extent trend index, which calculates average trends in natural wetland extent over time.