

FAST FACTS



On climate and water

- 1. Climate change is exacerbating both water scarcity and water-related hazards (such as droughts), as rising temperatures disrupt precipitation patterns and the entire water cycle.
- 2. Over two billion people worldwide don't have access to safe drinking water today a number that is expected to increase, exacerbated by climate change and population growth.
- 3. Only 0.5 per cent of water on Earth is useable and available freshwater and climate change is dangerously affecting that supply. Over the past twenty years, terrestrial water storage including soil moisture, snow and ice has dropped at a rate of 1 cm per year, with major ramifications for water security.
- Limiting global warming to 1.5°C compared to 2°C would approximately halve the proportion of the world population expected to suffer water scarcity, although there is considerable variability between regions.
- 5. Most of the freshwater used, about 70 per cent, is used for agriculture (it takes between 2000 and 5000 liters of water, on average, to produce a person's daily food).
- 6. Climate change has made extreme weather events such as floods and droughts more likely and more severe.
- 7. Rising global temperatures increase the moisture the atmosphere can hold, resulting in more storms and heavy rains, but paradoxically also more intense dry spells as more water evaporates from the land and global weather patterns change.
- 8. Drought and flood risks, and associated societal damages, are projected to further increase with every degree of global warming.
- 9. Wetlands such as mangroves, seagrasses, marshes and swamps are highly effective carbon sinks that absorb and store CO2, helping to reduce greenhouse gas emissions.
- 10. Wetlands also serve as a buffer against extreme weather events. They provide a natural shield against storm surges and absorb excess water and precipitation. Through the plants and microorganisms that they house, wetlands also provide water storage and purification.
- 11. Early warning systems for floods, droughts and other water-related hazards provide a more than tenfold return on investment and can significantly reduce disaster risk: a 24-hour warning of a coming storm can cut the ensuing damage by 30 per cent.

Sources: <u>UNICEF</u> (1), <u>UN</u> (2), <u>WMO</u> (2), <u>WMO</u> (3), <u>IPCC</u> (4), <u>FAO</u> (5), <u>IPCC</u> (6), <u>World Bank</u> (7), <u>IPCC</u> (8), <u>UNEP</u> (9, 10), <u>GCA</u> (11)

