

Intergovernmental Hydrological Programme

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IHP ACTIONS IN THE IMPLEMENTATION AND MONITORING OF THE SUSTAINABLE DEVELOPMENT GOAL 6 RELATING TO WATER AND SANITATION

Item 5 of the provisional agenda

Summary

This document outlines actions of the Intergovernmental Hydrological Programme (IHP) towards the implementation of the Sustainable Development Goal 6.

IHP'S ACTIONS IN THE IMPLEMENTATION AND MONITORING OF THE SUSTAINABLE (SDG 6) INDICATOR 6.5.2 (Agenda item 5)

1. SDG Target 6.5 calls for countries to implement integrated water resources management at all levels, including through transboundary cooperation, as appropriate. To measure progress on transboundary cooperation in accordance to target 6.5, indicator 6.5.2 was adopted. UNESCO is co-custodian with the United Nations Economic Commission for Europe (UNECE) of the monitoring of the SDG 6 Indicator 6.5.2, that is defined as the “proportion of transboundary basin area with an operational arrangement for transboundary cooperation” (see: [Reporting under SDG indicator 6.5.2 \(unesco.org\)](https://unesco.org)).

2. The reporting on SDG indicator 6.5.2 takes place at three-year intervals since 2017. Progress reports are published together with UNECE and UN-Water after each monitoring exercise and launched at the Stockholm World Water Week together with the other SDG 6 indicator reports. The first report, entitled “Progress on Transboundary Water Cooperation: Global baseline for SDG indicator 6.5.2”, was published in 2018 in four languages (English, French, Russian and Spanish). Its main results were also included in the “SDG 6 Synthesis report” presented at different events, such as the United Nations High-Level Political Forum (July 2018) that undertook an in-depth review of the SDG 6. The second report, entitled “Progress on Transboundary Water Cooperation: Global status of SDG indicator 6.5.2 and acceleration needs”, was launched on 23 August 2021 and is translated in five languages (Arabic, English, French, Russian and Spanish). The data collected by UNESCO and UNECE from reporting exercises are available in the United Nations Statistics Division, which is the repository of all SDGs indicators data.

3. From the beginning of monitoring process on SDG indicator 6.5.2 and as a follow up of decision adopted by the IHP Intergovernmental Council (IGC) in June 2018, IHP and partners organised several workshops, including in online format, in order to respond to challenges encountered during the monitoring and collect recommendations for possible improvements with a view to support Member States. This includes regional meetings held in Douala, Cameroon (July 2018); Montevideo, Uruguay (November 2018); and Istanbul, Turkey (February 2019). UNECE and IHP organized 5 webinars in May and June 2020 (in English [two sessions], French, Russian and Spanish). These online events gathered around 300 participants in total and contributed to increase the rate of submission and the quality of reports in the second reporting exercise. IHP also remotely participated to the “Arab region workshop on SDG indicator 6.5.2”, held in Beirut (Lebanon) on 5 March 2020. A workshop for the Asian countries was organized by the UNESCO Jakarta office with UNECE on 17 September 2020.

4. The results of the second monitoring highlighted several gaps, especially regarding data availability and cooperation requirements over transboundary aquifers. IHP is especially working with Member States to improve information on these topics.

5. To facilitate the reporting process, and the filling of the template, UNESCO and UNECE have started considering the modalities and characteristics of an online reporting system for SDG indicator 6.5.2 to be established for the next reporting exercises.

NEW INDICATOR ON WATER EDUCATION (Agenda item 5)

6. As a follow-up to Resolution XXIII-8 adopted by the IHP-IGC in its 23rd Session (June 2018), the Secretariat has advanced with the definition of methodologic approaches for a new indicator on water education in the general context of the 2030 Agenda for Sustainable Development. Initial actions were reported to the IHP Bureau at its 58th Session

(September 2019; [IHP/Bur-LVIII/10](#)). With the objective of gauging water education programmes at the tertiary level in national formal education systems, the indicator is proposed to measure the number of graduates from water-related degrees, expressed as a percentage of the total number of graduates in tertiary education and also as a percentage of the total population (related theoretical age cohort). In the initial process, Gabon and Uruguay were involved as pilot countries.

7. In March 2019, IHP met representatives from 3 ministries and directors of several institutions in charge of water education in Gabon. A first version of a questionnaire prepared by IHP was presented and discussed during a two-day workshop, organised in collaboration with the UNESCO Libreville Office in November 2019, in Libreville. Representatives of several water-related governmental agencies and tertiary institutions attended, in particular from the Ministry of Higher Education, Scientific Research and Technology Transfer, the Ministry of National Education (Statistical Directorate), the Ministry of Water, Energy, Development and Industrialization and Mineral Resources, the National Higher Institute of Agronomy and Biotechnology, the Masuku Polytechnic School, the Faculty of Science of the University of Science and Technology of Masuku, the National School of Water and Forests, the National Centre for Scientific and Technological Research and the IHP Focal Point of Gabon. The questionnaire was validated by the representatives of the participating institutions based on data on water-related courses and degrees submitted in December of the same year.

8. To further develop the basic concepts and the working questionnaire towards the water education indicator, Uruguay was involved in 2019 and 2020 as the pilot country in the Latin America and Caribbean (LAC) region. Comparable to Gabon, Uruguay is a country with a low population and a few numbers of educational institutions at the tertiary level. To benefit from the expertise available in the UNESCO Water Family, the UNESCO Chair on Water and Culture and the Category II Centre CeReGAS (Regional Centre for Groundwater Management for Latin America and the Caribbean), both in Uruguay, were involved in the process of the development of a methodology for the water education indicator. The first step was to define the difference between a water professional and a water expert. Hence, water professionals would be those having received education at a tertiary level that led to an academic and/or professional degree also linked to the study and management of water. On the other hand, water experts would be those involved in all aspects of water on a daily basis with knowledge and skills developed through a process of practical experience. The questionnaire was further refined and different approaches to assess water education in tertiary institutions and the corresponding degrees were applied in Uruguay. A 'water-related degree' would be a degree leading to a university or tertiary technical diploma containing a percentage of compulsory subjects in the field of water equal to or greater than 20%.

9. A second proposal to assess water education at the national level was developed in 2020 and beginning of 2021 by the UNESCO Chair on Water Resources Management and Culture in Italy. According to the methodology put forward, considering all degrees involving water-related subjects, the ratio of water-related subjects out of the total subjects of the respective degree is calculated. For those degrees involving water-related subjects, the quartiles of the above-mentioned ratio are calculated. The quartile function allows to create four different levels of acquisition of water-related knowledge by students: each level is weighted on the basis of water-related subjects' occurrences in the corresponding degrees. The highest level, or alternatively the two highest levels, can be considered as leading to the formation of water professionals.

10. In analogy to existing 2030 Agenda indicators, the new water education indicator for a defined time span could read as follows: (a) water professionals, by sex, as a percentage of total inhabitants (or eventually per million inhabitants); and (b) water professionals, by sex, as a percentage of graduates at tertiary level. The questionnaire developed would enable

the collection of the necessary data to apply the indicator. The latter would allow a Member State to comparably monitor and evaluate, with own past records and with other countries, the evolution of its human resources capacities regarding water professionals.

11. After consultation with partners and involvement of additional stakeholders of the UNESCO Water Family, the ongoing work includes finalizing guidelines for data gathering and for the use of the new sex-disaggregated indicator on water education at the tertiary level, which could be globally applied in the context of the 2030 Agenda and beyond, as well as the formal engagement of Member States and Associate Members through the Ministries of (Higher) Education and equivalents, including Least Developed Countries (LDCs) and Small Island Developing States (SIDS), are being activated. It is foreseen to have sessions on the new indicator on water education at the 9th World Water Forum in Dakar, Senegal, in March 2022.