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UN 2023 Water Conference Side Event

Disaggregation of SDG indicator 6.4.2 (water stress) by river basin

24 March 2023, 11.00-12.15 (EST), UN Headquarters, New York

Organized by: Rwanda Water Resources Board with the collaboration of the Food and Agriculture Organization of the UN (FAO), Agência Nacional de Águas e Saneamento Básico (ANA) – BRAZIL, Istituto Superiore per la Protezione e la Ricerca Ambientale (ISPRA)– ITALY and the Stockholm Environment Institute (SEI) – USA

Background

While at global level water stress does not seem to present a serious threat to the sustainability of water withdrawal and use, the situation appears much grimmer if a closer look is given to the status of water resources at basin and sub-basin level. Whereas data are available, situations of high and very high water stress can be found in many regions across the globe.

Unfortunately, such information is often not available to water managers and decision makers, due both to the scarcity of sufficient data but also to the lack of methods capable to transform the existing data into usable information. Hence, disaggregating water stress is crucial to provide a finer view of both its causes and effects, allowing to target interventions at areas with high water stress and sectors with high water use.

This event presented a few innovative methods to disaggregate water stress (SDG 6.4.2) and its components at catchment and river basin level, through the presentation of a few case studies prepared in various countries following different methodologies.

Key issues discussed

- Why it is crucial to disaggregate the SDG indicator 6.4.2 (level of water stress) at subnational level to better identify the *hot spots* affected by critical or severe water stress.
- Global map of the disaggregation of SDG indicator 6.4.2 by *major river basins* and comparison with the map of the water stress at country level currently used by the countries to report on this indicator.
- Results and main challenges in implementing the disaggregation of SDG indicator 6.4.2 at *sub-basin level* in 5 pilot countries: Algeria, Brazil, Italy, Rwanda and Tunisia.
- Launch of the new *Water Stress plugin* developed by FAO in collaboration with the Stockholm Environment Institute (available for download in English, French and Spanish in this webpage <https://www.fao.org/land-water/events/un-2023/sdg642/en/>).
- Launch of the publication *A disaggregation of indicator 6.4.2 “Level of water stress: freshwater withdrawal as a proportion of available freshwater resources” at river basin district level in Italy* realized in a collaboration of FAO with the Italian Institute for Environmental Protection and Research (ISPRA) and the Italian National Institute of Statistics (Istat) (<https://doi.org/10.4060/cc5037en>).
- Lessons learned from the disaggregation of the level of water stress at basin and sub-basin level and way forward.
- Implications of disaggregating the SDG 6.4.2 for water management and policy with the other country partners.

Key recommendations for action

- FAO, taking advantage of country pilots results and lessons learned, will investigate the disaggregation of SDG 6.4.2 on a seasonal basis (temporal disaggregation) and in future climate scenarios.
- FAO will publish a reference protocol including a selection of data and methods to assess the SDG indicator 6.4.2 at river basin level.
- Countries need to invest more on data collection, ensuring a strong collaboration between the different national institutions dealing with water resources management.
- Countries need to consider the results of the analysis of the level of water stress when planning national water policies and interventions.
- FAO is encouraged to organize multi-stakeholder dialogues (including public, private, research organizations and extension services) to identify and clarify the main strategic criteria that need to be fulfilled, at basin and local scale, to assess environmental flows.
- FAO will continue working with its partners to support the achievement of the commitments on “SDG 6 Data for All” (<https://sdgs.un.org/partnerships/sdg-6-data-all>) and Integrated Monitoring Initiative for SDG 6 (<https://sdgs.un.org/partnerships/un-water-integrated-monitoring-initiative-sdg-6>)