

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

Target number: 6.6

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

Agency: United Nations Environment Programme (UNEP)

Has work for the development of this indicator begun?

Yes

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

UNEP (lead); CBD, Ramsar, IUCN and IWMI. 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, will be able to monitor global progress towards the entirety of SDG 6. As an inter-agency initiative, the initiative's partners include UNEP, UN-Habitat, UNICEF, FAO, UNESCO, WHO and WMO. Methodology development for each SDG 6 target is led by a Target Team, and for 6.6 the Target Team is led by UNEP (chair) and also includes CBD, Ramsar, IUCN and IWMI. Integrated monitoring is currently being pilot tested in six countries: Senegal, Peru, Jordan, Uganda, Bangladesh and the Netherlands. National working groups have been established in these countries to support the development of the methodology in a consultative process.

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

The National Statistical Offices of the six countries are all invited to the inception workshops and will be involved in the pilot testing of methodologies for SDG indicators, including 6.6.1.

Please briefly describe the process of developing the methodology for the indicator

A draft methodology has been developed by a global target team (see 6.2.1 above) and is currently being pilot tested in six countries as described above.

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

When do you expect the methodological work on this indicator to be completed?

The pilot testing is expected to be completed in October/November 2016, with revised and final methodology ready for roll-out in March 2017.

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 of Biodiversity but will continue beyond that date to synchronise with the rest of the SDG Targets set at 2030. 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. Accordingly 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 health or state of these ecosystems

How do you plan to collect the data?

- 1) Send questionnaire(s) to country
- 2) Obtain data directly from country database/website
- 3) Joint survey/compilation with national agency and international entity
- 4) Satellite images, remote sensing

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. 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 the novel element that has been developed.

Three principle aspects of these ecosystems are monitored to describe the extent:

- Their spatial extent
 - The quantity of water contained within these ecosystems
 - The health or state of these ecosystems
- These are also linked to water quality as collected by 6.3.2

There are a number of international organisations and projects with abundant literature that describes the data, the collection of data and the processing of this data to achieve the objective of measuring the change in extent of water-related ecosystems. The collection of data is possible through the collaboration of international and national institutions (UNEP (GEMS Water); WCMC; Biodiversity Indicators Partnership – Ramsar, Convention on Biological Biodiversity; Convention on Combatting Desertification; GEO/GEOSS, NASA, GRDC), provide the networks required. Ramsar Parties will in addition be required to report (for each COP, every 3 years, starting in 2017) if they have a national wetlands inventory, on the extent in km² of the total wetlands surface.

With what frequency is data expected to be collected?

Every two to three years is a realistic frequency for updating the indicator information.

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

Yes

If yes, please briefly describe:

Several of the components of the indicator such as spatial extent and volume of water stored in lakes and wetlands are collected and regularly validated by national water authorities. For the earth observations that will be used for the compilation of the indicator national ground verification programmes are planned.

Please note:

Under the UN-Water umbrella, a joint and collaborative monitoring effort has been established which involves all relevant UN entities and ensures coherence in implementation of global monitoring and reporting for SDG 6 in its entirety. Through this initiative an initial roll-out of SDG 6 indicators is currently taking place in 6 countries. To find out more about the integrated monitoring of water and sanitation related SDG targets, see www.unwater.org/gemi.

The indicators proposed for SDG 6 are conceptually clear, have an established methodology, build on international standards and many countries are already collecting the required information on a regular basis. Further information on methodology for all of SDG 6 indicators can be found in the UN-Water metadata compilation: <http://bit.ly/28N7Ef8>.