

CLIMATE MOBILITY AND CHILDHOOD

EXAMINING THE RISKS,
CLOSING THE DATA AND EVIDENCE GAPS
FOR **CHILDREN ON THE MOVE**

Data InSIGHT #2
September 2024

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What is IDAC?

The International Data Alliance for Children on the Move (IDAC) is a cross-sectoral global coalition that aims to improve data and statistics and support evidence-based policymaking for migrant and displaced children. Co-funded by the European Union and jointly led by Eurostat, IOM, OECD, UNHCR and UNICEF (Secretariat Chair), IDAC brings together governments (including experts from national statistical offices and migration- and displacement-related ministries), international and regional organizations, NGOs, think tanks, academics, civil society and youth. At the end of 2023, IDAC's membership had surpassed 50, including 25 Member States.

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INTRODUCTION >>

Growing up on a planet under threat



Although children are the least responsible for climate change, they are being profoundly shaped by the many ways it is changing life on our planet. Children today are growing up in a warmer, more polluted and more disaster-prone world than any generation to date. While not all natural hazards are linked to climate change, the evidence is indisputable that many of them are being exacerbated by human behaviour.¹ Nearly one in two children reside in a country classified as “extremely high risk” to the impacts of climate change.² And history has proven time and time again that when crisis strikes – no matter the cause – children are likely to experience stresses and shocks more acutely than adults.

New coping mechanisms and adaptation strategies are emerging as climate change intensifies hazards such as storms, floods, wildfires, droughts and extreme temperatures, and the places we live become uninhabitable. For many children and their families, the choice of whether or not to leave home because of the impacts of climate change – and whether they have the ability to move – will become key questions in their pursuit of a safe, secure and sustainable way of life. These outcomes are more broadly captured by what is known as **climate mobility**.

Official terminology related to climate mobility and children, and working terms used in this report can be found on pp. 7–9

An uncertain future

Data and evidence show that, globally, children are increasingly exposed to a more hazardous environment – among many other crises³ – but we cannot predict with any certainty to what extent this will lead to movement. Furthermore, while millions of people have been displaced by sudden onset disasters worldwide,⁴ it is difficult to know how much of this displacement can be attributed to climate change alone given the complex link between climate change and factors such as fragility and conflict.

Current estimates and models of the scale of climate-related migration and displacement in the decades to come produce vastly different scenarios.* Although decision makers and researchers have recognized that children are particularly vulnerable to the impacts of climate change, none of the most widely cited predictions on migration and displacement are age specific, and substantial data gaps exist regarding where and how climate mobility will introduce or exacerbate rights violations in children’s lives.

Yet we know that regardless of what has spurred their movement, children on the move are often deprived of child-critical services – such as health care, school, social protection and child protection

services – and face serious risks and intense insecurities in their day-to-day lives.

How might children be affected when climate change and human mobility intersect during their formative years? What do policymakers and practitioners across sectors need to know to ensure that children in this context are not left behind? What do the available data and evidence indicate about how children’s rights may be impacted? Where is more information needed? And what can be done now to ensure that the response to climate change includes children on the move?

Examining an important relationship

This Data InSIGHT report – the second of its kind⁵ produced by the [International Data Alliance for Children on the Move \(IDAC\)](#) – explores the questions raised above. It brings together the available evidence, research and perspectives from key actors working on the intersection of climate mobility and children, recognizing that this relationship is complex and very much still unfolding. The analysis here is not intended to be exhaustive nor definitive; rather, IDAC’s goal is to demonstrate the important links between children on the move, climate change and sustainable development and thus drive meaningful investments in climate action.

*This report uses the working terms ‘climate-related migration’ and ‘climate-related displacement’ to capture the wide array of circumstances and scenarios that may pertain to children on the move in the context of climate change (see also ‘Working terms used in this report’, p. 9). These terms do not replace the official, legal or statistical definitions put forth by United Nations agencies.

Uprooted and marginalized

A life on the move is already the reality for millions of children, many uprooted because their communities have become unsafe due to conflict, violence or disasters. The most recent data show that there are an estimated 35.5 million international child migrants worldwide, many of whom are in need of international protection. The number of children displaced by conflict and violence reached a record high of 47.2 million children in 2023.⁶ And between 2016 and 2023, there were 62.1 million internal displacements of children linked to weather events such as storms, floods, droughts and wildfires (see 'The Issue' #10, p. 24).

Despite the substantial size of this population, data and evidence on children on the move remain scarce and many of them continue to encounter high barriers to equal participation in society.

CLIMATE MOBILITY AND CHILDHOOD: Examining the risks, closing the data and evidence gaps for children on the move is organized into four sections:

I >> FOUNDATIONS: Language and data concerns explains the challenges involved in identifying and collecting data on children on the move in this context and provides essential terminology from official sources

II >> THE ISSUE: 11 questions, 11 insights highlights several central issues vital to building a more nuanced understanding of climate mobility and childhood

III >> IMPACTS: Deprivations, risks and vulnerabilities examines sector-specific aspects of the well-being of children on the move as they navigate the impacts of climate change, suggesting areas where more data and evidence are needed

IV >> ACTIONS: Better data and evidence to protect children on the move in a changing climate sets a course of action to ensure that the rights of migrant, displaced and immobile children are prioritized and data and statistical systems are prepared to include them as climate-related hazards escalate

As this report points out, there are major limitations to the current data on child mobility and climate change. These include significant gaps in the evidence and research; lack of quality data to allow for disaggregation by the most basic characteristics (e.g., age, sex and migratory status); and scarce intersectional analysis that captures the experiences

of marginalized groups such as girls, children with disabilities, Indigenous peoples and minorities. These data gaps are due in part to inherent challenges involved in collecting data on climate mobility across demographic groups (regardless of age), but are also the result of a lack of child focus in current data, evidence and policy discussions on this topic. Improving the quality of these data is vital to upholding the rights of every child as the threats of climate change amplify.

Investing in a future with promise

Around the world, many States, organizations and practitioners have recognized the urgent need to consider children on the move in the context of climate change and in data-related work. This report highlights a few key examples of these good practices and perspectives from relevant experts, including details on how IDAC, a cross-sectoral alliance dedicated to improving data and statistics on behalf of migrant and displaced children, is contributing to these efforts.

Quality data and evidence play a pivotal role in designing and implementing policies and programmes that work for all children affected by climate mobility, and in holding policymakers accountable. Quality data and evidence can help countries better track and monitor the well-being of children on the move and take action to ensure that these children do not fall through the cracks. Quality data and evidence are vital to monitoring progress towards realizing the 2030 Agenda for Sustainable Development, including its goals for marginalized children and its call for urgent action to combat climate change.

Children have the right to a healthy environment and to grow up on a liveable planet. They have the right to be actively engaged in the discussions and decisions that will impact their future and the future of generations to come. As those who have the most to lose if urgent action is not taken, children have the right to be heard. Every child deserves a safe place to call home, no matter where their individual paths may take them.

“According to the preamble of the Paris Agreement, parties should respect, promote and consider their respective human rights obligations – including the right to health; the rights of Indigenous peoples, local communities, children, migrants, persons with disabilities and people in vulnerable situations . . . – when addressing climate change.”

– Report of the United Nations Secretary-General¹⁷

Method explainer: How research for this report was conducted

This brief is based on a literature review conducted in the first half of 2023 to foster greater insights into climate mobility and childhood. A key finding of the review is that child-specific data and evidence on climate mobility remain very limited. The literature review thus used broad inclusion criteria in selecting sources available in English. Building on this literature review, this Data InSIGHT references over 150 academic articles, reports and other publications from United Nations agencies, non-governmental organizations and civil society organizations that focus on children, climate change, migration, displacement and immobility. Data and evidence that capture the intersection of climate change and/or migration and displacement in specific sectors, such as health, education and child protection, were also used.

A few larger-scale quantitative studies on climate mobility and several smaller-scale studies that used mixed-method approaches to data collection, including surveys, focus groups and key informant interviews, were also included. Several studies that focused on particular countries or communities were selected to highlight the diverse aspects of climate mobility in different contexts around the world.

The literature review was complemented by inputs from IDAC members, experts and youth working at the nexus of climate change, migration, displacement and data, which are presented as FOCUS sections of this report. A 'call for contributions' questionnaire was sent to all IDAC members, giving them an opportunity to share their efforts to improve the evidence base on children moving in the context of climate change (see 'FOCUS on noteworthy initiatives', p. 26).

Leveraging the limited knowledge base
In many cases, data and evidence related to disaster displacement were more readily available than on other forms of climate mobility. While not all forms of disasters or weather events can be linked to climate change (see 'FOCUS on attribution', p. 14), this report considers evidence on displacement associated with disasters and

weather events given its significant overlap with other forms of climate-related migration and displacement.

In areas where no child-specific data and evidence were available, the literature review utilized studies on adults that could also pertain to children's experiences. Data and evidence from other crisis contexts, such as child displacement due to conflict, are cited in some instances to complement the limited available data specific to children and climate mobility.

Considering the current data landscape on this subject, this report has a number of limitations. First, the report analysis is based on literature available in English and does not consider work published in other languages. Second, while efforts were made to analyse sources in order to provide a global picture, more data and evidence were available for some regions and countries than others. Additionally, many of the studies in this report do not include representative data on children and climate mobility. Finally, as described in the 'Foundations' section, terminology surrounding climate mobility is contentious and the current evidence base does not utilize standardized, scientific and clear definitions related to climate change, migration and displacement – making it more difficult to compare evidence across contexts.

The goal of this report

With the above limitations in mind, the information in this publication should not be viewed as a comprehensive scientific or statistical analysis of the scale and impact of climate mobility on children. Rather, it brings the child lens to a body of evidence where children are largely missing, asks critical questions and reaffirms the need to uphold the rights of children in the climate response and climate adaptation strategies. In doing so, the report intends to spotlight the need for better and more specific data on climate mobility, which can be disaggregated by variables including age, sex, migratory status, disability status, race, ethnicity and others.

>> FOUNDATIONS: Language and data concerns



What is climate mobility?

Clear definitions and terminologies are important – particularly when it comes to protecting the rights of vulnerable and marginalized populations, like children on the move. They help identify different groups of children, which groups are being protected under international or national laws, and which groups may need more attention or focus from policymakers so that their needs are met, their rights are respected and their aspirations realized. When key stakeholders – including children and youth advocates – speak a common language based on agreed terminology, dialogues and interventions that aim to protect children affected by climate mobility are likely to be more inclusive, efficient and productive.

Establishing terminology that precisely captures the nexus of climate change and human mobility remains a challenge. Why? For one, climate change can influence human mobility in multiple ways that do not fit neatly into the terms, classifications and international frameworks most commonly used today to describe, protect and count populations who have migrated, been displaced or been relocated.⁸ For instance, usage of the term ‘climate refugee’ has become a topic of debate among academics, advocates, practitioners and other stakeholders.⁹ Some agencies employ the term, as seen in the United Nations Statistical Commission’s recently adopted Global Set of Climate Change Statistics and Indicators;¹⁰ but others, such as the International Organization for Migration (IOM) and the United Nations High Commissioner for Refugees (UNHCR), suggest it is a misnomer because ‘climate refugees’ are not officially recognized in international law.^{11, 12, 13, 14} While the term is used colloquially to describe individuals who are forced to flee their homes due to environmental factors, ‘climate refugee’ does not have a clear legal definition, leading to complexities in providing adequate protection and support for those who have crossed borders for climate-related reasons.

Prioritizing clarity and consistency

Directly identifying the impacts of climate change as the primary reason for movement introduces an added layer of complexity. Climate change acts as a ‘vulnerability multiplier’ – it magnifies the impact of conditions that can contribute to displacement, such as poverty, loss of livelihoods and tensions relating to dwindling resources. Moreover, it can contribute to degraded and dangerous conditions in areas of origin and destination, thereby limiting the availability of safe and sustainable solutions for affected people.

Climate-related mobility can be interwoven with other forms of movement, such as labour migration, migration for education or circular, seasonal or pendular migration; it can also intersect with parallel crises tied to movement, such as fragility and conflict. Furthermore, the definitions used to describe climate- and weather-related phenomena may vary by institution or audience, and attributing a particular weather event – e.g., a storm, flood or drought – to climate change alone is not a straightforward process (see ‘FOCUS on attribution’, p.14).

For the reasons described above, some are cautious about the use of a separate category to refer to a ‘climate migrant’ that is distinguishable from a ‘non-climate migrant’;¹⁵ in light of the critical role that the impacts of climate change do play in patterns of human mobility, however, leading organizations like IOM have a well-established working definition for ‘climate migrant’.

This section shares a limited set of essential terminology related to climate mobility and children – as defined by official sources such as IOM, UNHCR and UNICEF – which are important to bear in mind from a statistical perspective. The glossary is followed by an overview of the legal landscape for children on the move in the context of climate change and a summary of the challenges involved when collecting data on climate mobility. The important aspect of attribution is also discussed, which is the science of understanding the role of climate change versus natural weather patterns and climate variability.

Terminology relevant to climate, human mobility and children from official sources

Terminology related to climate

Climate and weather

“[R]elated concepts that differ with regard to timescale. Weather refers to variations in atmospheric conditions from one hour, day, or season to the next, while climate refers to long-term patterns (often 30-year averages).”¹⁶

Climate change

“[R]efers to a change in the state of the climate identifiable by long-term changes in the mean and/or variability of its properties. It may be due to natural internal processes or external forcings including anthropogenic changes in the composition of the atmosphere or in land use.”¹⁷

Disaster

“A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts.”¹⁸

Environmental degradation

“The reduction of the capacity of the environment to meet social and ecological objectives and needs. . . . Degradation of the environment can alter the frequency and intensity of natural hazards and increase the vulnerability of communities. The types of human-induced degradation are varied and include land misuse, soil erosion and loss, desertification, wildland fires, loss of biodiversity, deforestation, mangrove destruction, land, water and air pollution, climate change, sea level rise and ozone depletion.”¹⁹

Extreme weather event

“An event that is rare at a particular place and time of year. Definitions of ‘rare’ vary, but an extreme weather event would normally be as rare as or rarer than the 10th or 90th percentile of a probability density function estimated from observations. By definition, the characteristics of what is called extreme weather may vary from place to place in an absolute sense.”²⁰

Hazard

“The potential occurrence of a natural or human-induced physical event or trend or physical impact that may cause loss of life, injury or other health impacts, as well as damage and loss to property, infrastructure, livelihoods, service provision, ecosystems, and environmental resources.”²¹

Weather-related disasters

A subgroup of disasters linked to weather-related events (e.g., floods, storms, droughts, wildfires, landslides and extreme temperatures) that can lead to displacement. The Internal Displacement Monitoring Centre (IDMC) has collected geocoded data on disaster displacement since 2016. Although weather-related events involve natural processes, human influence cannot be overlooked – be it human-induced effects on climate change or environmental degradation. Disasters were responsible for nearly one in two internal displacements recorded by IDMC worldwide in 2023 and more than 79 per cent of those were the result of weather-related events such as floods and storms, while in 2022, weather-related events were tied to 94 per cent of internal displacements.²²

Terminology related to human mobility

Children on the move

“A compound concept that has gained traction on the operational level in the international community, the term describes children who have been directly or indirectly affected by migration and displacement, either internationally across borders or within the same country. When referring to children on the move, IDAC includes child migrants; children in need of international protection, such as refugees and asylum-seekers; internally displaced children; children indirectly affected by migration and displacement, such as children who stay behind while parents or caregivers migrate; stateless children²³ and child victims of cross-border trafficking.”²⁴

Climate migration

“The movement of a person or groups of persons who, predominantly for reasons of sudden or progressive change in the environment due to climate change, are obliged to leave their habitual place of residence, or choose to do so, either temporarily or permanently, within a State or across an international border.”²⁵

Disaster displacement*

“The movement of persons who have been forced or obliged to leave their homes or places of habitual residence as a result of a disaster or in order to avoid the impact of an immediate and foreseeable natural hazard.”²⁶

“Situations where people are forced to leave their homes or places of habitual residence as a result of a disaster or in order to avoid

the impact of an immediate and foreseeable natural hazard. Such displacement results from the fact that affected persons are (i) exposed to (ii) a natural hazard in a situation where (iii) they lack the resilience to withstand its impacts. It is the effects of natural hazards, including the adverse impacts of climate change, that may overwhelm the resilience or adaptive capacity of an affected community or society, thus leading to a disaster that potentially results in displacement.”²⁷

Evacuation

“Evacuation is the rapid movement of people away from the immediate threat or impact of a disaster to a safer place of shelter. It is commonly characterized by a short time frame, from hours to weeks, within which emergency procedures need to be enacted in order to save lives and minimize exposure to harm.”²⁸ **Pre-emptive evacuations** refer to evacuations that take place before a disaster is predicted to occur.

Immobility

“[R]emaining in place despite exposure to risks and hazards that arise due to the impacts of climate or environmental change. Immobility can be voluntary or involuntary, or a mixture of both. Voluntary immobility occurs when people prefer to stay in place due to strong place attachment or cultural identity. Involuntary immobility refers to the phenomenon when people have the desire to move but lack the means – commonly referred to as ‘trapped populations’ (see below). The

* Definitions per IOM and UNHCR, both adapted from The Nansen Initiative, *Agenda for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change*, vol. 1, 2015, p. 16.

phenomenon where people lack both the desire and means to move is known as *acquiescent immobility*.²⁹ This report uses the term **'immobile children'** to refer to persons under the age of 18 who experience situations of immobility, whether voluntary or involuntary (trapped).

Person displaced in the context of disasters and climate change

"A person who is forced or obliged to leave their home or place of habitual residence as a result of disaster or in order to avoid the impact of an immediate, foreseeable natural hazard including the adverse impacts of climate change. Most often, such persons are displaced within their own country, but they may also be displaced across an international border."³⁰

Planned relocation

"[A] planned process in which a person or groups of persons move or are assisted to move away from their home or place of temporary residence, are settled in a new location, and provided with the conditions for rebuilding their lives."³¹

Trapped populations

Populations "who do not migrate, yet are situated in areas under threat, . . . at risk of becoming 'trapped' or having to stay behind, where they will be more vulnerable to environmental shocks and impoverishment. The notion of trapped populations applies in particular to poorer households who may not have the resources to move and whose livelihoods are affected."³²

Working terms used in this report

To reflect the scope and purposes of this report, three working terms – **'climate mobility'**, **'climate-related migration'** and **'climate-related displacement'** – are used. These umbrella terms capture the multiple and sometimes overlapping links between the impacts of climate change and mobility among children. Their usage aims to sensitize policy- and decision makers to the many ways in which child movement can be tied to climate change – whether or not it is the predominant reason for their movement – and spark discussions about the complex nexus of climate change, human mobility and immobility as it pertains to children's rights.

In this report, 'climate mobility' is used to describe all forms of human mobility directly or indirectly driven by climate change either within the same country or internationally across borders. The term comprises the full spectrum from voluntary to forced movements, which can be difficult to differentiate in the context of climate change. References to 'climate mobility' include climate-related migration, climate-related displacement, planned relocation and evacuation, and other movements driven or influenced by climate change.³³

'Climate-related' language is used when referring to migration and displacement in this publication in light of the challenges involved in directly linking movements to the effects of climate change and to account for the role of other variables, such as socio-economic factors, fragility and conflict.

'Climate-related migration' acts as an umbrella term here that refers to situations where climate-related impacts contribute to a person or people's decision to migrate. 'Climate-related displacement' is used to describe situations when people are forced from home or obliged to do so for reasons linked to climate change, which may be due to either sudden or slow-onset weather events linked to climate change or other adverse impacts of climate change.

Many organizations use the terms 'climate mobility' or 'climate-related migration' to broadly describe movement connected to climate change; but to date, no explicit, comprehensive definitions of these terms exist among key stakeholders.



FOCUS on the legal landscape

Children have been recognized as a particularly vulnerable group when it comes to navigating the effects of climate change in everyday life. Ensuring their rights when they have migrated or been displaced for climate-related reasons, whether within their own country or across borders, is essential.³⁴ While most children on the move in the context of climate change will stay within their respective country, some may cross borders in search of safety, sometimes triggering the need for international protection. States are obligated to uphold the rights of all individuals within their jurisdiction and protect them without discrimination.

Reaffirming rights

There are a number of existing legal instruments or principles at the international, regional and national levels that protect or might be used to protect children who cross borders for climate-related reasons (see Annex, pp. 62–65). They are drawn from different branches of international law (such as human rights, refugee, international humanitarian and environmental law) and may be binding or non-binding.*

For example, the Convention on the Rights of the Child (CRC) – the most widely ratified human rights instrument in the world – outlines key legal protections for the rights of all children regardless of factors such as nationality, ethnicity or any other status.³⁵ General Comment No. 26 of the Committee on the Rights of the Child published in August 2023 reaffirms children’s right to a clean, healthy and sustainable environment under the Convention and calls on States to uphold the rights of children impacted by “climate change-induced migration and displacement.”³⁶

The Sendai Framework for Disaster Risk Reduction 2015–2030, the Global Compact for Safe, Orderly and Regular Migration (GCM), the Global Compact on Refugees (GCR) and the United Nations Secretary-General’s Action Agenda on Internal Displacement, among other global frameworks, recognize links between climate change, disasters, migration and displacement and highlight the need to protect children in these contexts.^{37, 38, 39}

* For reference and further discussion, see Office of the United Nations High Commissioner for Human Rights, ‘International Human Rights Law’, OHCHR, Geneva, <www.ohchr.org/en/instruments-and-mechanisms/international-human-rights-law>, accessed 21 March 2024; Cullen, Miriam, ‘Disaster, Displacement and International Law: Legal protections in the context of a changing climate’, *Politics and Governance*, vol. 8, no. 4, 10 December 2020; United Nations High Commissioner for Refugees, ‘Climate Change Impacts and Cross-Border Displacement: International refugee law and UNHCR’s mandate’, UNHCR, Geneva, 12 December 2023.

+ A refugee is someone who is unable or unwilling to return to their country of origin owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion. See [Children on the Move: Key terms, definitions and concepts](#) for more details.

International refugee law may apply for those crossing borders, with UNHCR noting specific groups eligible for protection in the context of climate change, if they meet the definition of a refugee.⁺ Per a note issued in 2023 by UNHCR, this would include those fleeing conflict or violence caused or exacerbated by the effects of climate change or disaster; environmental defenders, activists or journalists; and those belonging to particular marginalized or vulnerable groups (e.g., women, children, the elderly, persons with disabilities, minority groups, Indigenous peoples) who disproportionately experience the impacts of climate change or are denied or excluded from resources or assistance.⁴⁰

Additionally, international human rights law prohibits returning individuals to situations of harm. Policy tools like humanitarian protection and regional agreements further aid those displaced across borders. UNHCR guidance issued in 2020 further details legal considerations for the protection of persons displaced across borders in the context of climate change and disasters.⁴¹

Regional refugee laws may also provide protection. For instance, refugee definitions in the Organisation of African Unity Refugee Convention and Latin America’s Cartagena Declaration both include those seeking refuge due to events “seriously disturbing public order”, which could include climate-related events.

High risk, limited options

In the absence of further implementation of GCM Objective 5, however, which would accelerate regular pathways of migration and allow international protection to migrants and internally displaced persons that may cross borders after disasters or in the context of climate change, those facing the highest risks currently have few options to move safely and regularly across borders. While the majority of climate mobility is recognized to be internal, migration laws in most countries are not contextualized to receiving, providing protection for or realizing the specific rights of environmental migrants.



Under the current most common pathways, most people uprooted by the impacts of climate change that may need to cross a border will be unlikely to meet legal definitions or other conditions for family or humanitarian admissions to destination countries, potentially risking family separation and leaving many children and young people stranded with nowhere to go.

Collaboration to protect

Bringing key stakeholders to the table – including affected children and youth themselves – is an important component of building the kind of coalition needed to drive forward policy, action and investments. While climate mobility has become an increasingly visible issue during seminal gatherings like the Conference of the Parties (COP) of the United Nations Framework Convention on Climate Change (UNFCCC), more focus on children is needed. For example, at COP28 in 2023, of nearly 60 events that examined migration, environment, climate change and disaster risk reduction, just a fraction of them centred on children and youth perspectives.⁴²

It is important to build on existing processes and recommendations by taking action on the ground. The GCM, for instance, notes the importance of resilience and disaster risk reduction in minimizing the drivers and structural factors that compel people to leave their country of origin (see ‘The Issue’ #2, p. 17),⁴³ but so far, there are gaps in taking action for children and their families. Strengthening States’ capacity to

collect reliable, age-disaggregated data is crucial to bridging the gaps between policy and action, because these data enable decision makers and stakeholders to track the implementation of global commitments and ensure that national policies and programmes on the ground are upholding children’s rights.

Data for children

Given how crucial data are to effective migration governance, the role of data and evidence is emphasized in many international frameworks. States are being called on to invest in better collection, sharing and use of age- and sex-disaggregated data that capture the intersection of climate change, human mobility and the rights of the child in order to fortify the legal and policy environment. Committee on the Rights of the Child General Comment No. 26 stresses the need for reliable, disaggregated data and research on the impacts of climate change on children’s rights, while the Sendai Framework highlights the need for improved data collection tools and methodologies. The GCM, GCR and the Action Agenda on Internal Displacement note the paramount importance of data and evidence in protecting all migrants and refugees – including children – no matter why they have left home.

Further details on the legal instruments, guidance and documents that protect children on the move in the context of climate change, including relevant statements on data collection, are available in the Annex.

Data issues: Limitations and challenges

Human mobility in the context of climate change is a complex and often multidimensional phenomenon that does not fit neatly into existing migration and displacement categories. This makes collecting and analysing climate change-specific data on groups of affected populations on the move difficult, particularly when it comes to children. These challenges, which are broadly summarized below, have contributed to the limited availability of data and evidence on children on the move impacted by climate change. Without these data, policymakers and practitioners will lack essential tools to identify the children at risk, monitor those who have migrated or been displaced by climate change impacts, and enact evidence-based policies to address their vulnerabilities and deprivations.

- 1. Mobility decisions related to the adverse impacts of climate change are often strongly linked with other drivers of movement, such as those related to education, job opportunities or better access to services.** As migration data are often collected based on one primary driver of migration, the interdependent nature of the impacts of climate change can complicate efforts to identify those children who have migrated or been displaced primarily because of climate change. Data collected in emergency contexts such as disasters, for instance, are typically collected quickly and tend to record only one motive for migration and displacement. Even when survey respondents are asked to identify multiple reasons for mobility, they may not cite environmental factors unless explicitly asked in survey questionnaires.⁴⁴ Similarly, data collected and reported on displacement due to disasters or weather-related events are usually explicitly separated from data collected on displacement due to conflict, despite mounting evidence of multicausal displacement (see 'FOCUS on conflict and climate mobility', p. 55).
- 2. Attributing migration and displacement to climate change-related impacts alone is not a straightforward process.** While human mobility is undoubtedly linked to the impacts of climate change, establishing this link directly is challenging (see 'FOCUS on attribution', p. 14). This has resulted in some discrepancies and inconsistencies in the terminology used when referring to different forms of climate mobility in data collection and research efforts (for instance, clearly differentiating between 'disasters', 'weather events' and the 'impacts of climate change'), which have limited the availability of comparable data and evidence.
- 3. Human mobility decisions related to climate change are complex and often do not fit neatly**

into the 'voluntary' or 'forced' migration classifications. When it comes to slow-onset events such as land and forest degradation, for instance, pressure may mount over time on a family or particular household members to move. Such a decision would typically be designated as a voluntary reason for migration, even if the environmental constraints leading to migration gave the family little choice but to move.⁴⁵ Furthermore, a family may split up as an adaptation strategy, with some children and parents or caregivers staying behind and others leaving home (see 'The Issue' #8, p. 23). Existing data collection processes are in many cases unable to capture these complexities.

- 4. Collecting data on decision making and immobility in the context of climate change can be challenging.** Migration and displacement data are typically collected in transit or destination locations and do not capture the perspectives of those who stay behind. 'Immobility' can be categorized on a spectrum of voluntary and forced: Some families may choose to stay behind, while others may be forced to stay, typically referred to as a 'trapped' or 'involuntarily immobile' population.⁴⁶ Methodologically, it can be difficult to identify immobile populations without having information on the environmental and socio-economic conditions of households before they face environmental shocks and stresses.⁴⁷
- 5. There are already major data gaps when it comes to the age-disaggregated data necessary to identify children among populations who are on the move.** Quality data that can be disaggregated by critical dimensions are missing for most groups of children on the move.⁴⁸ For instance, nearly 3 in 10 countries still do not collect age-disaggregated international migration data.⁴⁹ Age-disaggregated data are critical not only for identifying children in the general population, but also for identifying age-specific vulnerabilities throughout a child's growth and development. Gaps in data collected on the experiences of children on the move, weak data comparability due to a lack of standardized practices and methodologies, limited sharing and utilization of data, insufficient resources, political obstacles and competing priorities have left too many children on the move invisible in migration and displacement statistics, regardless of whether climate change has played a role in their movement or not. These challenges are especially prominent when it comes to data on internal displacement due to disasters.

FOCUS on attribution: The role of human behaviour in climate change



According to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), "It is indisputable that human activities are causing climate change, making extreme climate events, including heat waves, heavy rainfall, and droughts, more frequent and severe."⁵⁰ The IPCC further cites evidence that climate change will likely increase migration and displacement numbers – noting, for instance, that for every one degree Celsius of warming, the global risk of displacement due to floods is likely to increase by 50 per cent⁵¹ – and states that most climate mobility will be internal within countries or from rural to urban areas.⁵²

"It is indisputable that human activities are causing climate change, making extreme climate events, including heat waves, heavy rainfall, and droughts, more frequent and severe."

-Sixth Assessment Report of the IPCC

Understanding relationships

But because weather events and climate variability continually take place (with or without human intervention) – and influence human mobility – it is not always straightforward to attribute specific hazards to climate change alone.⁵³

By definition, 'disasters' are a result of the interaction between a hazardous event – which may be influenced by climate change – and vulnerability, which may have many roots.⁵⁴ Not all disasters are tied to the impacts of climate change, such as those

connected to geophysical hazards (e.g., volcanic activity, earthquakes), although research in this area is still emerging.^{55, 56} Moreover, as previously discussed, although there is a clear link between human mobility and the impacts of climate change, this relationship may also be indirect, connected with other forms of migration and displacement, or interact with additional crises.

These uncertainties have led to the growing science of attribution, which uses statistical modelling to help identify which human behaviours are harmful to the planet and, in turn, enact policies and make commitments to adjust these behaviours.⁵⁷

Planning for what's to come

The science of attribution is crucial for understanding the connection between human activities and escalating climate risks, informing adaptation and mitigation strategies, and monitoring countries' commitments and obligations. Improving data and evidence, however, on the linkages between any disaster, weather event or climate hazard, different forms of human mobility and immobility, and children's well-being, is equally important. Understanding these relationships is essential to responding to the disasters already impacting millions of children around the world and planning for the intensified risks expected to come, regardless of the exact degree to which humans have influenced these risks.

Given the challenges involved in isolating climate change as an independent driver of human mobility, this report considers a broad range of types of mobility in which climate change, environmental degradation and disasters play a role in children's migration and displacement experiences.

>> THE ISSUE: 11 questions, 11 insights



#1. | While we know climate change can be directly and indirectly linked to patterns of human mobility and displacement, do we have the data to estimate to what extent child mobility has been or will be affected?

Climate change is difficult to isolate as a driver of human mobility; this, coupled with a lack of child-specific data and research on the links between migration, displacement and climate change, means the number of children who are and will be on the move as climate change intensifies remains unclear.

More children are exposed to serious climate-related hazards than ever before (see #3, p. 18); in some cases, this exposure intersects with and influences their mobility. But the extent of this movement so far or what it will be in the years to come cannot be stated with a high level of certainty. While there is scientific consensus that climate change, in tandem with demographic, economic, political and social factors, is expected to increase migration and displacement among children, the specific scale, timing and location are at present impossible to reliably predict.

This ambiguity is due in part to the complex and unprecedented nature of climate change – including its intersection with other drivers of migration and displacement (see #2, p. 17) – making it a challenge to isolate its effects in the data on children on the move. Within the available evidence, there are important and sensitive distinctions to be made between movement due to climate change versus movement due to weather-related events (see ‘Foundations’, pp. 5–14).

Methodological challenges and a lack of data collection standards in this area further limit the quantitative data, although country-level data on internal displacement have been produced (and to a lesser degree on cross-border migration). Data reflecting mobility due to slow-onset environmental processes, such as drought or sea level rise, are largely qualitative, with few comparative studies.⁵⁸

Additionally, among the limited number of studies and research projects that are climate change- and mobility-specific, few address children in particular. These significant gaps in the data and evidence are not only concerning when it comes to understanding the situation of climate-related migrant and displaced children, but also in regard to the entire population of children on the move – many of whom are among the most vulnerable children on the planet (see #4, p. 19).

Estimates vary widely when it comes to predicting

the number of children who will be on the move as a result of climate change-induced threats; it is critical that those cited are derived from empirically based conceptual tools that consider the complexities of human mobility and climate change, as well as cross-cutting issues (e.g., social, economic, political and environmental).⁵⁹

A few examples of estimates include:

- Slow-onset climate impacts (e.g., water stress, failing crops, sea level rise and storm surges) could result in the (internal) displacement of 44 to 113 million people by 2050; in a more pessimistic scenario, this number could reach as high as 125 to 216 million.⁶⁰
 - The Sahel Predictive Analytics project suggests that by 2050, between 7.1 million and 18.3 million people in the Sahel could be on the move within their countries due to slow-onset impacts.⁶¹
- Some models suggest climate change will only marginally affect international migration in the 21st century,⁶² yet higher numbers have been predicted regionally, particularly in sub-Saharan Africa.
 - According to the Africa Climate Mobility Model, there could be between 400,000 and 500,000 cross-border climate migrants in Africa alone by 2050.⁶³
- Looking at forced migration, the number of asylum applications to the European Union, for instance, has been forecast to increase as global temperatures rise, with estimates ranging from an additional 98,000 to 660,000 applications per year by 2100, varying by climate change scenario.⁶⁴

These predictions are for the total population; to date, no child-specific estimates exist. Because the proportion of children among migrant and displaced populations can vary by region, age distribution is vital to identifying where children are most at risk. For instance, the heightened threats of climate change in sub-Saharan Africa are particularly concerning given the region’s large number of children and youth.^{65, 66}



More research and studies are urgently needed to improve our understanding of the scale of climate mobility and how children may be affected.

#2. | How does climate change interact with other common drivers of child migration and displacement?

Climate change is exacerbating many of the factors that trigger migration and displacement among children, such as food insecurity, poverty and conflict.

Climate change is increasingly seen as a threat multiplier in children's lives, intersecting with and often intensifying pre-existing threats and sources of instability associated with migration and displacement. Hazards such as storms, floods, droughts and rainfall fluctuations can lead to crop failures, water insecurities and food shortages, reduce or eliminate families' sources of income, and introduce or heighten disputes over critical resources like land and water. In this way, climate

change can exacerbate the factors that can result in conflict or raise tensions in existing conflicts and trigger migration and displacement.^{67, 68}

In humanitarian and fragile contexts, it can be especially challenging to prepare for and respond to climate shocks and stresses, which may undermine communities' resilience and expose children living in these areas to greater risk of climate-related displacement.⁶⁹



Data and research must further investigate how climate change interacts with other threats in children's lives, and the implications of this interaction for climate mobility among children.



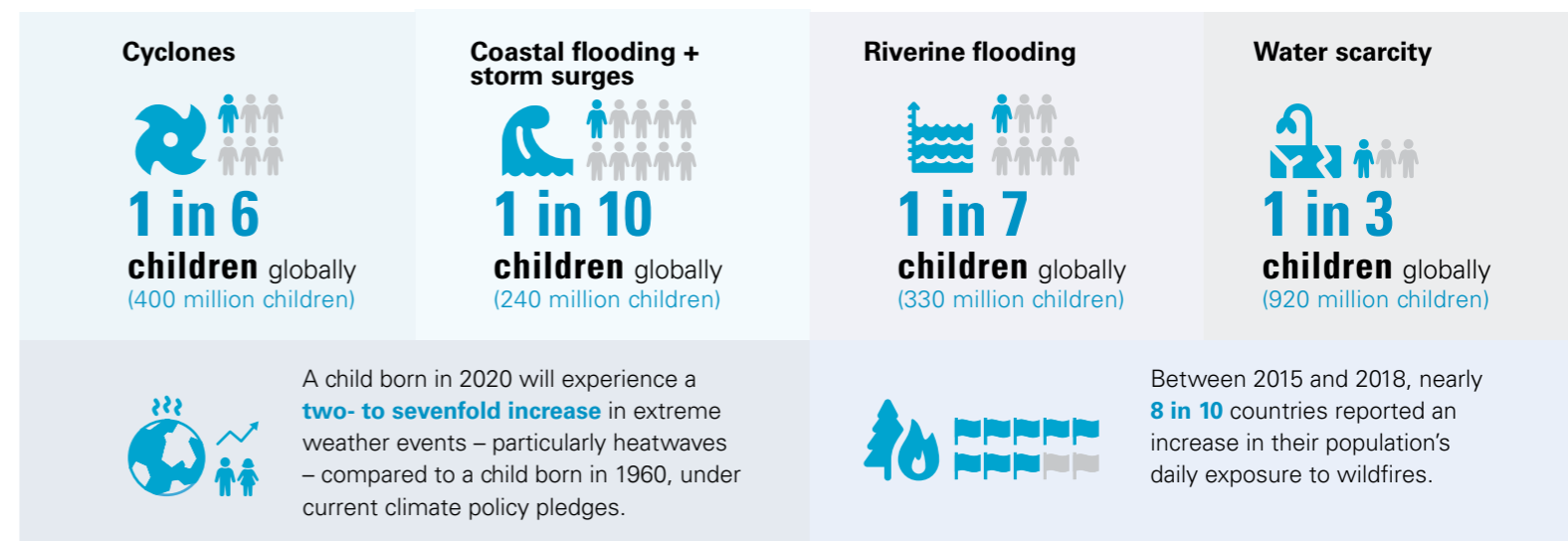
#3. | When it comes to specific climate change-related hazards associated with migration and displacement, how many children are at risk?

Children growing up today are more exposed to a number of climate and environmental hazards than previous generations.

Already, approximately 1 billion children (nearly half of the world's under-18 population) live in extremely high-risk countries.⁷⁰ And globally, children are exposed to a number of threats – many of which are

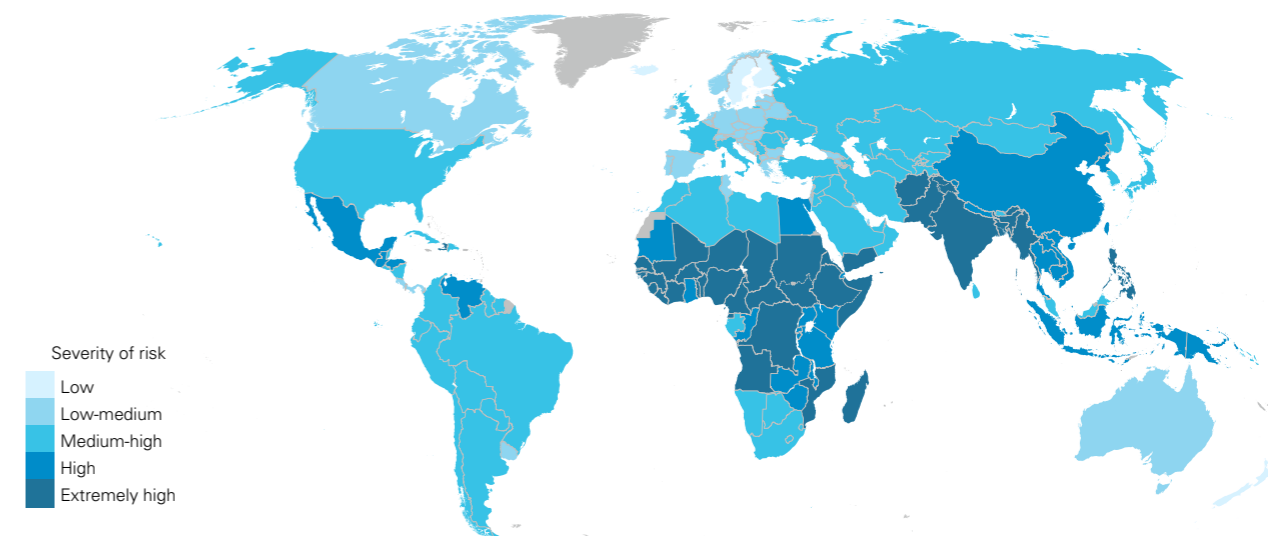
expected to further intensify as climatic conditions continue to shift, meaning more children are likely to be at risk in the years to come.

FIGURE 1 | CHILDREN'S EXPOSURE TO CLIMATE- AND WEATHER-RELATED HAZARDS



Source: UNICEF, *The Climate Crisis is a Child Rights Crisis: Introducing the Children's Climate Risk Index*, 2021; Thierry, Wim, et al., 'Intergenerational Inequities in Exposure to Climate Extremes', *Science*, vol. 374, no. 6564, 26 September 2021, pp. 158–160; Watts, Nick, et al., 'The 2019 Report of The Lancet Countdown on Health and Climate Change: Ensuring that the health of a child born today is not defined by a changing climate', *Lancet*, vol. 394, no. 10211, 16 November 2019, pp. 1836–1878.

FIGURE 2 | THE CHILDREN'S CLIMATE RISK INDEX



Source: UNICEF, *The Climate Crisis is a Child Rights Crisis: Introducing the Children's Climate Risk Index*, 2021.
 Note: This map does not reflect a position by IDAC, its members or contributors to this publication on the legal status of any country or territory or the delimitation of any frontiers. The dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. The final boundary between the Sudan and South Sudan has not yet been determined. The final status of the Abyei Area has not yet been determined.



Regular monitoring of children's exposure to climate- and weather-related threats must continue in every country to pinpoint risks among children and how these risks are reshaping patterns of migration and displacement.

#4. | How might climate mobility introduce or exacerbate vulnerabilities among children?

Acute deprivations and heightened risks are likely to be common among children affected by climate-related migration and displacement.

Children on the move for any reason commonly face steep barriers to accessing their basic rights, regardless of why they have migrated or been displaced.

- As many as two in three refugee children are estimated to be **extremely poor**; refugee children are up to three times as likely to be poor compared to adults.⁷¹
- Displaced children in camp settings frequently **lack access to adequate water, sanitation and hygiene facilities**,⁷² which can lead to major health challenges.
- Children on the move consistently have **lower health care access and vaccination rates** compared to their host peers.⁷³
- Food security and nutrition assessments have found **higher levels of malnutrition** among internally displaced children than their non-displaced peers.⁷⁴
- Close to half of all school-age refugees are **out of school** and only 6 per cent attend university.⁷⁵ In 2021, more than 9 million internally displaced children were at risk of missing out on school.⁷⁶

- Displaced children, particularly girls, are **vulnerable to sexual assault or harassment** in temporary shelters or housing facilities, as they are often cramped, have poor lighting, and lack privacy or separate water and sanitation facilities for women and girls.^{77, 78}

It is likely that children impacted by climate mobility will face many of these same deprivations, with the additional shocks and stresses associated with climate change in some cases amplifying them or introducing new ones. For instance, the World Bank estimates that 32 to 132 million people may be pushed to survive on less than US\$2.15 per day (2017 PPP) by the end of the decade as a result of climate change – a notable forecast given that poverty is a common driver of migration.⁷⁹

Looking at consequences for child health, children under age 5 may bear 88 per cent of the disease burden due to climate change;⁸⁰ health risks can result in migration and displacement, while climate mobility itself may expose children to new health risks and act as a risk multiplier.⁸¹



The well-being of all children whose mobility has been affected by the impacts of climate change must be monitored and closely tracked to ensure their rights are being upheld.



#5. | Where and which children are most likely to be on the move because of the impacts of climate change?

Children in particular regions, fragile settings and the poorest countries face disproportionate risks to the impacts of climate change, which may compel them to move.



Depending on where they live and the surrounding circumstances, some children are more likely to move than others. Children living in countries and regions that have contributed least to the climate crisis are often disproportionately exposed to its impacts. For instance, although Africa has historically contributed less than 3 per cent to global greenhouse gas emissions, it is among the parts of the world most vulnerable to climate change.⁸²

Children in sub-Saharan Africa are particularly exposed to climate-related threats, where a unique confluence of factors (such as sea level rise, extreme weather events and underlying vulnerabilities) increase the likelihood they will experience migration and displacement.⁸³ A striking 9 in 10 (89 per cent) children internally displaced by droughts worldwide between 2016 and 2023 were located in this region, where drought acts as a driver of migration.⁸⁴

By 2050, sub-Saharan Africa could witness up to 86 million internal migrants on the move because of climate change,⁸⁵ a projection of particular concern due to the region's increasing share of the world's children and youth, a cohort expected to grow by 60 per cent from 2020 to 2100.⁸⁶

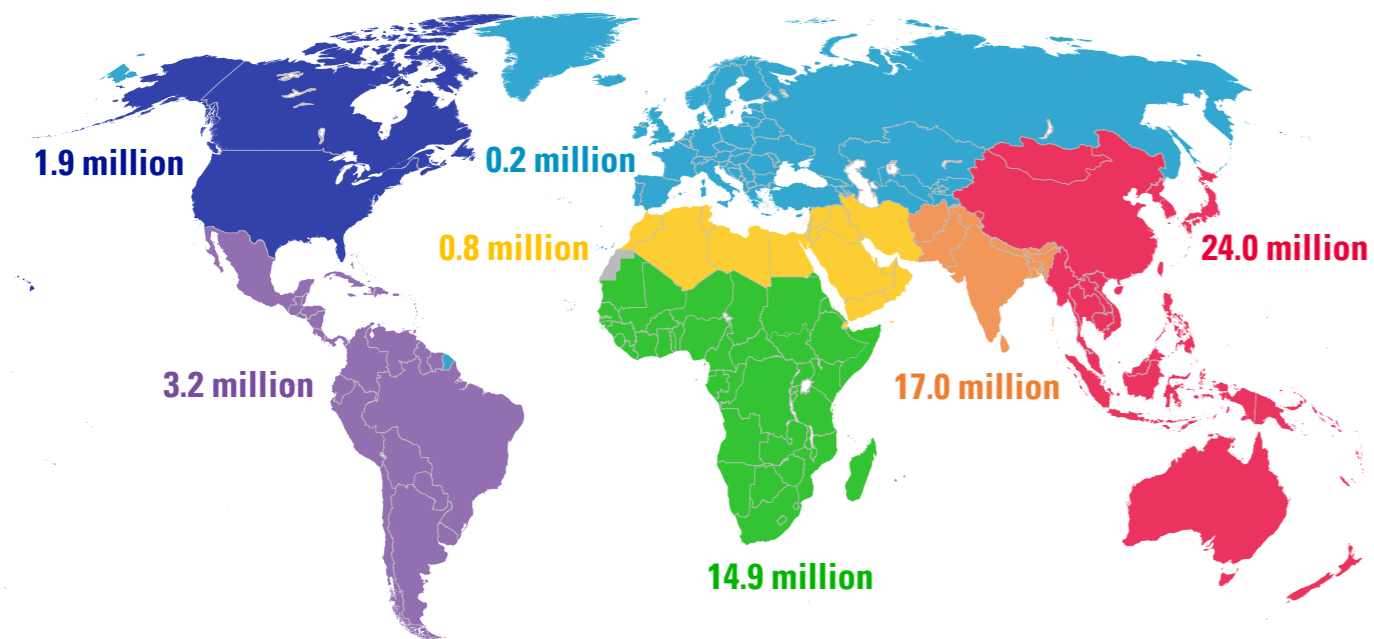
When it comes to dangerous storms – some of which can be attributed to climate change – children in East Asia and the Pacific are of particular concern,

with estimates indicating that this region accounted for more than one in two (57 per cent) children internally displaced by storms between 2016 and 2023.⁸⁷ Children living in Small Island Developing States are disproportionately exposed to storms and sea level rise.⁸⁸

Meanwhile, by 2090, almost half of the 2.8 billion people that could be affected by heatwaves – a hazard that has been correlated with migration patterns – are projected to live in Southern Asia (1.3 billion).^{89, 90}

Children living in low- and middle-income countries, least developed countries, and humanitarian or fragile settings are also among the most vulnerable to climate change. Nearly 90 per cent (29 of 33) of the countries defined as extremely high risk by the Children's Climate Risk Index are also considered fragile contexts.⁹¹ Governance plays a key role in this regard, and ongoing conflict undermines resilience and adaptation.

While climate change is disproportionately affecting children in poor countries, high-income countries are not immune to the crisis: Between 2016 and 2023, wildfires in the United States and Canada triggered 713,000 child displacements (or 8 in 10 child displacements globally due to this type of disaster), many of which were pre-emptive evacuations.⁹²

FIGURE 3 | INTERNAL CHILD DISPLACEMENTS, ALL HAZARDS, BY WORLD BANK REGION, 2016–2023

Source: IDMC, Global Internal Displacement Database, 2024.

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. The dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. The final boundary between the Sudan and South Sudan has not yet been determined. The final status of the Abyei Area has not yet been determined.



Quality local, national and regional data that can be disaggregated by age and sex (at minimum) are vital to capturing geographic and socio-economic inequities and ensuring that the children most marginalized by climate change are not left even further behind.

#7. | How many children in high-risk climate areas will not leave home?

The majority of children living in the places most vulnerable to climate change are unlikely to move.

In comparative case studies of several locations in Africa affected by environmental and climate impacts, over half (55 per cent) of respondents living in high-risk climate areas did not consider moving, while close to a quarter (23 per cent) considered moving but lacked the resources to do so.¹⁰¹ This will likely be the case for many children: Of the 1 billion children living in places at extremely high risk of climate threats, most will stay in place.^{102, 103} This sizeable population of children will come with a distinct set of needs and vulnerabilities that must also be considered in the climate response.

Decisions not to move may be informed by strong ties to land, culture and communities and by economic factors. Some individuals or families may want to move but lack the resources to do so, leaving them 'involuntarily immobile' or 'trapped'. These outcomes can also vary for individual family

members and different age groups (see #8, p. 23).

Some evidence also suggests that climate change may lead to a decrease in international migration among certain groups. For instance, a World Bank study in West Africa found that droughts resulted in 25 per cent fewer international migrants originating from affected areas. This result is explained by lower agricultural yields resulting in fewer financial resources, which, in turn, financially restricted options for international migration among middle-income groups. This domino effect, however, was not seen for the poorest and richest households, likely because they were already financially constrained and unable to migrate or had the means to migrate regardless of changing environmental conditions.¹⁰⁴ This also points to continued socio-economic inequities as families adapt to the impacts of climate change.



To date, most data on migration and displacement are collected in locations of transit and destination, rather than locations of origin.¹⁰⁵ More data and evidence are needed in areas of origin where climate-related threats are most acute to understand the numbers and situations of immobile children.

#6. | When children move because of climate-related threats, how far will they go?

Most children on the move in a changing climate will not cross borders.

Estimates of climate-related migration are fraught with uncertainty, but prevailing projections suggest that most of those affected, including children, will move within their own countries. Many families and children confronted with the impacts of climate change may not have the choice and/or resources to move long distances – particularly if, for example, climate threats have already eroded their sources of income. Families may also not want to cross borders or continents, preferring to remain as close

as possible to home, family and communities where they are more likely to have established social networks.⁹³

Multiple studies and meta-analyses suggest that climatic events are more likely to lead to internal rather than international migration.^{94, 95, 96, 97, 98, 99} This statement is also supported by the IPCC's Sixth Assessment Report.¹⁰⁰



An accurate picture of climate mobility among children relies on data that capture internal and international movement; to date, there are many concerning gaps in the available data on internal displacement.



#8. | How might the experiences, aspirations and intentions of children and youth differ when it comes to climate mobility?

Research in this area is limited – but age and life stage can play an important role in patterns of climate mobility.

Whether a child, adolescent or youth, the ways in which climate mobility will shape an individual's experiences will differ dramatically. A report examining mobility and immobility in several locations in Africa showed that children, older people and persons with disabilities were most likely to remain in high-risk climate areas, while those aged 18–24 years were most likely to leave.¹⁰⁶ It also found that two in five young Africans considered climate mobility normal and one in five had concrete plans to move. These figures are especially notable given that by 2100, half of the world's youth are expected to reside in Africa.¹⁰⁷

Households in high-risk areas may choose to split up as a strategy to adapt to climate change and diversify sources of income. In some contexts, children will stay behind while parents move temporarily, seasonally or for indefinite periods of time.

To properly understand how these experiences differ by age, it is also critical to directly engage with the children, adolescents and youth themselves whose mobility has been impacted by climate change-related threats.



More data at local levels are needed to understand household migration decision-making processes, including the specific aspirations and experiences of children and youth who are affected by the impacts of climate change.

#9. | How does gender influence climate mobility among children?

Women and girls may be more likely to stay behind when disasters hit – which can expose them to serious harm.

In disaster settings, pre-existing gender inequalities can exacerbate risks for women and children, especially girls, and deprive them of life-saving choices like migration.^{108, 109} Gender norms and hazard type may lead to women and children, especially girls, remaining in high-climate risk areas to care for children and family members, while men may be more likely to move to supplement family income in response to climate threats.^{110, 111, 112, 113}

Evidence across different contexts has shown gender and age disparities in mortality rates during and after disasters – but these outcomes vary by cultural context, level of economic development and disaster type.^{114, 115} Gender may influence

women and girls' freedom of movement and access to information, assets and safe shelters in post-disaster settings, which can impact their chances of survival.¹¹⁶

Social, cultural and gender norms as they relate to one's life stage can play a significant role in deciding who remains at home and who migrates, with often serious repercussions for girls. Girls who are displaced and those who stay behind are likely to face heightened risks and rights violations – including gender-based violence and child marriage – experience limited access to gender-specific relief and assistance, and miss school at higher rates than their male peers.^{117, 118, 119}



A gender-based approach to upholding the rights of children across climate mobility contexts includes systematic collection, analysis and use of data that can be disaggregated by age and sex and reflect gender-specific issues.

#10. | How does the number of new internal displacements that are weather related compare to those caused by conflict and violence?

From 2016–2023, data show that in most years, the number of new internal child displacements related to disasters was equal to or higher than those related to conflict and violence. In 2023, however, conflict and violence drove more new internal displacements than disasters.⁺

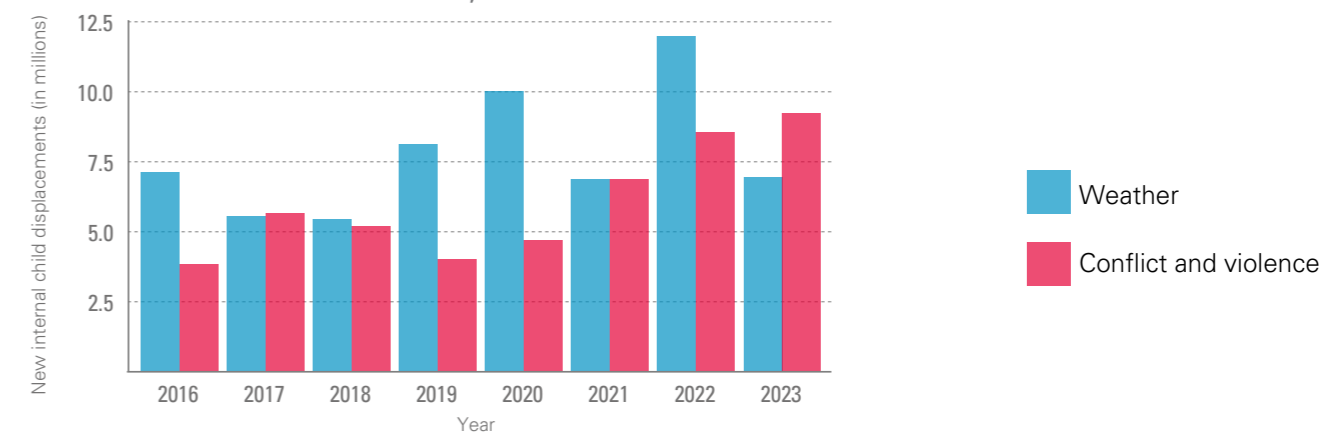
Crisis is often tied to high numbers of children being displaced. Between 2016 and 2023, the number of new internal child displacements due to weather-related disasters (i.e., storms, floods, droughts, wildfires, mass movements, extreme temperatures, wave action, erosion) reached 62.1 million, along with another 48.1 million related to conflict and violence. Over this eight-year period, new internal displacements of children due to weather events outpaced those due to conflict and violence at a rate of nearly 5 to 4.¹²⁰

As the IDMC has reported, weather-related disasters drove a clear majority of new internal child displacements in four of the last eight years, reaching a high of 67 per cent in 2020. But this shifted in 2023 as conflicts escalated in several parts of the world: Conflict and violence accounted for 51 per cent of new internal child displacements that year, compared to 39 per cent related to weather events.¹²¹

With these trends in mind, however, it is vital to clarify that the duration of a child's displacement will differ significantly by the reason for leaving home. In terms of weather-related displacements, those driven by rapid-onset events (e.g., storms, floods, wildfires) tend to be short term, compared to the often more permanent displacement driven by slow-onset events (e.g., droughts, erosion).¹²²

Furthermore, when it comes to the population of children residing in internal displacement, the number driven from home by conflict far surpasses those on the move because of disasters: At the end of 2023, 28.6 million children were living as internally displaced persons due to conflict and violence, compared to an estimated 3.1 million children as a result of disasters.

FIGURE 4 | ESTIMATED NUMBER OF NEW INTERNAL CHILD DISPLACEMENTS DUE TO WEATHER VERSUS CONFLICT AND VIOLENCE, 2016–2023



Source: IDMC, Global Internal Displacement Database, 2024.



More data on children displaced from home due to extreme weather events are urgently needed to capture the scale, scope and impact of this type of displacement.

⁺ Not all recorded internal displacement due to disasters is weather related, though historical IDMC data show that storms and floods consistently drive the largest numbers of this type of displacement. Geophysical disasters, such as earthquakes, volcanic eruptions and landslides, also contribute to the number of disaster-related displacements and may shift these proportions in certain years. For instance, new disaster displacements attributed to weather-related factors declined from 98 per cent in 2022 to 79 per cent in 2023, due in large part to the displacements related to earthquakes that occurred in the latter year.

#11. | How serious are the data gaps on climate mobility among children and how can we address them?

Data gaps are widespread, thereby limiting our preparedness for a child-centred, rights-based approach to climate mobility.

The knowledge base regarding children on the move, immobile or trapped within their own countries in the context of climate change is concerningly limited. For instance, age and sex are known for only 57 per cent of the internally displaced population according to data compiled and analysed by UNHCR.¹²³ Moreover, there are few projections related to expected internal migration.

In low-income countries where the threats of climate change are high, child-specific data are largely unavailable, while in both low- and high-income settings, disaggregated data on the socio-economic conditions of migrants and displaced persons are often not collected. Better country- and regional-level data are also needed to capture how many children will move internally, leave rural areas for urban ones, remain within their regions, move across or between continents, or choose

not to/be unable to move. Data that capture how these decisions are made before, during and after disasters are also notably scarce. Furthermore, data on children and climate mobility must indicate how age group (e.g., children of different ages, adolescents, youth) and sex influence climate change adaptation strategies.

Until comprehensive global estimates that encompass both internal and international movements, disaggregated by age and sex, are produced, the expected scale and impact of climate-related migration and displacement among children will remain uncertain. The international community must work together to close the extensive data gaps and strategically produce migration and displacement data and evidence that are simultaneously child sensitive and responsive to climate change-related threats and risks.



Investments must be made in the collection, analysis and use of quality data and evidence to ensure that when climate change intersects with child mobility, children's rights are upheld.



FOCUS on noteworthy initiatives to build the evidence base



Colombia, Nepal and Tonga: Initiating data collection strategies to capture children's experiences

- Statistical strategizing in countries around the world demonstrates how national-level data actors can take action to ensure children on the move in a changing climate are not left behind.

Colombia, a country impacted by both conflict and climate change, has one of the world's most **comprehensive databases on internal displacement**. This information is derived from the government's national Registry of Victims (Registro Único de Víctimas), whose robust dataset includes data on persons affected by the country's ongoing armed conflict and on internal displacement. Because the data can be disaggregated by age, sex, location, ethnicity, disability status and sexual orientation, they provide a rich evidence base to inform policies and programmes. This is a good example of how data and statistical systems can be built to capture the needs of vulnerable groups, including children, in the context of displacement.¹²⁴

In 2016, the National Statistics Office of **Nepal** carried out its first **national climate change survey** to inform disaster-related policy and decision making. The survey was used to produce a comprehensive analysis of the number of households experiencing different specific types of disasters and hazards in Nepal, the knowledge and perceptions of climate change, and the impacts of disasters on household well-being across multiple dimensions, including food security and access to essential services.¹²⁵

The statistical office is now carrying out a follow-up survey focused on loss and damage as a result of climate-induced disasters, which includes age- and sex-disaggregated data on mortality, injury, disability status and loss of property, as well as climate-related migration, displacement and immobility.

Nepal also adjusted its **census** to capture **data on climate mobility**. In many cases, national censuses that capture reasons for migration are limited to economic motives, personal decisions, family reunification and education. In a significant effort to quantify the influence of climate events on human mobility at the national scale, the 2021 Nepal Census incorporated disasters as a reason for migration. This is a simple, effective way to adjust current data collection mechanisms in order to shed light on climate mobility within a country.

Most recently, in 2022, the government established a **disaster risk reduction web portal and database** in alignment with Nepal's Disaster Risk Reduction National Strategic Plan of Action (2018–2030). This initiative allows real-time access to information on hazards, disaster events, affected populations and spatial data.

Tonga, which comprises over 170 islands in the South Pacific Ocean, is highly exposed to natural hazards, including cyclones, storm surges and volcanic eruptions. The government collects data on the number of houses damaged or destroyed by disasters each year, using its Initial Damage Assessment form. The assessment specifically captures **data on the age and sex of household members whose homes have been destroyed**, which can be used to extrapolate age- and sex-

disaggregated data on internal displacement. This good practice, which helps build evidence on the number of children impacted by specific disasters, should be considered across high-risk settings like Tonga.¹²⁶

Save the Children: Understanding implications of climate-related internal migration on children

- Quality data and research on climate mobility should include children's experiences and perspectives and engage multiple stakeholders to shed light on children's well-being across dimensions.

In eastern Kenya's Garissa County, a high proportion of families are migrating from rural to urban areas due to climate-related shocks, including drought. In this context, Save the Children is conducting **qualitative research to understand the drivers, experiences and effects of migration on children** in the affected area. The research will profile the characteristics of children and their families moving from rural to urban settings for climate-related reasons and explore the implications of this type of migration on children's protection needs, well-being and access to basic services. A mixed-method approach is being used and data are being collected from caregivers and children aged 9–17 years.

Researchers are collaborating with the county government departments of education, health and child protection to establish where the needs of migrant families are not being met and how to make improvements. The team is also training research staff on child participation and the use of child-friendly tools to carry out research.

IDMC: Understanding education outcomes for children displaced due to disasters

- Standardized surveys can capture the specific impacts of migration and displacement due to disasters on children's well-being; when they produce data that can be disaggregated, surveys can be used to identify inequalities among the most vulnerable groups of children on the move.

IDMC, a leading source of data and research on internal displacement, carries out standardized **socio-economic impact assessments to understand how displacement is affecting internally displaced children and children in host communities**. Surveys have been carried out in

situations linked to disasters, including drought, sea level rise and floods. The survey includes a specific module that measures how the education of children in displaced and host communities is being affected. Results are disaggregated by age, sex and disability status, as well as other factors when relevant.

Results have shown that frequent interruptions in the education of internally displaced children are common following their displacement, often lasting several months, and that out-of-school rates are higher among displaced versus non-displaced children in the same area. The results have also found gender disparities in school attendance, with girls attending school at a slightly lower rate than boys in most contexts.

Mixed Migration Centre: A deep dive into the reasons for and experiences of climate mobility

- Adjusting existing data collection methodologies and collecting qualitative data through sources such as focus groups and in-depth interviews can help capture the nuanced, context-specific and sometimes indirect ways that climate change and environmental factors can influence decisions to move or stay.

Since 2014, the Mixed Migration Centre (MMC) has been collecting data on migrants and refugees travelling mixed movement routes through 4Mi, a global, standardized data collection system. A key component of 4Mi's questionnaires focuses on 'reasons for migration', which includes the option 'natural disasters or environmental factors.'

To better understand the intersection of climate change, environmental factors and mobility decisions, MMC analysed over 20,000 interviews held in 2021–2022 with people who had left countries across Asia; West, Central and East Africa; and Latin America. When asked about their reasons for leaving home, only 1–5 per cent of respondents reported environmental factors. When specifically asked whether environmental factors played a role in the decision to move, however, 20–40 per cent of respondents said yes. This demonstrates the importance of carefully **designing or adjusting surveys to capture the more nuanced ways climate change or environmental factors may influence mobility decisions**.¹²⁷

Age- and sex-disaggregated data and child-specific considerations are also incorporated into 4Mi's data collection and analysis on climate mobility. This has allowed notable trends to be identified: Data from Mozambique revealed that

women and children were more likely to be forcibly displaced than men following Cyclone Idai, as men tended to stay behind to maintain families' livelihoods.¹²⁸ And in an agropastoralist community in Uganda, children and elderly persons were among the demographic groups most likely to stay in areas impacted by climate variability and environmental stressors, while young men and women younger than 25 were most likely to move.¹²⁹

MMC has also carried out **in-depth climate mobility case studies** in Africa to uncover community perceptions, attitudes and decision making around mobility and immobility related to climate change.¹³⁰ Survey interviews and focus groups conducted in some contexts, such as in Egypt, revealed that mobility was not commonly cited as a response to climate-related hazards; rather, many people interviewed did not have the resources or capacity to migrate, nor the aspiration to do so, despite reports of numerous climate hazards in the area.¹³¹

IOM: Working with local pastoralist groups to mitigate conflict over resources

- Real-time availability of strong and reliable statistical data that tracks movement influenced or shifted by climate change can help policymakers and stakeholders understand changing patterns of mobility and avert, mitigate and manage conflict.

Transhumance, or the seasonal movement of people

and livestock across regions, is a long-standing traditional practice and an important economic activity and source of food security around the world. In West and Central Africa, where roughly 13 per cent of inhabitants are nomadic or semi-nomadic,¹³² unpredictable periods of rainfall related to climate change have introduced challenges for transhumant communities looking for pastures to feed their animals, fertile farmland and sufficient water points. This has shifted migratory routes and resulted in growing competition over scarcer resources, leading to tensions between farming and herding communities.

In order to prevent and reduce these conflicts, IOM developed the Transhumance Tracking Tool (TTT) to provide reliable data and support policies and decision making that effectively respond to the changing situation on the ground. The TTT maps formal and informal transhumance corridors, crossing points, risk zones and pastoral infrastructures. Working in partnership with pastoral organizations in the region, IOM is using its transhumance tool to create a space where **data and information are leveraged to inform peaceful dialogues on the use of common resources**.¹³³

Since its deployment in 2019, TTT's early warning system has shared 7,723 alerts (up to June 2023) and recorded the passage of over 2.2 million animals and almost 65,000 transhumant herders in West and Central Africa. By combining real-time data on transhumant mobility with targeted interventions, the tool is helping to prevent and resolve natural resource-related conflicts in an inclusive, conflict-sensitive and climate-responsive manner.



FOCUS on youth taking action to protect their future



As the climate crisis accelerates, millions of children and young people are organizing like never before to call for climate action. Inspired by young leaders like Greta Thunberg, they have voiced the urgency of the issue, highlighting that as a younger generation, they will suffer the consequences of the crisis most. As climate activist Eric Njuguna puts it: “It is well acknowledged that across the globe, people who have the least role in causing the climate crisis are bearing the brunt of it, and unfortunately, climate justice is not talked about enough.”¹³⁴

Youth activists are making important contributions to the policy discussion related to climate mobility. It is vital that their voices are actively included and leveraged as the climate crisis unfolds.

Highlighting climate mobility at COP28

In the lead-up to COP28, children and youth from around the world collaborated to produce a [Global Youth Statement](#), which was presented at the climate action summit. The statement is the result of a rigorous consultative process that spanned 150 countries and was complemented by findings of a UNICEF U-Report that polled 771,000 children and young people to understand their views on preparedness for climate change.

This important call to action for policymakers, international organizations, civil society and other key stakeholders covers the concrete policy demands of children and youth, structured across

18 thematic sections. These demands include recognizing that children have particular needs as the effects of climate change can carry life-long impacts, and ensuring that they are involved in decision-making processes. The statement also emphasizes the necessity of a gender-responsive approach to mitigation, adaptation, service provision and social protection, particularly for marginalized groups, including during disasters.

The Global Youth Statement directly addresses climate change, human mobility and vulnerable populations, calling on world leaders to “[s]afeguard the wellbeing of mobile populations, promote solutions for people to stay and to move in response to disasters and extreme events induced by climate change”. The statement highlights that “children, youth and women [forced or triggered to move due to climate change] especially are in dire need for local, national and international support and protection from human rights violations and trafficking”, thereby sending a clear message that children and youth on the move are especially at risk and must be prioritized in migration-related policy and decision making.

Advocacy and data for action

At COP28, the [Africa Climate Mobility Initiative \(ACMI\) Youth Forum](#) launched its [Climate Mobility Guidebook](#), which aims to educate children and youth about the realities of the climate crisis – including the devastating impacts of climate change on human development, forced displacement and voluntary migration. ACMI, which promotes an

evidence-based approach to policymaking in the context of climate mobility in Africa, established the Youth Forum in 2022 to drive advocacy and action in partnership with the African Union Youth Envoy, UNICEF, the Migration Youth & Children Platform (MYCP), YOUNGO and the Resilient40.

Exploring existing data and projections from IDMC, IOM and the World Bank, the guidebook presents data on the increasing number of people whose mobility is being impacted by climate change in Africa. The new resource further explains how children and youth can work towards sustainable climate action in Africa by, for instance, acquiring quality green skills, advancing informed policy advocacy and gaining contextual climate literacy. Career opportunities for young people looking to work in the climate mobility space are also outlined.

These efforts followed the Youth Forum’s intervention at COP27, during which the young leaders led the development of [the first African Youth Declaration for Climate Mobility](#). It outlined a set of clear demands and recommendations to address the impacts of climate mobility on children and youth, including an urgent call for greater investments in data, research and evidence:

“We urge leaders, researchers and decision-makers to address the existing evidence gaps on children and youth affected by climate mobility. This means investing in substantive data collection – including age and gender disaggregation – and combining scientific and Indigenous knowledge to better understand vulnerability and shape community solutions.”¹³⁵

Amplifying the role of youth

COP28 saw the active engagement of its first Youth Climate Champion, a newly established flagship post within COP Presidency leadership that signals an increasingly prominent role for youth in climate action in the years to come. The summit also introduced Youth Stocktake, a new data-driven project co-ordinated by YOUNGO. The initiative assesses youth involvement and policy implementation within the UNFCCC process, using data sources including national reports, surveys and youth-led evaluations.

Meanwhile, at the Dubai Youth Climate Dialogue, young scholars and climate activists came together

to discuss climate concerns, including migration and displacement. Participants highlighted the need for data-driven solutions when addressing the needs of vulnerable groups. Finally, the Youth4Climate Awards provided financial backing to youth-led climate projects, some of which address issues that pertain to migrant and displaced children, such as food security and water availability.

“Although initiatives such as the Youth Stocktake are heartening, targeted capacity-building initiatives in developing countries are needed to improve data availability and inform evidence-based policies that support migrant and displaced children,” said Hector Poveda, MYCP’s Climate Mobility Lead, following COP28. “These data must be accessible and interpretable for policymakers and communities alike. Investing in data visualization tools and translating complex data into actionable insights is crucial to informed decision making.”

Critical involvement in regional processes

- The 2022 [Kampala Ministerial Declaration on Migration, Environment and Climate Change](#) is a key regional declaration that aims to bring States together to prioritize and respond to the impacts of climate change on human mobility. The regional agreement emerged out of the Inter-Ministerial Conference on Migration, Environment and Climate Change, held in Kampala, where African countries gathered to develop and sign the declaration.

To ensure that youth perspectives were reflected in the declaration, youth consultative forums, surveys and panel discussions were organized throughout the Kampala conference. As a result, [a youth statement](#) related to climate mobility in Africa was developed, while three youth priority actions were included in the final declaration; critically, one of them focuses on closing knowledge gaps related to “context-specific vulnerability of communities.”¹³⁶

Participating youth also highlighted the need for data democracy to inform decision making. This means ensuring that communities whose mobility is being shaped by climate change can access accurate, accessible and up-to-date data and statistics to inform local and national initiatives and projects.¹³⁷

The meaningful input from African youth in the development of the Kampala Declaration reiterates the need to provide a platform for young voices at key forums addressing climate mobility.

>> IMPACTS: Deprivations, risks and vulnerabilities



This section highlights six sector-specific dimensions – poverty; food security and nutrition; water, sanitation and hygiene (WASH); health; education; and child protection – where the needs of children on the move due to climate change are likely to go unmet, based on the available evidence. It also examines additional intersectional considerations, along with the important roles of urbanization and conflict in experiences of climate mobility.

As noted throughout this report, data and evidence that capture how and to what degree climate mobility is influencing childhood around the world remain scarce. It is not only unclear how many children are or are likely to be on the move because of the impacts of climate change, but also how mobility and immobility will shape their lives, for the better or for the worse. These outcomes will be mitigated by many individual factors, such as a child's age and life stage, socio-economic group, disability status, race and ethnicity, as well as whether or not a child's migration is well managed. Still, the evidence base today leaves little doubt that many children on the move for climate-related reasons are likely to face unacceptable deprivations, risks and vulnerabilities.

Throughout this analysis, key questions and areas where further investigation is needed offer guidance on how to narrow the gaps in the data and evidence and ensure children affected by climate mobility are included in policy and programmatic responses across sectors and contexts.





Poverty



Key questions, key insights

- What is the impact of poverty on children and their families' ability to adapt to climate change?
- How do disasters, hazards and the long-term effects of climate change influence child poverty and related migration, displacement or immobility outcomes for children?
- What are the risks and vulnerabilities for both children on the move and immobile children who experience climate-related poverty?

Children from the poorest families, communities and countries will be hardest hit: Poverty undermines children and families' resilience to the impacts of climate change and reduces choices around the decision to move or stay. This may lead to increased displacement and involuntary immobility for the poorest children and households at the forefront of the climate crisis.

The link between climate change and poverty is devastating: The World Bank estimates that as many as 32 to 132 million people may be pushed to survive on less than US\$2.15 per day (2017 PPP) by the end of the decade as a result of climate change.¹³⁸ Climate-related poverty may drive migration and displacement and amplify many of the challenges that children on the move typically face. Poverty can affect nearly all aspects of a child's life discussed in this section, including access to nutritious food, safe WASH facilities, adequate health care, quality education and a life free from harm.

Inequitable conditions

Developing countries are less likely than wealthier countries to have the infrastructure and resources to adapt to climate change and prepare for disasters, extreme weather events and environmental degradation. This can propel the most vulnerable families further into poverty and increase their risk of becoming displaced or trapped in dangerous environments. And in the poorest countries, the consequences of disasters and extreme weather events can be severely life-threatening: In the last 50 years, nearly 70 per cent of deaths caused by climate-related disasters occurred in least developed countries,¹³⁹ with children likely comprising a substantial number of these lives lost.

Climate-related displacement is not only the result of a community's exposure to hazards, but is also affected by its capacity and level of preparedness to adapt to those hazards. Countries with similar geographies and climate risks can have different displacement outcomes. Some displacements can be attributed to limited local- or national-level capacities to design and implement disaster risk reduction measures, preparedness and early warning systems,¹⁴⁰ which require consistent financing and resources that many poor countries lack. The United Nations has estimated that developing countries face a funding gap for climate adaptation projects of between US\$194 billion and US\$366 billion every year.¹⁴¹ When poverty intersects with other overlapping crises, such as fragility and conflict, government capacity to respond to climate-related shocks may be even further impeded.¹⁴²

Living in places prone to disasters can lead to greater household poverty over time. Areas with a higher average number of disasters have been associated with a higher risk of households being chronically poor or becoming impoverished, while children comprise a larger share of household members in poor or chronically poor households in disaster-prone areas compared to areas with fewer disasters. In disaster-prone areas, inequities have

also been noted between ethnic groups, with some marginalized Indigenous communities showing higher rates of poverty than other groups.¹⁴³

Disasters can also have more pronounced ripple effects in poorer countries, which are likely to experience greater economic and non-economic losses and damages driven by climate change compared to richer countries.¹⁴⁴ When disasters lead to displacement, host communities may be unprepared to receive large influxes of internally displaced persons, which can strain health and education systems for children in host communities and displaced children alike, particularly in places where resources are already scarce.¹⁴⁵

Socio-economic inequities within countries can play a significant role in children's experiences as the impacts of climate change intensify. Poorer communities and families are less likely to have the resources to adapt to climate change, as they more often depend on natural resources and have less access to health care, education and climate-resilient housing. In some contexts, migration and displacement become the most practical solutions for poor children and families facing hardships such as decreasing crop yields or loss of landmass in coastal areas.¹⁴⁶

Opportunities and restrictions

While climate-related migration and displacement will offer a way out of poverty for some, for others it may perpetuate it. For instance, families who move from rural areas to cities (see 'FOCUS on urbanization and climate mobility', p. 53) – a common direction of travel for many children on the move – may lack the skills and education to secure work in urban areas and, as a family's resources deplete, children may see their education disrupted.¹⁴⁷ For children who stay behind while parents migrate, remittances may improve household wealth and introduce other benefits, but there are often trade-offs, such as interrupted family ties and loss of transfer of knowledge and skills.¹⁴⁸

Poverty may further limit the pursuit of international migration as an adaptation strategy to climate change. For example, a Princeton study projects a 10 per cent decrease in international migration by the end of the century among families from the lowest-income groups, under a scenario in which the world's social, economic and technological trends remain relatively constant.¹⁴⁹ This is already being seen in some areas where international migration among poor families has decreased as a result of slow-onset impacts like drought.¹⁵⁰ For some, immobility is voluntary, while others might consider moving but find themselves involuntarily immobile or 'trapped,' typically due to financial constraints.¹⁵¹

When considering the age of immobile populations, available evidence shows that children are among those more likely to stay behind.¹⁵²

Consequences of staying behind

Poor children living in high-risk areas, whether voluntarily immobile or trapped, are likely to endure compounding risks throughout their childhoods. Poor or chronically poor children in disaster-prone areas have been found to experience more severe vulnerabilities than poor children in areas with fewer disasters, such as greater incidence of diarrhoea among children under age 5, lower primary school enrolment rates for all children, and lower secondary school enrolment rates for girls.¹⁵³ These findings indicate that living in disaster-prone areas can be a risk factor in itself and lead to deprivations that carry repercussions long into adulthood.^{154, 155} With this in mind, more age- and sex-disaggregated data that examine how poverty impacts climate mobility across different life stages are crucial.

Additionally, when communities are forced to relocate due to environmental degradation or climate-related disasters, they experience profound losses in terms of their homes, livelihoods and cultural heritage. Children, who are particularly vulnerable during such upheavals, often face disruptions in their education, health care and social support networks, further exacerbating the challenges they already face due to poverty and displacement.

Despite substantial evidence exploring the connection between poverty and climate change for the general population, fewer studies examine the component of climate mobility decisions and outcomes, and even fewer focus on children. Better data to capture how different types of disasters, weather-related events and other hazards influence household poverty, children's well-being and mobility and immobility are essential in order to better understand these dynamics.



Data and evidence can help by examining:

- Effects of specific types of disasters and hazards and the long-term effects of climate change on child poverty
- Relationship between climate-related poverty, decision making and human mobility and immobility for children and parents
- Vulnerabilities and needs of poor children who are on the move, immobile or stay behind while their parent(s) move for climate- or weather-related reasons

Adapting to change

Throughout history, migration has played a critical role in humans' successful response to climate variability and environmental change.¹⁵⁶ Accordingly, researchers and policymakers have increasingly recognized migration as a potentially effective adaptation strategy as the impacts of climate change intensify.¹⁵⁷ Migration can offer opportunities for families to earn more income, diversify their livelihoods and generate social or financial remittances, which may especially benefit children who stay behind.¹⁵⁸ When migration – including migration pathways – is well managed, it can represent a positive adaptation strategy to climate change-related impacts.

At the same time, when it is not safe, orderly and regular, migration (for any reason) may perpetuate

poverty and lead to increased vulnerabilities, particularly for children, and generate non-economic losses, such as severed ties to land and cultural heritage.¹⁵⁹ States have an important role to play in this regard, by designing policies and programmes that ensure children are supported through their migration journeys and that support migrants and non-migrants alike to adapt to climate change.^{160, 161}

Systematically expanding child- and migrant-sensitive data on climate mobility and immobility is a foundational first step to designing, implementing and monitoring policies that can promote choice and reduce vulnerabilities for children and families at the forefront of climate change.



Food security and nutrition



Key questions, key insights

- What is the connection between food security, nutrition, climate change and mobility and immobility?
- Which risks related to food insecurity and malnutrition are children in a changing climate most likely to face? Do they differ for girls and boys?
- How do disasters, hazards and the long-term effects of climate change influence food security and nutrition for children on the move and those who stay behind while parents migrate?

Climate change is undermining food security and nutritional outcomes around the globe, which can both drive and result from migration and displacement. The impacts of food insecurity and malnutrition are especially devastating for young children, whose healthy growth and development depend on steady access to nutritious food, and for adolescent girls, many of whom already struggle to access nutritious diets, especially in fragile contexts.



Food security, nutrition, climate change and child migration and displacement are strongly interlinked in complex and multifaceted ways.¹⁶² On the one hand, climate hazards can lead to food insecurity and undernutrition, compelling families to be on the move. On the other hand, climate-related migration and displacement can introduce or exacerbate challenges involving regular access to food and nutritious meals. Regardless of whether children are on the move or immobile, ensuring children and families are well nourished helps build more resilient people, societies and systems.

Significant threats to well-being

The World Food Programme (WFP) has estimated that by 2050, the risk of hunger and malnutrition could increase by 20 per cent unless action is taken to reduce the adverse impacts of climate change. WFP has also stated that undernutrition will be the leading cause of child deaths related to climate change.¹⁶³

Children are at higher risk of malnutrition compared to adults, and the consequences can be longer lasting and more severe. Malnutrition in children can lead to short- and long-term health challenges, influence brain development, hinder school performance and lead to cognitive dysfunction later in life.^{164, 165} Maternal malnutrition during pregnancy can also result in long-term complications for children, including visual, cognitive and hearing impairments.¹⁶⁶ And for children under 5, the consequences can be particularly devastating: Nearly half of deaths among children in this age group are linked to undernutrition.¹⁶⁷

Adolescent girls may also be disproportionately vulnerable to the impacts of climate change-related food insecurity and undernutrition relative to men and boys. Gender imbalances may result in less bargaining power, lower social capital, greater care burdens and limited access to resources for girls, all of which can influence their access to nutritious food within a household or community. Global data show that adolescent girls around the world are already suffering from undernutrition, micronutrient deficiencies and anaemia at staggering rates, particularly in humanitarian and fragile settings.¹⁶⁸

Shifting patterns

The IPCC's latest report states with high confidence that "climate change is already contributing to reduced food security and nutrition and will continue to do so."¹⁶⁹ Sudden-onset hazards, such as rain, floods and cyclones, and slow-onset hazards, including droughts, erosion and salinization, can negatively impact agricultural production and food systems as a whole and damage and destroy crops, threaten livestock and render entire areas unsuitable for agriculture.^{170, 171}

In addition to the direct economic and nutritional consequences of lower crop yields for farming households, carrying out mitigation measures (e.g., more frequent replanting, crop diversification) to address shifts in agricultural productivity tends to fall more heavily on the shoulders of women. This can divert women's time from child feeding and care practices and potentially further undermine child nutrition.¹⁷²

Hunger levels are higher in countries with agricultural systems that are sensitive to rainfall and temperature variability and in which a higher portion of the population depends on agriculture.¹⁷³ Climate shocks can also indirectly impact food accessibility: Crop failures due to droughts may trigger increases in food prices and reduce the availability of diverse and nutritional foods, and floods may damage water and sanitation systems, which can negatively impact food quality and safety.¹⁷⁴

In areas where people rely on a single staple food, such as maize, a single shock to food production can demolish a community's entire food supply and lead to migration and displacement, often to urban settings.¹⁷⁵ In other cases, multiple disasters or extreme weather events may compound to drive food insecurity and displacement.¹⁷⁶

Heightened vulnerability

Climate-related food insecurity may drive one or both parents to migrate temporarily while children stay behind. Regardless of why parents are on

the move, parental migration has been linked to increased risks of food insecurity, wasting and stunting for children who stay behind due to, for instance, less parental supervision, high cost of migration and possible reductions in important infant and young child feeding practices, such as breastfeeding.^{177, 178, 179} These risks may be particularly acute for children who stay behind in areas vulnerable to climate change, where food insecurity may already be a factor.

Food insecurity and malnutrition can also be a consequence of displacement. Many countries with the largest numbers of internally displaced persons also face crisis levels of food insecurity.¹⁸⁰

Malnutrition among internally displaced children may be a result of their families' loss of land and/or livelihood; poor WASH conditions; and limited access to nutritious food and health services, particularly in urban settings.^{181, 182}

Although evidence indicates that displaced children are especially vulnerable to food insecurity and malnutrition, data on the impact of climate-related migration, displacement and immobility on these risks are extremely limited. For example, data on food security and nutrition among internally displaced populations are typically collected at the household level and not disaggregated by age, rendering the needs of growing children invisible.¹⁸³



Data and evidence can help by examining:

- Impacts of disasters, weather events and the long-term effects of climate change on children's access to nutritious food
- Intersection of food insecurity and malnutrition, human mobility decisions and outcomes for children
- Barriers to accessing nutritious food for children displaced, migrating or immobile due to climate change





Water, sanitation and hygiene (WASH)



Key questions, key insights

- How do disasters, hazards and the long-term effects of climate change impact WASH infrastructure and services?
- How might climate-related migration, displacement and immobility shape a child's access to WASH?
- What are the consequences of inadequate access to WASH for children?

Climate change is introducing new stressors on WASH systems around the world, which can have devastating, cascading consequences for children's health and well-being. These multifaceted impacts can drive migration and displacement or become a result of it.

Safe drinking water, proper sanitation and adequate hygiene services are essential to children's health and well-being. But around the world, 648 million children lack access to safely managed drinking water, 1 billion lack safely managed sanitation and 594 million lack basic hygiene services. Climate change, among other threats, is complicating efforts to extend this access, with the poorest and most marginalized children – including many who are on the move – at heightened risk of missing out on life-saving WASH services.¹⁸⁴

Mounting concerns

The impacts of climate change can have numerous, cascading effects on WASH services. For instance, low rainfall, droughts, heatwaves and extreme temperatures may cause water sources to dry up or increase the demand for water, leading to water scarcity. This can introduce a host of issues in a child's life: Water scarcity may prevent families from practicing proper handwashing and hygiene; require women and children, particularly girls, to walk greater distances to collect water, which can result in missed classroom time and threaten children's safety; and, in some cases, create or escalate conflict.¹⁸⁵ Children living in water-scarce areas may be unable to stay hydrated or be forced to rely on unsafe water sources, which can contribute to the spread of water-borne diseases. These complex and interrelated concerns, both direct and indirect, can factor into decisions to move and lead to forced displacement.^{186, 187}

Climate-related shocks and hazards can also damage water and sanitation systems, which may be difficult or costly to rebuild.¹⁸⁸ Strong storms and cyclones may destroy water and sanitation infrastructure, and flooded latrines and septic tanks may contaminate water sources, making water unsafe to drink.¹⁸⁹ Following Cyclone Amphan in Bangladesh, one study found that three quarters of survey respondents reported that all the WASH facilities they used – including water sources, sanitation facilities and bathing facilities – had been destroyed; only 20 per cent of respondents were receiving WASH services in the aftermath of the disaster.¹⁹⁰

Unsafe conditions

At this time, comprehensive data and evidence on children's access to WASH services if they are on the move for climate-related reasons are limited. But evidence from humanitarian and displacement settings more broadly finds that children commonly face barriers to accessing WASH. For instance, a study of 21 refugee camps and settlements across five countries found that only one in three refugees had access to basic sanitation and one in four to hand hygiene facilities. Furthermore,

large inequalities were observed across different groups.¹⁹¹

The layout of displacement camps can introduce barriers to accessing WASH infrastructure for children with disabilities, as latrines, bathing facilities and water points are often far away and thus inaccessible.¹⁹² Lack of privacy and inadequate lighting in sanitation facilities can make women and girls feel unsafe and put them at risk of sexual and gender-based violence in displacement settings.¹⁹³ And for adolescent girls, access to menstrual health services can be limited or inadequate in many camp settings.¹⁹⁴ Since internal displacement and refugee camps are intended to be temporary facilities, governments and other partners may not always invest in WASH infrastructure and collect data related to WASH access among transient populations.¹⁹⁵

Children migrating to cities for climate-related reasons may also face severely limited access to safe drinking water and proper sanitation, particularly if they settle in urban slums. Water scarcity, insufficient drainage systems, lack of latrines and bathing facilities, and inadequate hygiene management have been documented among internal migrants in urban slums who relocated for climate-related reasons.¹⁹⁶ Urban sanitation systems may come under further stress as urbanization driven by climate-related migration and displacement scales up, particularly in slum settlements. Rural-to-urban migrant families may face additional hurdles to accessing basic services in urban settings due to exclusionary migration policies.¹⁹⁷



Children bearing the brunt

While WASH services are essential for everyone, the health consequences of inadequate access to WASH services are especially dire for children, particularly for young children. Diarrhoeal disease is the fourth leading cause of death among children under age 5 globally and can primarily be attributed to unsafe drinking water and poor sanitation and hygiene. Recurring diarrhoea can prevent children from absorbing nutrients, which results in malnutrition and long-term negative health consequences (see 'Health' section, pp. 42–44). Inadequate WASH environments have been estimated to contribute

to close to 4,000 deaths a day, 1,000 of which are among children under 5.¹⁹⁸

While there is clear consensus that climate change will create significant hurdles to improving WASH access for all populations and that children are especially at risk, data and evidence regarding children's specific WASH deprivations following climate change-related events remain extremely sparse. And for children who are migrating, displaced or immobile for climate-related reasons, data on their access to WASH are even more limited.



Data and evidence can help by examining:

- How disasters, hazards and the long-term effects of climate change are affecting WASH systems in rural and urban settings
- Health and well-being among children on the move due to climate change in scenarios where WASH services are limited
- How policies and programmes can better support the WASH-related needs of children who have migrated or been displaced for climate-related reasons



Health



Key questions, key insights

- What are the potential impacts of disasters, hazards and the long-term effects of climate change on the health of migrant, displaced and immobile children?
- How do age and sex influence health outcomes for children migrating, displaced or immobile in the context of climate change?
- How might experiences of climate mobility and immobility during childhood result in mental health challenges?

Climate change is negatively impacting human health; as children grow and develop, they are more vulnerable to these risks than adults. Climate-related migration and displacement may introduce further health risks for children, who often face barriers to accessing health services when they are on the move.

The World Health Organization (WHO) has warned that “climate change is the single biggest health threat facing humanity.”¹⁹⁹ WHO estimates that between 2030 and 2050, climate change will result in approximately 250,000 additional deaths per year due to malnutrition, malaria, diarrhoea and heat stress alone.²⁰⁰ Children are especially vulnerable to climate-related health risks, particularly those who are under age 5.²⁰¹ Children face greater exposure to air pollutants than adults relative to their body weights, are less able to regulate their body temperatures when exposed to extreme heat, and have immature immune systems.^{202, 203} In some contexts, health risks related to climate change may drive migration and displacement. In others, climate mobility may expose children to new health risks or “act as a risk multiplier by compounding the effects of pre-existing social and political determinants of health.”²⁰⁴

Exposed to harm

Disasters and weather-related emergencies can directly impact children’s health by heightening their risk of injury, illness and/or psychological trauma related to displacement.²⁰⁵ For instance, heatwaves may trigger health complications in children such as heat-stroke, kidney-related diseases and respiratory and infectious diseases, while flooding has been shown to increase childhood mortality and morbidity by exposing children to infectious diseases – particularly through unsafe water or food – in the aftermath of floods.²⁰⁶

Climate- and weather-related emergencies can also lead to disruptions that have cascading effects on children’s health and their access to services. If health records are lost or destroyed during disasters, for instance, administrative issues may arise that can interrupt access to care when children leave home.²⁰⁷

In evacuation centres and displacement camps, where health care is typically limited, children may not have access to child-specific care, including routine, life-saving vaccinations.²⁰⁸ Similarly, in post-disaster settings, overcrowding, inadequate nutrition and poor access to safe drinking water and sanitation can put children at risk of sanitation-related illnesses, vector-borne diseases, malnutrition, heat stress and respiratory diseases.

Disasters and weather-related emergencies can also lead to major disruptions in access to gender-specific health services, which can have negative long-term implications for women, girls and boys. For instance, access to sexual and reproductive health services, such as contraception and health services for pregnant women, may be limited.²⁰⁹ Women who have been displaced multiple times

due to extreme weather events may be less likely to utilize antenatal care compared to non-displaced women, in part due to damaged or destroyed local health facilities and limited availability of services in displacement-prone areas, which can lead to serious health complications for mothers and their babies.^{210, 211}

High costs to care

Like other groups of children on the move, children displaced in the context of climate change are likely to face socio-economic hardships that can amplify barriers to accessing health services. Migrant and displaced families may be unable to afford high out-of-pocket health-care costs, particularly when migrating or displaced due to climate-related loss of land, destruction of property or deteriorating livelihoods. Moreover, children displaced due to climate hazards, disasters and weather events – whether internally or across borders – may lack legal protection and not have access to essential services, including health care.²¹²

Children who have migrated or been displaced to urban areas (see ‘FOCUS on urbanization and climate mobility’, p. 53) for climate-related reasons may also encounter barriers to accessing safe WASH facilities, an important lifeline to health for all children. Inadequate access to WASH facilities can contribute to the spread of diseases, including diarrhoea, malaria, pneumonia, skin problems



and common colds – health risks to which young children are particularly vulnerable (see ‘WASH’ section, pp. 39–41).^{213, 214} Meanwhile, climate-related migration and displacement within disaster-prone rural areas can also introduce limitations to receiving proper health care, such as easy access to health-care practitioners.²¹⁵

A child’s age and sex are crucial factors when considering health risks associated with climate mobility. For instance, children under age 5 are especially vulnerable due to their physiological immaturity; common health threats in the context of climate mobility, such as malnutrition, dehydration, and air-, water- and food-borne toxins, may alter these younger children’s healthy cognitive maturation and long-term development trajectories.²¹⁶ In some cases, parents grappling with climate-related displacement may be more likely to seek care for sons than daughters.²¹⁷ These findings reiterate the need for age- and sex-disaggregated data to capture how specific groups of children may face different health risks and barriers to accessing care.

Hazards in destination sites can also have a disproportionate impact on the health of children who have already migrated or been displaced, whether for climate-related or other reasons. Some evidence finds that health outcomes following disasters vary by a child’s migration status, suggesting that the health disadvantages that children on the move commonly face in destination countries are likely to be amplified when exposed to disasters, hazards and long-term climate change impacts.²¹⁸

Impacts on mental health

Climate mobility can also harm children’s mental health.²¹⁹ Children who live through disasters, for

instance, may experience ongoing psychological distress and trauma, including anxiety, post-traumatic stress disorder and depression.^{220, 221} Mental health risks related to climate mobility are especially concerning for children, as childhood is a time of “extremely high developmental vulnerability,” when most psychiatric disorders are developed.²²²

When children are on the move for climate-related reasons, they often lose both physical and emotional ties to communities of origin.²²³ These losses can have a severe impact on a child’s mental health and well-being, although more child-specific research is needed on this topic.²²⁴

Mental health concerns can vary by a child’s life stage. For instance, during middle childhood (ages 6–12), fear of accidents and catastrophes is developmentally common, and climate-related stressors such as heat stress or drought may delay developmental milestones and adversely impact mental health. On the other hand, during adolescence – a period of major neurocognitive and hormonal changes – children may be especially vulnerable to the adverse impacts of disrupted social networks arising from mobility or immobility. Age-disaggregated data that capture mental health outcomes among children and adolescents on the move due to the impacts of climate change, however, remain limited.²²⁵

Less is known about the impacts of immobility – including children who are trapped in high-risk environments – and its consequences for physical and mental health. More data on these scenarios are urgently needed to better understand the associated health risks for children and to prepare health systems accordingly.



Data and evidence can help by examining:

- How disasters, hazards and the long-term effects of climate change are affecting health systems at large and availability of child-specific health services in particular
- Barriers to accessing health services for children and families migrating, displaced or immobile due to climate change
- Climate-related mobility and immobility impacts on children’s health, including mental health, and how different types of climate events and mobility responses influence children’s health



Education



Key questions, key insights

- How do disasters, hazards and the long-term effects of climate change affect children's access to the classroom and learning?
- How do climate-related migration and displacement influence children's education and learning outcomes?
- Which groups of children impacted by climate mobility are most at risk of missing out on schooling?

Like other children on the move, children migrating or displaced for climate-related reasons are likely to experience major disruptions to their education and learning. This may be due to a combination of immediate interruptions caused by climate-related emergencies and longer-term barriers introduced or exacerbated by climate mobility, including socio-economic, legal, administrative, cultural and mental health obstacles.

Although the intersection of education and climate mobility has not been explored extensively, it is well documented that displacement – whether due to disasters or conflict – is disrupting children's education around the world.²²⁶ As many as 40 million children may be missing out on schooling every year due to environmental factors, including disasters and disease outbreaks, some of which can be attributed to climate change.²²⁷ Close to half of all school-age refugee children are out of school and only a small percentage attend university – evidence of the significant obstacles to learning faced by vulnerable children on the move.²²⁸

There are no global estimates for the number of children migrating or displaced for climate-related reasons who are out of school, but the evidence suggests that this group is at risk of falling behind or dropping out and that education systems are currently not prepared to support them.

Learning, interrupted and overlooked

The education sector is often overlooked and underfunded in displacement settings: In 2019, education made up only 2.6 per cent of total humanitarian funding.²²⁹ Lack of adequate support through humanitarian response plans in 2021 threatened access to quality education for more than 9 million internally displaced children.²³⁰ These concerning trends are likely to apply to children on the move in the context of climate change as well, as climate-related migration and displacement is disproportionately concentrated in the most socio-economically fragile countries and can further burden already struggling education systems.²³¹ ²³² Climate-related rural-to-urban migration and displacement may put additional strain on education systems in city centres, where, in some contexts, restrictive registration rules may prevent migrant and displaced children from enrolling in school.²³³

In the immediate aftermath of sudden-onset disasters, school buildings, learning supplies and roads and bridges connecting to schools may be damaged or destroyed; in some cases, school buildings may be turned into evacuation centres, which can disrupt children's access to the classroom for days, weeks, months or even years.²³⁴ Disasters may also lead to absenteeism due to injuries sustained by students, teachers and parents.^{235, 236} These circumstances can contribute to high levels of displacement and continued barriers to the classroom, while also interrupting education for children who are trapped or immobile in high-risk areas.^{237, 238}

Ripple effects

Lack of financial resources may also present a major hurdle for students migrating or displaced in the context of climate change as families may lose their land, assets and livelihoods in these circumstances. Even if school is free, additional educational costs, including supplies, books, uniforms and transportation may prevent children from going to school.²³⁹ When displacement is accompanied by economic stress, children may drop out of school in order to work or be forced into child marriage (see 'Child protection' section, pp. 48–50). Economic hardships may also exacerbate gender gaps in education for girls displaced in the context of climate change, with families prioritizing boys attending school in areas facing both sudden- and slow-onset disasters.^{240, 241}

When migrant and displaced children do attend school, the quality of their education may be hindered by teacher shortages, teachers who lack formal training, lost or destroyed school records, administrative or legal barriers, discrimination and language challenges – obstacles that are well documented across migration and displacement settings.^{242, 243} Similarly, schools are often unprepared to support the mental health and psychological needs of children migrating or displaced in the context of climate change.²⁴⁴ This is particularly concerning given the links between poor mental health and trauma (see 'Health' section, pp. 42–44) and decreased academic performance.²⁴⁵

Complex challenges

Children who stay behind while parents migrate for climate-related reasons may face distinct educational barriers and opportunities, although data



are limited on this topic. In the context of labour migration, evidence has shown that children who stay behind tend to suffer from worse educational outcomes.²⁴⁶ In some contexts, however, remittances sent home by family members may help support children's continued education and close education gaps for girls, in particular.²⁴⁷

In scenarios of planned relocation, large portions of a community may be relocated from areas vulnerable to climate change. Relocated school-age children may experience trauma, ongoing community tension and obstacles to assimilating in host communities – all of which may shape their

success in the classroom; at the same time, when schools close in places of origin due to a decline in students, children who do not move may see their educational opportunities diminish.²⁴⁸

Like other groups of children on the move, those displaced, immobile or staying behind while their parents or caregivers migrate in the context of climate change are likely to face significant barriers to learning. Data and evidence on the educational experiences of migrant and displaced children in a changing climate are urgently needed to better prepare education systems for the climate hazards expected to intensify in the years to come.



Data and evidence can help by examining:

- Impacts of climate disasters, hazards and the long-term effects of climate change on children's access to education and learning outcomes
- Enrolment rates, attendance rates and learning outcomes of school-age children displaced or migrating for climate-related reasons
- Barriers and opportunities to accessing education for children displaced, migrating or immobile for climate-related reasons

Travelling across borders and deprived of their rights

Although most children moving for climate-related reasons will stay within their own countries,²⁴⁹ some children will cross borders. Children who do so for climate-related reasons are typically not protected under international refugee law and many have few legal pathways to migrate.²⁵⁰ The Convention on the Rights of the Child, however, stipulates that these children have the same rights as all other children and UNCHR has stated that "[i]n many situations, people displaced in the context of the impacts of climate change and disasters will be entitled to international protection under international law."²⁵¹ But in practice, children who cross borders due to the impacts of climate change "may fall through the cracks of international protection mechanisms . . . leaving them in a state of limbo."²⁵¹ (See also, 'FOCUS on the legal landscape', pp. 11–12.)

Laws and policies in host countries may explicitly exclude irregular migrants or non-citizens from their health care, education or social protection systems, including those migrating or displaced

for climate-related reasons. Even if families and children in irregular situations are technically entitled to essential services, they may be reluctant to take advantage of them for fear of detection and deportation.²⁵² Socio-cultural and linguistic obstacles may introduce further hurdles for children who are able to enrol in schools abroad and for families navigating unfamiliar, complex welfare systems.^{253, 254}

Despite these risks, foundational data on the numbers and experiences of irregular migrant children are not currently systematically collected,²⁵⁵ nor are data on the numbers of children who have migrated or been displaced abroad for climate-related reasons (see 'Foundations', pp. 5–14). Ensuring no child falls through the cracks of international protection mechanisms starts with ensuring these children become systematically visible in data and research on international migrants, climate change and sector-specific issues, while safeguarding their rights and protecting their privacy.



Child protection



Key questions, key insights

- How do disasters, hazards and the long-term effects of climate change effect children's exposure to violence, exploitation and abuse?
- Which specific child protection risks are children on the move likely to face in the context of climate change and disasters?
- Which groups of children on the move are most vulnerable?

Climate change and related mobility can exacerbate the root causes of many child protection threats and amplify pre-existing inequalities. Children migrating or displaced for climate-related reasons are especially at risk of sexual and gender-based violence, child marriage, child abuse and neglect, child labour, and child trafficking and smuggling.

* For example, the [Convention on the Rights of the Child](#) guarantees the rights of all children "irrespective of the child's or his or her parent's or legal guardian's race, colour, sex, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status"; see UNHCR, *Climate Change Impacts and Cross-Border Displacement: International refugee law and UNHCR's mandate*, Geneva, 2023.

Climate-related migration and displacement can disrupt social and economic structures and intensify the underlying drivers of violence, exploitation and abuse.^{256, 257, 258} Data and evidence that reflect how climate mobility is shaping these rights violations in different contexts around the world remain scarce – but given how often threats to children’s safety and well-being go unnoticed or unreported, this is a critical area of concern as the impacts of climate change escalate.²⁵⁹

A vicious cycle

The interaction between climate change and violence against children can be described as a vicious cycle. Disasters and extreme weather events can lead to separation and relocation of families, collapse of social networks, breakdown of social norms, altered family dynamics, destruction of infrastructure and introduction of mental stress and trauma – major disruptions that have been tied to higher incidence of violence against children, while violence against children itself can reduce resilience to climate change.^{260, 261} Changes in family and social structures following climate or weather emergencies are particularly important to consider, as perpetrators of violence against children are often reported to be family members or community members.^{262, 263}

Girls who remain immobile in areas where climate-related threats are high may also be exposed to intensified rights violations, such as child labour and sexual violence. In many parts of the world, girls are responsible for collecting natural resources, such as water and firewood; during droughts, they may have to travel farther and more often to collect water, which has been associated with a heightened risk of sexual violence.²⁶⁴

Women and girls are often disproportionately exposed to violence in emergency and displacement settings, including temporary shelters, refugee camps and evacuation centres.²⁶⁵ Girls displaced for any reason – whether climate-related or not – are vulnerable to sexual assault and harassment in temporary shelters or housing facilities, as they are often cramped, poorly lit, and lack privacy or separate WASH facilities for women and girls.^{266, 267} Gender-based violence may be more common among those displaced by disasters than those who stay in communities of origin, due to reduced parental supervision, unequal distribution of relief supplies and increased community tensions upon relocation.²⁶⁸ Boys can also encounter safety risks in displacement, including gender-based violence, forced labour and recruitment to armed groups, although less evidence on this area is available.²⁶⁹

Children with diverse sexual orientation, gender identity, gender expression and sex characteristics (SOGIESC); who belong to ethnic or religious minority groups; and children with disabilities may also face pronounced vulnerabilities in emergency and displacement settings. These groups may be prevented from accessing shelters following climate emergencies – exposing them to additional risk of violence or death – or face ongoing discrimination when trying to access other forms of post-disaster relief or assistance.²⁷⁰ Data and evidence on these groups of children in the context of climate change, however, remain especially sparse, so the full extent of the risks they face remains unknown.^{271, 272, 273}

Exposure to harm

In countries where child marriage is still practiced, disasters and the impacts of climate change have been linked to an increased risk of girls being married before the age of 18.^{274, 275} In some contexts, families have described child marriage as a strategy to move their daughters away from areas prone to environmental disasters or predictable catastrophes, such as river level rise. Extreme weather events linked to climate change can also lead to loss of life, putting girls who are left behind at higher risk of marriage.²⁷⁶

Displacement itself can push girls into child marriage as a result of the social and physical conditions of evacuation centres and displacement camps and increased financial strains.^{277, 278, 279} A UNICEF analysis of historical data confirms the link between climate change and child marriage, demonstrating that a 10 per cent change in rainfall due to climate change can be associated with a 1 per cent increase in levels of child marriage.²⁸⁰

In areas where men migrate or are displaced for climate-related reasons, changes in social structures may have detrimental consequences for those who stay behind, including increased levels of sexual harassment in the absence of male household members, resulting in social stigma and more cases of child marriage.²⁸¹

Concerning circumstances

Climate hazards may also deplete family resources and increase children’s susceptibility to human trafficking or the ‘sale of children’ for exploitative work arrangements.²⁸² Traffickers may use post-disaster settings as an opportunity to recruit and exploit vulnerable populations, including women, children, migrants, refugees and internally displaced persons.^{283, 284, 285}

Similarly, children and families who face unexpected

loss of lives, land and livelihoods for climate-related reasons may see irregular migration as the only viable pathway to pursue opportunities elsewhere. Many may turn to smugglers to make cross-border migration journeys. Children who are smuggled are especially vulnerable to exploitation, including trafficking, sexual exploitation, forced labour, child marriage and organ removal.²⁸⁶ These risks are particularly high for unaccompanied children and children who have been separated from their parents or primary caregiver.

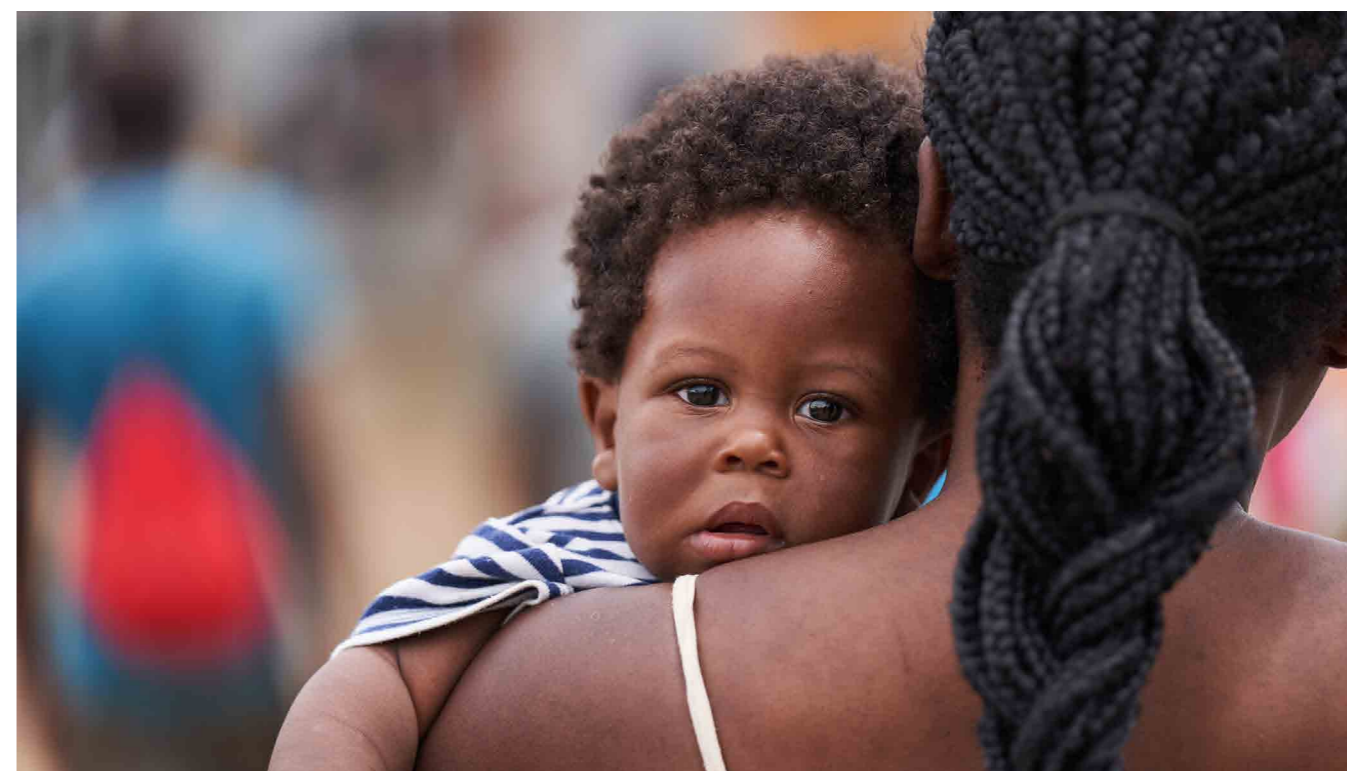
While current data indicate a correlation between climate hazards, human mobility and child protection issues, the evidence is mostly limited to smaller-scale qualitative studies or operational data from NGOs or civil society organizations. Research in the

aftermath of disasters and weather-related events that is child-specific or that focuses on gender-specific risks that pertain to boys, children with diverse SOGIESC, children from ethnic or religious minority groups, and children with disabilities is largely missing from the evidence base. Data on sexual and gender-based violence can be particularly difficult to collect due to general under-reporting among victims and data collection methods that require special sensitivity to protect victims, especially children.²⁸⁷ And the connection between climate change, human mobility and issues such as family separation, child labour, detention and birth registration have received even less attention. Greater investments are needed to systematically collect quality data on the child protection risks associated with climate mobility.



Data and evidence can help by examining:

- Impacts of disasters, hazards and the long-term effects of climate change on different child protection violations, including violence against children, child marriage, child abuse and neglect, child labour, child trafficking and smuggling
- Child protection risks and vulnerabilities specific to different groups of children, including girls, boys, children with diverse SOGIESC, children belonging to ethnic or religious minority groups, and children with disabilities





Intersectional considerations

Children with disabilities

Natural hazards, including those exacerbated by climate change, can directly and indirectly heighten risks for children with disabilities. Persons with disabilities are often excluded from early warning signs and evacuation planning and procedures – for instance, emergency communication may not be provided in sign language or through audio messaging and persons with disabilities may be deprioritized or socially excluded during emergencies – which can put children with disabilities in danger.^{288, 289}

Children with disabilities are disproportionately represented in the poorest households and more likely to experience inadequate housing and food insecurity. This can render children with disabilities and their families less able to adapt to a changing climate and put them at higher risk of forced displacement.²⁹⁰ In other contexts, children with disabilities may be prevented from moving as an adaptation strategy, leaving them trapped in potentially unsafe environments.²⁹¹

For children with disabilities who do move, challenges are likely to continue during and after migration and displacement. Temporary evacuation centres or schools may be inaccessible to children with physical and visual impairments.²⁹² Even in the context of more voluntary migration related to climate change, migrant children with disabilities can face compounding challenges, such as barriers navigating a new language, culture and school, in addition to exclusion or discrimination because of their disability status.²⁹³

Regardless of their reason for being on the move, children with disabilities commonly encounter high barriers to full and equal participation in society.²⁹⁴

Gender

A growing body of evidence shows that women and girls disproportionately experience the impacts of climate change. In low- and middle-income countries, women are more dependent on natural resources than men, and agriculture is the most

important employment sector for women.²⁹⁵ During periods of environmental stress, such as erratic rainfall or periods of drought, women must work harder to secure income for their family – and girls may have to leave school to help manage this increased burden.²⁹⁶

Traditional gender norms may also constrain women's ability to use migration as an adaptation strategy in response to climate stress. For instance, women in rural areas where resources have been depleted or destroyed may face significant social costs to migrating to places where more work is available, such as urban areas. In communities where gender norms limit women's agency and decision making, women and their children may wait to migrate until environmental stressors become acutely urgent – giving them less time to plan their journey and potentially exposing them to additional risks at home and in their destination.²⁹⁷

During more extreme disasters, women and girls may face gender-specific safety risks in some contexts, such as limited access to information during emergencies or restrictions on their movement.²⁹⁸ In the aftermath of disasters, women and girls may be less able to access relief and assistance, including reproductive care and menstrual hygiene products, and may face heightened risks to gender-based violence.^{299, 300}

Despite evidence indicating that harmful gender norms can exacerbate challenges for women and girls in the context of migration, displacement and climate change, few studies focus on child-specific gender vulnerabilities in this context. More data are needed on the topic to adequately inform both gender- and child-sensitive programming and policies.

Indigenous peoples

Children from Indigenous communities face unique challenges in the context of climate-related migration and displacement. Indigenous families are at heightened risk of being displaced due to climate hazards, as their livelihoods are often tied to their land and agriculture, and they have been politically, economically and socially marginalized throughout history. Indigenous peoples are three times as likely to experience poverty than non-Indigenous peoples, a key risk factor for climate displacement.³⁰¹

Once displaced, Indigenous families may find themselves in communities that do not speak or teach Indigenous languages, which can contribute to difficulties securing employment, learning in school and integrating into host communities.³⁰² Indigenous students displaced in the context of climate change may also face discrimination in the classroom and

exclusion from educational systems.³⁰³ Displacement or relocation of Indigenous communities can also lead to significant cultural and identity loss, as Indigenous peoples' ancestral lands are often a source of cultural, spiritual and social identity.³⁰⁴

Pastoralist communities

Pastoralist communities, who engage in some form of voluntary mobility as a way of life, also face distinct vulnerabilities in the context of climate change given their special attachment to land and its role in their livelihoods. (See also the work of MMC and IOM in 'FOCUS on noteworthy initiatives to build the evidence base', pp. 26–28.) Climate hazards such as droughts may slowly decrease their mobility options and lead to displacement. As IDMC explains, "when their coping capacities are exhausted and 'normal' migration is no longer possible, pastoralists fall into a gradual process of impoverishment and become internally displaced."³⁰⁵ Increased movement among some nomadic pastoralist populations has led to some children becoming separated from their families.³⁰⁶ Similarly, climate change can disrupt seasonal or circular migration patterns based on the environment, forcing families to leave their traditional lifestyles and find alternative livelihoods elsewhere.³⁰⁷

Despite the risks that these communities are likely to face, research on the impacts of climate-related displacement among Indigenous and pastoralist populations is extremely limited. When it comes to children's experiences in these contexts, the evidence is even more sparse. More comprehensive data are urgently needed to ensure that children living in communities with strong attachments to land can be supported in the face of climate change.



FOCUS on urbanization and climate mobility

Today, more than half the global population – 4.4 billion inhabitants – live in cities³⁰⁸ and over 1 billion people live in urban slums.³⁰⁹ Rapid urbanization is expected to continue, with the urban population projected to double by 2050.³¹⁰ Climate-related migration and displacement may contribute to this growth, as it often takes the form of internal, rural-to-urban migration.³¹¹ In some contexts, however, climate threats may lead to outmigration from cities due to the expected exacerbation of climate hazards.³¹² The relationship between climate mobility, urbanization and childhood is underexplored and more data are needed to comprehensively understand it.

Complex links

Climate-related rural-to-urban migration is often linked to economic migration, as climate hazards may disrupt the livelihood of families dependent on land and natural resources and drive them to seek alternative sources of income in cities.³¹³ Rural families migrating or displaced for climate-related reasons are likely to be financially vulnerable and lack the skills and education required to secure urban jobs. As a result, they typically work in the informal sector and settle in urban slums.³¹⁴

Several studies focusing on the living conditions of ‘climate migrants’ in urban slums around the world show that these families face immense daily challenges, including insufficient food and proper nutrition; limited access to adequate WASH facilities; barriers to health care, education and child protection services; and inadequate housing.^{315, 316, 317} Displacement itself can add to the challenges of life in slum settlements, as recent arrivals are less likely to have a strong support system through family and communal ties.³¹⁸

While evidence is limited on the specific conditions of climate-related migrant and displaced children living in urban slums, the arduous conditions can



have cascading effects on nearly all aspects of a child’s well-being and protection.³¹⁹

Compromised environments

Many cities around the world are especially vulnerable to climate change threats such as sea level rise, dramatic fluctuations in precipitation, floods, extreme hot and cold temperatures, and increasingly frequent and intense cyclones and storms.³²⁰ Urban slum dwellers in developing countries are especially at risk, as they tend to live in the most hazard-prone areas, such as along riverbanks and waterfronts, on hillsides prone to landslides and in polluted areas. Slum dwellers also typically live in unstable housing structures that are unable to withstand extreme weather events and other climate threats, putting climate-related displaced families at risk of secondary displacement when crisis hits.³²¹

Although climate change will likely lead to increased urbanization in many contexts, many children and families will remain in or move to rural settings. They, too, will face a unique set of risks and vulnerabilities. While the evidence base on rural climate mobility is limited, families moving to rural settings may have little or no access to health, education and transportation services. Some evidence finds that parents displaced for climate-related reasons in rural settings are less likely to seek health services for their children than their non-displaced counterparts, in part due to limited local availability of doctors and the high cost of reaching medical centres.³²²

Cities, prepared and ready

While research to date reveals many of the challenges that migrant and displaced families in urban settings face, more data and evidence are needed to understand the child-specific risks in urban slums and the scale and geography of children on the move due to climate change. The global response must not only ensure that cities are prepared to support urban slum children on the move for climate-related reasons, but also that cities themselves provide safe and resilient homes for all children.

Efforts should also be made to improve and standardize age-disaggregated data on urban populations as a whole, as many countries define and count urban residents differently.³²³ These measures should be balanced with improved data and evidence on rural climate mobility and its impact on children’s well-being to ensure that no child on the move due to climate mobility – whether in an urban or rural setting – is left behind.



FOCUS on conflict and climate mobility

While climate change itself does not directly cause conflict, it may exacerbate the factors that ultimately lead to it. Emerging evidence makes clear that, in many contexts, conflict and disasters interact and intersect with one another as drivers of displacement. Of the 50 countries and territories that recorded new internal displacements associated with conflict, 45 also recorded new internal displacements associated with disaster.³²⁴ In other words, nearly all countries dealing with internal displacement triggered by conflict “are simultaneously dealing with disasters and the impact of these dual challenges on populations, institutions and governance.”³²⁵ In many cases, children will experience multiple displacements due to both conflict and disasters, and one type of displacement can often increase vulnerability to another.

Multifaceted stresses

Climate change can put stress on natural resources, exacerbate existing social, economic and political pressures, and amplify the risk of local or larger-scale violence within a country.^{326, 327} For example, in the Horn of Africa region, several conflicts have emerged between agricultural and pastoral communities fueled by climate-exacerbated droughts and variability in water supply.³²⁸ Some experts have argued that climate change-related extreme drought and water scarcity contributed to the war in Syria in 2012, as droughts had already triggered large-scale displacement, led to food insecurity and increased unemployment, all of which undermined political stability in the country.³²⁹ Some evidence shows that climate variability can increase recruitment of children – both girls and boys – by armed groups, as it may trigger economic strain, withdrawal from school and displacement to camp settings, which are often used by armed groups as recruitment grounds.³³⁰

Enduring conflicts can also undermine populations’ resilience to climate-related shocks and hazards, compound vulnerabilities for conflict-displaced persons and lead to multiple displacements. For example, in Colombia, the Niger and Somalia, floods, droughts, landslides and storms displaced groups who were already on the move due to conflict. Displacement camps for both refugees and internally displaced persons are often located in climate-hazardous areas, which can increase the risk of secondary displacement for both climate- and conflict-displaced groups.³³¹ Similarly, displaced families often move to urban slum settlements that are especially prone to climate risks (see ‘FOCUS on urbanization and climate mobility’, p. 53). Children displaced multiple times due to conflict and

disasters are likely to have unique, multidimensional needs that are not yet well captured in the data.

Barriers to access

Geographic overlap between conflict and disasters can also amplify challenges to providing humanitarian services to impacted populations. For instance, disasters may occur in areas controlled by non-State armed actors, presenting barriers to humanitarian actors’ access. Similarly, disaster risk reduction plans and systems are challenging to set up in locations affected by ongoing conflict, putting children living in these areas at risk of future disaster displacement.³³²

Current research and data collection efforts tend to separate analysis of persons displaced by conflict from those displaced by disasters, but often do not consider how these phenomena intersect, overlap and affect vulnerability. UNHCR notes, “disaggregating displacement data solely by trigger, such as conflict or disaster, masks the complex drivers that affect people’s resilience, coping capacities and decisions to flee.”³³³ Evidence that does explore conflict and climate mobility rarely highlights the specific needs and experiences of children. Future research should consider how conflict and disasters may interact to drive individual or multiple displacements and how multicausal displacement impacts children’s lives.



FOCUS on expert perspectives

Alexandra Bilak, Director of the Internal Displacement Monitoring Centre (IDMC), is an expert on internal displacement, climate change and disasters. “Counting the number of people displaced as a result of climate change is a complex endeavor,” Bilak emphasizes. While IDMC can track displacement linked to sudden-onset disasters such as storms and floods – which are becoming more frequent as a result of climate change – it is more difficult to capture displacement due to the indirect effects of climate change such as food insecurity or loss of livelihoods. This form of displacement, she notes, “goes mostly unrecorded.” Reflecting more broadly on gaps in the data on internal displacement, Bilak comments, “Internal displacement is one of the most under-researched aspects of human mobility. Using proxies to estimate the number of affected children can be helpful to raise awareness but is not enough to inform policies and operational decisions. More investments are needed in country-level data collection, analysis and dissemination.”

Robert Beyer is a Data and Research Analyst at the International Organization for Migration (IOM), and an expert in data on migration and displacement in the context of disasters, climate change and environmental degradation. He works to understand historical patterns of human mobility in response to climate-related changes and forecast future global hotspots of climate mobility, bringing together global, socio-economic and mobility data sets. “When considering data gaps and limitations, Beyer stresses the limited available data on internal migration flows, noting that climate mobility – whether short-term displacements or longer-term rural-to-urban migration – typically takes place within country borders. He also notes the scarcity in age-disaggregated data and points out, “Including age as a key demographic characteristic in surveys would often come at a small additional price in relation to the benefits of the insights that it would make possible.” Beyer points out that existing data on climate mobility are often not readily comparable, and “consolidating and harmonizing existing data should be high priority.”

* See, for example, Beyer and Milan, *Climate Change and Human Mobility*; and Beyer, Robert, Jacob Schewe and Guy J. Abel, ‘Modeling Climate Migration: Dead ends and new avenues’, *Frontiers in Climate*, vol. 5, 29 August 2023.

IV >> ACTIONS: Better data and evidence to protect children on the move in a changing climate



Whether the impacts of climate change contribute to a child's or family's decision to move, force them to flee or trap them in a state of immobility, the climate crisis is amplifying risks and deprivations for children around the globe. Many children on the move in the context of climate change are facing threats to their physical and mental well-being at the most basic levels, including their access to food and proper water and sanitation, their access to quality learning and their right to a life free from harm. As the global community advances the climate action agenda, we must ask ourselves: How can we ensure children who have migrated or been displaced are counted, protected and reach their full potential?

We must be accountable to children in climate action by developing policies and programmes that prioritize the best interests of the child in all decisions affecting them. Children have a right to be involved in these decisions and a right to know what is at stake if States do not act. And no matter how climate mobility plays out in a child's life, they have a right to family unity; protection from harm; access to health care, education, and other social services; and a life free from discrimination.

Governments (local and national), United Nations bodies, donors, civil society, the private sector and children and youth themselves must come together to respond to the climate crisis and enact policies that ensure every community in every country is prepared and resilient. These measures must anticipate, recognize and respond not only to the harms that human mobility in this context may introduce into a child's life, but also to the important opportunities that climate mobility offers for societies to adapt and thrive.



Evidence-informed progress

Data and evidence have a key role to play in shaping the policy environment and targeting resources and efforts towards those most marginalized in the context of climate mobility. When quality, nationally produced data are matched by sound quantitative and qualitative research, they provide the surest way to reflect and track the well-being of children – regardless of their legal or migratory status. And when data and evidence are shared responsibly within and among countries, regions and key stakeholders, they can be optimized to guide rights-based, child-centred policies and programmes, prepare delivery systems so that essential services and social protection mechanisms continue under all circumstances, and ensure that in times of crisis, all children on the move are protected.

Persistent gaps in the data and evidence, however, mean many migrant, displaced and immobile children are not being counted and their voices and stories are not being heard. In too many cases, this translates into children's needs remaining unmet and rights unrealized.

To ensure that climate policy, action and financing do not leave children on the move behind – and

to reach the most vulnerable where risks are high and capacities to cope are low – policymakers, governments, United Nations bodies, donors, civil society, the private sector and youth- and migrant-led organizations must work hand in hand with data actors and researchers from across sectors.



IDAC: Bringing stakeholders to the table to enact change for children on the move

As a cross-sectoral coalition that links key statistical actors working at the nexus of migration, displacement and children's rights, the IDAC platform offers States the tools, guidance and expertise to improve their capacities to collect better data on all children, including those who are migrants, displaced or immobile. The coalition is currently invested in a number of initiatives that focus on data-driven solutions to ensure that children on the move are included in the climate response.

For instance, last November, IDAC partnered with UNICEF Innocenti – Global Office of Research and Foresight and UNICEF's Division of Data, Analytics, Planning and Monitoring to host a workshop on climate mobility and children on the move. The event convened academics, experts from major international organizations and youth representatives to exchange knowledge and examine the data and evidence landscape on climate mobility. Existing and emerging data

initiatives were highlighted, with participants also taking a critical look at the data gaps and discussing the key measures needed to ensure children on the move in a changing climate are reflected in data and statistical systems.

The group also identified the need to collaboratively map out relevant policies, laws, networks and initiatives that are already underway, including those utilizing innovative methodologies to capture data on climate mobility. As an initial outcome of the workshop, attendees will publish a report that synthesizes the discussions and puts forth a strategic road map for action.

To bolster youth capacity in data work, IDAC has strengthened its partnership with MYCP by forming a youth committee on data. Youth will engage in evidence-based efforts to fill the data gaps on children on the move, including those effected by climate mobility.

Data, evidence and climate action for children on the move: IDAC's key recommendations



Engage, educate and empower children and youth on the move due to the impacts of climate change to meaningfully participate in data collection efforts that capture their lived experiences

- Investments should be made to build youth capacity in data collection and analysis and evidence-based policymaking, particularly for youth affected by climate mobility (e.g., the IDAC-MYCP youth committee on data).
- Data, research and information on climate mobility must be more accessible to children and youth, including by making information available in child-friendly formats and in the languages of affected populations.
- Timely social messaging and data collection tools like UNICEF's [U-Report](#) should be leveraged to ensure children and youth are engaged in the programmes, preparedness and emergency response plans, and advocacy actions that shape their lives.



Invest in data and statistical systems; improve data availability, quality and analysis; and close data gaps on climate-related migration and displacement

- Existing systems and tools can be adapted to better capture the needs of children on the move due to the effects of climate change. For instance:
 - Across sectors, data collection tools should be designed to more systematically capture data that can be disaggregated by age, sex and migration/displacement status, at minimum, and also aim to capture location, household income and other social and demographic variables, such as disability status, ethnicity and race.
 - National censuses can be adapted to incorporate migration data and include disasters as a 'reason for migration'.
 - Special efforts should be made to capture age- and sex-disaggregated data on internal displacement, whether due to disasters, conflict or multiple causes.



Design and invest in strategic data collection efforts and research that examine climate mobility and child well-being, including in conflict, humanitarian and fragile settings, and bring stakeholders and partners to the table to discuss and act on these findings

- Studies and research on climate mobility must include a child-specific lens.
- Investments should be made in data collection and research initiatives across sectors to better understand the impacts of climate-related migration and displacement on the five domains

* For guidance, see International Data Alliance for Children on the Move, *Manual on Child-Specific Data Capacity Strengthening on Children on the Move*, United Nations Children's Fund, New York, 2023, and United Nations Children's Fund and United Nations High Commissioner for Refugees, *Responsible Disaggregation of Data on Refugee and Other Forcibly Displaced Children*, UNICEF and UNHCR, New York and Copenhagen, 2023.

central to child well-being (survive and thrive, learning, protection from harm, safe and clean environment, life free of poverty).

- Data and research should consider how different kinds of climate mobility affect children – e.g., internal migration and displacement, international migration and displacement, and immobility and trapped populations, among other relevant situations.
- Data that reflect how child-critical services and infrastructure have been or are affected or disrupted by disasters can be leveraged to help governments plan and prepare for future crises.
- End users of data should play a role in the early stages of data collection processes to ensure that findings are relevant and actionable; this includes involving populations whose mobility has been affected by the impacts of climate change, including children and youth.



Enable sharing of data and methodologies, including innovative approaches, within and between countries, organizations and regions

- Agreeing on a standardized set of key terms relevant to climate mobility (across governments, United Nations agencies, civil society, donors and affected communities) will enhance comparability of data across contexts and establish good practices.
- Systematic exchange of responsible data generated at local, national, line-ministry and citizen levels that deal with climate change, human mobility and children will help foster a child-sensitive, whole-of-government and -society approach to data collection and sharing.
- Regional economic communities and other regional processes can be leveraged to promote harmonized, responsible data-sharing systems and exchange of good practices and lessons learned in implementing child-focused climate action and migration and displacement policies.
- Greater efforts should be made to improve the analysis, communication and sharing of data and knowledge generated about the impacts of climate change on children's lives among key stakeholders and decision makers, including policymakers.



Improve collaboration between key stakeholders to minimize the risks children on the move are likely to face due to the impacts of climate change

- Cooperation within and between countries, regionally and globally is critical to child-sensitive, evidence-based action, policies and investments.
- Mapping out and promoting co-ordination of relevant initiatives, partnerships and processes can foster alignment of the policy and programme response across contexts.
- By working together to strengthen data and statistical systems, governments can forge a unified approach to climate change and mobility that upholds children's rights and is based on evidence.
- At local-, national- and global-level discussions on climate change, children on the move must be prioritized in data collection efforts so that their vulnerabilities can be clearly identified and addressed.
- Close co-ordination between countries, the private sector, academia, researchers and think tanks across sectors, those working on the humanitarian response, disaster risk reduction, migration and displacement, and affected children and youth themselves, is key to bolstering the climate response for children on the move.



Advocate for child-responsive and mobility-sensitive climate finance that supports evidence-based interventions

- Projects and programmes that support children on the move in the context of climate change should earmark funds for data work.
- Special efforts should be made to garner funds for data work on climate mobility and children in key global forums, such as the UNFCCC Conference of the Parties (COP).
- Quality data and evidence can be harnessed to ensure financial resources target and reach the most vulnerable and marginalized populations.

ANNEX

Key international and regional frameworks, guidance and documents related to climate change, human mobility and child rights

International and regional frameworks

Framework	Description
Convention on the Rights of the Child (CRC) (1989)	The most widely ratified human rights treaty in the world, the CRC is a foundational treaty that ensures legal protections and rights for every child. The CRC reaffirms the rights of all children regardless of their or their legal guardians' nationality, ethnicity or other status. In August of 2023 the Committee on the Rights of the Child issued General Comment No. 26 , which outlines children's right to a clean, sustainable and healthy environment as part of the CRC. The comment specifically states obligations to uphold the rights of children impacted by "climate change-induced migration and displacement" and develop climate adaptation frameworks that incorporate child-rights-based approaches. The comment also stresses the need for States to improve the collection of reliable, disaggregated data and research on the impacts of climate change on children's rights.
United Nations Framework Convention on Climate Change (UNFCCC) (1992)	Ratified by 198 countries, the UNFCCC represents a foundational climate change agreement that establishes a basic legal framework and principles for international climate change cooperation. The agreement has provided a platform for subsequent climate agreements, including the Paris Agreement.
Convention on the Rights of Persons with Disabilities (2006)	Article 11 calls on States to take "necessary measures to ensure the protection and safety of persons with disabilities in situations of risk, including situations of armed conflict, humanitarian emergencies and the occurrence of natural disasters." The Convention further calls for the collection of disaggregated data to help States formulate and implement policies that address the barriers faced by persons with disabilities in exercising their rights.
African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa (Kampala Convention) (2009)	The only legally binding continent-wide treaty in place for the protection of internally displaced persons, the Convention highlights States' obligation to protect and assist those who have been internally displaced due to "natural or human made disasters, including climate change."
Cancún Adaptation Framework (2010)	The first internationally agreed-upon text that recognizes "climate change induced displacement, migration and planned relocation" as adaptation challenges under UNFCCC processes.

Framework	Description
Sendai Framework for Disaster Risk Reduction 2015–2030 (2015)	This pivotal framework describes priority areas to reduce disaster risk and includes several provisions on disaster displacement. Recognizing children as a particularly vulnerable group, the framework stresses the importance of enhancing tools and methodologies “to record and share disaster losses and relevant disaggregated data and statistics.”
2030 Agenda for Sustainable Development (Sustainable Development Goals/ Global Goals) (2015)	Adopted by all United Nations Member States, the 2030 Agenda “provides a shared blueprint for peace and prosperity for people and the planet, now and into the future.” The 2030 Agenda acknowledges that climate change is “one of the greatest challenges of our time” and Sustainable Development Goal (SDG) 13 specifically calls on Member States to “take urgent action to combat climate change and its impacts.” The SDGs are built around tracking national progress towards common indicators, noting that “reliable disaggregated data will be needed to help with the measurement of progress and to ensure that no one is left behind.” Several SDG targets may be relevant for children on the move in a changing climate, such as SDG 13.1, which calls for “strengthening resilience and adaptive capacities to climate-related hazards and natural disasters in all countries,” and SDG 10.7, which calls on States to “facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies.”
Paris Agreement (2015)	A legally binding treaty, the Paris Agreement was adopted by 196 States at the 2015 United Nations Climate Change Conference (COP21). Its overarching objective is to hold “the increase in average global temperature to well below 2°C above pre-industrial levels” and pursue efforts to limit warming to 1.5°C above pre-industrial levels by the end of the century.
Global Compact for Safe, Orderly and Regular Migration (GCM) (2018)	The first intergovernmental United Nations agreement that puts forth a common approach to managing international migration, the GCM repeatedly recognizes the links between migration and climate change, calls for the prioritization of better data and evidence and emphasizes the guiding principle of child sensitivity. The GCM specifically calls on States to “strengthen joint analysis and sharing of information to better map, understand, predict and address migration movements, such as those that may result from sudden-onset and slow-onset natural disasters, the adverse effects of climate change, environmental degradation, as well as other precarious situations.”
Global Compact on Refugees (GCR) (2018)	A foundational framework for governments, international organizations and other key stakeholders to support sustainable solutions for refugee populations, the GCR notes that “climate, environmental degradation and natural disasters increasingly interact with drivers of refugee movement.” The GCR calls for enhanced collection, analysis and sharing of data on refugees, returnees and host communities disaggregated by gender, age and disability status.
Global Set of Climate Change Statistics and Indicators: Implementation guidelines (2023)	Developed by the United Nations Statistics Division in close collaboration with the Secretariat of the UNFCCC and the Expert Group on Environmental Statistics, these guidelines aim to support countries in the implementation of the Global Set of Climate Change Statistics and Indicators, which were adopted at the fifty-third session of the United Nations Statistical Commission in 2022. The framework includes an indicator that specifically references “climate refugees, climate migrants and persons displaced by climate change.”

Guidance and documents

Guidance/Document	Description
Principles on Housing and Property Restitution for Refugees and Displaced Persons (Pinheiro Principles) (2005)	The United Nations Pinheiro Principles recognize the rights of all refugees and displaced persons, including those displaced by disasters, to return to their homes and land. They establish important international standards and offer States practical guidance for upholding these rights, while also outlining approaches to achieving durable solutions beyond return. The Principles highlight the need for States and other relevant authorities and institutions “to collect information relevant to facilitating the restitution process, for example by including in the registration form questions regarding the location and status of the individual refugee’s or displaced person’s former home, land, property or place of habitual residence. ...including at the time of flight.”
Agenda for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change (Protection Agenda) (2015)	Endorsed by 109 States, the Protection Agenda aims to support States in improving their capacity to prepare for and respond to cross-border disaster displacement in both countries of origin and destination. The Protection Agenda’s first priority area for action is to collect data and enhance knowledge on cross-border disaster displacement, and it specifically calls for “gender- and age-disaggregated data regarding the overall number of people displaced in disaster contexts, including across international borders.”
Disaster Displacement: How to Reduce Risk, Address Impacts and Strengthen Resilience (2019)	As part of the Words into Action guidelines series, this guide provides practical, specific advice on the implementation of the Sendai Framework for Disaster Risk Reduction in relation to disaster displacement. It provides recommendations for the data that should be collected and analysed before displacement, during a disaster and over time, and stresses that data should ideally be disaggregated by age, gender and health status and identify “those with specific needs”, including children.
Legal Considerations Regarding Claims for International Protection Made in the Context of the Adverse Effects of Climate Change and Disasters (2020)	Issued by UNHCR, this document offers guidance to governments, legal practitioners and administrative and judicial decision makers. It addresses the applicability of the international protection framework in the context of cross-border climate change and disaster displacement. It emphasizes that “women, children, elderly people and people with disabilities, who have inherent vulnerabilities, minority groups, Indigenous peoples, and persons living in rural areas relying on natural resources for their livelihoods, will be especially at risk.”
Shining a Light on Internal Displacement: A vision for the future – Report of the United Nations Secretary-General’s High-Level Panel on Internal Displacement (2021)	Published by the High-Level Panel on Internal Displacement established by the United Nations Secretary-General, this report underscores the importance of strengthening nationally owned, government-led data and statistical systems to enhance data and respond to the needs of internally displaced persons – including those displaced by disasters and the adverse impacts of climate change – utilizing gender- and age-sensitive approaches.
Guiding Principles for Children on the Move in the Context of Climate Change (2022)	Derived from internationally recognized human rights mechanisms, normative frameworks and other operational guidelines, these guiding principles produced by UNICEF in collaboration with IOM, Georgetown University and the United Nations University, were developed to safeguard the rights of children on the move in the context of climate change. The report repeatedly references a lack of disaggregated data and evidence on children on the move in the context of climate change as a roadblock to developing effective measures and policies to secure their rights.

Guidance/Document	Description
United Nations Secretary-General's Action Agenda on Internal Displacement: Follow-up to the Report of the UN Secretary-General's High-Level Panel on Internal Displacement (Action Agenda) (2022)	Building on the 2021 report of the High-Level Panel on Internal Displacement, the Action Agenda sets out a plan and call to action to support and protect internally displaced persons around the world. The Agenda recognizes that climate change is a major contributor to internal displacement and notes that when it comes to internal displacement, "children and marginalized groups often face the greatest impacts."
Climate Change Impacts and Cross-Border Displacement: International refugee law and UNHCR's mandate (2023)	Building on UNHCR's 2020 guidance, this document explains how international law can be applied to protect persons displaced across borders in the context of climate change and disasters and examines UNHCR's mandate in regards to international refugee law in this context. It notes that "the growing numbers of people displaced by climate change have prompted calls for new legal instruments, including a Protocol to the 1951 Convention"



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