

# Climate change-induced water insecurity endangers children

The global community must act to ensure that all families have clean water



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**Today, 1.42 billion people – including 450 million children – live in areas of high or extremely high water vulnerability (UNICEF, 2021). This means they face a double burden: their areas lack adequate water services and infrastructure, and water is already scarce.**

Water stress is growing due to population growth and increased demand from sectors such as agriculture, as well as decades of misuse, poor management, over-extraction of groundwater and contamination of freshwater supplies. In the coming years, climate change is expected to exacerbate water scarcity even further.

Many changes in climate are felt through water – notably droughts, floods and rising sea levels. Approximately 74% of natural disasters between 2001 and 2018 were water related (UNICEF, 2021). Extreme weather events can damage water and sanitation infrastructure and services. This affects homes, schools and healthcare facilities, as well as food supplies.

Rising sea levels can lead to saltwater intrusion, contaminating the drinking water supplies on which entire communities rely. Rapid melting of glaciers changes river flow patterns in downstream areas. This contributes to risks of flooding and damage to infrastructure – including dam bursts – in some areas, and low flows in rivers in other areas, thus reducing the amount of water available.

Water scarcity and climate change are also drivers of conflict and migration, as communities and entire populations compete for shrinking water resources. Conflict, in turn, puts more strain on food and water supplies. Families may be forced to leave their homes in search of reliable water supplies and livelihood opportunities. They often move to urban areas and towns, which puts even more pressure on already strained services.

← 1-year-old Camari holds his mother's hand as they stand near the river in Lawaki village. Although their village tap is working again, the water pressure is too low to meet the needs of all the villagers



Taken together, the growing threat of water insecurity due to climate change jeopardises the significant progress in child survival and sustainable development made over the last several decades. It puts the lives of children in vulnerable communities at risk today, and threatens future generations.

**“Every day, over 700 children under age 5 die from diarrhoea linked to unsafe water, inadequate sanitation and poor hygiene.”**

### **Water scarcity imperils children’s education, health and safety**

Access to safe water is paramount to children’s survival. Every day, over 700 children under age 5 die from diarrhoea linked to unsafe water, inadequate sanitation and poor hygiene.<sup>1</sup> Those who survive can experience lifelong effects: when children get sick with diarrhoea, they are unable to absorb the nutrients they need to grow. Over time this can lead to stunting and may irreversibly damage children’s physical and mental development. Unsafe water and sanitation can lead to malnutrition or make it worse: inadequate access to water, hygiene and sanitation is estimated to account for around 50% of global malnutrition.

Lack of water in pregnancy also impacts the unborn child: data from a study of women living in rural Africa show that girls born during severe droughts suffer the consequences throughout their lives, including growing up shorter (Damania et al., 2017).

Water scarcity can also profoundly affect children’s education, development and safety. Their health and learning can suffer when educational facilities do not have adequate water for drinking and handwashing. When water sources dry up, children may be forced to drop out of school to spend more time collecting

water from sources that are farther away. Not only does this disrupt their education, but carrying heavy loads of water places a great physical burden on children.

Whether it is violence or water shortages that force people from their homes, migration makes children and families more vulnerable both to abuses and to health threats. On the move, children often have no choice but to drink unsafe water. In protracted conflicts, children under 5 are more than 20 times more likely to die from diarrhoeal disease linked to unsafe water and sanitation than they are from violence (UNICEF, 2019).

We can achieve water security for every child only when families and communities have access to water that is safe, reliable and affordable and when they can cope with threats such as water scarcity, extreme weather events and climate shocks.

At UNICEF, we envision four dimensions to building a more water-secure future for children:

- 1 safe and affordable drinking water services that are sustainable, close to home and managed professionally
- 2 climate-resilient WASH (water, sanitation and hygiene) services that help communities both mitigate and adapt to the impacts of climate change
- 3 prevention of water scarcity crises through early warning systems and early action
- 4 water cooperation for peace and stability.

We are pursuing these goals by working with governments and partners using four main strategies:

- 1 advocating for political commitment and policy change
- 2 accelerating financing and capacity development
- 3 mobilising businesses and encouraging innovations
- 4 activating young people as champions and agents of change.

<sup>1</sup> This is UNICEF’s calculation based on several data points. See also UNICEF (2021).



↑ A boy enjoying his bath, in Limbe, in the south-west of Cameroon

In order to achieve SDG 6 targets (clean water and sanitation for all) and combat the impact of climate change, UNICEF has set an ambitious goal: by 2025,

we aim for all 450 million children and their families who live in areas of high water vulnerability – 1.42 billion people in total – to have resilient solutions. By 2030, we aim for children everywhere to have access to a safe and affordable water supply and to live in water-secure communities.

➤ Find this article online at [earlychildhoodmatters.online/2021-3](https://earlychildhoodmatters.online/2021-3)

## References

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