

# The climate-changed child

A CHILDREN'S CLIMATE RISK INDEX SUPPLEMENT

Published by UNICEF  
Division of Global Communication and Advocacy  
3 United Nations Plaza  
New York, NY 10017, USA  
**Contact:** [pubdoc@unicef.org](mailto:pubdoc@unicef.org)

**Website:** [www.unicef.org](http://www.unicef.org)

**Suggested citation.** United Nations Children's Fund, *The climate-changed child: A children's climate risk index supplement*, UNICEF, New York, November 2023.

**ISBN:** 978-92-806-5509-4

© United Nations Children's Fund (UNICEF), November 2023

## Data Sources

**GPW:** CIESIN, 2019. *Gridded Population of the World, Version 4: Population Density, Revision 11*. Center for International Earth Science Information Network, Columbia University, published by NASA Socioeconomic Data and Applications Center (NASA SEDAC), (DOI 10.7927/h49c6vhw)

**EC JRC/Google:** EC JRC/Google, 2023. *JRC Global Surface Water Mapping Layers, v1.4*. Brussels and Mountain View, California: European Commission Joint Research Centre and Google. <https://data.jrc.ec.europa.eu/dataset/jrc-gswe-global-surface-water-explorer-v1>

**NASA MODIS:** NASA MODIS, 2023. *Vegetation Indices Monthly (MOD13A3) Version 6.1*. Washington, DC: National Aeronautics and Space Administration, Moderate Resolution Imaging Spectroradiometer, (DOI 10.5067/MODIS/MOD13A3.061)

**WPP:** UNDESA, 2022. *World Population Prospects 2022*, Online Edition. New York: United Nations, Department of Economic and Social Affairs, Population Division, <https://population.un.org/wpp/>

**WHO/UNICEF JMP:** WHO/UNICEF JMP, 2023. *Household Data*. Geneva and New York: World Health Organization and UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene, <https://washdata.org/data/household#!/>

**WRI:** WRI, 2023. *Aqueduct Water Risk Atlas*. Washington, DC: World Resources Institute, <https://www.wri.org/applications/aqueduct/water-risk-atlas/>

## COVER PHOTOGRAPH

A mother and daughter look out over submerged houses in Panyagor in Twic East, Jonglei State in South Sudan.

© UNICEF/UN0594299/Naftalin

# The climate-changed child

A CHILDREN'S CLIMATE RISK INDEX SUPPLEMENT

# Key messages

**Climate change threatens the lives, health and well-being of children. They are the most vulnerable to its effects, and those who live in low-income communities are at particularly high risk of harm.**

Children are not like little adults. Their bodies and minds are uniquely vulnerable to the impacts of climate change such as pollution, deadly diseases and extreme weather. Yet they have been either ignored or largely disregarded in the global climate change discourse and financing.

UNICEF's 2021 landmark Children's Climate Risk Index (CCRI) report found that 1 billion children are at extremely high risk of the impacts of the climate crisis and examined eight components of climate and environmental shocks and stresses. This report builds on the CCRI and examines one of these components – water scarcity (the physical availability of water) along with water vulnerability (the combination of water scarcity and lack of access to drinking water service).

## **As of 2022:**<sup>1</sup>

- Almost 1 billion children (953 million) are exposed to high or extremely high water stress.
- 739 million children are exposed to high or extremely high water scarcity.
- 436 million children live in areas with high or extremely high water vulnerability.
- 470 million children face high or extremely high drought risk.

<sup>1</sup> Figures in this report refer to the 163 countries included in the 2021 UNICEF CCRI.

While countries all over the world face water stress as they struggle to balance demand with available supplies in a changing climate, the combination of physical water scarcity and inadequate infrastructure for drinking water services creates water vulnerability. Managing water scarcity and reducing water vulnerability will require much stronger action in national adaptation plans and climate finance investments.

Putting children at the centre of the global response to the climate crisis will not only protect the health and well-being of children, but also lead to stronger communities and more resilient economies.

At COP28, world leaders and the international community must take critical steps with and for children, to secure a livable planet.

## **They must:**

- Elevate children within the final COP28 Cover Decision and convene an expert dialogue on children and climate change.
- Embed children and intergeneration equity in the Global Stocktake (GST).
- Include children and climate-resilient essential services within the final decision on the Global Goal for Adaptation (GGA).
- Make the Loss and Damage Fund and funding arrangements child-responsive with child rights embedded in the fund's governance and decision-making process.

# Contents

<b>Key messages</b> .....	<b>2</b>
---------------------------	----------

## **Foreword**

**UNICEF Executive Director**

<b>Catherine Russell</b> .....	<b>4</b>
--------------------------------	----------

## **PART 1**

<b>Climate change is changing children</b> .....	<b>6</b>
--	----------

Introduction.....	7
-------------------	---

The myriad effects of climate change on children .....	11
--	----

Rising to the challenge globally .....	16
--	----

## **PART 2**

<b>Spotlight on water scarcity and water vulnerability</b> .....	<b>20</b>
--	-----------

Definitions .....	21
-------------------	----

Climate change is making water scarcity worse across regions.....	22
---	----

Access to safe WASH services is not improving fast enough .....	28
---	----

Water vulnerability: A combined problem of water scarcity and lack of access to WASH services .....	30
--	----

<b>Case studies</b> .....	<b>36</b>
---------------------------	-----------

## **PART 3**

<b>Critical actions to ensure a livable planet for children</b> .....	<b>42</b>
---	-----------

## **ANNEX**

**Countries where children are most at risk –**

<b>CCRI rankings</b> .....	<b>46</b>
----------------------------	-----------

# Foreword

**UNICEF Executive Director**  
Catherine Russell



**Syrian Arab Republic, 2023**

@ UNICEF/UN0795033/Deeb

The global failure to confront the climate crisis – the greatest threat of this generation – has created a child rights crisis. It is jeopardizing every child's fundamental right to health and well-being.

Every passing year, the effects pile up: millions displaced from their homes, heatwaves, droughts and flooding that unleash havoc, education disrupted and diseases made more endemic.

But climate policy and financing, media coverage and global discourse on climate change all too often ignore the fact that children's bodies and minds are uniquely vulnerable to pollution, deadly diseases and extreme weather.

In 2021, UNICEF released the landmark Children's Climate Risk Index (CCRI). It was the first time we laid out the threat that climate

change poses to children, across eight climate and environmental shocks. It showed that nearly half the world's children – 1 billion – live in countries classified as extremely high-risk and this figure is only likely to get worse as the impacts of climate change accelerate.

Over the past year, we have built on the CCRI with new research and have found that:

- 559 million children are currently exposed to high heatwave frequency, rising to all 2.02 billion children globally by 2050.
- Over the past six years, there were 43 million internal displacements of children linked to weather-related disasters – the equivalent to approximately 20,000 child displacements per day.

This report examines another critical issue for children likely to worsen due to climate change: water scarcity and water vulnerability. The lack of safe drinking water, sanitation and hygiene is destructive to all aspects of a child's life.

Over 730 million children are exposed to high or extremely high water scarcity and 436 million children live in areas with high or extremely high water vulnerability.

Despite these clear impacts, children's needs are being relegated to the sidelines. We ignore them at our peril.

Children and young people themselves have consistently made urgent calls for their voices to be heard but they have almost no formal role in climate policy and decisions. They are rarely considered in climate adaptation, mitigation or finance plans and actions.

But they have not lost hope. They continue to raise their voices and take action to demand an urgent response to the planetary crisis. It is our collective responsibility to listen and put children at the centre of urgent climate action.

Confronting the planetary crisis for children requires a global movement of partnership. This year, UNICEF is launching the Sustainability and Climate Action Plan, our organization's commitment to galvanize global efforts to fill global gaps to protect the most vulnerable children.

COP28 is a critical opportunity to finally put children on the climate change agenda.

At COP28, UNICEF is calling for:

- Elevating children within the final COP28 Cover Decision and convening an expert dialogue on children and climate change.
- Embedding children and intergeneration equity in the Global Stocktake (GST).
- Including children and climate-resilient essential services within the final decision on the Global Goal for Adaptation (GGA).
- Making the Loss and Damage Fund and funding arrangements child-responsive with child rights embedded in the fund's governance and decision-making process.

COP28 cannot be business as usual. We cannot keep going down the same path. Let's ensure that COP28 becomes a turning point in finally putting children at the center in our shared fight against climate change.



---

### **Ethiopia, 2022**

Ten-year-old Bukhari Aden helps his mother lead camels to a shallow pond to drink. He has never been to school. *"There is no water near the village. If water was available nearby, it would be easy for me to go to school."*

© UNICEF/UN0639604/Ayene

## **PART 1**

# **Climate change is changing children**

The climate crisis is not just changing the planet – it is changing children. From the moment of conception until they grow into adulthood, the health and development of children's brains, lungs, immune systems and other critical functions are affected by the environment they grow up in. Children are not like little adults; their smaller and less-developed bodies and minds are uniquely vulnerable to pollution, deadly diseases and extreme weather.



## Introduction

**The lives of millions of children around the world are being upended by the climate crisis. Geography does not protect against climate change; it is affecting children everywhere – even in high-income countries – and the world is not doing nearly enough to protect them.**

In Europe, Canada and the United States, children with asthma and other respiratory conditions have suffered even worse breathing problems caused by inhaling the particles produced by wildfire smoke into their young lungs, placing them at risk of long-term damage. The ongoing drought in the Horn of Africa and desertification across the wider Sahel region along with growing water scarcity in the Middle East will have far-reaching consequences for children.

Climate-exacerbated weather events have increased six-fold in East Asia and the Pacific region over the past 50 years. In Africa, 39 out of 49 countries with available data have an overall CCRI score in the 'extremely high' or 'high' risk class. Summer temperatures are predicted to rise by up

to 4°C by 2071–2100 compared to pre-industrial temperatures in the Middle East and North Africa.

Some 4.2 billion children are expected to be born over the next 30 years. There will be no 'new normal' climate for them. Around the world, extremes of drought, heat and flooding are becoming more common and are set to become more severe, with some regions already experiencing swings between the three and infrastructure and services are struggling to cope.

**Children are particularly vulnerable to the effects of climate change.** They are disproportionately affected by the impacts of disasters, environmental degradation and the climate crisis compared to adults through pollution, deadly diseases and extreme weather events. For example:

- Killer childhood diseases are spreading more because of environmental degradation and climate change.
- Children are more likely to suffer from air pollution than adults.

- Infants and young children are less able to regulate their body temperature and more prone to dehydration, making them more vulnerable during extreme heatwaves.
- Child malnutrition is worsened by crop failures and rising food prices, which is exacerbated by higher temperatures and increased rainfall linked to climate change.
- Forty million children are having their education disrupted every year because of disasters exacerbated by climate change, and this number continues to increase.
- Extreme heat is associated with an increase in mental health problems including post-traumatic stress disorder and depression in children and adolescents.

Children who live in low-income countries are at particularly high risk of harm caused by climate change. In 2021, over three-quarters of United Nations humanitarian appeals arose at least in part from an extreme weather event – rising from 36 per cent in 2000.



Funding needs for UN humanitarian appeals tied to extreme weather events have risen sharply since 2000. Hazards such as droughts and floods that are exacerbated by climate change pose immediate risks to children's lives and health, but they also lead to scarcity of resources – which can cause conflicts – and result in children being displaced from their homes and having their education disrupted.

**Children have been ignored.** Despite their unique vulnerability, children have been either ignored or largely disregarded in the response to climate change. Only 2.4 per cent of climate finance from key multilateral climate funds support projects incorporating child-responsive activities.

The word 'children' appears only twice in the Intergovernmental Panel on Climate Change's *2023 Synthesis Report of the IPCC Sixth Assessment Report*. The UN synthesis report on the technical dialogue of the first global stocktake released in September 2023 does not refer to 'children' at all and 'youth' only four times.

---

### Ethiopia, 2023

In Libemuket, a cluster of five villages located in south-west Ethiopia, climate change and drought are threatening crops and livestock, pushing the local population to the brink.

© UNICEF/UNI417897/Pouget

Children and young people are consistently making urgent calls for their voices to be heard on climate topics. As the UN Committee on the Rights of the Child has pointed out, taking their rights and their views into account would lead to more ambitious and effective policies on environmental protection. And yet children have almost no formal role in climate policy and decisions, and they are rarely considered in existing climate adaptation, mitigation or finance plans and actions. According to UNICEF analysis, a mere 23 per cent of Nationally Determined Contributions (NDCs) mentioned that the NDC process was participatory and involved young people and even less, 2 per cent, mentioned that the process involved children.

**Children must be at the centre of the global response.** Adapting essential services, compensation for loss and damage, disaster risk reduction, early warning and increased investment in decarbonization can make the difference between life and death, a future or disaster, for the planet's children.

Governments have an obligation to ensure a clean, healthy and sustainable environment to protect and fulfil children's rights.

It is our collective responsibility to put children at the centre of urgent climate action to ensure that all – including the most vulnerable – have a liveable future.

## Mitigation, adaptation and loss and damage at COP28

Addressing the challenge of the climate crisis requires political ambition and commitments around three pillars during COP28:

**Mitigation** to reduce emissions, including transitioning from fossil fuels to renewable energy, which is becoming increasingly cheaper, addressing agriculture, land use change and deforestation, and ensuring more sustainable cities to slow the rate of climate change. This includes replacing or retrofitting physical infrastructure, carbon capture, and transformation of key sectors including the energy sector. The onus is on the major emitters to reach net zero emissions as close to 2040 as possible and support emerging economies with know-how and finance to hit their 2050 targets.

**Adaptation** to prepare for a climate-changed world and shield it from the worst effects. This involves physical adaptations (e.g., protecting coastlines, modifying agriculture, improving water management and enhancing heat management) as well as social adaptations (e.g., expanding social protection, facilitating mobility and disaster risk management).

**Loss and damage** of life, land, livelihoods or cultural heritage caused by the climate crisis is one of the greatest intergenerational injustices that children face today. At COP27 in 2022, parties made the momentous decision to establish a Loss and Damage Fund. It is a critical, albeit first, step towards addressing loss and damage and a long-awaited breakthrough in climate negotiations. The Fund and related finance arrangements present an opportunity to learn from past experiences of financing climate action and to include children as key actors. A transitional committee has been set up to make recommendations on how to operationalize the new funding arrangements and fund for consideration and adoption by COP28.



### Pakistan, 2023

@UNI431639/UNICEF/Sokhin

*“The air is unbreathable. The heat is unbearable. And the level of fossil fuel profits and climate inaction is unacceptable. Leaders must lead. No more hesitancy. No more excuses. ... G20 countries responsible for 80 per cent of global emissions must step up for climate action and climate justice. ... We need ambitious new national emissions reduction targets from G20 members. ... And all actors must come together to accelerate a just and equitable transition from fossil fuels to renewables.”*

**United Nations Secretary-General António Guterres, July 2023**



---

### Indonesia, 2020

Satrio Widodo, 7, stands on a sea wall near his home in Jakarta, Indonesia, in an area frequently flooded due to rising sea levels. Jakarta is one of the fastest sinking cities in the world, sinking as much as 25 cm a year in some parts. By 2050, North Jakarta – with its millions of residents – could be entirely underwater.

© UNICEF/UNI390327/Wilander

## The myriad effects of climate change on children

**UNICEF's groundbreaking Children's Climate Risk Index (CCRI) in 2021 showed that nearly all children are already exposed to at least one major climate and environmental hazard, shock or stress and nearly half (1 billion children) live in countries at extremely high risk.**

This report provides a deep dive into one dramatic example of the risks facing children as laid out in the CCRI – water scarcity and vulnerability. UNICEF analysis of recently released data shows that by 2022 large numbers of children were already living in areas of high or extremely high water vulnerability (low or very low levels of drinking water service combined with high or very high risk of water stress, interannual variability, seasonal variability, groundwater decline and drought) and the problem is projected to get much worse in the future.

Other dimensions of the climate crisis' often-compounding impacts and hazards facing children include:

**Disease:** Environmental degradation and climate change affect the spread of diseases that predominately kill children. For example, flooding damages water and sanitation infrastructure, potentially contaminating water supplies and leading to the unsafe discharge of faecal wastes into the environment, which can increase waterborne diseases. Globally, diseases associated with unsafe drinking water, sanitation and hygiene remain a leading cause of death among children under five. High temperatures allow deadly pathogens to spread in freshwater making it dangerous to drink. Already, more than 1,000 children under the age of five each day die from diseases arising from lack of water, sanitation and hygiene.

Due to increased temperatures, mosquitoes will contribute to the spread of malaria and dengue fever and will likely expand to areas where those diseases are not endemic. Morbidity and mortality from yellow fever and other water-borne climate-sensitive diseases will likely rise because of climate change.

**Diet and nutrition:** A diverse diet is vital for children to ensure that they get the nutrients they need for healthy development. Higher temperatures and increased rainfall intensity and variability linked to climate change are associated with failed crops and increased food prices, leading to reduced diet diversity in children.

Food insecurity is predicted to increase as the climate crisis worsens, with the communities that are already worst affected suffering more and others experiencing problems for the first time. When children and pregnant women suffer malnutrition, it leads to increased susceptibility to disease and infection, and poor developmental outcomes.

**Education:** Climate shocks disrupt children's education both directly and indirectly. Extreme weather events can damage or destroy schools. Illnesses caused by climate impacts keep children out of school.

In areas affected by water insecurity, droughts have a direct impact on children's attendance, reducing their time in school due to longer times dedicated to fetch water, or dropping out of school completely. In Ethiopia, for example, around 20 per cent of girls and 5 per cent of boys miss time in school to fetch water in normal circumstances. During droughts, this amount of time increases significantly, with a much larger toll on girls. Water scarcity also affects girls' education as they may be less willing to attend school during their periods if sanitation facilities are inadequate.

Even where schools remain open and children continue to attend, the impacts of climate change can affect children's ability to learn. Scorching heat and inadequate drinking water supplies are not conducive to concentration.

Climate-exacerbated disasters disrupt the education of nearly 40 million children annually, and this number continues to increase each year.

**Migration and displacement:** According to the United Nations High Commissioner for Refugees (UNHCR), hazards resulting from the increasing intensity and frequency of extreme weather events are already causing on average more than 20 million people to leave their homes and move to other areas in their countries each year.

Storms and flooding are more likely to cause displacement, accounting for 95 per cent of recorded child displacements between 2016 and 2021. Research conducted by UNICEF and partners, during that period show that 43 million children were displaced. In relative terms, small island developing states and countries in the Horn of Africa were worst affected.

The negative impact of climate change on access to water resources can trigger tensions within and between countries and with host communities. Conflicts over resources are a cause of displacement and cross-border migration and can hamper return for those who have already been displaced.

Children who are displaced are at increased risk of several dangers. They may become separated from their families, subsequently facing a greater likelihood of experiencing exploitation, trafficking, violence or abuse. Their education and access to essential services such as health care are likely to be disrupted.

**Mental health:** Children all over the world are in the frightening position of witnessing the impacts of climate change and understanding its implications for their futures while having little power to change the situation. This means that children and young people suffer from climate anxiety on a significant scale. They perceive governments as failing to take sufficient action, which can cause further distress. Survey results show that over 45 per cent of children and young people ages 16–25 in 10 countries reported that 'their feelings about climate change negatively affected their daily life and functioning'.

The rise in global temperatures also poses risks to children's mental and emotional health. Extreme heat is associated with an increase in mental health problems including post-traumatic stress disorder and depression in children and adolescents.

**Gender:** Climate hazards can have disproportionate impacts on girls. Loss of livelihoods, displacement and migration from climate-related events often put girls in precarious positions. Gender-based violence and child marriage increase following extreme weather events and disasters. For example, in Bangladesh, the number of marriages of girls ages 11 to 14 increased by 50 per cent in years with heatwaves lasting longer than 30 days.



---

### Somalia, 2022

An aerial photo of the Ladan camp for displaced people in Dollow, Somalia. A study found that 43,000 “excess deaths” may have occurred in 2022 from the drought in Somalia.

© UNICEF/UN0742108/Condren

## Environmental impacts

**Air pollution:** Climate change and air pollution are interrelated. Atmospheric warming associated with climate change has the potential to increase ground-level ozone, increasing air pollution while ozone and other greenhouse gas (GHG) emissions cause air pollution and contribute to climate change.

Children are more likely to suffer from air pollution than adults. Generally, they breathe faster than adults and their brains, lungs and other organs are still developing. The impacts of air pollution on children include death, respiratory infections, cancer and developmental damage.

For example, over 83 per cent of children in Europe and Central Asia are exposed to ambient air pollution. In Egypt, the number of people dying prematurely of air pollution each year is estimated at almost 20,000. The World Bank has calculated that the cost of health problems arising from poor air quality amounts to 2.5 per cent of the country's GDP.

Indoor cooking with open fires or stoves fuelled by kerosene, wood or other solid fuels is another serious cause of air pollution that harms children. Used by 2.4 billion people worldwide, household air pollution from indoor cooking is responsible for over 237,000 deaths of children under 5 per year.

**Heatwaves:** Around the world in 2023, global temperatures once again broke records and extreme heat events endangered lives and livelihoods. As the climate crisis intensifies, heatwaves are becoming more frequent, more severe, more widespread and longer in duration. UNICEF research has found that by 2050 almost every child on the planet will be exposed to high heatwave frequency. Those in the poorest communities will face the greatest risks.

Infants and young children are more vulnerable than adults to extreme heat, as they are less able to regulate their body temperature and more prone to dehydration. This means that high temperatures are more likely to cause a range of symptoms including severe heatstroke leading to organ failure. In older children, heatwaves can increase heart rates and respiratory conditions. Extreme heat events can also have devastating effects on communities and essential services, threatening children's access to education, food and water, and causing conflict and displacement.

**Flooding:** Children are especially vulnerable to flash floods because of their quick onset and destructive nature. They often move at incredible speeds, leaving children and their families with little warning to prepare and respond. Strong currents and debris in the water put them at risk of injuries and drowning.

Beyond the immediate risks of death and injury, floods pose a risk to children's health. Floods compromise safe water supplies, increasing the chance of diarrhoea outbreaks which can cause dehydration and malnutrition. Children affected by frequent flooding over time are more likely to be stunted and underweight. Floods also damage sanitation facilities or take place in areas of open defecation, contributing to water contamination.



## UNICEF regional CCRI analyses highlight unique vulnerabilities

The East Asia and the Pacific region's unique geography, with many countries located along continental arcs and offshore archipelagos, places much of its population at risk. The Pacific Island countries are hotspots for cyclones, rising sea levels, ocean acidification and coral bleaching. There has been a significant increase in climate-exacerbated extreme weather events in the East Asia and the Pacific region over the past five decades, including:

- Elevenfold increase in floods
- Fourfold increase in storms
- 2.4-fold increase in droughts
- Fivefold increase in landslides

On average, these climate-exacerbated weather events have increased sixfold in East Asia and the Pacific region.

In Africa, 39 out of 49 countries with available data have an overall CCRI score in the 'extremely high' or 'high' risk class.

While children and communities in the northern part of Africa tend to be exposed to higher risks related to water scarcity and air pollution, those living in the western and eastern parts of the continent, particularly in the tropical areas – are more heavily affected by the risks posed by vector-borne diseases, heatwaves and riverine flooding.

The Middle East and North Africa is among the world's most vulnerable regions when it comes to climate change. The region is warming faster than the global average, with summer temperatures predicted to rise by up to 4°C by 2071–2100 compared to pre-industrial temperatures.

In parts of the Middle East, combined heat and humidity are predicted to reach or exceed the thresholds of human tolerance and adaptability within this century. In other parts of the region, combined heat and drought will accelerate desertification and lead to increases in dust storms, with dire impacts on children's health.

### Philippines, 2021

"Impoy" Prince Jhay Mark Timonio, 8, sits in the debris of broken houses in Bohol, Philippines. His family, like most in his area, lost their house when Typhoon Rai hit the Philippines on 16 and 17 December 2021.

© UNICEF/UN0570025/Hogsholt



## Rising to the challenge globally

### **COP28 is an opportunity for the world to unite and meet this crucial moment and fulfil young people's hopes and demands.**

Part 3 of this report outlines the comprehensive critical actions needed to ensure a livable planet for every child. Increased investment in decarbonization and mitigation, adaptation and environmental protection and extended coverage of essential resilient social services to protect vulnerable populations from hazards, shocks and stresses exacerbated by climate change are all urgently required. Governments must prioritize the most vulnerable populations who are most at risk as a central focus of the COP28 discussion. This includes dramatically increasing finance for adaptation and providing new and additional funds to address loss and damage, particularly for the poorest countries and most vulnerable communities that have contributed the least to the climate crisis. For example, low-income countries have a joint population of 1 billion, yet contribute less than 1 per cent of global emissions (0.98 per cent).

Climate adaptation and resilience planning not only reduces risk to children; it also delivers economic benefits: \$1 invested in adaptation efforts such as early warning systems or water infrastructure management can result in up to \$10 in net economic gains. With ambitious adaptation action, the number of people in need of humanitarian assistance from climate disasters could drop by 90 per cent by 2050 and better access to resilient water, sanitation and hygiene (WASH) services could reduce the climate risk for 415 million children.

A faster and fairer transition to a low-carbon economy is an opportunity for children to live healthier, happier and more prosperous lives. Decarbonization and emissions reduction could lead to reductions in childhood asthma and adverse birth outcomes such as low birthweight. The transition to a low-carbon economy also carries the potential for children and young people to develop new skills and gain new employment opportunities in a new and growing labour market for clean energy and sustainability.

With concerted efforts, we can make a difference. Estimates of projected temperature rises this century are coalescing around figures lower than the worst-case scenarios of recent years. Yet it is also becoming clear that the world may have been underestimating the magnitude of extreme weather events. The long-term impacts of climate change will be disastrous without the required investments. At COP28, world leaders and the international community must take critical steps with and for children to secure a livable planet.



## Climate finance for children is woefully inadequate

Lower-income countries and children – those most affected by the climate crisis – are overlooked by climate finance.

Despite bearing the brunt of the climate crisis, children are being failed by climate funding commitments. Children and their rights are largely absent from climate finance allocations. Only 2.4 per cent of climate finance from key multilateral climate funds (MCFs) support projects incorporating child-responsive activities. And when children are considered, they are treated as vulnerable victims rather than potential agents of climate action. Across all MCFs, just 1 per cent is the involvement of children part of the design or monitoring of the project. According to the United Nations Environment Programme, international adaptation flows to lower-income countries are 5 to 10 times below estimated needs, and this gap is widening.

Approximately three-quarters of climate finance is currently raised and spent domestically in advanced economies, with the remaining one-quarter representing international flows. As a result, climate finance is overwhelmingly concentrated in advanced economies and East Asia. The Independent High-Level Expert Group on Climate Finance estimated that an additional US\$500 billion of international finance a year

is required for developing countries, rising to US\$1 trillion a year by 2030.

At 90 per cent, mitigation efforts take the lion's share of climate finance today, with only a small portion of the remaining 10 per cent for adaptation directed to the countries most vulnerable to climate change. Many sectors that are critical to children such as climate education and climate-responsive social protection are virtually unfunded by the leading climate finance vehicles.

Important and hopeful reforms to climate finance currently are being debated at a global level. The Bridgetown Initiative, a set of ambitious commitments to finance the Sustainable Development Goals and climate finance, was formulated by United Nations Secretary-General António Guterres and Barbados Prime Minister Mia Amor Mottley. Recognizing the deep burden of debt and liquidity challenges faced by lower-income countries, the initiative proposes a large-scale SDG stimulus package including climate finance, while stressing the need for reform of the international financial architecture.

When it comes to national plans, there are reasons for both optimism and reservation. Each party to the Paris Agreement is required to establish and regularly update a Nationally Determined Contribution (NDC), an action plan to cut emissions and adaptation.

A 2022 UNICEF analysis found that governments are making progress in incorporating more child-sensitive commitments in their NDCs, including in countries where children are exposed to high levels of climate risk but funding for such commitments is often lacking. The good news is that 65 per cent of new and updated NDCs refer to children and young people compared to only 32 per cent of first or previously submitted NDCs. Yet only 34 per cent of NDCs identify children as a vulnerable group and only 11 per cent identify children as drivers of change. In addition, according to UNICEF analysis, a mere 23 per cent of NDCs mentioned that the NDC process was participatory and involved young people and even less, 2 per cent, mentioned that the process involved children.



Argentina, 2020

@ UNICEF/UN0364359/Gil

“

## YOUTH ESSAY: Climate finance is about fulfilling obligations

By Nicki Becker, Argentina, 22

**I'm from Argentina, a country that has had many economic problems for as long as I can remember.**

The climate crisis must be a priority for my country, but currently, it has to repay a huge debt to the IMF. But, who owes whom? At some point, the debt is with us, the young people who are and will suffer the consequences of climate change. For young people living in countries experiencing this situation, climate financing is almost the only way not to be indebted for life. Not only because of the debt incurred by our countries but also because of decisions we didn't make that have led us to experience the climate crisis.

Despite climate financing being a complex and technical subject, I believe that at the very least understanding why it's important is not complicated. It's as simple as something we are taught from a young age: if you break something, you have to take responsibility for it. The most developed countries became wealthy at the expense of emitting a lot of

greenhouse gases that caused changes in the climate system. The paradox is that they aren't the only ones affected by this change; other countries that don't pollute as much as they do are affected to an even greater degree. While there have been many promises, the full amount of promised financing has not yet been provided. Sometimes, it is even given in the form of loans and only for mitigation, neglecting the adaptation that is crucial in poorer countries.

Climate financing is essential so that less-equipped countries can adapt to the impacts of climate change that we are already experiencing today, and at the same time, decarbonize their economies. It's not a matter of being 'good-hearted' and lending a hand to a friend; it's simply about fulfilling their obligation to pay for what they have damaged in others.

## BOX 3

## Climate change is a driver of child displacement and exacerbates humanitarian crises

Climate change is driving humanitarian needs and human suffering, particularly for the poorest countries and the most vulnerable people living in them.

Whether it is an immediate shock such as a hurricane or slow-onset hazards such as droughts, the effects of climate hazards linger long after the climatic 'event' has passed. One way in which climate change affects humanitarian needs is displacement. Millions of children around the world are on the move, driven from their homes by weather-related events, exacerbated by climate change such as floods, storms, droughts and wildfires. Displacement can multiply climate-exacerbated risks for children and their families. In the aftermath of a disaster, children may become separated from their parents or caregivers, amplifying risks of exploitation, child trafficking, and abuse. Displacement can disrupt access to education and healthcare, exposing children to malnutrition, disease, and inadequate immunization, while overcrowded and under-resourced evacuation sites may be located in climate-vulnerable areas.

Yet children displaced by extreme weather-related events have been statistically invisible. Children on the move are likely to slip through the cracks unnoticed.



### Syrian Arab Republic, 2021

Children stand outside tents in a flooded area of Kafr Losin Camp for internally displaced families.

© UNICEF/UN0405704/Akacha



### Yemen, 2023

A 7-year-old girl drinks water from a dispenser at her home in Dhamar Governorate.

© UNICEF/UN0818966/AI-Sunaidar

## PART 2

# Spotlight on water scarcity and water vulnerability

Whether it is too much, too little or too polluted, climate change is felt through water. Despite the recognition of the centrality of water in the climate crisis, actions in this area are still limited in scope and ambition. Water security for all can only be achieved if people have access to drinking water that is safe, affordable and sustainable, and resilient to threats related to water scarcity, extreme weather events and climate shocks.

### As of 2022:

**953 million children** were exposed to high or extremely high water stress.

**739 million children** were exposed to high or extremely high water scarcity.

**436 million children** live in areas of high or extremely high water vulnerability.

## Definitions

### Water stress

The ratio of total water demand to available renewable surface and groundwater supplies. Water demand includes domestic, industrial, irrigation, and livestock uses. Available renewable water supplies include the impact of upstream consumptive water users and large dams on downstream water availability. Higher values indicate more competition among users.

*Data source: WRI*

### Water scarcity

UNICEF's CCRI defines the water scarcity index based on composite measure of:

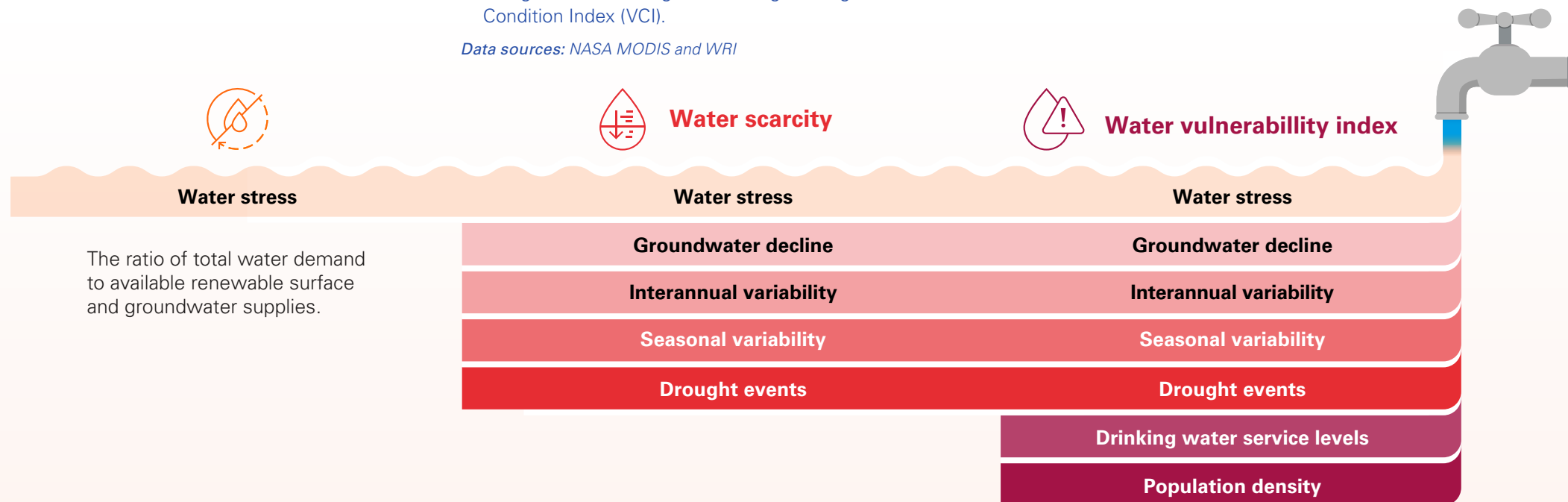
- Baseline water stress, which measures the ratio of total water withdrawals to available renewable surface and groundwater supplies.
- Interannual variability, which measures the average between-year variability of available water supply, including both renewable surface and groundwater supplies.
- Seasonal variability, which measures the average within-year variability of available water supply.
- Groundwater table decline, which measures the average decline of the groundwater table.
- Drought, which measures the impact of meteorological drought on natural vegetation using the Vegetation Condition Index (VCI).

*Data sources: NASA MODIS and WRI*

### Water vulnerability

UNICEF calculates the water vulnerability index based on a composite measure of water scarcity and drinking water service levels (WHO/UNICEF Joint Monitoring Programme) using population data from the Gridded Population of the World and the United Nations' World Population Prospects. Higher values indicate high levels of water scarcity and low levels of drinking water service.

*Data sources: GPW, NASA MODIS, WHO/UNICEF JMP, WPP, and WRI*



## Climate change is making **water scarcity** worse across regions

### **In 2022, 739 million children were exposed to high or extremely high water scarcity.**

In 54 countries more than a quarter of children were exposed to high or extremely high water scarcity.

Every region of the world, including high-income countries, faces challenges related to water scarcity. Large numbers of people in low, middle and high-income countries are already facing physical water scarcity and with climate change, the problem is projected to get much worse over the coming decades.

Globally, droughts are becoming more frequent and more severe, lasting longer and covering wider areas as a consequence of climate change and increased water demand – contributing to a deterioration of water scarcity scores. In addition, climate change is disrupting weather patterns and rainfall, leading to unpredictable water availability and exacerbating water scarcity.

Water scarcity not only presents a threat to agriculture, industry and economic growth but also makes it more difficult to keep WASH services running and to extend services to those who remain unserved.

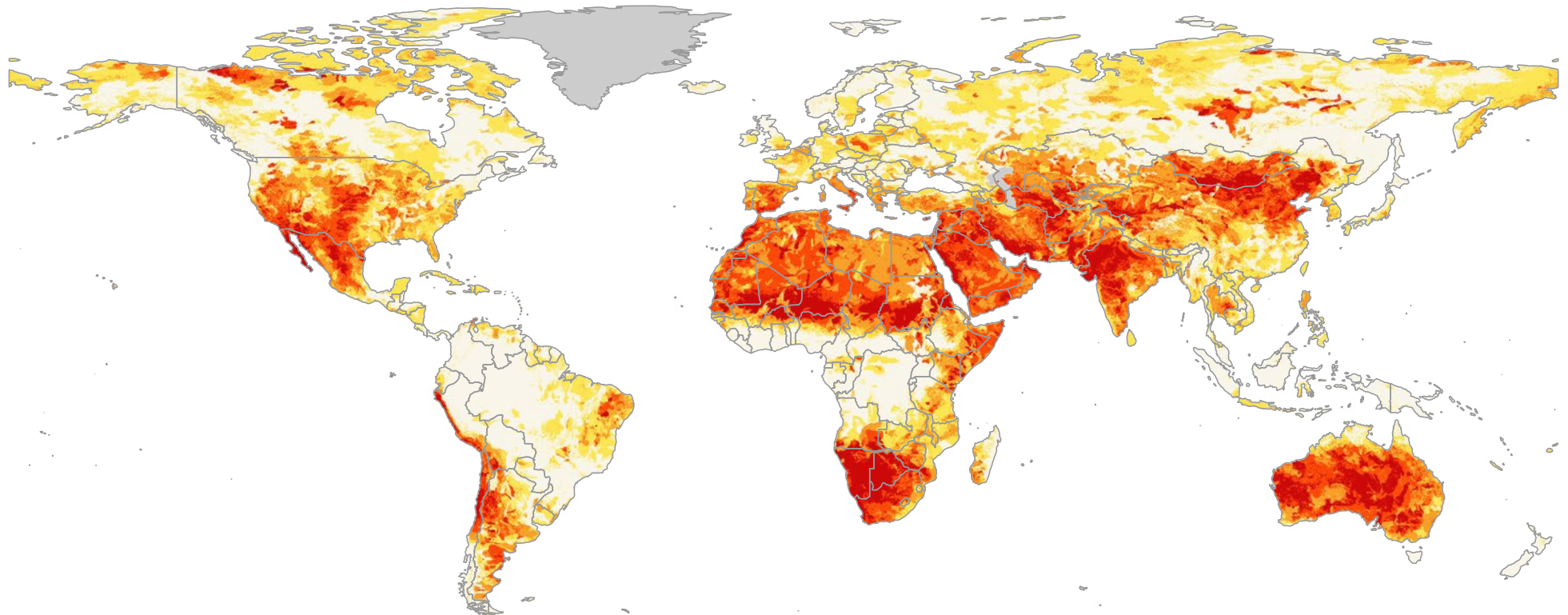
Across the world, water demand is exceeding the available renewable resources, further compounding water scarcity. Globally, demand has more than doubled since 1960.

UNICEF analysis of data from the World Resources Institute (WRI) indicates that the number of countries exposed to high or extremely high baseline water stress will increase from 47 to 58 between 2022 and 2080, while the number of children exposed will rise from 953 million in 2022 to 988 million in 2050.

Sub-Saharan Africa will face the biggest change in water demand between now and 2050. While most countries are not extremely water-stressed right now, demand is growing faster there than in any other region. By 2050, water demand in sub-Saharan Africa is expected to skyrocket by 163 per cent – four times the rate of change compared to Latin America, the second-highest region, which is expected to see a 43 per cent increase in water demand.



**MAP 1** Water scarcity index, 2022



### Water scarcity index:



<span style="color: #800000;">■</span>	Extremely high (3.23 to 5.00)
<span style="color: #FF4500;">■</span>	High (2.36 to < 3.23)
<span style="color: #FF8C00;">■</span>	Medium (1.59 to < 2.36)
<span style="color: #FFD700;">■</span>	Low (0.93 to < 1.59)
<span style="color: #D2B48C;">■</span>	Very low (0.00 to < 0.93)
<span style="color: #A9A9A9;">■</span>	No data / not applicable

**Data Source:** UNICEF Risk Analysis and Preparedness Section (RAPS), Office of Emergency Programmes (EMOPS). World Geodetic System 1984 (WGS84) projection.

Map Production Date: 11 October 2023

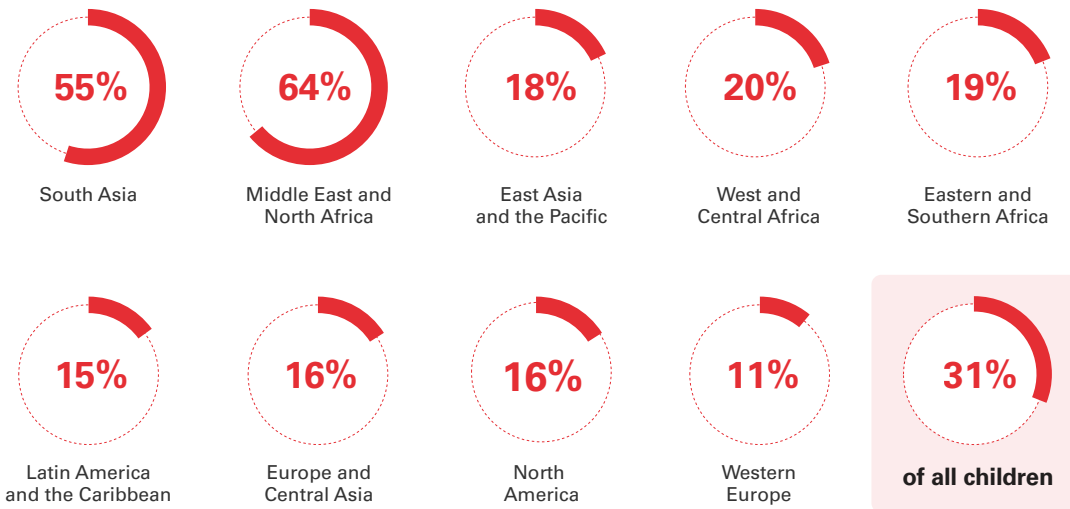
**Note:** This map does not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers.

**FIGURE 1** Number and percentage of children exposed to high or extremely high water scarcity by region, 2022



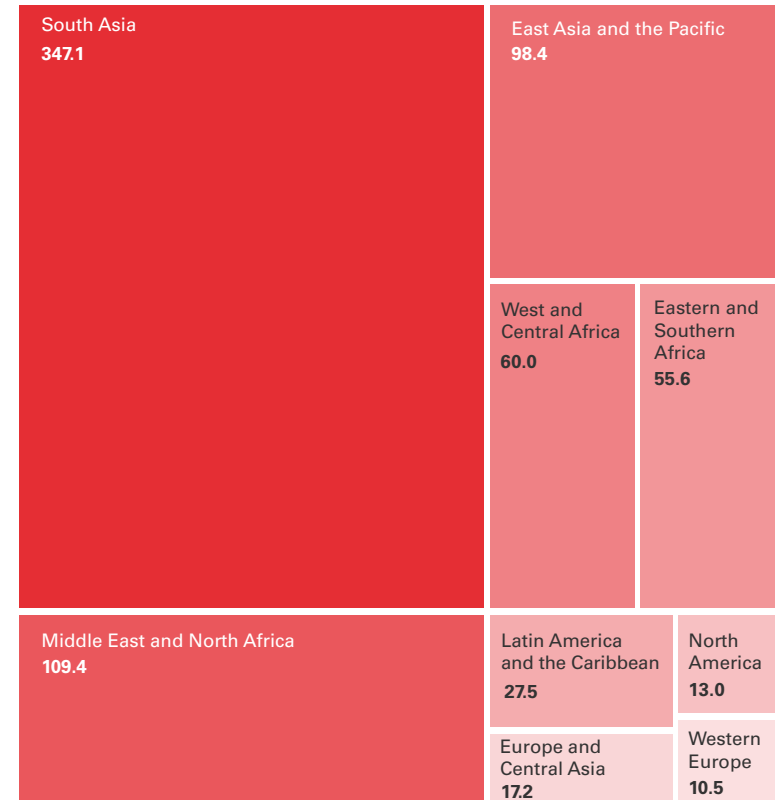
## Water scarcity

### Percentage of children



Total number of children exposed to extreme **water scarcity** in 2022: **739 million**

### Children (millions)



**Note:** Regional and global aggregates based on 163 UNICEF CCRI countries with data available in 2022.

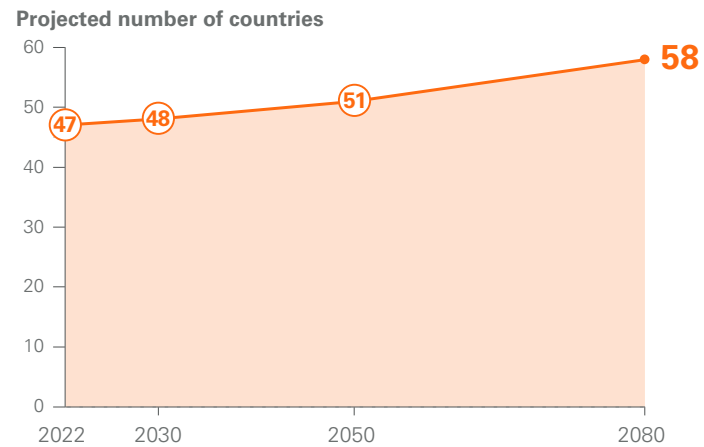
**FIGURE 2** Countries and children exposed to high or extremely high baseline water stress in 2022 and projections for 2030, 2050 and 2080



## Water stress

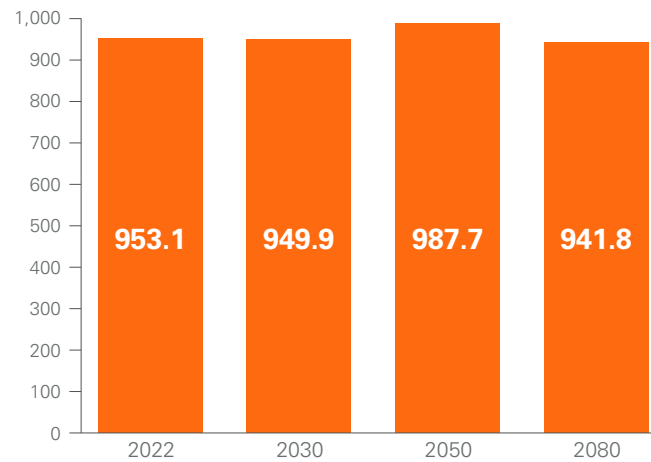
Change,  
2022–2080

▲ +11



millions of children

▼ -11  
million



**Note:** Global aggregates based on 163 UNICEF CCRI countries with data available in 2022.



### Egypt, 2022

A boy watches as homes are connected to safe drinking water for the first time in a village in Fayoum governorate, Upper Egypt.

© UNICEF/UN0639401/Emad

## Drought and children

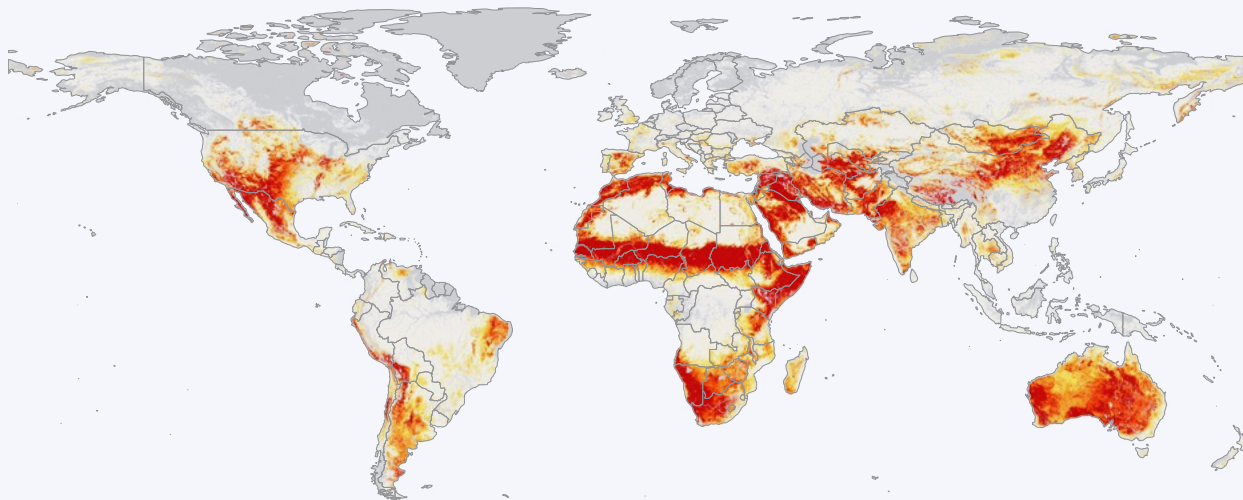
Since 2000, the number and duration of droughts have risen 29 per cent globally. A systematic review in India found that droughts negatively affect children's nutrition and health since they result in compromised diets. Women and girls face the largest burdens from drought in education levels, nutrition, health, sanitation and safety.

Drought is one of the five variables used to assess water scarcity and extreme water vulnerability. UNICEF analysis of the NASA MODIS Vegetation Indices shows that **470 million children** were already facing high or extremely high levels of exposure to drought in 2022.

In 2022 the top five countries were India, Niger, Sudan, Burkina Faso and Jordan. There were 46 countries where more than a quarter of

children had high or very high levels of drought exposure including 24 countries with more than half of children exposed and 10 countries with more than three-quarters exposed (>95 per cent of children in Niger). While the proportion of children exposed was smaller in China (15 per cent), India (21 per cent), Nigeria (33 per cent) and Pakistan (21 per cent) over 193 million children faced high or very high drought exposure in these countries in 2022.

**MAP 2** Drought exposure, 2022



### Drought exposure

<span style="color: #800000;">■</span>	Extremely high (3.95 to 5.00)
<span style="color: #FF4500;">■</span>	High (2.70 to < 3.95)
<span style="color: #FF8C00;">■</span>	Medium (1.15 to < 2.70)
<span style="color: #FFD700;">■</span>	Medium-low (0.25 to < 1.15)
<span style="color: #D2B48C;">■</span>	Low (0.00 to < 0.25)
<span style="color: #808080;">■</span>	No data / not applicable

**Data Source:** UNICEF Risk Analysis and Preparedness Section (RAPS), Office of Emergency Programmes (EMOPS), 2023. World Geodetic System 1984 (WGS84) projection.  
Map Production Date: 10 October 2023.

**Note:** This map does not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers.



---

### Ethiopia, 2023

In the climate-affected Libemuket district of southern Ethiopia, a young girl drinks water from the tap of a water tank provided by UNICEF in response to the drought.

© UNICEF/UNI417902/Pouget

## Access to safe WASH services is not improving fast enough

**The percentage of population worldwide with access to safely managed drinking water rose from 61 per cent in 2000 to 73 per cent in 2022. However, there are still 2.2 billion people without access to safely managed services (more than 1 in 4 people). Moreover, 703 million people do not have access to even basic drinking water services. No region is on track to achieving the SDG targets of universal access to safely managed drinking water by 2030. A sixfold increase in progress is needed to achieve the SDG global water target by 2030.**

With 3.5 billion people without access to safely managed sanitation, achieving the SDG target for basic hygiene services coverage by 2030 will require a threefold increase in the overall rate of progress.

The 594 million children globally who still lack even basic drinking water, sanitation and hygiene services are particularly vulnerable to water scarcity and climate-exacerbated hazards, shocks and stresses.

The majority of children who still lack basic WASH services live in low and middle-income countries in sub-Saharan Africa, Central and Southern Asia and Eastern and South-Eastern Asia. Coverage is lowest in the Least developed countries and fragile contexts.

The latest WHO estimates show that as a result approximately 400,000 children under five continue to die each year – over 1,000 every day – from entirely preventable diseases caused by unsafe drinking water, sanitation and hygiene. Climate change will only make these figures worse.

Inadequate WASH services disproportionately affect women and adolescent girls who are unable to meet their personal needs and remain primarily responsible for domestic chores such as cooking, cleaning and caring for children, older people and those with disabilities. Around 1.8 billion people still collect drinking water from supplies located off-premises, and in 7 out of 10 households women and adolescent girls are primarily responsible for water collection.

WASH services are essential for children's health, but inadequate WASH affects more than just their health. It affects their physical development, exacerbating malnutrition and stunting. It affects their education, disrupting learning and sometimes forcing them to skip school to walk long distances to collect water. Water scarcity reduces livelihood opportunities for their families and communities, leading to migration, conflict and other negative coping strategies such as child labour.

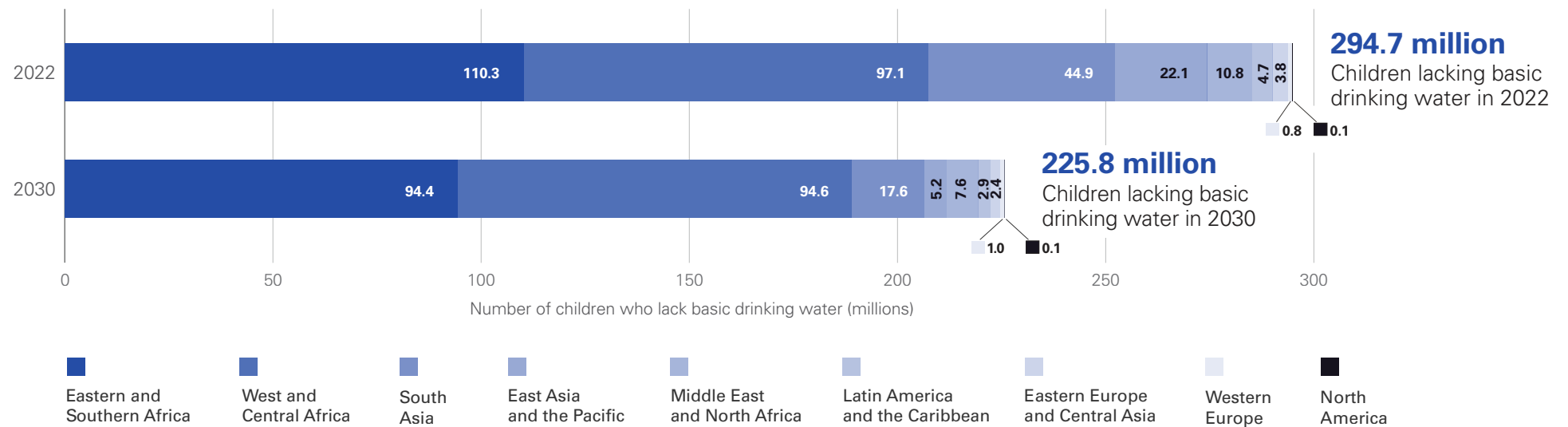
Since 2015, coverage of drinking water services has increased in all UNICEF regions but at current rates of progress the world will only reach 77 per cent coverage of safely managed drinking water by 2030, leaving 2 billion people without. While coverage of at least basic drinking water services is projected to reach 95 per cent, 435 million people will still rely on distant, unsafe and unreliable water sources in 2030.

In 2022, more than two thirds of the 295 million children who lacked basic drinking water services lived in two regions: Eastern and Southern Africa (110 million) and in West and Central Africa (97 million). And there were more children exposed in South Asia (45 million) than in all the other regions combined. Projections for 2030 show that coverage of basic drinking water services is expected to increase in all regions, except for Western Europe, thereby reducing the number of children exposed to water vulnerability. At current rates of progress, South Asia will more than halve child exposures from 45 million to 18 million.

million. But there will still be around 225 million children without basic drinking water in 2030 of whom more than 8 out of 10 will be living in sub-Saharan Africa.

Along with impacts on food security, livelihoods and economies, climate change and increased water scarcity will make it more difficult to keep existing drinking water services running risking the possibility of some people currently served to lose their existing service level and making even more difficult to extend services to those who remain unserved.

**FIGURE 3** Projected number of children who will still lack basic drinking water in 2030



**Note:** Regional and global aggregates based on 163 UNICEF CCRI countries, areas or territories with data available in 2022.

## Water vulnerability: A combined problem of water scarcity and lack of access to WASH services

- **Top 5:** India, Niger, Eritrea, Yemen and Burkina Faso had the highest overall child exposure to high or extremely high water vulnerability.
- **Top 5 relative:** Niger, Eritrea, Jordan, Burkina Faso and Yemen. In 35 countries more than one-quarter of children are exposed to high or extremely high water vulnerability, including 19 countries with more than half of children exposed and seven countries with more than three-quarters exposed.
- **Top 5 absolute:** India, Nigeria, Pakistan, Ethiopia and China.

As of 2022, 436 million children face extreme water vulnerability. This new estimate resulting from a more thorough analysis of updated datasets is essentially unchanged since UNICEF first published the extreme water vulnerability index in 2021.

The extreme water vulnerability index combines data on physical water scarcity (water stress; interannual variability; seasonal variability; groundwater table decline and drought), drinking water service levels and population density.

While reducing water scarcity can be very challenging – beyond working across sectors to improve water resource management – improving access to climate-resilient WASH services has an immediate impact on water security and improves the score of water vulnerability in a given area.

In short, if access and resilience of WASH services are improved, then vulnerability is reduced even in areas facing growing water scarcity.



### Afghanistan, 2023

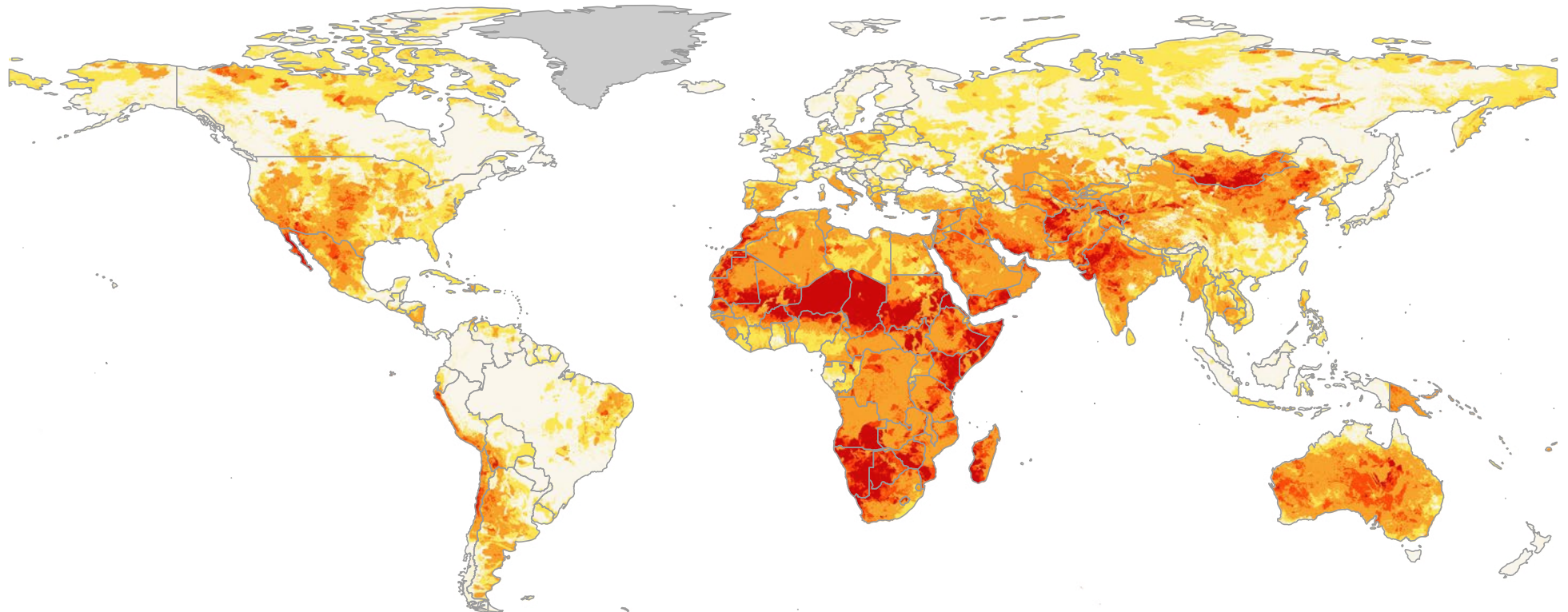
A boy carries home a jerry can full of water from a UNICEF-supported water point in Noorkhail village in Badghis Province.

© UNICEF/UN0855414/Naftalin



## MAP 3

## Water vulnerability index, 2022



## Water vulnerability index:



<span style="color: #800000;">■</span>	Extremely high (2.76 to 5.00)
<span style="color: #FF4500;">■</span>	High (2.30 to < 2.76)
<span style="color: #FF8C00;">■</span>	Medium (1.28 to < 2.30)
<span style="color: #FFD700;">■</span>	Low (0.75 to < 1.28)
<span style="color: #D2B48C;">■</span>	Very low (0.0 to < 0.75)
<span style="color: #A9A9A9;">■</span>	No data / not applicable

**Data Source:** UNICEF Risk Analysis and Preparedness Section (RAPS), Office of Emergency Programmes (EMOPS), and WHO/UNICEF JMP, 2023. World Geodetic System 1984 (WGS84) projection.

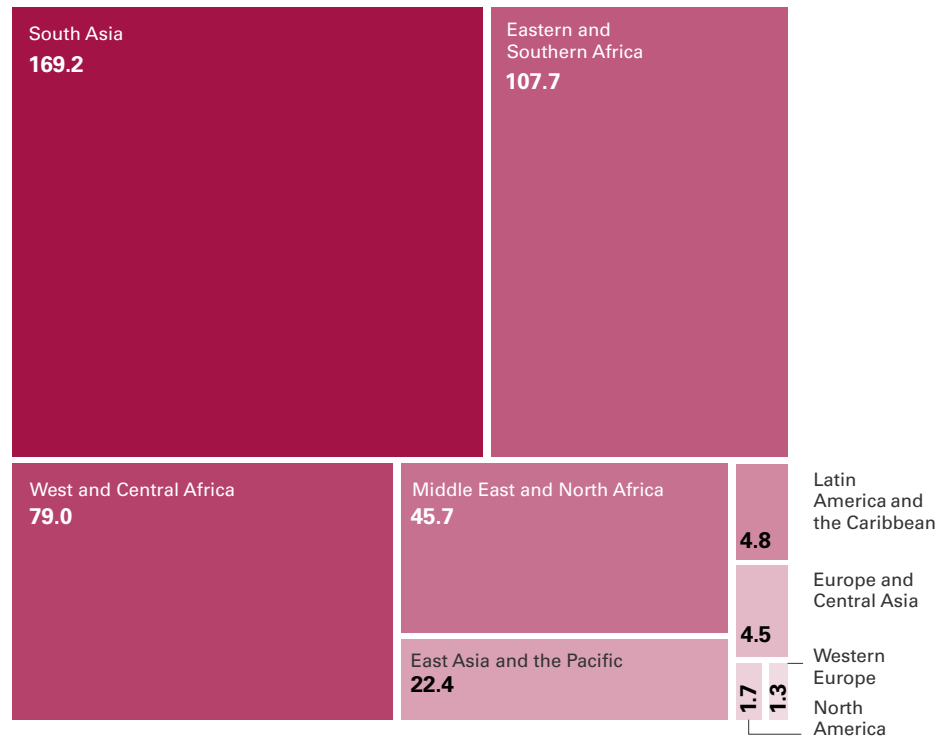
Map Production Date: 11 October 2023.

**Note:** This map does not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers.

**FIGURE 4** Regional distribution of children exposed to extreme water vulnerability in 2022

 **Water vulnerability**

**Number of children exposed to extreme water vulnerability**



Total number of children exposed to extreme **water vulnerability**: **436 million**

**Note:** Regional and global aggregates based on 163 UNICEF CCRI countries, areas or territories with data available in 2022.



**TABLE 1** Top 25 countries, areas or territories, by child exposure to high or extremely high water vulnerability in 2022 (ranked score)

COMBINED RANK (PERCENTAGE AND NUMBER OF CHILDREN EXPOSED)			PERCENTAGE OF CHILDREN EXPOSED			NUMBER OF CHILDREN EXPOSED (MILLIONS)		
1	India	3.3	1	Niger	97.8 %	1	India	133.8
2	Niger	2.7	2	Eritrea	95.6 %	2	Nigeria	26.5
3	Eritrea	2.4	3	Jordan	85.1 %	3	Pakistan	24.2
4	Yemen	2.3	4	Burkina Faso	82.5 %	4	Ethiopia	23.2
5	Burkina Faso	2.2	5	Yemen	81.6 %	5	China	20.3
6	Jordan	2.2	6	Chad	81.0 %	6	Niger	14.3
7	Chad	2.2	7	Namibia	80.6 %	7	United Republic of Tanzania	13.9
8	Namibia	2.0	8	Zimbabwe	74.3 %	8	Yemen	12.7
9	Zimbabwe	2.0	9	Mauritania	73.3 %	9	Sudan	12.2
10	Mauritania	1.9	10	Somalia	68.4 %	10	Kenya	10.6
11	Somalia	1.8	11	Botswana	65.8 %	11	Afghanistan	9.7
12	Senegal	1.7	12	Oman	63.6 %	12	Angola	9.5
13	Botswana	1.7	13	Senegal	63.3 %	13	Burkina Faso	9.5
14	Sudan	1.6	14	Lesotho	59.2 %	14	Democratic Republic of the Congo	8.7
15	Oman	1.6	15	Bahrain	59.1 %	15	Chad	7.8
16	Morocco	1.6	16	Morocco	58.6 %	16	Morocco	6.9
17	Lesotho	1.5	17	Sudan	55.4 %	17	Madagascar	6.9
18	Bahrain	1.5	18	Angola	51.9 %	18	Somalia	6.5
19	Angola	1.5	19	Madagascar	50.8 %	19	Mozambique	6.1
20	Ethiopia	1.4	20	Afghanistan	46.8 %	20	Zimbabwe	5.7
21	Madagascar	1.4	21	Kenya	43.9 %	21	Senegal	5.3
22	Afghanistan	1.4	22	United Republic of Tanzania	42.2 %	22	Iraq	5.0
23	United Republic of Tanzania	1.3	23	South Sudan	41.8 %	23	Iran (Islamic Republic of)	4.6
24	Kenya	1.3	24	Ethiopia	40.4 %	24	Zambia	3.8
25	Nigeria	1.1	25	Cyprus	39.7 %	25	Jordan	3.7

## UNICEF contributions to COP28 negotiations in the water and sanitation sector

- **Under the Global Goal on Adaptation (GGA) stream,** UNICEF urges negotiators to set adaptation targets per theme (including in water and sanitation).
- **Under the mitigation stream,** UNICEF urges negotiators to consider that sanitation has been omitted in most of the NDCs up to now. A 2022 study found that only 20 per cent of 54 countries most at risk to the impacts of climate change has child-sensitive sanitation commitments. Prioritizing the most appropriate types of sanitation and wastewater treatment processes and management practices in revised NDCs (towards the Second Global Stocktake) will provide countries with major new opportunities to cut GHGs and enable energy recovery. There are also untapped opportunities for mitigation by improving water and sanitation services energy efficiency, and by considering the benefits of nature-based solutions.
- UNICEF also urges climate negotiators and climate finance institutions to direct adequate climate finance towards low carbon and resilient water and sanitation services. Directing more climate finance efforts in areas where high exposure to climate hazards overlap with low access to WASH services, especially in the least developed countries and among disadvantaged groups including children.





## YOUTH ESSAY: Leaders can only inspire responsible behaviour by acting responsibly

By Parneet Kaur, member of the YOUNGO Climate Finance Working Group, India

---

**There's no greater threat to humanity than the delusional belief that the climate crisis will spare the privileged few. The most humbling and terrifying thing about the climate catastrophe is that it does not discriminate – it will get to all of us eventually.**

The climate movement begs for an intergenerational consensus on acknowledging the severity of the climate crisis and its impacts on our well-being, education, employment and food systems. It should be envisioned as a human rights movement, as billions struggle to secure their basic right to clean air and water.

As young people our responsibility is to bring to power leaders who put climate action first. The climate movement should urgently graduate from advocacy to a rapid implementation phase in proactive partnership with global leaders. The role of the leaders is two-fold: to oversee implementation and nurture an ecosystem that incentivizes just transition and to ensure that there are adequate safety nets for the most vulnerable and marginalized communities

while implementing rapid plans for adaptation and mitigation.

The disruptive impact of transition on vulnerable communities can be mitigated by empowering them as agents of change rather than victims of change. Involving communities as chief architects will simultaneously cultivate a tradition and shared understanding of sustainability, thus signifying greater awareness and ownership of one's environment.

As the Founder of Girl Up Zubaan, a local initiative in India aimed at empowering the marginalized, I want to shine light on the intersection of gender and climate and how it can be leveraged to reach global consensus on climate action.

My city, Chandigarh and the entire north of India were battered with record-breaking rains leading to catastrophic flooding in July 2023. Women and children in the most impoverished regions suffered disproportionately due to disruption to food and water services, and compromised sanitation and hygiene thus

complicating and compounding their existing vulnerabilities concerning their economic, physical and psychological well-being. Disaster-prone areas become breeding grounds for exploitation of women and other vulnerable communities. It's one thing to devise climate adaptation and mitigation techniques from a women-centric perspective to account for the unique vulnerabilities that arise due to climate change, but it's altogether different to have female leaders at the helm of policy-making and implementation. Women should equally be part of the solution.

## Case studies

### Case Study

## Innovations in climate disaster risk reduction in the Bolivarian Republic of Venezuela



Disaster risk reduction is an essential element of responding to climate change as children increasingly need holistic solutions that address both the impacts of sudden-onset disasters such as hurricanes and floods and resilient solutions that promote climate-smart development for the long term.

In partnership and coordination with the Minister of Water and implementing partners, UNICEF Venezuela supported the implementation of integrated WASH and Climate, Environment, Energy, and Disaster Risk Reduction (CEED) innovations, contributing to community resilience and adaptation to climate change. In 2023, UNICEF and partners enabled access to safe water for 256,500 people in five states through the rehabilitation of water pumping, treatment, disinfection and distribution systems and installation of solar-powered technologies.

In the remote indigenous community of San Francisco del Guayo, six hours away by boat from Tucupita, the capital of Delta Amacuro State, local communities used to consume untreated water directly from the Orinoco River for drinking, food

preparation and hygiene. This increased the prevalence of waterborne diseases such as skin and gastrological illnesses. The community's greatest need was to have a reliable water service that could operate even during extreme weather events. UNICEF and its partners built a solar-powered water treatment plant benefitting approximately 15,000 people in San Francisco del Guayo and in the neighboring fluvial communities. Because it does not depend on unreliable grid power, the water treatment plant ensures greater resilience to extreme weather events while contributing to helping reduce greenhouse gases. This intervention not only provides water to households but also contributes to improved WASH services in San Francisco's schools and to a hospital. In addition, the new plant facilities serve as a meeting point for the community, facilitate hygiene, and promote protection, health, and education activities – all part of UNICEF's behavior change work in the communities.

### Venezuela (Bolivarian Republic of), 2023

© UNICEF/UNI419014/Delacroix

**Bolivarian Republic of Venezuela, 2023**

Franco, 10, collects safe water at the UNICEF-installed solar-powered water treatment plant in San Francisco de Guayo in Delta Amacuro State.

© UNICEF/UN0824385/Pocaterra

## Case Study

### Early detection of groundwater depletion in Madagascar

The semi-arid southern region of Madagascar has been hit hard by years of severe droughts, which has left more than 4.8 million people in need of humanitarian assistance. The region has the country's lowest water supply coverage, which is further exacerbated by climate change. The lack of rainfall and other environmental factors have also affected the region's vegetation and agricultural production, leaving many in the region facing severe hunger. The high levels of food insecurity pushed hundreds to leave their homes and migrate in search of more secure livelihoods. In 2023, 479,000 children under age 5 are expected to suffer from acute malnutrition in the region.

To better understand and predict the risks of droughts, UNICEF in collaboration with the European Union and the Ministry of Water, Energy and Hydrocarbons developed a Groundwater Early Warning System (GEWS) in the region to monitor groundwater and predict droughts. The system tracks the quality of groundwater and forecasts the likelihood of droughts using a combination of underground water pressure measurements

and satellite data. Historical drought trends are determined from long-term averages (20 years for rainfalls and 17 years for the vegetation index) that serve as a baseline against which current conditions are compared throughout the year, making it possible to differentiate levels of drought severity.

The system has proven to be a critical tool for understanding the south of Madagascar's vulnerability to recurrent droughts and its ability to track precipitation and vegetation growth. It is now possible to monitor drought and provide early warnings for better and more proactive responses. The system also improves planning for drought adaptation practices such as water trucking and helps trigger rapid responses.

GEWS data are compared with food security and nutrition assessments to better target vulnerable populations in the drought-affected southern districts. A monthly drought-focused bulletin, based on the collected data, is produced and shared amongst WASH partners, the

communities and farmers to provide them with information to better guide the planning and implementation of water programmes and the cost of water.

UNICEF is currently expanding the groundwater mapping so all new water points have online reporting capability. The mapping will monitor water usage and ensure that there is no over-extraction from the groundwater resources, which are made even more fragile by climate change.



---

#### Madagascar, 2021

© UNICEF/UN0406738/Andrianantenaina





---

### Madagascar, 2021

Children collect water from small holes dug within wells inside an almost-dry source in the drought-stricken south of Madagascar, reflecting the lives of very underprivileged families who struggle daily for water. The water is dirty and the salinity makes it hard to drink.

© UNICEF/UN0406738/Andrianantenaina

## Case Study

### Climate-resilient education and youth engagement in local action in India



India's Maharashtra State, the country's economic 'capital' with the city of Mumbai, has witnessed a seven-fold increase in drought and six-fold increase in floods and cyclones over the past decade. Groundwater is the main source of drinking water in nearly 85 per cent of rural areas and around two thirds of its area is prone to drought. The population depends heavily on boreholes or wells to meet their domestic water needs. Repeated droughts have resulted in losses of life and crop loss, relocation, and disruption to essential basic services like nutrition, health, education, and water and sanitation services. Youth from Maharashtra have been raising their voices on the climate crisis and demonstrating successful innovations at the grassroots level.

Maha Youth for Climate Action (MYCA) is a programme in partnership between the State Department of Environment and Climate Change and UNICEF Maharashtra with other partners. The platform has more than 500 youth advocates working on climate action to influence state-level climate change-related policies and programmes and raise awareness in their communities. The programme provides three levels of training

covering climate action planning, climate action reporting, and climate advocacy and policy, followed by self-paced training modules on climate advocacy. UNICEF supported MYCA Fellowships to accelerate local climate actions and enables outstanding advocates to undertake green initiatives in their field. Selected MYCA Fellows receive a stipend and a mentor to help strengthen green skilling and encourage long-term youth engagement.

The MYCA initiative has trained 2.8 million youth, 465,000 children, over 10,000 teachers and 1,000 professors. The youth-led actions and advocacy in the State have successfully led to the government implementing climate curriculum in first and second grades covering 65,000 primary schools at the State level and plans to build the capacity of 100 master trainers and 10,000 schoolteachers through related trainings.

In 2022, UNICEF supported 10 MYCA youth members' participation in the Local Conference of Youth (LCOY) along with 110 national youth delegates. The conference participants drafted a national youth statement to be submitted to the

COY17 (Conference of Youth) and later to the COP presidency at COP27 in the form of a Global Youth statement. In the next three years, 700,000 young people will be engaged in low-touch action and in reporting on water conservation.

---

#### India, 2023

© UNICEF/UN0828751/India Country Office

## Case Study

# Reducing the impact of greenhouse gas emissions from sanitation in Kampala, Uganda



Climate change and sanitation are intrinsically connected. Poorly managed sanitation emits significant greenhouse gas emissions, contributing to the global climate crisis. Climate change is also damaging sanitation services and infrastructures, displacing people into areas with limited access to safely managed sanitation. The growing population results in increased production of human faeces with 57 per cent not treatable in a centralized manner through sewers. In 2022, there were still 36 countries with open defecation rates between 5 per cent and 25 per cent and in 13 countries; more than one in four people still practice open defecation.

Data on GHG emissions due to sanitation are sparse. A 2022 report estimates that global methane emissions from non-sewered sanitation systems are equivalent to approximately 377 metric tons of carbon dioxide per year, or 4.7 per cent of global anthropogenic methane emissions. Methane and nitrous oxide are the most significant GHG emitted by sanitation systems and have a heating potential 25 and 300 times greater –

respectively – than carbon dioxide. It is crucial to gather more timely data and knowledge on the correlation between climate change and sanitation and how sanitation contributes to GHG emissions.

An analysis citing Kampala, the capital of Uganda, estimated emissions from all stages of the sanitation service chain. The city was selected for its good data availability and as it is served by both on-site (78 per cent) and sewer-based (22 per cent) sanitation. The analysis showed that emissions associated with long periods of storage of faecal waste in sealed anaerobic tanks (49 per cent), discharge from tanks and pits direct to open drains (4 per cent), illegal dumping of faecal waste (2 per cent), leakage from sewers (6 per cent), wastewater bypassing treatment (7 per cent) and uncollected methane emissions at treatment plants (31 per cent), are contributing to high levels of GHG emissions. The city's sanitation produces 189 kilotons CO<sub>2</sub> per year and it may represent a significant proportion of total city-level emissions. The results suggested that emissions from sanitation

and their management could play a vital role in reducing greenhouse gases, particularly methane. Making improvements in sanitation management along the entire service chain and controlling emissions will have an important impact on reducing the long-term impact on the climate.

---

### Uganda, 2022

© UNICEF/UN0714839/Abdul



## PART 3

# Critical actions to ensure a livable planet for children

---

### **Madagascar, 2023**

Nady, 13 outside her new, temporary classroom, provided by UNICEF following the devastation brought by Cyclone Freddy in February and March of 2023.

© UNICEF/UN0831644/Andriantsorana

As this report has shown, water insecurity is a serious threat to children's health and futures, and it is compounded by climate change. Unless we act now, we risk a reversal in our progress towards reaching every child with safe WASH.

But water insecurity is just one element of the climate crisis. This crisis demands comprehensive action across all sectors to ensure a future worth living for children.

COP28 is a critical juncture in the fight against climate change. World leaders and the international community must take critical steps with and for children to elevate children's needs and rights within the UNFCCC framework to secure a livable planet.

### At COP28, UNICEF is calling for:

1

#### The elevation of children within the final COP28 Cover Decision and an expert dialogue on children and climate change.

These are key steps in securing long-term climate action for children.

The Sharm el-Sheikh Implementation Plan took a critical step in recognizing the importance of children's participation in the planning and implementation of climate policy and action. Building on this progress, Parties at COP28 may consider inviting the Subsidiary Body for Implementation to convene an expert dialogue on children and climate change. The dialogue could aim to discuss a holistic approach to child-sensitive climate action, including addressing their distinct and heightened needs, as well as their participation.

2

#### The embedding of children and intergeneration equity in the Global Stocktake (GST).

The GST will inform the next round of NDCs submissions and the inclusion of a strong focus on children will set a precedent for greater inclusion and focus, including in all future NDCs. The GST output must send a clear signal that the next round of NDCs should be both child- and gender-responsive. This can be done by:

- Elevating recognition of children's position as a vulnerable group in need of special protection and investment, particularly with respect to adaptation and loss and damage.
- Recognizing the need for meaningful and cross-cutting engagement of children and youth in decision-making processes at all levels.
- Affirming that approaches to climate action should be aligned with countries' human rights obligations, including the rights of children and the principle of intergenerational equity.

## 3

### The inclusion of children and climate resilient essential services within the final decision on the Global Goal for Adaptation (GGA).

Ensuring this decision text includes key recommendations for children will strengthen the implementation of adapted services for children in every country for years. In order to ensure that the GGA framework is child-responsive, the following proposals are suggested:

- Integrate the rights of children and intergenerational equity under general and cross-cutting considerations in the GGA framework.
- Recognize children and youth as key stakeholders in climate action, to bolster inclusive and participatory approaches.
- Identify targets for themes/sectors listed in Decision 3/CMA.4, prioritizing focus on essential social services that reach children and communities most at risk, including drinking water and sanitation, health, nutrition (food and agriculture), and social protection (livelihoods).
- Add the education sector as a theme.
- Mandate the development of age- and sex-disaggregated indicators under the GGA, in order to capture needs and progress for children and other vulnerable groups.

## 4

### The Loss and Damage Fund and funding arrangements to be child-responsive with child rights embedded in the fund's governance and decision-making process.

Specifically, the fund and its arrangements should:

- Respect and protect child rights – including the best interests of the child and their right to be heard – in loss and damaging financing decisions, and in the L&D Fund's governing instrument, accountability mechanisms and guidelines.
- Ensure that financing provides immediate relief following sudden-onset events, as well as building long-term resilience for children, including for those affected by slow-onset events.
- Invest in early-warning and anticipatory action, adaptive and shock-responsive social protection, disaster risk reduction and broader adaptation and mitigation strategies and financing, addressing both economic and non-economic impacts.
- Ringfence significant resources for child-critical social services, including health, education, food, nutrition, clean energy, water, sanitation, and child and social protection.
- Establish a dedicated funding window for local communities, facilitating more inclusive, equitable and effective climate finance in addressing children's context-specific priorities.

## Beyond COP28 UNICEF is calling on Parties to:

**PROTECT** the lives, health and well-being of children and the resilience of their communities by adapting essential social services to a changing climate, more frequent disasters and degrading environment. This will require:

- An increase in climate financing, with pledges to double adaptation finance honored and surpassed.
- Funding for vulnerable countries already experiencing irrevocable loss and damage must be scaled up.
- A comprehensive review of the Standing Committee on Finance to ensure a stronger consideration of children's rights in the mandate of the committee.
- Reform of the international financial system under the Bridgetown Initiative, as endorsed by the United Nations Secretary-General, to enable countries to adequately respond to the climate crisis.
- Increased investments in data and in evidence-based essential social services and systems, including health, nutrition, education, WASH and social protection, to strengthen children's adaptive capacity to climate impacts and withstand shocks.
- The private sector to act and leverage their own resources, knowledge, expertise, technology, innovative solutions and financing mechanisms to strengthen the essential social services for children including through clean energy solutions.
- Investors and the business community engaged in global climate financing to step up their commitments on adaptation finance.

**EMPOWER** every child through their life course with the developmental opportunities, education and skills to be a champion for the environment. This will require:

- The participation of children and young people – who can represent the demands of their national youth constituencies including marginalized groups – in COP28 delegations, negotiation teams and all formal policymaking bodies and forums.
- Increased investment in youth-led action on climate change
- Increased investment in sustainability education, which provides a tremendous multiplier effect. Improved education for young people which builds knowledge and skills will contribute to improved sustainability practices and a reduction in emissions at the individual, institutional and communal levels.
- The private sector maximizing opportunities to build the adaptive capacity of young people.

**REDUCE** emissions and fulfil ambitious international sustainability and climate change agreements, including via:

- Developed economies reaching net zero emissions as close to 2040 as possible and support emerging economies with know-how to reach net zero by 2050 or sooner.
- Businesses reducing their emissions, adopting clean energy solutions, setting science-based targets, developing climate transition action plans, investing in net-zero solutions and disclosing their progress.



---

**Mali, 2023**

A young girl at the Bawa internally displaced persons site in the northeast of Mali.

© UNICEF/UNI430555/N'Daou

## ANNEX

# Countries where children are most at risk – CCRI rankings

The Children's Climate Risk Index (CCRI), originally published in 2021, is structured according to two sets of indicators:

1. Exposure to climate and environmental hazards, shocks and stresses
2. Child vulnerability

Across these two categories, the CCRI brings together a total of 57 indicators to measure risk across 163 countries.



# The Children’s Climate Risk Index

CCRI RANK	COUNTRY	CLIMATE AND ENVIRONMENTAL FACTORS	CHILD VULNERABILITY	CHILDREN’S CLIMATE RISK INDEX
1	Central African Republic	6.7	9.8	8.7
2	Chad	7.0	9.4	8.5
2	Nigeria	8.8	8.1	8.5
4	Guinea	7.7	8.9	8.4
4	Guinea-Bissau	6.4	9.5	8.4
4	Somalia	7.0	9.3	8.4
7	Niger	7.3	8.9	8.2
7	South Sudan	6.8	9.2	8.2
9	Democratic Republic of the Congo	7.2	8.6	8.0
10	Angola	6.5	8.9	7.9
10	Cameroon	7.8	7.9	7.9
10	Madagascar	7.8	7.9	7.9
10	Mozambique	7.5	8.2	7.9
14	Pakistan	8.7	6.4	7.7
15	Afghanistan	7.3	7.9	7.6
15	Bangladesh	9.1	5.1	7.6
15	Benin	7.1	8.1	7.6
15	Burkina Faso	7.3	7.8	7.6
15	Ethiopia	7.1	8.1	7.6
15	Sudan	6.9	8.2	7.6
15	Togo	7.8	7.3	7.6

CCRI RANK	COUNTRY	CLIMATE AND ENVIRONMENTAL FACTORS	CHILD VULNERABILITY	CHILDREN’S CLIMATE RISK INDEX
22	Côte d’Ivoire	7.2	7.7	7.5
22	Equatorial Guinea	5.1	8.9	7.5
22	Liberia	6.8	8.1	7.5
22	Senegal	7.9	7.1	7.5
26	India	9.0	4.6	7.4
26	Sierra Leone	6.9	7.9	7.4
26	Yemen	7.0	7.8	7.4
29	Haiti	6.7	7.8	7.3
29	Mali	7.0	7.5	7.3
31	Eritrea	5.5	8.3	7.1
31	Myanmar	8.3	5.4	7.1
31	Philippines	8.9	4.0	7.1
34	Papua New Guinea	5.1	8.3	7.0
35	Democratic People’s Republic of Korea	8.2	5.0	6.9
35	Ghana	8.2	5.0	6.9
37	Gambia	6.5	7.1	6.8
37	Uganda	6.3	7.3	6.8
37	Viet Nam	8.8	3.0	6.8
40	China	9.0	2.0	6.7
40	Lao People’s Democratic Republic	7.5	5.8	6.7
40	Malawi	5.7	7.5	6.7
40	Mauritania	6.1	7.2	6.7
40	United Republic of Tanzania	6.2	7.2	6.7
45	Zambia	5.3	7.6	6.6
46	Cambodia	7.2	5.6	6.5
46	Indonesia	8.1	4.2	6.5
48	Congo	6.0	6.8	6.4
49	Kenya	6.2	6.4	6.3
50	Thailand	8.4	2.3	6.2
51	Burundi	4.3	7.4	6.1
51	Nepal	7.5	4.2	6.1

CCRI RANK	COUNTRY	CLIMATE AND ENVIRONMENTAL FACTORS		CHILD VULNERABILITY		CHILDREN'S CLIMATE RISK INDEX	
		Score	Indicator	Score	Indicator	Score	Indicator
51	Zimbabwe	5.7	●	6.5	●	6.1	●
54	Guatemala	6.6	●	5.1	●	5.9	●
54	Mexico	7.7	●	3.1	●	5.9	●
56	Djibouti	4.3	●	6.9	●	5.8	●
57	Rwanda	4.5	●	6.7	●	5.7	●
58	Egypt	7.3	●	3	●	5.6	●
59	Honduras	6.5	●	4.3	●	5.5	●
59	Venezuela (Bolivarian Republic of)	6.8	●	3.9	●	5.5	●
61	Colombia	6.9	●	3.4	●	5.4	●
61	Ecuador	6.9	●	3.5	●	5.4	●
61	Iraq	7	●	3.1	●	5.4	●
61	Lesotho	4	●	6.6	●	5.4	●
61	Malaysia	7.2	●	2.8	●	5.4	●
61	Morocco	7	●	3.3	●	5.4	●
61	Sri Lanka	7	●	3.3	●	5.4	●
61	Tajikistan	6.7	●	3.6	●	5.4	●
61	Uzbekistan	7.5	●	2.2	●	5.4	●
70	Brazil	7.3	●	2.4	●	5.3	●
70	Iran (Islamic Republic of)	7.3	●	2.3	●	5.3	●
72	Dominican Republic	6.4	●	3.7	●	5.2	●
72	Eswatini	3.4	●	6.6	●	5.2	●
72	Republic of Korea	7.3	●	1.8	●	5.2	●
72	Solomon Islands	4.1	●	6.1	●	5.2	●
72	South Africa	5.7	●	4.7	●	5.2	●
77	El Salvador	6.3	●	3.5	●	5.1	●
77	Gabon	5.4	●	4.8	●	5.1	●
77	Namibia	5.3	●	4.9	●	5.1	●
80	Bolivia (Plurinational State of)	5.5	●	4.5	●	5	●
80	Peru	6.4	●	3.3	●	5	●
80	Suriname	6.5	●	3.1	●	5	●
80	United States	7.3	●	1.3	●	5	●
84	Albania	6.5	●	2.5	●	4.8	●
84	Botswana	4.5	●	5	●	4.8	●
84	Guyana	6	●	3.3	●	4.8	●

CCRI RANK	COUNTRY	CLIMATE AND ENVIRONMENTAL FACTORS		CHILD VULNERABILITY		CHILDREN'S CLIMATE RISK INDEX	
		Score	Indicator	Score	Indicator	Score	Indicator
84	Syrian Arab Republic	5.3	●	4.2	●	4.8	●
88	Cuba	6.4	●	2.4	●	4.7	●
88	Saudi Arabia	6.8	●	1.7	●	4.7	●
90	Algeria	6.2	●	2.6	●	4.6	●
90	Nicaragua	4.6	●	4.5	●	4.6	●
90	Russian Federation	6.5	●	1.8	●	4.6	●
90	Turkmenistan	6.5	●	2.0	●	4.6	●
94	Japan	6.3	●	2.1	●	4.5	●
94	Jordan	5.5	●	3.4	●	4.5	●
94	Kyrgyzstan	6.2	●	2.2	●	4.5	●
97	Libya	5.5	●	3.2	●	4.4	●
97	Oman	6.2	●	1.9	●	4.4	●
97	Turkey	5.8	●	2.7	●	4.4	●
100	United Arab Emirates	6.0	●	2.0	●	4.3	●
101	Mongolia	5.2	●	3.1	●	4.2	●
102	Argentina	5.6	●	2.2	●	4.1	●
102	France	6.1	●	1.2	●	4.1	●
102	Italy	5.9	●	1.8	●	4.1	●
102	Kazakhstan	5.7	●	1.9	●	4.1	●
102	Republic of Moldova	5.2	●	2.7	●	4.1	●
102	Romania	5.4	●	2.5	●	4.1	●
108	Chile	5.8	●	1.5	●	4.0	●
109	Paraguay	4.5	●	3.3	●	3.9	●
109	Serbia	5.2	●	2.2	●	3.9	●
111	Azerbaijan	4.1	●	3.4	●	3.8	●
111	Belize	4.9	●	2.6	●	3.8	●
111	Bhutan	4.3	●	3.3	●	3.8	●
111	State of Palestine	5.1	●	2.3	●	3.8	●
111	Ukraine	5.3	●	2.0	●	3.8	●
111	United Kingdom	5.6	●	1.3	●	3.8	●
117	Armenia	4.4	●	2.9	●	3.7	●
117	Canada	5.4	●	1.5	●	3.7	●
117	Israel	5.3	●	1.6	●	3.7	●
117	Spain	5.3	●	1.7	●	3.7	●

CCRI RANK	COUNTRY	CLIMATE AND ENVIRONMENTAL FACTORS		CHILD VULNERABILITY		CHILDREN'S CLIMATE RISK INDEX	
121	Australia	5.4	●	1.2	●	3.6	●
121	Bulgaria	4.1	●	3.0	●	3.6	●
121	Lebanon	4.4	●	2.7	●	3.6	●
121	Panama	3.7	●	3.4	●	3.6	●
121	Tunisia	4.5	●	2.5	●	3.6	●
126	Poland	5.0	●	1.7	●	3.5	●
127	North Macedonia	4.6	●	2.0	●	3.4	●
128	Greece	4.7	●	1.7	●	3.3	●
128	Kuwait	4.6	●	1.8	●	3.3	●
130	Belarus	4.7	●	1.3	●	3.2	●
130	Croatia	4.0	●	2.4	●	3.2	●
130	Hungary	4.4	●	1.8	●	3.2	●
133	Bahrain	3.9	●	2.3	●	3.1	●
133	Qatar	4.1	●	1.9	●	3.1	●
135	Bosnia and Herzegovina	3.8	●	2.2	●	3.0	●
135	Portugal	4.4	●	1.4	●	3.0	●
135	Uruguay	4.0	●	1.9	●	3.0	●
138	Costa Rica	3.5	●	2.2	●	2.9	●
138	Slovakia	3.7	●	2.0	●	2.9	●
140	Montenegro	3.4	●	1.9	●	2.7	●
140	Netherlands	4.1	●	1.0	●	2.7	●
142	Georgia	2.8	●	2.3	●	2.6	●
142	Germany	3.9	●	1.1	●	2.6	●
142	Latvia	3.3	●	1.9	●	2.6	●
145	Belgium	3.8	●	0.9	●	2.5	●
145	Cyprus	3.5	●	1.4	●	2.5	●
147	Brunei Darussalam	2.9	●	1.8	●	2.4	●
147	Czechia	3.2	●	1.6	●	2.4	●
147	Denmark	3.6	●	0.9	●	2.4	●
147	Lithuania	2.6	●	2.1	●	2.4	●
147	Switzerland	3.3	●	1.3	●	2.4	●
152	Slovenia	3.0	●	1.5	●	2.3	●
153	Liechtenstein	3.3	●	1.0	●	2.2	●
154	Austria	2.6	●	1.5	●	2.1	●

CCRI RANK	COUNTRY	CLIMATE AND ENVIRONMENTAL FACTORS		CHILD VULNERABILITY		CHILDREN'S CLIMATE RISK INDEX	
154	Ireland	2.3	●	1.8	●	2.1	●
154	Malta	2.9	●	1.2	●	2.1	●
154	Norway	3.3	●	0.8	●	2.1	●
158	Sweden	2.8	●	0.7	●	1.8	●
159	Estonia	2.1	●	1.2	●	1.7	●
159	Finland	2.6	●	0.7	●	1.7	●
161	New Zealand	2.4	●	0.8	●	1.6	●
162	Luxembourg	1.1	●	1.8	●	1.5	●
163	Iceland	1.0	●	0.9	●	1.0	●

## For every child

Whoever she is.

Wherever he lives.

Every child deserves a childhood.

A future.

A fair chance.

That's why UNICEF is there.

For each and every child.

Working day in and day out.

In more than 190 countries and territories.

Reaching the hardest to reach.

The furthest from help.

The most excluded.

It's why we stay to the end.

And never give up.



© United Nations Children's Fund (UNICEF)

November 2023

Published by UNICEF

Division of Global Communication and Advocacy

3 United Nations Plaza

New York, NY 10017, USA

**Contact:** [pubdoc@unicef.org](mailto:pubdoc@unicef.org)

**Website:** [www.unicef.org](http://www.unicef.org)