**Target number:** 6.6 Indicator

**Number and Name:** 6.6.1 Change in the extent of water-related ecosystems over time

**Agency:** UN Environment

**Has work for the development of this indicator begun?** Yes, the integrated monitoring project for SDG 6 under UN-Water (www.sdg6monitoring.org), is collecting data between March – September 2017 to create a 2017 baseline. All 193 UN Member States have been contacted by a priority being placed on gathering data for the significant water bodies in a list of 65 countries. The step-by-step methodology for the indicator is also available on the monitoring website at http://www.sdg6monitoring.org/news/2017/3/21/monitoring-ecosystems-indicator-661.

**Who are the entities, including national and international experts, directly involved and consulted in developing the methodology/and or data collection tools?**

Methodology development for each SDG 6 target is led by a Target Team which includes:

- UN Environment: Led by Joakim Harlin (joakim.harlin@unep.org) and including GEMS/Water and UNEP/WCMC
- Convention on Biological Diversity
- Ramsar Convention on Wetlands
- The International Water Management Institute (IWMI)
- The European Space Agency
- The International Union for Conservation of Nature (IUCN)

Under the UN-Water umbrella, an integrated global monitoring initiative (www.unwater.org/gemi) was established in 2014 and together with the WHO/UNICEF JMP and WHO GLAAS, is monitoring global progress towards the entirety of SDG 6. As an inter-agency initiative, the initiative’s partners include UN Environment, UN-Habitat, UNICEF, FAO, UNESCO, WHO and WMO.

**What is the involvement of or how do you plan to involve National Statistical Systems in the development of the methodology?**

National Statistical Offices are fully involved in the development of the methodology. Many national level experts have contributed to the work of the 6.6.1 Task Team. Additionally, integrated monitoring has been pilot tested in five countries: Senegal, Peru, Jordan, Uganda and the Netherlands and further testing is now being rolled out in other countries. National working groups have been established in these countries to support the development of the methodology in a consultative process. The National Statistical Offices of the five countries are involved as well as other parts of the National Statistical System.

**Please briefly describe the process of developing the methodology for the indicator**
The methodology was developed by a global target team in collaboration with a variety of national and international experts. Further refinement of the methodology is based on feedback from countries.

Please indicate new international standards that will need to be proposed and approved by an intergovernmental process (such as UNSC) for this methodology. The proposed draft methodology aligns with classifications of water related ecosystems as agreed by CBD and RAMSAR. Avenues for further integrating this methodology into the UN Statistical Commission are being discussed.

When do you expect the methodological work on this indicator to be completed? The pilot testing was completed in 2016, and the methodology and initial data collection were rolled-out in 2017. Data collection for 6.6.1 and 6.3.2 have been combined.

Are data and metadata already being collected from the National Statistical System for one or more components of this indicator? Yes

If yes, please describe: This indicator tracks changes over time in the extent of water-related ecosystems. It uses the imminent date of 2020 in order to synchronise with the Aichi Targets of the Convention on Biological Diversity but will continue beyond that date to synchronise with the rest of the SDG Targets set at 2030. The indicator methodology seeks to include the following ecosystem categories: wetlands (swamps, marshes and peatlands), open water (rivers and estuaries, lakes, coastal waters and reservoirs), and groundwater aquifers. Three principle sub-indicators describing aspects of these ecosystems are monitored to describe the extent:

- Their spatial extent
- The quantity of water contained within these ecosystems
- The quality of water contained within these ecosystems (directly linked to SDG indicator 6.3.2)

In addition, an optional sub-indicator for countries who have the ambition and ability to do so is “the health or state of these ecosystems.”

The ecosystems included are the wetlands described by the Ramsar Convention (Ramsar, 1971) as “‘areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres’. Also included is groundwater, where possible for countries.

How do you plan to collect the data?

X Send questionnaire(s) to country

X Obtain data directly from country database/website
Joint survey/compilation with national agency and international entity

Satellite images, remote sensing (exploring this option now together with UN-GGIM and GEO Secretariat)

If the indicator involves multiple components from different data sources, please describe how each individual component of the indicator will be collected here. The indicator will track changes over time in the extent of water related ecosystems such as wetlands, rivers, lakes and reservoirs, estuaries and groundwater (where possible). A combination of Earth Observation and ground-based data will be applied. For each of the ecosystem types, standard methods exist. Combining these metrics into one indicator is being developed in consultation with countries and the GEO-Secretariat and members of the UN-GGIM.

With what frequency is data expected to be collected? Every two years

Is there a process of data validation by countries in place or planned for this indicator? Yes

If yes, please briefly describe: All data will either originate from national level sources or be sent to national counterparts for official validation. UN Environment has already reached out to countries to identify the appropriate national focal point.