UN		
	목 표	6. Ensure availability and sustainable management of water and sanitation for all
	세부목표	6.6 By 2020 protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes
	Indicator	**6.6.1 Change in the extent of water-related ecosystems over time**

I. Global indicator

〈Type 2〉

Indicator	Change in the extent of water-related ecosystems over time
Definition	The indicator includes five categories: vegetated wetlands, rivers and estuaries, lakes, aquifers, and artificial waterbodies. For purposes of this methodology, the text refers only to these five ecosystem category terminologies. * Vegetated wetland includes swamps, fens, peatlands[1], marshes, paddies, and mangroves with reference to the Ramsar Convention on Wetlands definition of wetlands; artificial waterbodies include open waterbodies created by humans such as reservoirs, canals, harbors, mines and quarries.

II. Data description

[Data] Waterbodies as a proportion of the national land (permanent and maybe permanent) (% Total area)

Calculation method	The sub-indicators for the five categories follow their respective methodologies.
Unit	Percentage(%)
Data sources	**Level 1:** 2 Sub-Indicators based on globally available data from earth observations which will be validated by countries against their own methodologies and datasets: ① Sub-Indicator 1 - spatial extent of water-related ecosystems $\text{Percentage change in spatial extent} = \frac{(\beta-\gamma)}{\beta} \times 100$ where β= the average national spatial extent from 2001-2005, where γ= the average national spatial extent of any other 5 year period ② Sub-Indicator 2 - water quality of lakes and artificial water bodies The methodology for this Sub-Indicator describes how Earth observations are generated and processed into two datasets of chlorophyll-a(Chl) and total suspended solids(TSS) within lakes globally. Results are averaged over a year for each lake to produce lake-wide Chl and TSS concentrations. **Level 2:** Data collected by countries through 3 Sub-Indicators: ③ Sub-Indicator 3 - quantity of water (discharge) in rivers and estuaries $\text{Percentage change in discharge} = \frac{(\beta-\gamma)}{\beta} \times 100$ where β= historical 5 year reference discharge, where γ= the average discharge of 5 year period of interest ④ Sub-Indicator 4 - water quality imported from SDG Indicator 6.3.2 SDG Indicator 6.3.2. The data collected for Indicator 6.3.2 is utilized for Sub-Indicator 4 to inform a calculation of percentage change over time in

1) Peatland: Deposition region of peat (carbon compound produced from an accumulation of decayed or denatured vegetative organic matter).

	waterbodies with good ambient water quality. ⑤ Sub-Indicator 5 - quantity of groundwater within aquifers Percentage change in quantity= $\frac{(\beta-\gamma)}{\beta} \times 100$ where β= historical 5 year reference groundwater level, where γ= the average groundwater level of 5 year period of interest
Calendar	▌Time series: 2005-2018(All data for Korea are included) ▌Data release: Annually
Data compilers	UNEP(United Nations Environment Programme)
Global indicator link	▌Metadata: https://unstats.un.org/sdgs/metadata/files/Metadata-06-06-01a.pdf https://unstats.un.org/sdgs/metadata/files/Metadata-06-06-01b.pdf ▌Data: https://unstats.un.org/sdgs/indicators/database/