

# Sustainable Development Goals



Policy Brief

## Fresh water under threat



### About

The **Sustainable Development Goals Policy Briefs** highlight a hotspot of environmental concern. The evidence provided builds on the scientific data and information hosted on the online platform Environment Live and is complemented by stories from around the world. Readers are invited to explore the numerous clickable links throughout the Brief.

**Freshwater ecosystems** such as lakes and rivers are primarily affected by over-extraction, dumping of waste, discharge of wastewater and climate change. These ecosystems are essential for human health, biodiversity, and the functioning of other ecosystems on land and at sea. They provide important goods and services and are necessary for the replenishment and purification of water resources. By covering the entire water cycle and addressing the sustainability of water and sanitation access by focusing on the quality, availability and management of freshwater resources, SDG 6 acknowledges these links.



UN Environment is the Custodian Agency for three key indicators related to "Goal 6: Ensure availability and sustainable management of water and sanitation for all."

- 6.3.2 Proportion of bodies of water with good ambient water quality [↗](#)
- 6.5.1 Degree of integrated water resources management implementation (0-100) [↗](#)
- 6.6.1 Change in the extent of water-related ecosystems over time [↗](#)

Through the Integrated Monitoring Initiative, UN Water is the overall coordinator for SDG 6.

### Protecting and restoring freshwater ecosystems

To maintain their health and ability to provide important ecosystem goods and services such as drinking water, fisheries and irrigation, **freshwater ecosystems require the effective management of both quantity and quality.** [↗](#)



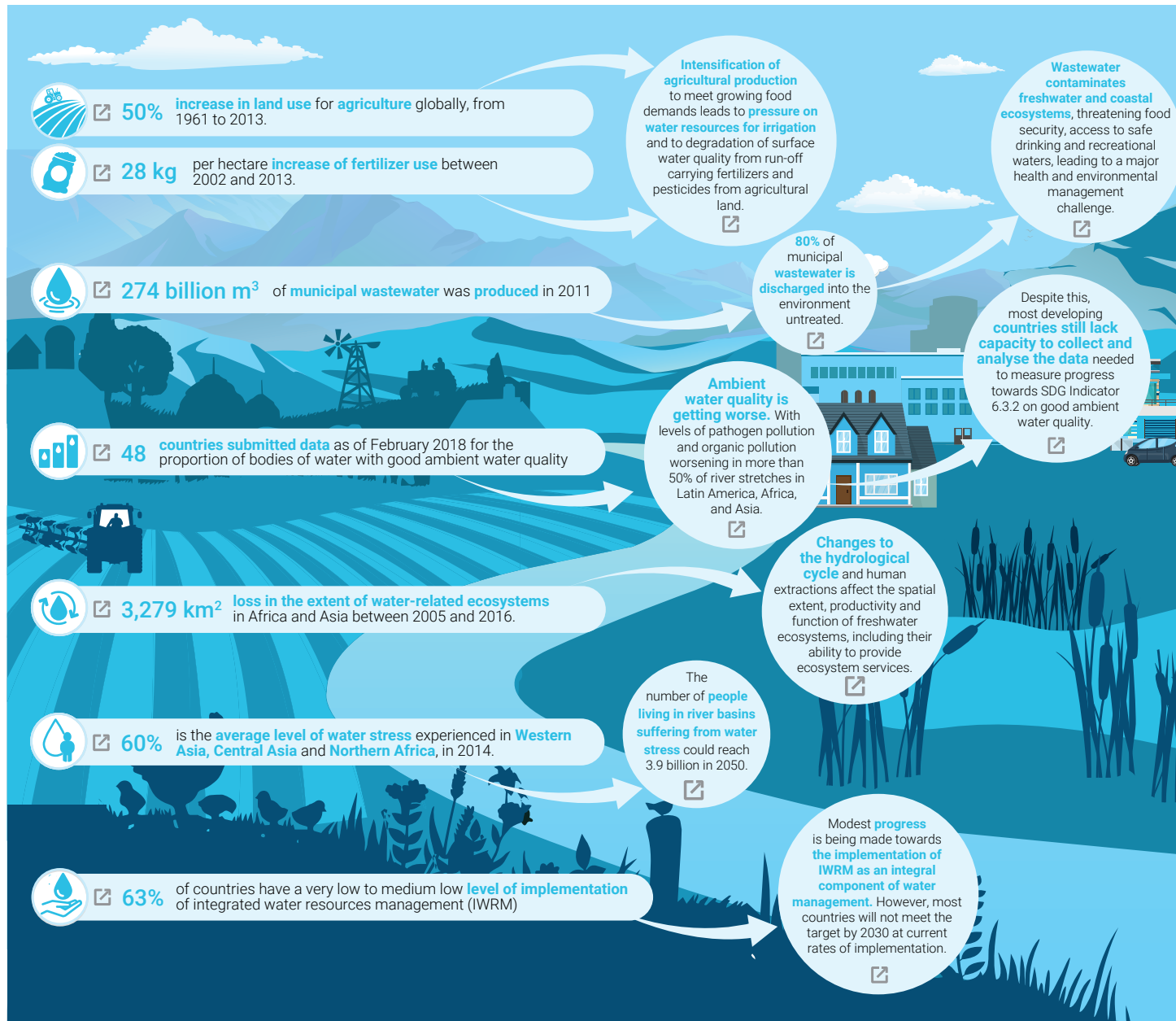
Protecting and restoring freshwater ecosystems supports the achievement of the following Sustainable Development Goals:

- **SDG 2:** Zero Hunger
- **SDG 3:** Good Health and Well-Being
- **SDG 6:** Clean Water and Sanitation
- **SDG 7:** Affordable and Clean Energy
- **SDG 12:** Sustainable Consumption and Production
- **SDG 14:** Life Below Water
- **SDG 15:** Life on Land

Join the **Keep it Clear Campaign** to find out more about UN Environment's work on fresh water. [↗](#)

**#KEEPITCLEAR** [↗](#)

## Facts and figures



## Action

### Towards solutions ...

- 170** Contracting Parties to the Ramsar Convention providing the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.
- 42** Parties to the UNECE Water Convention promoting joint management and conservation of shared freshwater ecosystem.
- 72** Countries which are party to the Nature Conservancy using ingenuity and innovation to support water resources.
- 40** countries contributing to the Water Action Decade accelerating action on water-related sustainable development

### ... for achieving the SUSTAINABLE DEVELOPMENT GOALS

**Water Pollution Management** (SDG 6, 3, 7) **Regulating Wastewater Treatment** (SDG 7, 14, 15)

**A Framework for Freshwater Ecosystem Management** (SDG 6)

**Compendium of Water Quality Regulatory Frameworks: which water for which use?**

**Nature-based Solutions for Water**

**Management and Restoration of Aquatic Ecosystems in River and Lake Basins**

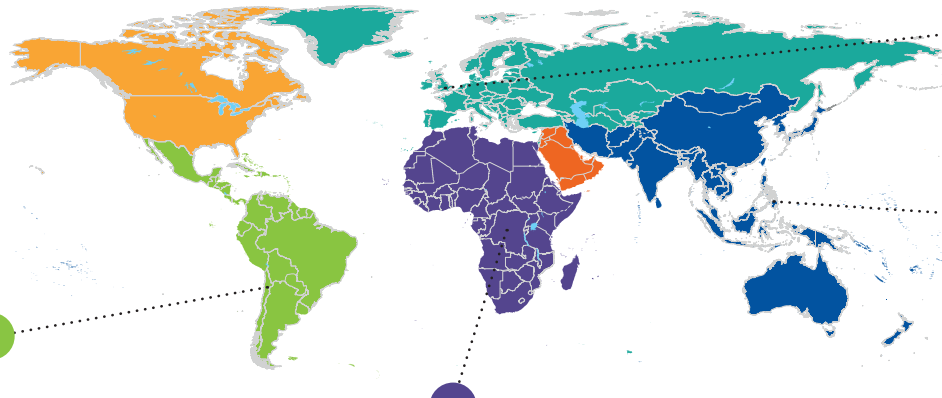
## Initiatives on the ground

### Supporting SDG 6 monitoring using Earth Observations

UN Environment is working together with space agencies and Google Earth to help countries understand the process and ownership of Earth Observations (EO) regarding SDG indicator 6.6.1 which includes data on extent and quality of freshwater ecosystems. UN Environment is tasked with producing methodologies for data collection from national data sources and tracking progress, as well as statistical capacity building. While the state-driven efforts to report and monitor ground-based and in-situ data form a key part of the current reporting process, there is potential for countries to take advantage of satellite-based EO to meet some of the reporting requirements of Indicator 6.6.1, regarding both spatial extent and quality of open waterbodies and wetlands. The new partnership is exploring the applicability of EO data to complement costly and time-consuming ways of data collection on the ground.

### Bringing water back through reforestation in Chile

The majority of the 4,000 inhabitants of Liquiñe, a rural town in the Los Ríos region of Chile, depend on the nearby forests, rivers and natural ecosystems. However, climate change and deforestation have left villages in this region without natural water-courses. With the support of the United Nations Programme on Reducing Emissions from Deforestation and Forest Degradation, Chile's National Forest Corporation (CONAF) began restoring the native forests in Los Ríos in 2016. The goal of the project is to increase the availability of water resources for different uses and to protect water sources for the future. This includes the restoration of forests and training small and medium landowners in the sustainable management of forests in a manner that increases the flow and catchment of water. However, the increase in water flows should be measured over the long term.



### DRC's Lukaya river catchment success

River catchment management is improving drinking water supplies in the Democratic Republic of the Congo (DRC) thanks to projects implemented by UN Environment. Additionally, the project's integrated approach addressed several core development challenges, including livelihoods and poverty reduction, food security and disaster risk reduction. An IWRM-based river basin management plan was developed by the local community and endorsed by central government. It provided a clear road map, defining priority actions to be carried out over the next three years (2016-2018). Environmental rehabilitation measures led to Lukaya water treatment plant downtime being reduced from an average of 300 hours to less than 40 hours per year. The River Users Association gained legal status, more visibility and legitimacy.

### Water-friendly farming in East Anglia, England

The River Nar in Norfolk was being affected by over-abstraction and pollution from local farms. The World Wildlife Fund (WWF) worked with Coca-Cola and Norfolk Rivers Trust and were able to provide support to farmers in the region to help reduce the impact of this pollution, enhance soil quality and improve water efficiency. Water sensitive farming is essential if we want healthy rivers in future. The WWF wants to work with 100 farmers to share the lessons they have learned and help them implement water sensitive farming. Within three years they are aiming to have reached at least 2,000 farmers across England and engaged with communities and businesses to promote better water stewardship.

### Battling pollution in the Philippines' largest lake

Laguna de Bay is the Philippines' largest lake and supplies Metro Manila's 16 million people with a third of their fish. It also supports agriculture, industry and hydro-power generation. A Global Nutrient Cycle Project, funded by the Global Environment Facility, is developing policies and practices to reduce the impact of nutrients on ecosystems. UN Environment has been contributing to these efforts to beat pollution through the project. Project leaders and local partners presented policy recommendations to governors of the provinces around the lake and Manila Bay in March 2017, including greater investment in improved land management practices, a phosphate detergent ban, and caps on the total amount of nitrogen and phosphorus being released from discharge points. Addressing pollution in the lake, powered by citizens and being supported by the highest decision-making levels through a ruling by the Supreme Court of the Philippines in 2008 that mandated the clean-up of Manila Bay and coastal areas, including Laguna de Bay, is a clear example of Filipinos' dedication to a sustainable environment.