

Climate change adaptation and resilience and water, sanitation and hygiene: links between SDG 13 and SDG 6

Sustainable Development Goal

13

Climate change is water change. Climate change is often discussed in terms of carbon emissions, but people feel the impacts largely through water. Rising temperatures mean increasingly severe floods, droughts and unpredictable weather patterns across the world, damaging water supplies and sanitation services.

The communities where WaterAid works are on the front line of global warming, and we are already seeing household water supplies under increased threat. Wealthy countries have caused this problem, but it is the poorest people in the world who are paying the price, as they are forced to turn to unsafe water resources. This not only causes severe long-term health effects, but exacerbates gender-based discrimination, because women and girls – typically responsible for collecting water – have to queue even longer at water points, or walk even further every day in search of water.¹ Disasters such as flooding cause severe damage to homes, schools, health centres, agriculture and water, sanitation and hygiene (WASH) infrastructure. Rebuilding and recovery efforts after

debilitating events take resources away from development activities, stagnating growth. Combined with rising temperatures, increasingly frequent extreme weather events help waterborne diseases, such as cholera, to spread further and faster.

Access to water and sanitation are human rights. In the context of climate change, building resilient and gender-responsive WASH services is an increasingly urgent priority – without these services, people cannot be resilient to anything. Resilient services and reliable water supplies can transform the prospects of communities living in poverty, enabling them to withstand longer dry seasons and flooding. Safely managed water and sanitation can also reduce exposure to waterborne diseases and boost living standards. For communities to adapt to climate change requires building local skills and capacities – and ensuring enough financing to support these localised responses.



A woman walks on cracked ground, towards a pond to collect water. Khulna, Bangladesh.

SDG 6 and SDG 13

- SDG 6 on clean water and sanitation and SDG 13 on climate change are inextricably linked. Climate change is experienced through changes in the water cycle – mitigating the effects of climate change is vital to achieving SDG 6.
- SDG 13 calls for ‘urgent action to combat climate change and its impacts’ through ‘strengthening resilience and adaptive capacity to climate-related hazards and natural disasters in all countries’. Both the Paris Agreement on climate change and the 2030 Agenda require each country to increase the resilience of development interventions, including WASH.
- Lasting, universal access to WASH increases water availability in times of scarcity, which provides the supplies for basic living needs to ensure food, health and livelihoods. Water is therefore a key ingredient in helping communities adapt to climate change. The combined benefits of improved safe water supply, decent sanitation and hygiene reduce the overall disease burden on poor and marginalised communities, so they are better able to cope with other impacts of climate change.³

Country case studies

Bangladesh

According to the Intergovernmental Panel on Climate Change, Bangladesh tops the list of countries most vulnerable to climate change, because of its heavy dependence on climate-sensitive agriculture and large number of people living only a few metres above sea level.⁵ The country has abundant water, but floods, cyclones and droughts – exacerbated by climate change – make it difficult to reach everyone, everywhere with WASH. Weather and climate change events substantially curtail drinking water availability and quality, and undermine performance of sanitation and hygiene services.

WaterAid has been working in Bangladesh for 30 years. Since 2009 WaterAid Bangladesh has led a programme integrated with education and health facilities to create climate-resilient WASH, working with community-led planning and disaster response committees to identify local threats and develop risk-reduction action plans and budgets, improving disaster resilience through improved WASH facilities.⁵ In the face of severe environmental challenges the programme

Data snapshot

- Sub-Saharan Africa is responsible for only 4% of global carbon emissions, but two thirds of its people are already feeling the effects of climate change.²
- Almost two thirds of the world’s population, about 4 billion people, live in water-scarce areas, where for at least part of the year demand exceeds supply. This is expected to increase to 5 billion by 2050 – one more person every two seconds.³
- Rich nations, which have caused the most carbon emissions, are failing to deliver on their obligations to the lower-income countries affected. In 2016, only US\$23 billion was spent on helping countries adapt – just 6% of global climate spending.⁴

has pioneered a range of innovative technologies including rainwater-harvesting systems, water storage, reverse-osmosis, dual platform tube wells and elevated latrines to help minimise the impacts of climate-related risks on people's access to clean water and decent toilets.

The Sahel

Africa's Sahel region has extreme climate uncertainty, with long dry seasons, frequent droughts and poor access to water. Unpredictable rainfall patterns threaten livelihoods and lives, so communities need tools to combat the growing threat of climate change.

WaterAid works in the Sahel to build community resilience to water scarcity, in Burkina Faso, Mali and northern Nigeria, through the Securing Water Resources Approach project.⁶ In Burkina Faso, this community-based water management strategy involves training people – both men and women – to collect and interpret water data, so community members can monitor droughts, flooding and changes in rainfall. Their findings inform water supply management during the dry season, and help regional authorities address threats to the supply.

Engagement with communities and regional authorities is crucial to coordinating the water supply and sustaining water security of the region in the context of climate change. WaterAid's locally based approach to gathering information and adapting to a changing climate is fundamental to communities' long-term resilience.



WaterAid/ Andrew McConnell



Bangre gives a drink of water to his one-year-old son, Enseta, at their home in Imbina, Burkina Faso.



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Above: Balima Karim checks the water level of an open well in Basbedo, Burkina Faso.



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



We recommend:

- **Include WASH in climate change policy as a key adaptation strategy.** Governments must commit to and incentivise better cross-institutional cooperation, recognising that water, sanitation and hygiene are essential elements in climate change adaptation.
- **Prioritise planning and support for water security.** Balance top-down policy and bottom-up planning for climate-resilient WASH to prevent and mitigate extreme weather events. All developing countries should urgently complete comprehensive National Adaptation Plans as required by the Paris Agreement, to clearly outline their priorities and guide the necessary actions and finance required to achieve them.
- **Increase investment in climate-resilient WASH and disaster risk reduction.** Wealthy industrialised nations that caused the climate change crisis must provide funding to fix it – in addition to finance from existing aid budgets. Developed countries must keep their promises on climate finance and increase investment in adaptation and mitigation, to which WASH services are essential.

References

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WaterAid is an international not-for-profit, determined to make clean water, decent toilets and good hygiene normal for everyone, everywhere within a generation. Only by tackling these three essentials in ways that last can people change their lives for good.

Mercy Corps is a leading global organization powered by the belief that a better world is possible. In disaster, in hardship, in more than 40 countries around the world, we partner to put bold solutions into action — helping people triumph over adversity and build stronger communities from within. Now, and for the future.