

WaterAid and climate change



WaterAid/ Poulomi Basu

Kajal Gautam, 16, and her cousin Khushboo Gautam, 16, on their way back after collecting safe water, Nihura Basti, Kanpur, India.

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What is climate change?

There are many different uses of the term 'climate change'. WaterAid strives to be consistent by using the following definitions of key terms:

- **Weather** – describes current atmospheric conditions, such as rainfall, temperature and wind speed, at a particular place and time. It changes from day to day.
- **Climate** – is the average (or 'normal') pattern of weather for a particular place over several decades.
- **Climatic variability** – is the changeable nature of weather patterns or events within the bounds of the present climate.
- **Climate change** – is a large-scale, long-term shift in the planet's weather patterns or average temperatures, which might be natural or caused by human activity.

Is climate change actually happening?

According to the Intergovernmental Panel on Climate Change¹ (IPCC), warming of the climate system is unequivocal, and, since the 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, global amounts of snow and ice have diminished, and sea level has risen. Human influence on the climate system is clear, and recent anthropogenic emissions of greenhouse gases are the highest in history.²

Why is climate change important to our work on water, sanitation and hygiene (WASH)?

Today's climate variability threatens the lives and prosperity of people across many of the countries where WaterAid works, along with other challenges such as rapid urbanisation, high inequality and changing land-use. **Climate change will worsen these existing challenges.**

The majority of climate impacts will be felt through the water cycle – droughts, floods, changing monsoons and rising sea levels. This will directly impact on WaterAid's mission of achieving universal access to sustainable WASH services by 2030.

¹The IPCC is the leading international body for the assessment of climate change. Thousands of scientists from all over the world contribute to the work of the IPCC on a voluntary basis. By endorsing the IPCC reports, governments acknowledge the authority of their scientific content.

² IPCC (2014) Fifth Assessment Report.

Although sometimes blamed, **climate change is not the cause of poor water and sanitation coverage**, or the reversal of previous gains. In reality, these problems are driven by various governance, financing, management and capacity issues. However, climate change will be an additional stress on the availability of WASH services.

Delivering universal access to sustainable WASH is a critical part of building resilience to the negative impacts of climate change, and should be considered a climate change adaptation mechanism. The 748 million poor and marginalised people who rely on unimproved drinking water sources will be increasingly vulnerable to climate change because such sources are highly exposed to climatic threats. Poor hygiene behaviours and lack of access to improved sanitation also increase vulnerability to climate change.

Addressing the drivers of climate change

To avoid catastrophic climatic changes an urgent and drastic reduction in global carbon emissions is needed. Carbon mitigation is intimately linked to WaterAid's poverty eradication work because 'business as usual' emission rates will reverse decades of development gains and radically reduce the chances of achieving universal access to WASH.

WaterAid recognises that a reduction in carbon emissions is vital; however, our programme and advocacy activities prioritise the demonstration of resilient WASH services and ensuring climate finance targets the development needs of poor people.



WaterAid/ GMB Akash/ Panos

Women collect unsafe water from a salinated pond, Koyra Number 4, Ward 7, Koyra, Bangladesh.

How does climate change relate to WaterAid's new Global Strategic Aims?

Reducing inequalities

Climate change is a driver of local, national and global inequality. Carbon-driven growth has largely benefitted wealthy and middle-income countries; however, the distribution of impacts is likely to be tilted against many of the world's poorest regions and the vulnerable populations within those countries. People who are vulnerable (because of poverty, gender, disability, ethnicity or age) have the least economic, institutional, scientific or technical capacity to adapt to the impacts of climate change. **The transfer of wealth and knowledge to help poor countries address climate change is fundamentally an issue of justice.**

Strengthening services

Investments in a strong water sector are equally as important to addressing climate change and ensuring sustainable WASH services as is the physical robustness of WASH infrastructure. The policies, procedures, financing and management arrangements required to deliver sustainable WASH services are the same as those required to facilitate adaptation and mitigate carbon emissions. **Good-quality data** (climate and water resource data), **coherent policies** across a range of sectors (including water, urban planning, health, energy and environment) and **monitoring of adaptation effectiveness** are essential building blocks of a governance system that can deliver and sustain WASH services in a changing climate.

Integrating WASH

Building resilience to climate change emphasises the need for **integrated sustainable development that addresses the multiple causes of vulnerability.** Access to WASH is critical to resilience, as is access to food, education, health services and economic opportunity. Large climate adaptation initiatives provide a unique opportunity for different sectors to work collaboratively on joint projects that address people's multiple development needs.

Hygiene

Climate change has both direct and indirect impacts on human health, through changed temperatures, air and water pollution, increased incidence of vector-borne and waterborne diseases and an increase in extreme weather events. Our ability to improve public health through increased access to WASH may also be affected by climate change – e.g. increasing water scarcity may reduce the availability of freshwater, which is fundamental to good hygiene practice. **Neglecting the importance of health (and hygiene) would, therefore, increase the public health risk from climate change, and the global health community has a vital role to play in responding to climate change.** Most critically, governments must ensure adaptation strategies are designed so that public health is maximised.

WaterAid's change objectives

WaterAid is using new research, evidence from our service delivery work, and targeted advocacy to pursue the following objectives.

- 1 Sustainable WASH is **widely acknowledged as a climate change adaptation mechanism that builds resilience** and helps communities cope with both climate variability and change.
- 2 Climate change is being used for the opportunities it provides, primarily in the form of **transferring wealth, knowledge and technology from developed to developing countries to help them adapt to and mitigate climate change**.
- 3 Governments are **successfully leveraging climate finance for development that enhances water security and delivers sustainable WASH services**, based on a portfolio of investment options developed by WaterAid and partners.
- 4 WaterAid is positioned as a **trusted, credible and evidence-based advisor** to governments and donors in supporting them to develop the systems and policies that build resilience to climatic threats.



Bangre Yamba Madi, 57, displays graphs charting monthly rainfall and well water level in Basbedo, Burkina Faso.

WaterAid's work on climate variability and change

WaterAid has over 30 years of experience in helping communities build resilience to climate variability. Although there is still a lot of uncertainty around the impact climate change will have on water resources and the communities that depend on them, WaterAid are able to implement 'no or low regrets' activities that build resilience to climatic threats regardless of exactly how the climate changes (wetter, drier, more variable, etc.).

All sustainable WASH programmes build community resilience; however, WaterAid has a number of programmes that are specific to climate-driven vulnerability:

- WaterAid's **securing water resources approach (SWRA)**³ builds communities' capacity to manage water-related threats, and ensures governments are more accountable and responsive to community demands for investments that enhance water security. The approach is described in detail in the *Water security framework*.⁴
- **Participatory WASH Vulnerability Analysis (PWVA)** helps communities to reduce their vulnerabilities by supporting them to draft their own development plans, which are then used as a basis for demanding better services and investment from responsible authorities. Efforts are being made to better embed the approach into the practice of local authorities.
- Climate change is predicted to increase the incidence of natural disasters, and WaterAid's *Disasters framework*⁵ outlines our approach to **disaster risk reduction and disaster response**. WaterAid has a growing body of experience in providing emergency WASH assistance immediately after a natural disaster (e.g. the recent floods in Pakistan and Malawi).
- WaterAid is conducting new research that unpacks the complex and evolving **climate finance landscape** to better understand how it relates to water security. The results will be used by WaterAid to help developing country governments secure climate finance for projects that improve access to WASH and enhance water security.
- WaterAid's **spatial planning for urban sanitation and water** project is studying the impacts of rapid urbanisation on a city's water and sanitation capacity has identified climate change as a major challenge. Combining this with new research on **climate change adaptation in low-income urban**

³ For more information see <http://www.wateraid.org/policy-practice-and-advocacy/water>

⁴ WaterAid 2012 Water security framework

⁵ WaterAid 2013 *Disasters framework* <http://www.wateraid.org/~media/Publications/Disasters-framework.ashx>

communities, WaterAid will continue to produce evidence of the policy frameworks and investments that are required to improve the resilience of poor urban residents.

Useful resources

For more information on WaterAid's work on climate change, including a comprehensive resource list, visit <http://www.wateraid.org/policy-practice-and-advocacy/climate-change>