ENSURING AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

Sustainable Development Goal 6 (SDG 6) – Ensure availability and sustainable management of water and sanitation for all – confirms the importance of water and sanitation in the global political agenda. Building on the relevant Millennium Development Goal, SDG 6 addresses the sustainability of access to water and sanitation by focusing on the **quality**, **availability** and **management** of freshwater resources.

The individual targets of SDG 6 cover the entire water cycle and its interconnections:

- 6.1: provision of drinking water
- → 6.2: sanitation and hygiene services
- 6.3: treatment and reuse of wastewater and ambient water quality
- 6.4: water-use efficiency and scarcity
- 6.5: integrated water resources management
- 6.6: protecting and restoring water-related ecosystems
- 6.a: international cooperation and capacity-building
- 6.b: local participation in water and sanitation management

Facts and figures

Today, around 1.9 billion people live in potentially severely water-scarce areas. By 2050, this figure could increase to around 3 billion people.

Globally, over 80 per cent of the wastewater generated by society flows back into the environment without being treated or reused.

An estimated 64–71 per cent of natural wetlands have been lost since 1900 as a result of human activity.

Environmental dimension of SDG 6

SDG 6 recognizes that countries' social development and economic prosperity depend on the sustainable management of freshwater resources and ecosystems. SDG 6 acknowledges that ecosystems and their inhabitants, including humans, are water users and that their activities on land can compromise the quality and availability of fresh water.

The water-related ecosystems addressed in SDG 6 include wetlands, rivers, aguifers and lakes, which sustain a high level of biodiversity. These ecosystems are also vital for providing multiple benefits and services, such as hydropower, irrigation, humidity and precipitation, habitats for aquatic life and water purification. Well-managed water-related ecosystems contribute to addressing the competing demands for water, mitigating climate change risks and helping to build community peace and trust. They are therefore essential for achieving sustainable development, peace and security as well as human health and wellbeing.

UN Environment and SDG 6

As the global environmental authority, the United Nations Environment Programme (UN Environment) connects the issue of freshwater to other aspects of sustainable development, such as oceans, land and agriculture. This work entails building national capacity to monitor freshwater ecosystem health, including water quality, facilitating integrated water resources management processes and the implementation thereof, and providing guidelines and inputs for country-level action to protect and restore freshwater ecosystems at the national level. Through this work, UN Environment provides support to countries in protecting and restoring their freshwater ecosystems with a view to sustaining their ecosystem services for generations to come.

As with other SDGs, the environmental indicators in SDG 6 are new, meaning that this is the first time that many UN Member States have had to collect, submit and analyse the kind of data required to measure progress under this Goal. As custodians of three indicators under SDG 6,



UN Environment has dedicated significant efforts to assisting countries to understand the purpose of, and methodologies and processes for, data collection.

UN Environment helps countries to monitor and report on three of the Goal's environmental indicators, related to the targets on freshwater ecosystem health and quality (6.3 and 6.6), and to integrated water resources management (6.5). The data is obtained through a process in which countries submit information by filling out a survey distributed by UN Environment.

These data submissions to UN Environment not only enhance analysis of the data, but fundamentally strengthen the global data infrastructure which feeds into the global monitoring mechanisms for the SDGs.

The data collected will contribute to an integrated SDG 6 synthesis report for 2018, which will provide one voice from the UN system on SDG 6 and feed into regional and global discussions of the high-level political forum on sustainable development. The data collection to establish a 2017 baseline began in May 2017 and is being carried out as part of an integrated SDG 6 monitoring initiative under the UN Inter-Agency Mechanism on All Freshwater Related Issues, Including Sanitation (UN-Water).

SDG 6 and the transition to sustainable and resilient societies

The 2030 Agenda for Sustainable
Development recognizes the rising
inequalities, natural resource depletion,
environmental degradation and climate
change witnessed across the world. All
of these challenges are closely related
to water resources and water-related
ecosystems, and a failure to address them
could undermine nature's ability to provide
key functions and services as well as
countries' potential to achieve a transition to
sustainable and resilient societies.

Some key messages for countries to consider in tackling some of these challenges include:

Inefficiency in water use: Few countries have the natural and financial resources required to continue increasing water extraction. The alternative is to make better use of the available resources. Agriculture offers opportunities for significant water savings given that the agricultural sector accounts for nearly 70 per cent of global freshwater withdrawals. Saving just a fraction of that amount would significantly alleviate water stress globally.

Supporting water monitoring in Fiji



In order to provide support to countries in monitoring and reporting on targets 6.3 and 6.6, UN Environment provided technical assistance in 2017 to strengthen the capacity of countries to generate data for indicators 6.3.2 – proportion of bodies of water with good ambient water quality – and 6.6.1 – change in extent of water-related ecosystems.

Data on these two freshwater indicators is often housed in different institutions and ministries, as is the case in Fiji, where UN Environment invited representatives from several line ministries working on water-related issues to a two-day workshop in September 2017 to discuss for the first time how the Government of Fiji could best collect and share water-related data. Participants were trained in the methodologies for monitoring the two freshwater indicators. As a consequence, Fiji was able to submit its data on its water quantity and quality in rivers, open water bodies and groundwater in accordance with the methodological requirements.

- Water pollution and wastewater: It is estimated that the vast majority of the world's wastewater is released into water bodies without any kind of treatment. Estimates suggest that if the natural environment continues to be degraded and unsustainable pressures put on global water resources, 45 per cent of the global gross domestic product, 52 per cent of the world's population and 40 per cent of global grain production will be at risk by 2050. Tackling pollution at its source and treating wastewater protects public health and the environment, mitigates the costly impact of pollution and increases the availability of water resources, in addition to recovering valuable nutrients and water resources.
- ➤ Extreme hydrological events: More intense and increasingly frequent floods and droughts as a result of climate change have become a growing concern and pose an imminent danger in risk-prone areas. Investment in data collection and monitoring to build countries' anticipatory capacity is urgently needed. The protection and restoration of water-related ecosystems can also help in mitigating the risks associated with floods and droughts.
- Rising inequality: Inequality is rising in terms of the availability and quality of water resources. People without adequate access to drinking water, energy and sanitation, and those living in polluted areas, often constitute overlapping segments of the population. The impacts of water challenges and risks thus disproportionately affect

the most marginalized groups and communities in society. Water pollution in impoverished areas often goes unnoticed and is left unaddressed. Increasing access to safe drinking water and sanitation for those without access should be the first priority in ensuring that no one is left behind. Implementing a holistic approach to integrated water resources management can provide the institutional structures and multistakeholder processes to engage marginalized groups in decision-making on water use and allocation.

UN Environment stands ready to work with Member States and relevant stakeholders to ensure that SDG 6 is fully implemented. For further information or questions, please contact Lis Mullin Bernhardt, Ecosystems Division, UN Environment at Lis.Bernhardt@un.org.

