



WATER AND  
CLIMATE CHANGE



**Water is the primary medium through which we will feel the effects of climate change. Water availability is becoming less predictable in many places, and increased incidences of flooding threaten to destroy water points and sanitation facilities and contaminate water sources.**

**In some regions, droughts are exacerbating water scarcity and thereby negatively impacting people's health and productivity. Ensuring that everyone has access to sustainable water and sanitation services is a critical climate change mitigation strategy for the years ahead.**

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## Challenges

Higher temperatures and more extreme, less predictable, weather conditions are projected to affect availability and distribution of rainfall, snowmelt, river flows and groundwater, and further deteriorate water quality. Low-income communities, who are already the most vulnerable to any threats to water supply are likely to be worst affected.

More floods and severe droughts are predicted. Changes in water availability will also impact health and food

security and have already proven to trigger refugee dynamics and political instability.

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## Opportunities

Water plays a pivotal role in how the world mitigates and adapts to the effects of climate change. An integrated view on water, the biosphere and environmental flows is required to devise sustainable agricultural and economic systems that will allow us to decelerate climate change, protect us from extremes and to adapt to the unavoidable at the same time.

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## Paris Agreement

The Paris Agreement brings all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so. The agreement charts a new course in the global climate effort. [Latest updates here.](#)

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### Facts and figures

- Globally, water scarcity already affects four out of every 10 people. A lack of water and poor water quality increases the risk of diarrhoea, which kills approximately 2.2 million people every year, as well as trachoma, an eye infection that can lead to blindness, and many other illnesses. ([WHO](#))
- Increasing temperatures on the planet and more variable rainfalls are expected to reduce crop yields in many tropical developing regions, where food security is already a problem. ([WHO](#))
- By 2025, 1.8 billion people are expected to be living in countries or regions with absolute water scarcity, and two-thirds of the world population could be under water stress conditions. ([UNESCO, 2012](#))
- With the existing climate change scenario, by 2030, water scarcity in some arid and semi-arid places will displace between 24 million and 700 million people. ([UNCCD](#))
- By the 2080s, land unsuitable for agriculture in sub-Saharan Africa due to severe climate, soil or terrain constraints may increase by 30 to 60 million hectares. ([FAO](#)).
- Scientists, farmers and the business community consider variability, casted as 'extreme weather events', as one of the most likely production risks over the next ten years ([WEF, 2015](#)).

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**Find out more:**

**FAO:** [Climate Change](#)

**IPPC (2008):** [Climate change and water](#)

**IPCC (2007):** [Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, 2007](#)

**OECD (2013):** [Water and climate change adaptation](#)

**UN-Water (2010):** [Climate Change Adaptation: The Pivotal Role of Water](#)

**WEF (2015):** [Global Risks Report 2015. 10th edition.](#)

**WMO:** [World Climate Programme](#)

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