

## **Water Sciences – Connecting the dots to achieve the 2030 Agenda for Sustainable Development**

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Land use change, urbanisation, climate change, demographic development and migration, conflicts and peace, change of diets, industry 4.0, globalisation etc. are among the challenges that water sciences need to address to serve societal needs. Water availability per capita is decreasing, water quality is deteriorating at many places, but water demand is continuously escalating. Business as usual in water science is not up to the related challenges. In fact, business as usual cannot be the answer in all aspects, i.e. also current policy making processes will need to improve and take stock of evidences provided by science in order to better address societal challenges.

However, exciting developments have been taking place. The global community agreed on a new and ambitious agenda for development, which aims to be comprehensive and include the participation of all stakeholders in one integrated framework. The 2030 Agenda for Sustainable Development provides a stimulating new era, with unique opportunities to reconcile science, society and policy making. Hydrology and water management – in all its facets including wastewater - play a central role in the Agenda 2030, as it is not only central in Sustainable Development Goal (SDG) 6, but it is fundamental for the realization of other SDGs related to, for instance, poverty reduction, sustainable growth, health, food security, climate change, ecosystems (land and sea), gender equality, etc.

Despite the recognition of the critical importance of water in this agenda, the implementation of related policies and use of scientific developments represent a difficult task. Two main challenges remain: (i) the utilization of the knowledge and developments already available, and (ii) the need to overcome current and future knowledge gaps ensuring that scientific results support sustainable development effectively.

The UN system will produce a Synthesis Report for SDG 6, which is currently being prepared by a UN-Water Task Force that includes several international organizations (i.e. CEO Water Mandate, FAO, ILO, UNDP, UNECE, UNEP, UNESCO, UNICEF, UN-Water TAU, WHO and WMO) and is coordinated by the UN World Water Assessment Programme of UNESCO. The Synthesis Report will provide an integrated analysis and synthesis of data, information and policy linkages between different SDG targets and indicators, providing Member States with 'the big picture' on progress made in achieving SDG 6, and recommendations for policy and decision makers and stakeholders in the water and development sectors.

The role of (water) science is more critical than ever. In this era of rapid developments we are in dire need for action: further insights are needed to fully understand and quantify the systematic links between the different SDGs in order to explore future possible development pathways. Sound scientific basis has to support the development of effective policy implementation strategies.