

# GLOBAL SOLUTIONS FOR WATER SUPPLY AND SANITATION

The objective is to work on achieving universal access to safe, resilient, and sustainable water supply and sanitation services

Improving policies, institutions, and regulations for both urban and rural services

Promoting water-secure cities and circular economy principles aligned with the global climate agenda

Fostering innovation and developing new service delivery models

**Lack of access to safely managed water supply and sanitation (WSS) services is a public health, economic, and environmental emergency** in low- and middle-income countries. This challenge is exacerbated by climate change, population growth, and rapid urbanization.



Globally **2 billion people lack access** to safely managed drinking water.

By 2030, an estimated **700 billion people** will be at risk of being **displaced by drought**



**3,6 billion people** lack access to safely managed sanitation facilities



**48% of global wastewater production** is released into the environment untreated

Climate change is set to intensify floods and droughts, making it difficult, for water utilities to expand and provide reliable WSS services to important segments of the population



# WATER IN AGRICULTURE

About **3.2 billion people** live in agricultural areas experiencing high levels of water stress or high drought frequency. An estimated **78%** of the world's poor **live in rural areas** and depend primarily on agriculture for basic income-most of them on smallholder family farms.



Over the next **30 years**, the world's population is expected to reach **10 billion people**. To feed the world and support a wide range of other social needs, agriculture must become more productive, resource-efficient, and environmentally sustainable.

**By 2050**, feeding a world population of 9 billion people will require an estimated **50% increase** in agricultural production and a **15% increase** in water withdrawals.

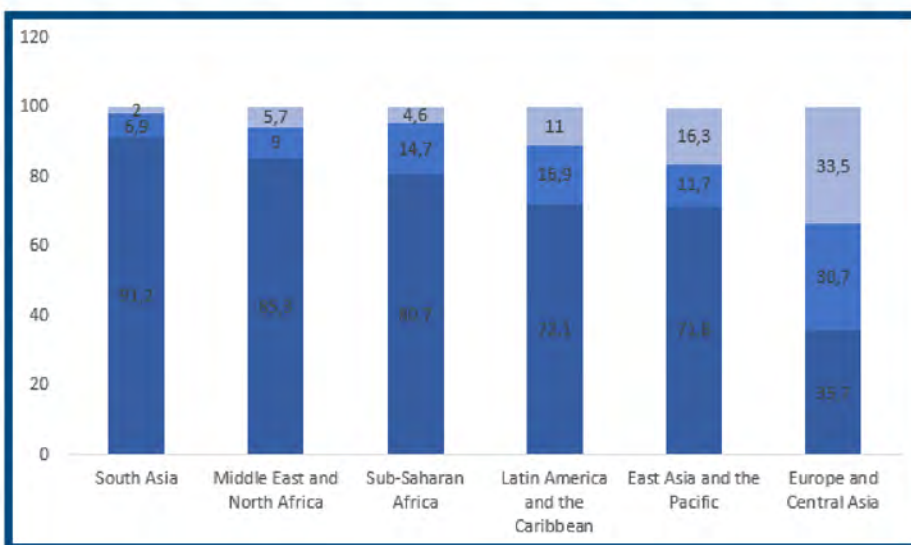


Irrigation covers only **20%** of the total land used for agriculture but supports **40%** of global food and fodder output, and supports **55%** of output value.



**Irrigation is responsible for using 70% of global freshwater** abstracted from rivers, lakes, and aquifers. Irrigation pumping uses **6%** of global electricity and irrigated rice alone is responsible for **11%** of human methane emissions.

Percentage of freshwater extraction by sector (%) in 2014



## What is needed for sustainable and resilient agriculture?

- Improvements in water service delivery and groundwater management.
- Water management in underserved areas to improve resilience to water shocks.
- Hybrid and customized solutions are needed to improve global water productivity.
- Changes are needed in what is produced and where, better accounting of water footprints and social values of the sector.

The sustainable achievement of these objectives is threatened by growing demand for food and fiber, unsustainable resource use, and ever-increasing climate volatility and change.



# CLIMATE CHANGE AND WATER



**9 out of 10 climate** change events are **water-related**

**\$18 billion a year** is the cost of **natural disasters** in low and middle-income countries



**12% of the world population** drinks water from **unimproved and unsafe sources**

**2 billion people** live in countries experiencing **high water stress**



**30% of the world population** live **without any form of sanitation**

Water scarcity in some places **will displace between 24 million and 700 million people**



**600 million children** globally will be living in areas of extremely high water stress

Climate impacts could push up **to 132 million into poverty**



The number of people at risk from floods will increase **from \$1.2 billion to \$1.6 billion**

**Every \$1 spent** in climate-resilient infrastructure **yields \$4 in savings**



Shift to low-carbon, resilient economies could create **over 65 million new jobs globally by 2023**



# Forests and Water

Forests are vital natural infrastructures whose efficient management should be incorporated into public strategies and policies in our countries.

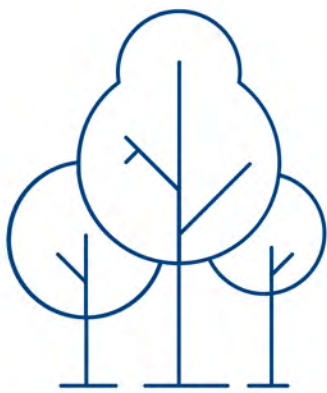


## Some Data



It is estimated that forest watersheds provide **75% of the world's accessible freshwater** resources.

**Only 12%** of the world's forests are designated for **biodiversity conservation**.



They occupy large extensions that reach **28.5% of the land**. Europe and South America have the largest forest area, followed by North America and Africa.

Deforestation of forests and trees **produces 15% of annual CO<sub>2</sub> emissions worldwide**. And about **78% of primary forests have been destroyed by man's hand**.



Forest area **decreased from 32.5% to 30.8%** in the three decades between 1990 and 2020, a net loss of **178 million hectares of forest** (equivalent to **90% of Mexico's land area**).

"Trees are the endless effort of the earth to speak to the sky that listens to it."

- Rabindranath Tagore