



FUTURES AT RISK:

PROTECTING THE RIGHTS
OF CHILDREN ON THE MOVE
IN A CHANGING CLIMATE

ABBREVIATIONS AND ACRONYMS

ABE	Alternative Basic Education
ACE	Action for Climate Empowerment
CEC	Community Education Centre
COP	Conference of the Parties
CSSF	Comprehensive School Safety Framework
CtC	Child-to-Child club
DRR	Disaster Risk Reduction
EDRM	Emergency and Disaster Risk Management
EHR	Electronic Health Record
GEAG	Gorakhpur Environmental Action Group
HIC	High-income Country
ICCAD	International Centre for Climate Change and Development
IDAC	International Data Alliance for Children on the Move
IDMC	Internal Displacement Monitoring Centre
IDP	Internally Displaced Person
LIC	Lower-income Country
LP	Learning Passport
NAP	National Adaptation Plan
NGO	Non-governmental Organisation
NODS	National Office for Disaster Services
PTSD	Post-Traumatic Stress Disorder
SDGs	Sustainable Development Goals
UNCRC	United Nations Convention on the Rights of the Child
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
WASH	Water, Sanitation, and Hygiene
WHO	World Health Organization
WIM	Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts

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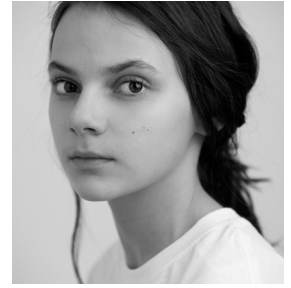
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FOREWORD



Levison Wood



Dafne Keen

Young people from every corner of the globe are coming together to call for action on climate change, asking world leaders to protect their futures. Because, while children have contributed the least to climate change, they are the ones who will feel its impacts most acutely.

Even now, children are already impacted by the effects of climate change. In some cases, children and their families have even found themselves uprooted, with increased storms, intensifying droughts, and rising sea levels all contributing to climate change-related displacement and migration. Their lives, families, and communities are upturned as the world around them changes.

But as their lives change, their rights do not. Every child has the right to education and health, as defined in the UN Convention on the Rights of the Child. Yet children displaced or migrating in the context of climate change are likely to face barriers to accessing education and health services. From economic barriers to harmful gender norms, among many more, children on the move may not find the systems they encounter to be built for their needs.

Importantly, **systems can prepare for the disruption we know is coming.** Unlike other forms of displacement and migration, such as conflict-related, we have the opportunity to map, identify, and prepare for the impacts of climate change. By understanding these challenges ahead of time, and strengthening education and health systems in response, we can realise the rights of every child, even if they move.

The UK Government can play a leading role in building these systems. As a leader on the global stage, including as one of the biggest donors to education and health multilaterals and the host of COP26, the UK Government can set a course of action to protect the futures of millions of children. The UK Government can lead the way in setting out a future that is built with climate change-related displacement and migration in mind, ready and prepared for the shocks we know are coming.

Children have called for climate action. This report sets out how we can heed their call and ensure that children affected by climate change-related displacement and migration can continue to realise their rights. Children are not the future, but rather the leaders of today. Let us follow their course as we build a better future, for every child.

Levison Wood

UNICEF UK High Profile Supporter

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EXECUTIVE SUMMARY

FUTURES AT RISK: PROTECTING THE RIGHTS OF CHILDREN ON THE MOVE IN A CHANGING CLIMATE

In 2020 alone, weather-related events were linked to 30.1 million new internal displacements, including 9.8 million new displacements of children.

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A boy walks home from school near Aberao village in Kiribati. Kiribati is one of the countries most affected by sea level rise. During high tide many villages become inundated making large parts of the villages uninhabitable.

The climate crisis is a child rights crisis.

Though children are least responsible for the global emissions that have led to the warming of the planet, they feel the greatest impacts. While climate change will have many repercussions, an often overlooked but critically important element is the likely increase of displacement and migration.

Already, children, their families and communities around the world have been displaced due to weather-related impacts, which can increase in frequency or be intensified by climate change. In 2020 alone, weather-related events – whether or not climate change-related – were linked to 30.1 million new displacements, including 9.8 million new internal displacements of children.

That equates to almost 26,900 new weather-related child displacements every day.

The exact number of children predicted to be migrating or displaced for reasons linked to climate change is challenging to determine due to a lack of reliable, accurate, and age-disaggregated data. However, estimates from the World Bank suggest that in sub-Saharan Africa, Southeast Asia, and Latin America, over 143 million people could migrate internally due to the impacts of climate change by 2050.

While figures are uncertain, what is clear is that when families move and children are displaced, access to education and health services is often disrupted. This report makes recommendations to the UK Government ahead of its hosting of COP26, setting out how it can mitigate the impacts of climate change-related displacement and migration by strengthening education and health systems to make them more resilient and ready to respond to the shocks we know are coming.

ADDRESSING AND PREVENTING CLIMATE CHANGE

The countries most affected by climate change and related displacement and migration are also those that have contributed least to the changing climate; that is to say, lower-income countries (LICs). Given this imbalance between LICs' contribution to and impacts from climate change, high-income countries (HICs), including the UK, have a responsibility to support those communities affected by climate change, including children and families on the move.

And while some level of displacement and migration is inevitable, efforts must be made to reduce the likelihood of these patterns through

climate change mitigation and adaptation. To do this, **HICs, including the UK, must act rapidly to reduce carbon emissions, reaching net zero as soon as possible.** The UK has already set out an ambitious target to achieve net zero emissions by 2050 – a welcome commitment that must be fully implemented and mirrored by other HICs. The positive impact this could have on the rights of people at risk of displacement is clear: across five countries in South Asia alone, limiting global warming to an increase of between 1.5°C and 2°C could protect more than 44 million people from displacement by 2050.

DEFINITIONS, DRIVERS, AND PATTERNS

Defining climate change-related displacement and migration is as challenging as it is to measure. Many different terms are used for human movement related to weather and climate change, including environmental migration, climate displacement and migration, human movement in the context of climate change, and climate refugees, among others. Climate change-related displacement and migration can generally be grouped into four categories: **displacement, migration, planned relocation, and immobility.**

Displacement related to climate change is associated with involuntary movement, often caused by the threat or effects of a sudden

or slow onset disaster. Displaced families will often move suddenly, for the short-term, and usually internally or immediately cross-border.

Migration related to climate change is a form of movement that implies (at least to some degree) that the move is voluntary. While migration implies voluntariness, there remains a question about the degree to which any climate change-related move is voluntary. Migration is usually long-term, if not permanent, and (as with displacement) often occurs internally or immediately cross-border. The causes of migration are complex and intersecting, related not only to the direct impacts of the changing climate, such as sea level rise and increasing frequency of droughts, but also subsequent economic impacts that can challenge families' livelihoods.

Another form of climate change-related displacement and migration (in the broadest sense) is **planned relocation**. Planned relocation is a process by which the State assists persons or groups of persons to move away from their homes to new places, temporarily or permanently, and occurs within national borders.

In exploring this issue, it is important also to recognise those communities and individuals that do not, choose not to, or cannot move. These populations are sometimes referred to as 'trapped' or 'voluntarily immobile', though we use the term **immobility**.

Children play on a fallen tree that came down during Cyclone Pam and crushed a car on the outskirts of Port Vila in Vanuatu.

Limiting global warming to an increase of between 1.5°C and 2°C could protect more than 44 million people from displacement by 2050.



COMPOUNDING VULNERABILITIES

Children are not a uniform nor homogenous group. As such, care must be given to the unique needs of particular children as we look to address the impacts of climate change-related displacement and migration. Some children, including girls, children with disabilities, and children living in conflict-settings or displaced by conflict, experience compounding vulnerabilities that can further limit their access to education and health systems.



Two mothers play with their toddlers after visiting the health centre in Alta Verapaz, north-central Guatemala.

EDUCATION SYSTEMS

Articles 28 and 29 of the UN Convention on the Rights of the Child (UNCRC) set out every child's right to a quality education. And yet, around the world, 258 million children and youth are out of school, and more than half of children living in low- and middle-income countries are unable to read a simple story by the age of 10. Climate change-related displacement and migration thus adds another layer of complexity to the existing **learning crisis**.

The obstacles faced by children affected by climate change-related displacement and migration include disruption in emergencies, as well as systemic and administrative, geographical, economic, sociocultural, and legal barriers. While more research is needed, emerging solutions offer possibilities for strengthening education systems to support the needs of children migrating or displaced in the context of climate change.

Around the world, 258 million children and youth are out of school.



Koumbéré, age 12, from near Mopti, central Mali, revises at night in her home. Koumbéré attends a community learning centre after her school was forced to close due to insecurity. UNICEF has helped to supported learning for 7,500 children like Koumbéré who are no longer in school because of instability in the regions of Mopti, Timbuktu, Gao and Segou.

Challenges and Emerging Solutions in Education Systems

Challenges	Emerging solutions
Disruption in weather-related emergencies	<ul style="list-style-type: none"> ■ Disaster Risk Reduction (DRR), as part of risk-informed education programming ■ Indigenous knowledge ■ Community awareness
Systemic/administrative barriers, such as inflexible curricula and overcrowded classrooms	<ul style="list-style-type: none"> ■ Strong literacy foundations prior to displacement or migration ■ Flexible pathways to return to the classroom ■ Catch-up learning ■ Teacher training to support students falling behind ■ Systems strengthening and resilience ■ Integrating education into national adaptation plans and strategies
Geographical barriers, such as impossible, long, or dangerous journeys to school	<ul style="list-style-type: none"> ■ Temporary learning facilities ■ Preparing inclusive distance learning materials ■ Teacher training for remote learning
Economic barriers, such as unaffordable school fees or the need to support the family through work	<ul style="list-style-type: none"> ■ Investment in socioeconomic development of communities ■ Offering additional services in school ■ Supporting skills development to prepare learners facing displacement or migration
Sociocultural barriers, such as xenophobia and discrimination	<ul style="list-style-type: none"> ■ Developing welcoming environments for displaced and migrant children ■ Language-in-education policies ■ Securing high-level support for integrating displaced or migrating children
Legal barriers, such as lack of legal documentation	<ul style="list-style-type: none"> ■ Effective policies to integrate displaced and migrant children into education systems ■ Securing high-level support for integrating displaced or migrating children

In addition to these barriers, compounding factors further hinder displaced or migrating children's access to education. Harmful gender norms and dynamics, for instance, intersect with climate change-related displacement and migration to further obstruct access to education for girls. Indeed, girls in displaced and migrating families in need of labour and domestic support are among the first to be pulled out of school and often bear the brunt of supporting mothers in the household. Challenges associated with mental health can further compound the barriers children face in

education, as children affected by trauma can find it difficult to concentrate and may exhibit anti-social behaviour as they work through their complex emotions.

Even if children are in education, attainment and completion can prove difficult. It is well-documented that moving can affect children's academic performance and school retention, with children displaced by conflict often falling behind their non-displaced peers both in terms of enrolment and achievement.

HEALTH SYSTEMS

Article 24 of the UNCRC sets out every child's right to the highest attainable standard of health. Yet hundreds of millions of children around the globe do not have access to healthcare. Millions more lack access to safe drinking water, adequate nutrition, and water, sanitation, and hygiene (WASH) facilities – all factors affecting children's health. Without proper planning, climate change-related displacement and migration threatens to weaken health systems, exacerbate health challenges for children around the globe, and stall progress toward global health commitments.

The impacts of displacement, migration, and climate change have already been felt by health systems, children's health, and children's access to health services. Understanding the multitude of health challenges that children may face is essential to strengthening health systems and ensuring that services are accessible to all. Importantly, working to achieve **universal health coverage** by investing in primary healthcare should be the foundation of all health systems strengthening efforts.

Challenges and Emerging Solutions in Health Systems

Challenges	Emerging solutions
Disruption in weather-related emergencies	<ul style="list-style-type: none"> ■ Incorporating DRR strategies into health sector planning ■ Developing contingency plans for the deployment of health personnel and resources during and after disasters ■ Utilising mobile health clinics during emergencies
Economic barriers, such as out-of-pocket expenses	<ul style="list-style-type: none"> ■ Working toward free at the point of use primary care
Legal barriers, such as barriers to healthcare for children without documentation	<ul style="list-style-type: none"> ■ Eliminating legal obstacles to accessing care for all migrant populations ■ Using firewalls to protect migrant and displaced populations' access to care
Sociocultural barriers, such as xenophobia and discrimination	<ul style="list-style-type: none"> ■ Training healthcare workers to provide culturally appropriate, gender-sensitive and child-friendly care ■ Investing in on-site or phone-based translation services ■ Providing culturally and linguistically appropriate information to migrant and displaced populations
Administrative barriers, such as lost or destroyed medical records	<ul style="list-style-type: none"> ■ Developing cloud-based medical record systems
Geographical barriers, such as a lack of rural facilities	<ul style="list-style-type: none"> ■ Relocating community clinics and NGO service providers to areas with limited access to services ■ Utilising home-based community health care delivery ■ Developing mobile and digital health platforms

In addition to the barriers already identified, girls, children experiencing poor mental health and trauma, and those living in urban settlements face unique and additional challenges in accessing healthcare. Lack of gender-sensitive services and stigma surrounding sexual and reproductive health and rights may prevent girls from accessing contraception or lead to disruptions in menstrual hygiene management, a phenomenon that has been well-documented in humanitarian settings. Migrant and displaced adolescent girls may also be at risk of becoming pregnant without access to reproductive

counselling or comprehensive prenatal or maternal support. In addition, children affected by climate change-related displacement and migration may face mental health challenges, such as trauma following disasters or stress and anxiety due to disruption in family and community ties. Finally, children in urban settlements face a unique set of additional vulnerabilities, as the cities and poorer urban areas within which their families reside contribute to poor health outcomes and often lack accessible health services.

Article 24 of the UNCRC sets out every child's right to the highest attainable standard of health. Yet hundreds of millions of children around the globe do not have access to healthcare.

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A father carries his daughter across flooded land in Sindh, Pakistan.

RECOMMENDATIONS TO THE UK GOVERNMENT

As climate change-related displacement and migration increases, ensuring that children can continue to realise their rights to education and health is the role of all UNCRC duty bearers around the world, including the UK. Without urgent action, displaced and migrating children will encounter systems that are unprepared to support their needs, putting their lives and futures at risk.

But by preparing now, these same systems can be adapted and built to minimise disruption and ensure no child is left without access to education or health services.


Addressing climate change-related displacement and migration is also critical to achieving the UK Government's Manifesto commitments: with girls disproportionately affected by the challenges ahead, supporting systems strengthening in the context of climate change and related migration and displacement is critical to delivering 12 years of quality education for every girl. And in order to end preventable child deaths, the UK Government must recognise and support children under five who are at increased risk as their families are on the move due to the effects of climate change.



Core recommendation

The UK Government should support the rights and needs of displaced and migrating children in the context of climate change by **facilitating cross-sectoral collaboration through the establishment of a technical facility on climate change-related displacement and migration and child rights.**

This facility should comprise practitioners, experts, academics, youth, civil society, and government representatives from across the health, education, migration, and climate sectors, providing a platform to share knowledge and best practice on systems strengthening in the context of climate change-related displacement and migration. **The facility should be launched at COP26, aligning with the UK Government's priorities on climate change adaptation and resilience.**



In addition to establishing the technical facility, the UK Government can support the rights of children affected by climate change-related displacement and migration by:

- **Addressing and limiting climate change**

Fully realise its commitment to achieve net zero emissions by 2050 and encourage other HICs to make a similar pledge at COP26.

- **Supporting data and evidence collection**

Invest in data and evidence for children affected by climate change-related displacement and migration by joining the International Data Alliance for Children on the Move and investing in collection of climate change-related data through this platform by COP26.

- **Raising awareness and championing children affected by climate change-related displacement and migration**

Use the UK's role as a leading international donor to champion the rights of children affected by climate change-related displacement and migration, ensuring they are highlighted in key COP26 outputs and discussions.

At the systems level, the UK Government should use the emerging solutions laid out in this report to inform and inspire their work on system strengthening, resilience, and preparedness. Concretely, these emerging solutions can be promoted by the UK Government through:

	EDUCATION	HEALTH
Committing to long-term systems strengthening in education and health programming	Connect UK Aid to long term systems strengthening results through all plans, programmes, and approaches	Connect UK Aid to long term health systems strengthening results through all plans and approaches, including the publication of the Ending Preventable Deaths Action Plan and Health Systems Strengthening Framework
Investing in the long-term resilience and sustainability of systems	Deliver a successful Global Partnership for Education replenishment in 2021, reaching US \$5 billion, and using the Global Education Summit to advance education resilience	Prioritise funding for Primary Health Care that strengthens health systems in bilateral programming and invest in multilaterals that centre health systems strengthening in their strategies
Championing DRR and disaster preparedness in education and health systems	Work with countries to embed DRR and other emerging solutions for education into National Adaptation Plans (NAPs) and national climate change strategies	Work with countries to incorporate health sector planning into NAPs and Health-NAPs

Conclusion

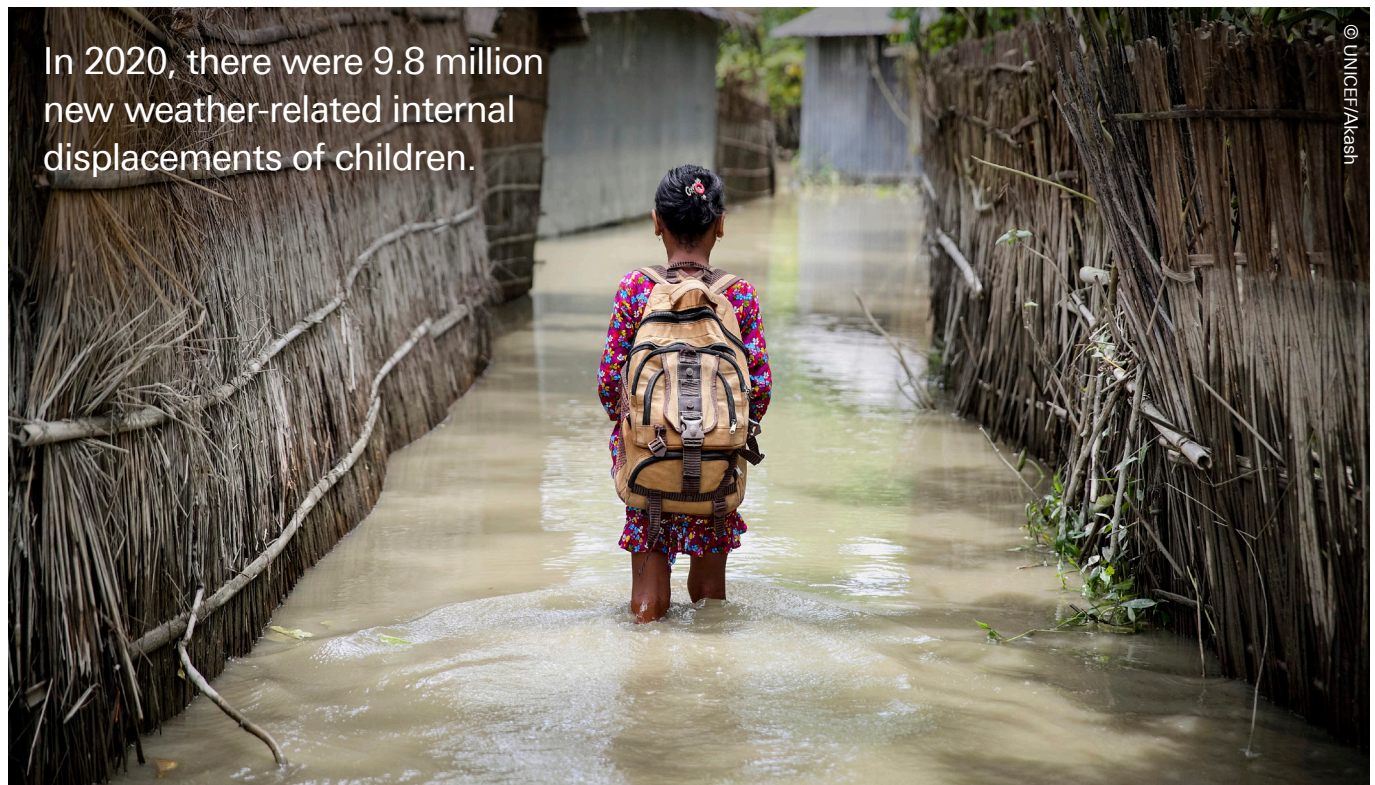
Climate change is having, and will continue to have, an impact on children and their rights. As global temperatures increase, children and their families will increasingly feel its effects, and – in the most severe cases – be forced to leave their homes. With the future patterns of climate change set out, education and health systems must be built to withstand the shocks we know are coming.

This year, 2021, offers a poignant opportunity to put the rights of children affected by climate change-related displacement and migration front and centre. With key education and health events throughout the year, as well as COP26 in November 2021, the UK Government has the chance to lead a course to deliver resilient education and health systems that address these children's needs. **The opportunity is clear and the need urgent. The UK Government must act now to support the right to education and health, for every child.**



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INTRODUCTION



In 2020, there were 9.8 million new weather-related internal displacements of children.

A child wades through flood water on her way to school in northern Bangladesh.

The climate crisis is a child rights crisis.

Though children are least responsible for the global emissions that have led to the warming of the planet, they feel the greatest impacts. And while climate change will have many repercussions, an often overlooked but critically important element is the likely increase of human movement.

Children, families, and communities around the world have already been displaced due to weather-related impacts, which can increase in frequency or be intensified by climate change. In 2020 alone, weather-related events – whether or not climate change-related – were already linked to 30.1 million new internal displacements,¹ including 9.8 million new displacements of children.² **That equates to almost 26,900 new weather-related child displacements every day.**

In addition to likely increases in displacement linked to weather-related events, the slow onset effects of climate change, such as rising sea levels, soil salinisation, and changing weather conditions, are likely to affect human mobility. Indeed, estimates from the World Bank suggest that in sub-Saharan Africa, Southeast Asia,

and Latin America over 143 million people could migrate internally due to the impacts of climate change by 2050.³ **Importantly, the uncertainty around exact predictions on climate change-related displacement and migration is in part due to the opportunity – and responsibility – countries like the UK have to stop catastrophic climate change.** The number of children who will be affected depends on taking climate action now.

While figures are uncertain, what is clear is that when families move and children are displaced, access to education and health services is often disrupted. As such, education and health systems must be strengthened with the future likelihood, patterns, and impacts of climate change-related displacement and migration in mind. Even more so than other drivers of displacement and migration (such as conflict), the timing, scale, and location of climate change impacts can be mapped and understood in advance of disruption. As such, there is **a unique chance to proactively address displacement and migration in the context of climate change before it occurs, protecting the rights of all children in the process.**

The United Nations Convention on the Rights of the Child (UNCRC) clearly sets out the rights of every child, with Articles 24 and 28 enshrining the rights to health and education, respectively. Importantly, **when children are displaced or migrate, these rights move with them.** As such, building and strengthening systems that can support every child's rights, regardless of their locality or immigration status, will be critical to realising States' roles as duty bearers under the UNCRC. The UK Government signed the UNCRC in 1991 and has been committed to protecting the rights of every child ever since.

As President of COP26, the UK Government now has the opportunity to lead countries to come together to plan for the needs and aspirations of children affected by climate change-related displacement and migration.

As President of COP26, the UK Government now has the opportunity to lead countries to come together to plan for the needs and aspirations of children affected by climate change-related displacement and migration.

This report explores how climate change-related displacement and migration does and will impact education and health systems, limiting children's realisation of their rights in the process. Through analysis of existing research and evidence coupled with examples from UNICEF's programmes around the world, a picture of the likely impacts of climate change-related displacement and migration – and suggested responses to it – emerges. The report concludes with recommendations for how the UK Government can work to support the implementation of these emerging solutions and protect the rights of affected children, now and in the future.

COVID-19 – another child rights crisis

The COVID-19 pandemic that began in 2020 put the futures of millions of children around the world at risk. UNICEF estimates that an additional 6,000 children were at risk of dying each day during the pandemic due to disrupted access to health systems and decreased access to food.⁴ At the peak of the global lockdowns, over 1.6 billion learners were out of school, and schools were closed for 168 million children for an entire year.⁵ Those most affected were also the most vulnerable, compounding existing disadvantages. The pandemic demonstrated the fragility of education and health systems and the urgent need to strengthen systems to prevent disruption during future crises.

COVID-19 also highlighted the challenges faced by families that had migrated to cities to find work, including in India. With strict lockdown enforced and factories and businesses shut, families were unable to support themselves as their daily subsistence wage evaporated. In response, many tried to return to their familial villages, sometimes walking long distances if they could not get train transport.⁶ With the intensifying impacts of climate change likely to increase the number of families moving to cities to find alternative livelihoods, populations at risk from a similarly precarious financial situation will only grow. This is especially true as climate change is also linked to an increasing likelihood of future pandemics.⁷

So, as the impacts of COVID-19 have impinged on children's rights around the world and put many families in devastating situations, they have also shone a spotlight on the need to accelerate action on building resilient education and health systems. The scale of disruption demands attention and encourages innovation for resilience building. The lessons from COVID-19 must be captured and learned in order to ensure that no child sees their future put at risk in this way ever again.

SCOPE AND LIMITATIONS OF THE RESEARCH

As a report by the UK Committee for UNICEF (UNICEF UK), this research primarily focuses on laying out the global impacts of climate change-related migration and displacement and how the UK Government can support affected children's rights. The report takes a global approach offering a high-level overview of the patterns, impacts, challenges, and emerging solutions.

This necessarily limits the ability of the research to explore the unique local, national, and regional impacts of climate change-related displacement and migration, though the authors have sought local examples and expertise where possible. Though limited research exists on the nexus of climate change, migration and displacement, and child rights, inferences and links can be made by exploring other forms of human mobility, including conflict-related displacement. The authors acknowledge that significantly more research is needed in this area.

Students with tablets at a school in Niamey, Niger. UNICEF provided the school with child-friendly tablets,

featuring off-line educational content adapted to the local context and curriculum. The tablets are solar powered.



ADDRESSING AND PREVENTING CLIMATE CHANGE

The countries most affected by climate change and related displacement and migration are also those that have contributed least to the changing climate; that is to say, lower-income countries (LICs).⁸ These countries also face additional vulnerabilities due to poverty, poor infrastructure, existing challenges in education and health provision, and dependency on agricultural livelihoods, among other challenges.⁹ Given the imbalance between LICs and high-income countries (HICs) in terms of contribution and impact, the latter have a responsibility to support those communities affected by the disasters of their climate emissions, including displaced and migrating children and their families.

And while some level of migration and displacement is inevitable, mitigation and adaptation efforts are critical to reducing the negative impacts of climate change. To do this, **HICs, including the UK, must act rapidly to reduce carbon emissions, reaching net zero as soon as possible.** The UK has already set out an ambitious target to achieve net zero emissions by 2050 – a welcome commitment that must be fully implemented and mirrored by other HICs. The positive impact this could have on the rights of people at risk of displacement is clear; across five countries in South Asia alone, limiting global temperature rises to between 1.5°C and 2°C could protect more than 44 million people from displacement by 2050.¹⁰

In addition, supporting adaptation efforts – including efforts to reduce displacement and allow for regular and safe migration – is necessary to protect children and their rights. The UK's adaptation agenda at COP26 is welcome, but must also consider displacement and migration in the changing climate, or put the futures of millions of children at risk.

Dhaka, the capital of Bangladesh, is among the fastest growing megacities in the world, with climate stresses playing a major role in families moving to the city.

High-income countries (HICs) have a responsibility to support lower-income countries (LICs) affected by the impact of their emissions.

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CLIMATE CHANGE-RELATED DISPLACEMENT AND MIGRATION

DEFINITIONS, DRIVERS AND PATTERNS

Climate change-related displacement and migration is a complex concept, often challenging to define and distinguish. While labelling exact instances of this phenomenon may be difficult, the impacts are qualitatively evident.

Moreover, historical events show that floods, droughts, tropical storms, and other weather-related impacts have major implications for children's access to education and health. With the increase of these events – and other slow-onset disasters – due to the changing climate, the impacts are similarly likely to increase, if careful planning is not undertaken.

DEFINITIONS

The terminology invoked around climate change and human movement is diverse. Terms include:

- Climate change-related mobility
- Climate migration or climate displacement
- Climigration
- Climate-linked or climate-induced migration and displacement
- Human mobility in the context of climate change¹
- Displacement due to human induced climate change
- Uprooted by climate change
- Displacement and distress migration
- Environmental migration²
- Environmental displacement
- Climate refugees³

Hurricane Irma hit the Caribbean in September 2017, causing damage in excess of \$13 billion and putting hundreds of thousands of children and families in danger.

- 1 East Africa – Peru – India Climate Capacities (EPICC), Potsdam Institute for Climate Impact Research
- 2 International Organization for Migration
- 3 The term climate refugee is not accurate as a refugee is a legal status defined and protected in international law through the 1951 Refugee Convention.



For the purposes of this report, we use the broad (though admittedly imperfect) term **climate change-related displacement and migration**. This encapsulates the varied impacts of climate change-linked human mobility, covering the spectrum of voluntary and involuntary movement as well as domestic and international moves. We also use the term to refer to both sudden-onset displacement associated with climate change, such as displacement immediately following storms, and slow-onset migration, such as migration driven by the impacts of increasing and intensifying droughts or soil salinisation.

Self-identification

Families affected by climate change-related displacement and migration do not always identify as being impacted by climate change. In the Maldives, for instance, families considering migration chiefly highlighted 'a better standard of living via improved services, better living conditions, and more job opportunities' as the rationale behind their move, with the 'potential of future impacts due to climate change' rarely identified.¹¹ This can lead to a challenging power dynamic between displaced and migrating populations and researchers, governments, and practitioners when determining if an individual or family is displaced by climate change.

There are questions surrounding the voluntary nature of any migration related to climate change.



A family affected by Cyclone Eloise walks to a relocation centre in Mozambique, seeking shelter and aid.

DRIVERS AND PATTERNS

The impacts of climate change lead to complex environmental, social, and economic changes that can have both short-term and long-term consequences for human mobility.¹² Climate change-related displacement and migration can generally be grouped into four categories: **displacement, migration, planned relocation, and immobility**.

Displacement

Displacement related to climate change is associated with involuntary movement, often caused by the threat or effects of a sudden or slow onset disaster. For many families, displacement is sudden in nature, short-term, and usually occurs internally or immediately cross-border.¹³ This form of movement is often associated with storms and floods, with increases in storm-related displacement already documented. For example, in the Caribbean islands, internal displacement related to storms and flooding increased six-fold in the 2014 to 2018 period compared to the 2009 to 2013 period.¹⁴ With general agreement among the scientific community that Category 4 and 5 hurricanes will increase as a result of climate change,¹⁵ displacement is only likely to increase in years to come. Other climate-related disasters, including cyclones, could also impact displacement, with high levels already reported from cyclones in southern Africa, India, and Bangladesh, among others.¹⁶

Slow-onset climate changes can also make it difficult for families to stay in their homes and lead to displacement. For instance, in 'one moderate future scenario, sea levels projected by 2050 are high enough to threaten land currently home to a total of 150 (140–170) million people'.¹⁷ While some families use forms of adaptation, including hard protection and infrastructure, to remain in place, sea-level rise can be linked to displacement.¹⁸ Indeed, the Government of Bangladesh estimates that 20 million people in the country could be displaced in the next 40 years due to sea-level rise.¹⁹ The Pacific Islands are among those worst affected, with the Governments of Papua New Guinea, Fiji, the Solomon Islands, and Vanuatu all planning for community relocation in response.²⁰

Similarly, intensifying droughts can be linked to displacement (although more evidence is needed to conclusively link intensifying droughts and climate change), with at least 250,000 drought-related new displacements in 2019 alone.²¹ Internal Displacement Monitoring Centre (IDMC) notes 'people become displaced when their livelihoods reach a critical threshold below which pastoralism or farming are unsustainable', such as in Ethiopia, where one drought caused households in the Somali region to lose up to 80% of their livestock.²² Increasing forest fires, changing weather patterns (including intensifying cold), and other effects of slow-onset climate change can further trigger displacement.

Migration

Migration related to climate change is a form of movement that implies (at least to some degree) that the move is voluntary, though there are questions surrounding the voluntary nature of any migration related to climate change.²³ Migration is usually long-term, frequently permanent, and often occurs internally or immediately cross-border.²⁴ The causes of migration are complex and intersecting.

In addition to affecting the safety and sustainability of communities as highlighted above, slow-onset climate change can lead to significant economic damage over time and may even disrupt the economic structure of communities and societies, leading families to seek alternative livelihoods elsewhere. This can appear as a form of **economic migration**, with climate change acting as an amplifier of other drivers of migration in challenging contexts.²⁵ Indeed, a 2020 study from ActionAid found that rural communities across five countries in South Asia unanimously stated 'that families are pushed to migrate mainly because of uncertainty of income from agriculture due to pests and diseases, reduced water availability, drying of water sources, and the erratic pattern of rainfall.'²⁶ Similar examples have been observed around the world, with erratic rainfall patterns in the Western Highlands of Guatemala driving some families to migrate to the United States as their agricultural livelihoods became unstable.²⁷ Climate change-related migration linked to income frequently manifests as a form of **migration to urban centres** (urbanisation), with families moving from rural communities to cities to seek alternative livelihoods.

CLIMATE-RESILIENT, MIGRANT-FRIENDLY CITIES AND TOWNS: BANGLADESH

Dhaka, the capital of Bangladesh, is among the fastest growing megacities in the world, with climate stresses playing a major role in urbanisation.²⁸ With one in every seven people in Bangladesh estimated to be displaced by climate change by 2050, the need to find alternative resettlement locations is both clear and urgent.²⁹ To address this, the International Centre for Climate Change and Development (ICCAD) is advocating for the Government of Bangladesh to build and support secondary towns. These towns

would be both climate resilient and migrant-friendly, offering opportunities for families and communities affected by climate change-related displacement and migration to start new and more sustainable lives in these urban centres. In order to create a 'pull' factor towards these secondary cities, support for education and healthcare, among other services, is suggested. This further creates an opportunity to use climate change-related displacement and migration as a way of supporting the realisation of children's rights.³⁰



A family walks beside a busy road in Dhaka, Bangladesh.

In addition to seeking survival for their families, some climate change-related migration can appear as people wanting to provide *better* lives for their families. As such, **education and skills** can be a driver of migration, particularly if families are experiencing environmental or livelihood degradation year-on-year. In the state of Uttarakhand, northern India, families identified education as one of the three main drivers of migration, although increasing strain on agricultural production may have initially influenced population movement. Indeed, very few young people are left in the mountain villages, instead seeking opportunities in the lower-level plains cities.³¹

Another key factor influencing some family members' decision to leave their home, particularly in the context of dwindling

livelihood opportunities, is the ability to offer **support to their families through remittances**. Remittances provide an important source of income for economically poor families around the world, with many relying on these funds to support their daily lives. For instance, in Somalia, about half of households rely on remittances to cover their basic needs.³² In Tanzania, where droughts have made it difficult for members of the Maasai community to keep their livestock, many have migrated to cities to earn income and send remittances to their families to support school fees and healthcare costs.³³ In India, remittances sent by the country's 100 million internal migrants 'represents a flow of money that is eight times greater than the Indian state's combined expenditure on education and health.'³⁴ Remittances have also been

found to be a possible source of support for climate adaptation, such as if they are used for protection against climate change-related hazards.³⁵

Finally, while climate change-related displacement and migration is increasing, human movement linked to weather is neither new nor necessarily undesirable.

Nomadic lifestyles and seasonal or circular migration are both long-held traditions in many communities around the world. However, climate change can disrupt these patterns and put livelihoods at risk if historic annual weather patterns alter. This could cause families to leave their traditional lifestyles and find alternative sources of income.

Planned relocation

Another form of climate change-related displacement and migration (in the broadest sense) is **planned relocation**. Planned relocation is 'a planned process in which persons or groups of persons move or are assisted to move away from their homes or places of temporary residence, are settled in a new location, and provided with the conditions for rebuilding their lives.'³⁶ It is undertaken by the State within national borders and can occur at the individual, household, or local level.³⁷ In just one example, the Republic of Fiji has already developed planned relocation guidelines in order to successfully implement future community movements.³⁸

Taniela, 13, stands in front of the wreckage of his home, after flood waters during Cyclone Yasa tore through his village in Cakaudrove, Fiji.

Immobility

In exploring climate change-related displacement and migration, it is important also to recognise those communities and individuals that do not, choose not to, or cannot move.

These populations are sometimes referred to as 'trapped'³⁹ or 'voluntarily immobile',⁴⁰ though we use the broad term **immobile** in this report. Children in immobile families are often absent from the discourse, with focus placed on those who are displaced or migrating. However, immobility is a critical factor that could limit children's access to education and health services, particularly if services are abandoned or relocated away from their homes. As such, children from immobile families and communities are included when we discuss children impacted by climate change-related displacement and migration.

Multiple relocations

It is also worth noting that displaced or migrating families are not immune from being uprooted again. A study from ActionAid highlighted the experience of one resident in the Sundarbans delta (South Asia): 'The current [house] is my fifth, as the rest have been gobbled up by the sea', going on to note 'even here, the sea is gradually coming closer, and high tide completely inundates my home.'⁴¹ In Uttarakhand, northern India, projections for the future climate show rising temperatures in the lower plains (home to the state's cities) which mean families migrating from their agricultural communities in the mountains may find that living in the plains becomes unbearable and they could be forced to return to the mountains as climate change continues.⁴²



Kampala Convention

The African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa, also known as the Kampala Convention, was adopted in 2009 and entered into force in 2013. It is 'the world's only legally binding regional instrument on internal displacement'.⁴³ The Convention aims to:

- 1) address the root causes of internal displacement and support durable solutions,
- 2) establish a legal framework for preventing internal displacement and supporting internally displaced persons (IDPs) in Africa
- 3) promote durable solutions, mutual support, and solidarity to combat and address internal displacement
- 4) set out States' responsibilities in relation to preventing internal displacement and protecting IDPs, and
- 5) set out other stakeholders' responsibilities in relation to preventing international displacement and protecting IDPs.⁴⁴

The Convention instructs States to 'Provide internally displaced persons to the fullest extent practicable and with the least possible delay, with adequate humanitarian assistance, which shall include food, water, shelter, medical care and other health services, sanitation, education, and any other necessary social services, and where appropriate, extend such assistance to local and host communities;' while also acknowledging the unique needs of children (included unaccompanied and separated children).

As internal displacement increases as a result of climate change, similar measures could be adopted nationally, regionally, or globally, in order to provide legal support for those affected by climate change-related displacement and migration.

Abdullah, 15, lives in a poor neighbourhood in Sabah, Malaysia. There are thousands of stateless children in Sabah who have become marginalised due to their status.



CLIMATE CHANGE-RELATED DISPLACEMENT AND MIGRATION

ESTIMATES OF CHILDREN AFFECTED

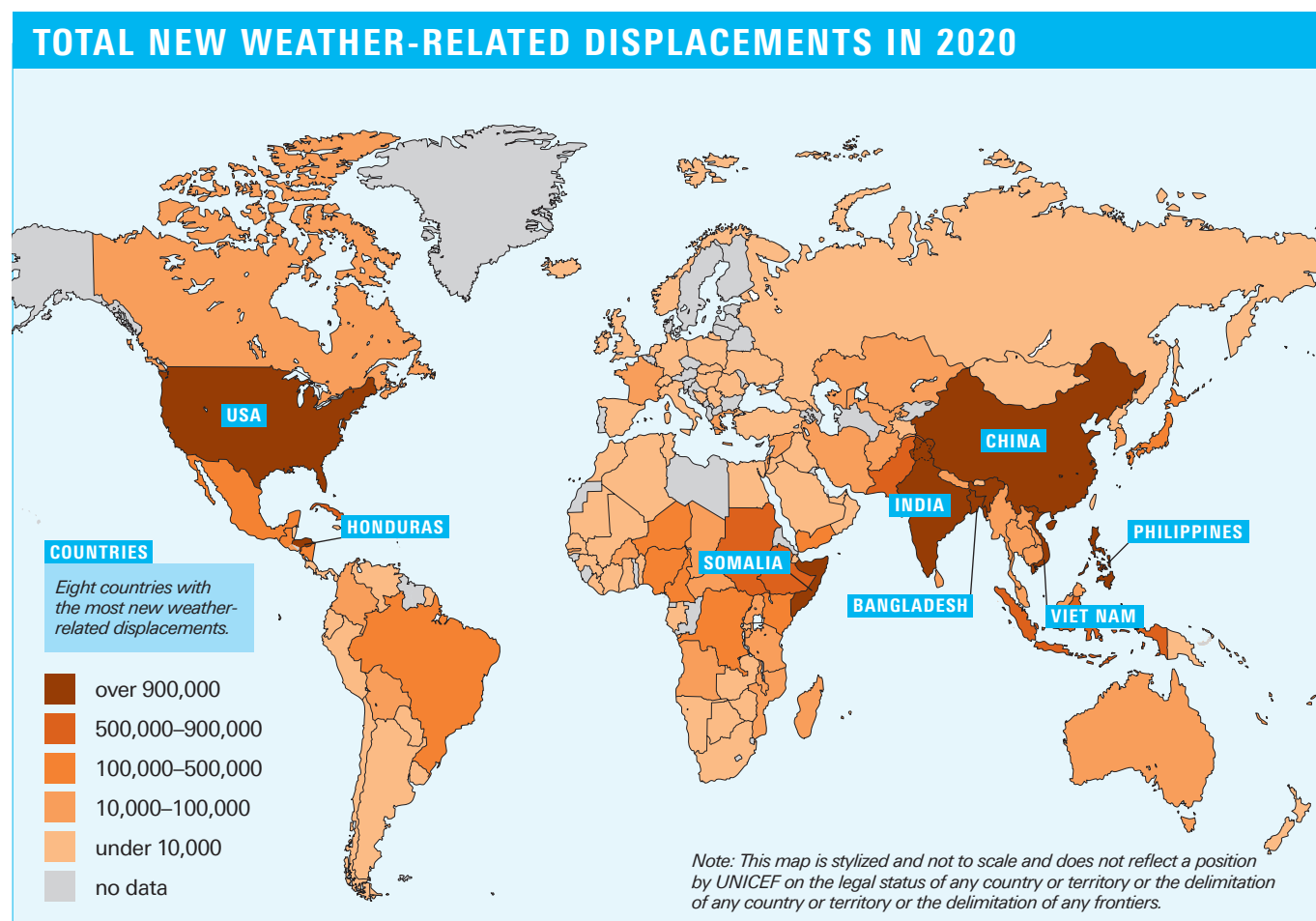
As of 2020, 36 million children were international migrants, including roughly 14 million refugee and asylum-seeking children.⁴⁵ In addition, for 2020 it was estimated that 23 million children were living in internal displacement due to conflict and disasters.⁴⁶ And yet, the unique needs and capacities of children are often overlooked in the migration and displacement discourse.

While the statistics for migration in general and for conflict or crisis-related displacements are usually better documented, statistics on children displaced or migrating for reasons related to climate change are less straightforward. This is in part due to the challenge of identifying climate change-related displacement and migration itself, as well as a general lack of age disaggregated data, particularly for internal displacement. Indeed, IDMC notes that 'out of the nearly 50 countries and territories for which [it] was able

to estimate the total number of IDPs [internally displaced persons] in 2018, only 14 per cent provided age disaggregation, and only one in four did so systematically.'⁴⁷

However, with climate change likely to increase the frequency and intensity of weather-related events, their effects on the displacement of children is critical. UNICEF estimates that children represented roughly one in three of all weather-related displacements in 2020, with 9.8 million of the 30.1 million new weather-related internal displacements affecting those under the age of 18.⁴⁸ This equates to almost 26,900 new weather-related child displacements every day.

This equates to almost 26,900 new weather-related child displacements every day.



An urgent need for more and better data and evidence

A recurring theme in research on climate change-related displacement and migration is **the need for more and better data**. There is both a lack of quantitative data in relation to the existing or predicted numbers of people displaced or migrating in relation to climate change, and a lack of qualitative data on the impacts. This is particularly true of children. The systems-level impacts and the effects on child rights thus require significantly more research and analysis in order to effectively prepare systems. This requires investment in data and evidence-gathering, as well as intersectoral collaboration to ensure the evidence is disseminated and used by all parties.

One way to support this data collection and dissemination is through the International Data Alliance for Children on the Move (IDAC).

IDAC comprises governments, international and regional organisations, civil society, academics, and think tanks in a global coalition aimed at improving statistics and data related to children on the move.⁴⁹ IDAC, and other intersectoral bodies, can provide significant and necessary support in ensuring essential data and evidence is collected, used, and disseminated to a wide range of stakeholders.

In addition to IDAC, a technical facility on climate change-related displacement and migration and child rights could enable the collection and dissemination of quantitative and qualitative data related to health and education systems-level impacts. While not the sole purpose of the facility, global level data collection and dissemination would necessarily underpin the technical level discussions on health and education. More and better data would facilitate evidence-based policymaking in these sectors and strengthen the work of the facility.

Advancing action for children affected by climate change-related displacement and migration: the case for a technical facility

Children around the world are already being displaced or having to migrate for reasons linked to the effects of climate change. And yet, too often conversations about these impacts, the science behind climate change, and the critical role of migration policy are happening in silos. This disconnected approach risks children and their needs falling through the gaps, as experts within national contexts and around the world develop piecemeal, rather than holistic, interventions to support those on the move in the context of climate change.

To address these gaps, the UK Government should establish and launch at COP26 a technical facility comprising practitioners, experts, academics, youth, civil society, and government representatives from across the child rights (in particular health and education), migration, and climate sectors. The technical facility would enable dialogue among technical experts, providing a platform to share evidence and best practice on how to support children affected by climate change-related displacement and migration. This evidence, generated in countries already impacted and responding to the effects of climate change, would be used to prepare systems likely to be affected further in future. With intersectoral collaboration essential to delivering strong and resilient systems in the context of climate change in general, and in terms of displacement and migration specifically, the case for this technical facility is clear.

As a leader on the world stage in both education and health, domestically and internationally, the UK has a key role to play in establishing this facility and driving forward its success. In doing so, it would support the realisation of the child rights around the world, while simultaneously advancing the adaptation and resilience work that is central to the COP26 agenda.

Using data for disaster preparedness in Indonesia

As the world's largest archipelagic state, with more than 17,000 islands,⁵⁰ Indonesia is vulnerable to a variety of disasters including floods, droughts, landslides, earthquakes, tsunamis and volcanic eruptions.

With projections of rising temperatures and sea levels, coupled with more extreme rainfall patterns due to climate change, the number of disasters is only expected to increase; a trend that is already taking place.⁵¹ According to government data, the number of disasters recorded per year increased from 143 in 2002 to 3,406 in 2018.⁵² These disasters are disrupting children's education: between 2004 and 2018, ten medium and large-scale disasters damaged 47,568 schools, or 18% of the total number of Indonesia's schools.⁵³ In addition to damaging schools, these disasters also trigger displacement - eliciting a further impact on children's education. In 2019, disasters triggered 486,000 displacements in Indonesia.⁵⁴ While the challenges are immense, the Government of Indonesia has proactively prepared for disasters to minimise their impacts on children.

In 2017, the Ministry of Education and Culture formed the national Safe School Program, a flexible, dynamic programme consisting of members across sectors of government, which aims to facilitate disaster-safe schools across the country. The programme maps out 10 steps to work toward disaster-safe schools, including participatory risk assessments with students and teachers, technical training sessions for students and teachers, the development of contingency plans, and the establishment of schooled preparedness teams. Importantly, SPAB prioritises a rights-based, interdisciplinary, and intercultural approach.

Complementing this work is a Disaster Risk Index Map that uses mapping technology and basic education data to map out schools and students in Indonesia that are located in disaster prone areas.⁵⁵ UNICEF is currently developing a similar tool in the health sector to map out health facilities' vulnerability to disaster. As the frequency and intensity of disasters is only expected to increase due to climate change, these tools will be critical to building stronger, more climate resilient health and education systems.

Cello and her mum stand in front of a river that overflowed and flooded their home in East Jakarta, Indonesia.

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GLOBAL POLICIES AND FRAMEWORKS

Policy, convention or framework	Relevance for child rights and climate change-related displacement and migration
United Nations Framework on Climate Change (UNFCCC) (1992)	<p>The UNFCCC sets out a near universally agreed objective to realise ‘stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.’⁵⁶</p> <p>The Framework sets the course for collective action to address climate change, recognising the shared burden and impact across countries and the need to align climate change mitigation with economic and social development. The Framework explicitly calls for Parties to ‘Take climate change considerations into account, to the extent feasible, in their relevant social, economic and environmental policies and actions...with a view to minimizing adverse effects on the economy, on public health and on the quality of the environment...’⁵⁷ The UNFCCC thus sets out the critical link between social issues, including education and public health, and climate change.</p>
United Nations Convention on the Rights of the Child (UNCRC) (1989)	<p>The UNCRC is the most widely ratified international convention, agreed by 196 countries. This internationally binding treaty outlines children’s rights across 54 articles, including Article 24 on health and Articles 28 and 29 on education. Included in Article 24 is also the right to a clean and healthy environment. Importantly, the UNCRC is underpinned by four principles, including non-discrimination. All rights included in the Convention apply to all children equally, regardless of who or where they are.</p>
Guiding Principles on Internal Displacement (1998)	<p>The Guiding Principles on Internal Displacement are considered the international standard on the rights of Internally Displaced Persons (IDPs). The Principles seek to ‘address the specific needs of internally displaced persons worldwide by identifying rights and guarantees relevant to their protection.’⁵⁸ They recognise ‘natural or human-made disasters’ as a reason for internal displacement, and entitle children, among other groups, to the ‘special needs’ they require for their protection during instances of internal displacement.⁵⁹</p> <p>The Principles further reiterate the rights of IDPs, including children, to education and health. Though not legally binding, the Principles are used by many government and non-government agencies as a guiding document for internal displacement.</p>
Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts (WIM), 2013	<p>Established in 2013 at COP19, the WIM seeks to:</p> <ol style="list-style-type: none"> 1) enhance knowledge on managing loss and damage risks, 2) strengthen coordination across sectors and stakeholders associated with loss and damage, and 3) support finance and capacity building to address loss and damage.⁶⁰ <p>In its five-year rolling workplan, adopted in 2017, the Executive Committee agreed that ‘Enhanced cooperation and facilitation in relation to human mobility, including migration, displacement and planned relocation’ would be a strategic workstream.⁶¹ In addition to continuing the work of the Taskforce for Displacement, priority activities for 2019–21 include encouraging dialogue on minimising and addressing migration and displacement, ensuring continued dialogue among stakeholders, and ‘seizing opportunities’ to engage in international processes associated with human mobility.⁶²</p>
Sendai Framework for Disaster Risk Reduction (2015–30)	<p>The Sendai Framework calls for ‘The substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries’, and recognises the links between climate change, disaster risks, and human rights.⁶³ The Framework sets out four areas for priority action:</p> <ol style="list-style-type: none"> 1) understanding disaster risk 2) strengthening governance 3) investing in DRR and resilience, and 4) enhancing preparedness.⁶⁴ <p>In relation to children, the Framework recognises children and youth as ‘agents of change’ and calls for their involvement in DRR, including in relation to education.⁶⁵ Health resilience is also a key part of the Framework.⁶⁶</p>
Paris Agreement (2015)	<p>The Paris Agreement, agreed in 2015 and entered into force in 2016, is a legally binding treaty on climate change. Adopted by 196 countries, the Agreement sets out global ambition to keep global warming under 2°C and promote efforts to keep to 1.5°C.</p> <p>The Agreement highlights the human rights obligations of States on ‘the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity.’⁶⁷</p> <p>The Agreement includes language on the importance of education in relation to climate change.</p>
New York Declaration for Refugees and Migrants (2016)	<p>The New York Declaration for Refugees and Migrants was unanimously adopted in 2016 by the UN General Assembly. The Declaration ‘paved the way’ for two global compacts: one on migration and one on refugees.⁶⁸</p>
Global Compact for Safe, Orderly and Regular Migration (2018)	<p>Climate change is referenced in both the Global Compact on Migration and the Global Compact on Refugees. The former devotes an entire section to ‘Natural disasters, the adverse effects of climate change, and environmental degradation.’⁶⁹ UNHCR considers that the latter ‘effectively acknowledges and addresses the reality of increasing displacement in the context of disasters, environmental degradation and climate change, and provides a basis for measures to tackle the many challenges arising in this area.’⁷⁰ However, the Global Compacts are non-binding, which can affect their full implementation.</p>
Global Compact on Refugees (2018)	

CLIMATE CHANGE-RELATED DISPLACEMENT AND MIGRATION

COMPOUNDING VULNERABILITIES

Those affected by climate change-related displacement and migration are not a homogenous group. Gender, conflict, and disability can all lead to additional vulnerabilities that compound and intersect with the challenges faced by migrating and displaced families in the context of climate change.

Climate change-related displacement and migration is a gendered issue

GENDER

As with climate change itself, climate change-related displacement and migration is a gendered issue. Women are often at greatest risk of displacement, with the United Nations Development Programme (UNDP) suggesting that 80% of climate displaced people are women.⁷¹

Research has highlighted the gendered impacts of displacement, migration, and climate change, with women and girls affected by gender-based violence, early and forced child marriage, fewer social and democratic opportunities, and higher rates of deprivation and poverty.⁷² Globally, 'the share of international female migrants in unskilled and semi-skilled jobs is higher in comparison to their male counterparts',⁷³ suggesting that women may be less likely to achieve a sustainable livelihood after migration.

A woman collects rainwater on a road during a drought in the south of Madagascar in 2021. Here, vulnerable families struggle daily for water and many children suffer from severe malnutrition.



© UNICEF/Andrananten

In Ky Nam commune, Central Vietnam, a study found that women faced more barriers in adapting to climate change than men for reasons including a lack of non-agricultural livelihood options, laws favouring male-dominated industries, and challenges accessing loans. This in turn impacted their decision and ability to migrate.⁷⁴ A study from rural Morocco suggests that when women's husbands migrate, the increased tasks and responsibilities placed on women are 'generally perceived as a burden.'⁷⁵ These studies suggest that both displaced or migrating and immobile women are likely to face gender-specific challenges. Girls also face education and health barriers related to their gender, including gendered expectations of care, safe access to facilities, economic disparities, and challenges in accessing support for adolescent girls' health. These will be explored in more detail later in the report.

Nour, 16, and her family were displaced from their home in Homs, western Syria. They resettled in Raqqa, northern Syria, which also became embroiled in violence. Nour could

not get medical care for a leg injury and her dad decided it was safer for her to return to Homs. Tragically, her leg had to be amputated. For the next two years, Nour had no access to school.

Children with disabilities

Children with disabilities similarly face additional barriers when affected by climate change-related displacement and migration. While Article 2 of the UNCRC states that all children have the rights set out in the Convention without discrimination, and Article 23 articulates the right of children with disabilities to 'enjoy a full and decent life, in conditions which ensure dignity, promote self-reliance and facilitate the child's active participation in the community',⁷⁶ children with disabilities are often left out of policy, funding, and data considerations. This not only limits their opportunities but also holds back adaptation to climate change, with experts suggesting that 'the failure to engage with disabled people in contemporary climate adaptation planning, disaster relief and recovery efforts overlooks their potential as knowledgeable and powerful agents of change.'⁷⁷ Thus, the needs, vulnerabilities, and voices of children with disabilities must feature throughout climate change-related displacement and migration discourse and policies, including health and education, and be underpinned by resources to ensure these children fully realise their rights.

Children with disabilities have the right to 'enjoy a full and decent life, in conditions which ensure dignity, promote self-reliance and facilitate the child's active participation in the community' UNCRC, Article 23.



Conflict and refugees

Just as climate change can exacerbate existing vulnerabilities, climate change can intensify socio-political tensions and contribute to conflict and violence.⁷⁸ However, **this connection is hotly debated**. Some experts have suggested that the depletion of natural resources due to climate change can increase competition for resources, fuel poverty, and trigger conflict and displacement. It has also been suggested that the extreme drought and water scarcity in Syria was a contributor to the 2011 civil war, which has led to mass displacement and resulted in the largest refugee crisis to date.⁷⁹ Climate change has also been linked to terrorism: in Niger, where agricultural and pastoral livelihoods have been threatened due to climate change, experts believe that al-Qaida has been more effective in recruiting disenfranchised youth with promises of money and food.⁸⁰

What is less contentious is the impact that climate change can have on communities already displaced by violence. In South Sudan, for example, where more than two million children have been displaced since the start of the civil war in 2013,⁸¹ climate shocks have compounded other interconnected challenges, such as food and water shortages and lack of

education and healthcare services, contributing to high levels of secondary displacement.⁸² Moreover, refugee and IDP camps are often located in areas that are highly vulnerable to climate impacts. For instance, in Bangladesh, hundreds of thousands of Rohingya refugees have sought shelter in camps at high risk of landslides, particularly during the monsoon season. In 2019 alone, 2,000 Rohingya refugees were affected by landslides. Climate change is only likely to fuel these impacts, as extreme rainfall events increase and intensify.⁸³

Even when children are integrated into the community, the barriers they have faced – and may continue to face – as a result of their displacement can contribute to their vulnerability. Refugee families are ‘often highly exposed and vulnerable to climate-related shocks and environmental degradation’, with environmental factors compounding existing protection and resource challenges.⁸⁴ Refugee families may also experience deprivation, meaning they may have limited resources to adapt to the changing climate. The unique and additional vulnerabilities of refugee children are thus important to consider in addressing climate change-related displacement and migration, including in relation to health and education.

Displaced children playing at Reg-R-e-Shan camp, Herat, western Afghanistan. UNICEF provides water, sanitation and hygiene for children and families in the camp.



CLIMATE CHANGE-RELATED DISPLACEMENT AND MIGRATION

EDUCATION SYSTEMS

OVERVIEW

Articles 28 and 29 of the UNCRC set out every child's right to a quality education. This right was further articulated in 2015, with the adoption of the Sustainable Development Goals (SDGs), specifically SDG4: *Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all*.⁸⁵ The UK Government recognised this right in its 2019

Manifesto, committing to 'stand up for the right of every girl in the world to have 12 years of quality education.'⁸⁶ Yet, millions of children remain without access to education, and millions more could be affected if education systems are not strengthened to support children affected by climate change-related displacement and migration.

Guiding documents	Relevance for climate change-related displacement and migration
Action for Climate Empowerment (ACE) and the Doha work programme (2012)	<p>ACE is the term used by the UNFCCC to describe efforts to improve 'education, training, public awareness, public participation, public access to information, and international cooperation'⁸⁷ on climate change. It is the implementation of Article 6 of the UNFCCC and Article 12 of the Paris Agreement.⁸⁸</p> <p>The Doha work programme, agreed in 2012, is an eight-year plan for implementing the ACE agenda. While not directly linked to displacement, education plays a critical role in building the resilience of children and communities.</p>
Comprehensive School Safety Framework (CSSF) (2017)	<p>The CSSF, developed by the Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector and the Worldwide Initiative for Safe Schools, seeks to comprehensively address school safety through three key pillars: Safe Learning Facilities, School Disaster Management, and Risk Reduction and Resilience Education.⁸⁹ It is intended as a tool for education sector analysis, used to strengthen education policy and management. The Framework encompasses a comprehensive set of responsibilities for education actors in building safe schools.</p>



THE SCALE OF THE CHALLENGE

Around the world, **258 million children and youth are out of school, and many more are in school but not learning basic skills.**⁹⁰ Indeed, estimates suggest that more than half of children living in low- and middle-income countries are unable to read a simple story by the age of 10.⁹¹ In some countries, this figure is as high as 80%.⁹² Nearly half of children with disabilities in the Global South are not in school,⁹³ and only a quarter of all countries have achieved gender parity at upper-secondary level.⁹⁴ The COVID-19 pandemic has only intensified these challenges, with schools closed for a year to 168 million children around the world⁹⁵ and 70 million children at risk of not acquiring basic skills in 2021.⁹⁶ Despite the promises set out in the UNCRC and the SDGs, the world remains woefully off-track to realising every child's right to education.

Climate change is already, and will only further challenge, progress on education. Research suggests that four million girls around the world could be prevented from completing their education in 2021 as a result of climate events (such as droughts and flooding), and that, by 2025, climate factors could be a compounding factor that prevents 12.5 million girls from completing their education every year.⁹⁷ Already, 40 million children see their education interrupted every year as a result of disasters.⁹⁸

Climate change-related displacement and migration thus adds another layer of complexity to the existing learning crisis. And yet, education needs remain largely absent from climate change discourse and climate change from the education discourse.⁹⁹

All solutions must be implemented with the full participation and support of the local community.

Residents clean the mud off school chairs at a kindergarten that was affected by flooding in East Jakarta, Indonesia, in February 2021.

BARRIERS TO ACCESS AND EMERGING SOLUTIONS

Displaced and migrating children, including in the context of climate change, face significant barriers in accessing education. Research suggests that 'Nearly every country affected by displacement yields evidence of lower enrolment and achievement rates and higher dropout rates among displaced children.'¹⁰⁰ While data on the number of children affected by climate change-related displacement and migration who are out of school is rarely collected, evidence from conflict-induced displacement suggests high numbers of affected children. More than one third of primary-aged refugee children are out of school, compared to just 9% of all children globally.¹⁰¹ And a staggering 97% of refugees never access tertiary education.¹⁰²

The obstacles to education that children affected by climate change-related displacement and migration face include **disruption in weather-related emergencies, as well as systemic and administrative, geographical, economic, sociocultural, and legal barriers.** In response to these challenges, some solutions begin to emerge for ways to strengthen systems and enable children to continue their education during and after displacement or migration. Importantly, all solutions must be implemented with the full participation and support of the local community. Community engagement is critical to the success of any education, or indeed climate change-related, initiative.



Disruption in weather-related emergencies

Immediately following disasters, 'education infrastructure may be destroyed or damaged, teachers and school personnel may have left and there may be indirect effects such as loss of livelihood, food and water insecurity or physical danger in the environment.'¹⁰³

Rebuilding after such events can prove challenging and lengthy: for instance, after the 2017 storm season in Dominica, some children continued to learn in temporary schools as late as April 2019.¹⁰⁴

If families are displaced during such emergencies, children may also be pulled out of school or find themselves too far from a school to access education. Emergency camps may not have the resources or facilities to continue education, and children may go without learning during this time. While such displacement is often short-term, reintegrating into education systems following disruption can be challenging.

Emergency camps may not have the resources to continue education.



Emerging solutions

Disaster Risk Reduction (DRR) practices are critical to strengthening the physical and bureaucratic infrastructure of the education system. DRR is part of **risk-informed education programming**, which aims to use an analysis of hazards and vulnerabilities to set out strategies to address these vulnerabilities, building stronger and more resilient education systems.¹⁰⁵ Risk-informed education programmes can reduce the impact of disasters, so as to minimise the need for displacement and reduce the likelihood or duration of educational disruption. For instance, in Peru, the Ministry of Education integrated DRR (including emergency preparedness) into the curriculum for grades 1-6. Schools were expected to use the flexibility of the curriculum to adapt and contextualise according to their own situation. Importantly, this work led to increases in evacuation drills at the school level and a better understanding of the holistic risk that children face in disasters.¹⁰⁶

Resources such as UNICEF's *Risk-informed Education Programming for Resilience Guidance Note*¹⁰⁷, the Inter-agency Network for Education in Emergency's *Minimum Standards for Education: Preparedness, Response, Recovery*¹⁰⁸, and UNESCO's International Institute for Educational Planning's work on crisis-sensitive educational planning¹⁰⁹ can provide support and guidance for ensuring a comprehensive and inclusive process.

Critical to the success of disaster preparedness is recognising the value and use of **indigenous knowledge**. In Zimbabwe, for instance, indigenous knowledge has been used to predict drought and rainfall patterns,¹¹⁰ making it a useful part of DRR. Utilising indigenous knowledge can also be part of community awareness, a critical aspect of DRR. Communities must be aware of, included in, and supportive of disaster preparedness.

A boy from Beira, central Mozambique, seeks shelter from Cyclone Eloise in January 2021. Cyclone Eloise brought wind speeds of 100 miles per hour and flooding. UNICEF emergency teams sought to provide children with shelter, food, water, medical attention and the protection from abuse and exploitation.

Disaster preparedness in Antigua and Barbuda

Antigua and Barbuda is extremely vulnerable to the impacts of climate change. Climate change is expected to accelerate coastal erosion and inundation, decrease annual rainfall, and increase the intensity of flooding and tropical storms on the islands.¹¹¹ In 2017 alone, 10 hurricanes hit the Caribbean Small Island Developing States – including Antigua and Barbuda – displacing more than 400,000 children and disrupting services for thousands more.¹¹²

In the aftermath of Hurricane Irma, 349 children from Barbuda were displaced to Antigua following the destruction of Holy Trinity Primary School. The Ministry of Education, Science and Technology took action to integrate the children into schools, along with over 250 children from other islands and territories that had suffered through Hurricane Maria.

At the time of integration, children were experiencing post-traumatic stress, so the initial stage involved rolling out Return to Happiness, an initiative developed by UNICEF in 1992 to support children ages 6-12 in dealing with trauma. Return to Happiness involves play-related activities like drawing, physical activities, art, poetry, recreation and orientation conducted under the direct supervision of trained professionals.

Several challenges arose as the children tried to attend school in Antigua: school records had been lost or destroyed and there was no mechanism to track students and teachers displaced to Antigua and prepare host schools to receive these students. In addition, there was a gap in monitoring the psychosocial support needs for both students and teachers who had been through the trauma of the hurricane.

Taking into account the lessons learned from emergency response and recovery, UNICEF has been working across sectors in Antigua and Barbuda to plan for future hazards and build climate change resilient education systems. The strategy has been evidence-based and includes gathering data and mapping out available resources in schools, including: the number of teachers trained in each school to deliver information on education in emergencies; the number of teachers trained to provide psychosocial support to student; which schools have been designated as shelters; and which schools have completed safe schools assessments. This data has been fundamental to working with the government to close gaps in emergency preparedness, reducing the likelihood of disruption in the face of future climate disasters and displacement.



Alil, age 5, sits in his family's tent in Codrington, Barbuda. Alil and his mother lived for more than two years in the tent, after Hurricane Irma devastated the island and their home in September 2017. The 12.6 million children of the Caribbean are among the most vulnerable in the world to being displaced by weather-related disasters.

As part of its role in building capacity across sectors, UNICEF collaborated with the Ministry of Education, Science and Technology and the National Office for Disaster Services (NODS) to facilitate Contingency Plan Coaching Sessions for teachers in schools across Antigua and Barbuda. In these sessions, teachers learned to conduct hazard and risk assessments to help inform their schools' contingency plans and map out their schools' vulnerabilities and capacities to respond to hazards. Part of the goal of these sessions was to bring together NODS with the education sector and ensure that a collaborative, coordinated approach is taken to emergency preparedness. Moreover, data from individual schools' risk assessments has also been used to help the Government of Antigua and Barbuda identify gaps in capacity and preparedness resources. Capacity assessments and contingency planning are particularly important to ensure schools, and systems as a whole, are prepared to integrate displaced students arriving from other parts of the country or nearby islands.

Systemic and administrative barriers

Returning to the classroom, whether in the same school or a new institution, can be challenging for children affected by climate change-related displacement and migration. Inflexible curricula can make it difficult for children who have experienced long gaps in their education to return to school. Children who do not sit formal exams, due to lack of access, opportunity, or preparation, may find themselves unable to evidence their learning. Even if children have participated in education or passed exams, they may find it difficult to demonstrate their skills if records are lost or destroyed. For instance, following Hurricane Katrina in the southern United States in 2005, there were challenges verifying records for children displaced across state lines.¹¹³ This, in turn, can make re-entry into the education system difficult.

Education systems may also be unprepared to absorb new populations of children. For instance, in Ouaka, Central African Republic, already overcrowded schools struggle to incorporate (conflict-affected) internally displaced children, as there are too few classrooms, teachers, and education materials to support the local community and displaced children simultaneously.¹¹⁴ This has led to the appointment of 'parent-teachers' rather than fully qualified staff, which is unlikely to be the most effective way to deliver a quality education.

Children playing on a bicycle in a polluted area of Dhaka, Bangladesh.



Education systems should be developed to support the needs of incoming and outgoing learners, creating enabling pathways for reintegration.

Emerging solutions

Education systems should be developed to support the needs of incoming and outgoing learners, creating enabling pathways for reintegration. A key feature of this is building foundations of learning, including **literacy** (in the broadest sense). Literacy not only underpins future learning, but also empowers children to undertake critical thinking, builds agency, and enables them to make wise decisions as they relate to climate change-related displacement and migration.¹¹⁵

In order to facilitate reintegration, **flexible pathways and catch-up learning** can be used to encourage children back to the classroom and accelerate their learning. Micro-assessments can be used to assess individual levels of learning and support teaching at the right level. This requires **teacher training**, necessitating the close collaboration of government departments and teacher training institutions, in order to ensure educators are able to support children with differing levels of learning and needs.¹¹⁶

This is all part of **systems strengthening and resilience**, which is essential to breaking down systemic barriers and ensuring children are able to continue learning after displacement or migration. In 10 countries in the Sahel region, UNICEF is working to strengthen education systems to develop cross-sectoral resilience to multiple hazards, including those related to climate change and the environment. This work has the aim of reaching 13 million girls and boys in the region with quality learning opportunities.¹¹⁷

Stronger education systems should be part of **Government's national adaptation plans and strategies**, recognising the role of strong, flexible, and inclusive systems in supporting children to continue learning during and after displacement or migration. This requires intersectoral collaboration, with education, migration, displacement, and climate change departments and experts coming together to understand and develop policies to address the challenges children may face.

Geographical barriers

Displaced or migrating children may also find themselves at a greater distance from their schools, with the journey to school either increasingly unsafe or altogether impossible. This was found to negatively impact school attendance following Hurricane Katrina in the southern United States, where displaced children did not have reliable access to transportation.¹¹⁸

If children are on the move for a longer period, it may be impractical to settle in one school and this could lead to the use of distance-learning initiatives. However, as COVID-19 has shown, distance learning is often inaccessible to those most in need, with 463 million children unreachable by these interventions during the pandemic.¹¹⁹ Barriers to distance learning include economic and infrastructural barriers, as well as a lack of support at home and a lack of teacher training for effective remote education.

UNICEF's Learning Passport

UNICEF's Learning Passport (LP), powered by Microsoft, is a digital learning platform offering online, mobile, and offline learning opportunities for children.¹²³ The platform hosts learning materials, offers support for teachers, and tracks children's educational progress, aiming to improve access to quality education for all children.¹²⁴ Originally designed for education in emergencies, the LP was adapted and scaled up rapidly to support learners affected by school closures during the COVID-19 pandemic.

In Timor-Leste, the platform was used as part of the country's *Eskola Ba Uma* (School Goes Home) initiative, offering online books, videos, and additional support for children with learning difficulties.¹²⁵ In 2020, the Ministry of Education and Higher Education in Puntland, Somalia, led the adoption of the LP in Africa. This provided local, contextualised content to children online and offline, enabling the Government to run large-scale learning initiatives during school closures.

The LP is now being rolled out in countries around the world to ensure children can continue their learning, no matter the circumstances.

Emerging solutions

Many innovative solutions have already been developed and rolled out in affected countries to address geographical barriers to education. For instance, in Mongolia, 'mobile ger kindergartens' follow nomadic families and ensure that vulnerable young children who are unable to attend regular kindergarten have access to school.¹²⁰ These schools better suit children with nomadic lifestyles and can be used as **temporary facilities** if schools are affected by floods or heavy snowfall.¹²¹ In Cambodia, temporary learning centres have been used during floods when school buildings have been deemed unsafe to use.¹²²

Preparing **distance learning materials** in advance of displacement and migration can also prepare systems for when disasters strike. Preparing inclusive no-tech, low-tech, and tech-enabled materials in advance could help ensure that every learner is reached by remote learning, even if they find themselves on the move. This also requires long-term investment in community infrastructure, such as internet connectivity, in order to support children's access to materials.

Materials alone are not enough, however – teachers must also be trained and prepared to support children through remote learning. As with supporting reintegration of children into education, working closely with teacher-training institutions is critical to developing the skills that educators will require to deliver remote teaching.

Many innovative solutions have already been developed and rolled out in affected countries to address geographical barriers to education.

Economic barriers

Climate change-related displacement and migration is intimately linked with poverty, often tied to diminishing income and in turn affecting families' ability to pay school fees or other costs related to education. In Gilgil, Kenya, rates of school attendance when families were affected by conflict displacement dropped from nearly universal to just 73%, with financial reasons most frequently cited as the reason for this drop in attendance.¹²⁶

In some instances, the economic impacts not only prevent children from attending school, but also force children to go to work to support their families. Research from Senegal suggests that children from agrarian families 'often leave school early to migrate in search of money and job opportunities to support the family in the village.'¹²⁷ And with climate change acting as an additional stressor for poor families, some may resort to erosive coping strategies that can negatively impact children. Following flooding in Bunyala District in Kenya, for instance, some children were taken out of school to help with alternative income generation, including non-farm work.¹²⁸

Emerging solutions

Critical to addressing the economic barriers to education for children affected by climate change-related displacement and migration is **investment in the socioeconomic development of communities**. Ensuring long-term economic development, bridging the humanitarian-development nexus, can support communities in developing economic resilience, in turn addressing economic barriers to education.

More immediately, **offering additional services** – placing schools at the heart of community support – can encourage children back into the classroom. In Somalia, UNICEF has partnered with the World Food Programme to provide school meals to children, encouraging them to attend and stay in school. Mental health services and psychosocial support are also important in ensuring that children are able to go to, stay in, and finish their education.

Given that much migration linked to climate change manifests as economic urbanisation, it is critical that children and young people have access to **skills development** before they are displaced. Building diversified and employable skills into curricula in areas likely to be affected by climate change-related displacement and migration could support children to avoid destitution if they are displaced or migrate in future.

Children and adults sift through rubbish at a dumpsite in Dandora, near the poor neighbourhood of Korogocho, Nairobi, Kenya.



Some children are taken out of school to help with income generation.

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Sociocultural barriers

Displaced or migrating children may also face barriers to education that are less formalised. Social barriers, including bullying from peers or educators, discrimination, or xenophobia, can keep children back from realising their right to education. These challenges not only occur at the individual level; institutional or structural discrimination can limit children's access to education, or even be enacted through education systems. These barriers exist even if children are displaced or migrate within national borders. In Taiz, Yemen, for example, overcrowding was used as an excuse to keep conflict-displaced children out of school, though interviewees suggested discrimination was the real reason for the denial of access.¹²⁹

Furthermore, linguistic barriers can challenge children's access to education and their ability to integrate. A report from UNICEF and UNESCO suggests that 'minority, migrant and refugee children learn better when mother-tongue instruction goes hand in hand with second (or additional) language learning'¹³⁰, yet children may be unable to access education in their native language following displacement or migration. For example, some internally displaced children in Ethiopia could not access education in their native Somali language because public schools largely provided education in Afan Oromo – a language they could not speak.¹³¹

Sociocultural barriers can also relate to the loss of culture and identity displaced or migrating children may face. Testimonies from research in Sri Lanka, for instance, highlighted 'the painful ruptures of family and communal ties that arise from displacement', suggesting a need for 'stronger psycho-social support and cultural continuity for displaced communities.'¹³² This could, in turn, have an impact on children's education.

Muna Zayed, age 10, fetches water in the Al Sha'ab camp in Aden, Yemen. Muna and her family fled to the camp after ongoing fighting in their home town of Taiz.



Strengthening education systems for all learners – including host or recipient communities – can further support the integration of affected children.

Emerging solutions

Addressing and removing the social, cultural, and political drivers of inequality is an important first step in challenging the sociocultural barriers that children affected by climate change-related displacement and migration face. More concretely and immediately, creating **welcoming environments** can help address sociocultural barriers for displaced or migrating children. This includes recognising and supporting the needs of linguistically diverse learners, including through developing coherent and effective **language-in-education policies**. Support is also needed for children experiencing disruption to their culture or identity as a result of displacement.

Strengthening education systems for all learners – including host or recipient communities – can further support the integration of affected children. International or regional agreements, similar to the **Djibouti Declaration**, could also help secure high-level support and protection for the education of displaced or migrating children.

The Djibouti Declaration

In December 2017, the Intergovernmental Authority on Development adopted the Djibouti Declaration on Refugee Education. This Declaration saw the Education Ministers of Djibouti, Ethiopia, Eritrea, Kenya, Somalia, Sudan, South Sudan and Uganda agree to take responsibility for refugee education within their jurisdictions 'without discrimination', and to integrate refugees into national education sector plans by 2020.¹³³ The Declaration is an important example of a regional approach to supporting education for children on the move, with countries working together to enable education across borders. Recognising that climate change-related displacement and migration is likely to manifest largely as internal or regional movement, similar regional agreements could be adopted to support children's unhindered access to education.

Legal barriers

While all children have the right to education, legal barriers remain in place. For instance, without legal documentation (such as a birth certificate or legal residence permit), children may be unable to enrol in school.¹³⁴ And while some institutions use firewalls⁴ to encourage children of undocumented families to access services, children may fear that they or their family will be detected, detained, or deported if they try to enrol in school.

Securing high-level support for children affected by climate change-related displacement or migration could help reduce legal barriers.

4 Firewalls prevent public authorities from requesting or accessing information about an individual's immigration status when the individual is accessing a public service.

Emerging solutions

As with sociocultural barriers, securing high-level support for children affected by climate change-related displacement or migration could help reduce legal barriers. For instance, in the 2018 Global Compact on Refugees, the international community set a time limit for integration of conflict-affected children, outlining efforts to 'minimize the time refugee boys and girls spend out of education, ideally a maximum of three months after arrival.'¹³⁵ A similar ambition should apply to children affected by climate change-related displacement and migration. This could also be included at the national level in national frameworks and policies.

At the local level, firewalls could be used to protect the children of undocumented parents. In the Hesse region of Germany, for instance, policies enable children to enrol without evidencing local residence. Similarly, school staff are not obligated to report 'irregular migrant children' in Frankfurt, Hamburg, and Munich, Germany.¹³⁶ Given that children have a right to education and to be protected from discrimination under the UNCRC, the immigration status of children should not impact on the realisation of their rights.



Two boys play outside in Kandahar, southern Afghanistan. Thousands of families have been displaced in the fighting between government forces and the Taliban.

Supporting children back into school in Somalia

Somalia is one of the most vulnerable countries in the world to climate change.¹³⁷ With temperatures projected to increase by 4.3° Celsius by the end of the century, prolonged droughts and increasing flood frequency are threatening the lives and livelihoods of many Somali families.¹³⁸ Already a country plagued by civil unrest and armed conflict, climate change is exacerbating the poverty and instability disrupting many children's lives. In April and May of 2020 alone, more than 919,000 people were internally displaced due to an above-average rainy season in Somalia.¹³⁹ In 2016/2017, more than one million people were displaced due to droughts.¹⁴⁰

Many rural communities facing livestock death and crop failure due to changing climate conditions have moved to urban and peri-urban centres where they may settle with communities displaced by violence. In these contexts, many families struggle to generate income and are dependent on NGOs and family members to meet their basic needs. IDPs in informal settlements are also at risk of eviction and secondary displacement: in Mogadishu nearly 148,000 people were evicted in 2017, most of which had previously been displaced.¹⁴¹ This constant instability threatens to disrupt the education of internally displaced children—an issue which many humanitarian actors have not prioritised. According to a recent analysis, 96% of internally displaced children in Somalia are not receiving education support as part of humanitarian response plans.¹⁴²

To respond to these challenges, UNICEF, with support from USAID, established 96 **Alternative Basic Education (ABE) centres** in Somalia. These schools offer a flexible curriculum and timetable, enabling children to access education in a time and format that works for them and their families. This flexible format is particularly conducive to students displaced by climate change, as they risk missing out or falling behind in school during or after displacement. The schools also have a community education committee (CEC) and Child-to-Child (CtC) club that further support children's engagement.

CtCs in particular offer a unique support structure to encourage children to attend school. Comprising mostly newly enrolled children, CtC members within a school come together to advocate for, and take action on, issues that affect them. They also act as peer supporters, mobilising children in the community to enrol in the ABE centre and checking on children who do not attend school. If children are absent from class, the CtC members take it upon themselves to find out the reasons for the absence and highlight to parents the importance of education. These programmes also offer an informal way to track student attendance and location, which is particularly important for children displaced by climate change who may move frequently or experience secondary displacement. The CEC plays a critical role in advocating for education of girls in the community and are responsible for smooth function of the schools.



A family displaced by drought shelters from the sun in Somalia. Many families have been forced to move. Displaced women and children are often exposed to further risks, such as lack of nutritious food and the spread of disease in overcrowded camps.

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Attainment and completion

Even if children affected by climate change-related displacement and migration overcome these barriers, they may experience difficulties in successfully completing their education. In discussing the complex impacts of the climate crisis on access to education in East Asia and the Pacific, UNICEF East Asia and Pacific Office notes 'relocation and attending classes in a different school generally translates to dropouts or lower academic performance as students may not be familiar with the material or the pace of education at the new school.'¹⁴³

Furthermore, children affected by displacement linked to conflict 'often have lower enrolment and achievement rates than their nondisplaced peers.'¹⁴⁴ Given that the barriers to education for displaced children are similar regardless of the reason behind displacement, it is reasonable to assume these challenges of attainment and completion hold true when children are uprooted in the context of climate change, too.

Nicole Becker, age 19, is a founder of Youth for Climate Argentina, an environmental group that is seeking action to protect children's futures.

ADDITIONAL CHALLENGES AND VULNERABILITIES

In addition to the barriers outlined above, compounding vulnerabilities such as gender or poor mental health can challenge children's realisation of the right to education.

Gendered impacts

Harmful gender norms and dynamics intersect with climate change-related displacement and migration to further challenge access to education for girls. These compounding challenges have been well-documented in other forms of displacement, with refugee girls at secondary school age only half as likely to be enrolled in education as their male peers.¹⁴⁵ IDMC notes 'displacement often aggravates gendered harmful social norms that discriminate and devalue girls' education, which together with gender-based violence at school, at home or in the community, early marriage and pregnancy, create major obstacles to learning.'¹⁴⁶ **Indeed, in Somalia, drought displacement led to a rise in the percentage of all children in school (34.5% to 37%), but a significant fall in the percentage of girls (45% to 29%).**¹⁴⁷ This could be as a result of an increased burden of household work placed on girls, a

Harmful gender norms and dynamics intersect with climate change-related displacement and migration to further challenge access to education for girls.



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phenomenon observed in South Asia where interviews revealed that families 'tend to rely more on the young girls burdening them with too much work at a very tender age'.¹⁴⁸ Indeed, when families move and circumstances require children to support through labour or domestic tasks, girls 'are often the first to be removed from schools and...bear the majority of the burden of supporting their mothers in maintaining the household'.¹⁴⁹

When girls are displaced to camps, they are at increased risk of gender-based violence and sometimes lack clean and sanitary hygiene facilities. This can impact girls' access to education as they may feel unsafe in, or on the journey to, school.

A boy prepares to leave an after-school session for more than 170 children who fled to Armenia from Nagorno-Karabakh. As part of the programme, children benefit from PE and art therapy sessions that help children recover from trauma.



Mental health and trauma

In addition, **children affected by climate change-related displacement and migration may experience mental health issues and trauma, further problematising their learning.**⁵ The stress of sudden or long-term environmental impacts can cause problems with concentration and behavioural issues, among other challenges that can affect education. In the Caribbean, for instance, when children were temporarily relocated from Barbuda and Dominica to Antigua following the 2017 hurricanes, some exhibited anti-social behaviour as they attempted to work through their traumatic experiences.¹⁵⁰

Conversely and importantly, education plays a critical role in mitigating the mental health impacts of climate change-related displacement and migration. Following Hurricane Katrina in the southern United States in 2005, it was noted that schools 'in host communities can play a pivotal role by providing a stable and therapeutic environment for displaced children.'¹⁵¹

While considering mental health and trauma in the provision of education is critical, it should not be assumed that all children will necessarily, nor uniformly, experience these challenges. Significantly more research is needed to identify how, why, and in what ways climate change-related displacement and migration is linked to mental health challenges, and how this may affect educational attainment.

Education plays a critical role in mitigating the mental health impacts of climate change-related displacement and migration.

5 Mental health and trauma will be further explored in the health section of this report.

CLIMATE CHANGE-RELATED DISPLACEMENT AND MIGRATION

HEALTH SYSTEMS

OVERVIEW

Article 24 of the UNCRC states that children have the right ‘to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health.’¹⁵² Target 3.8 of the SDGs aims to ‘achieve universal health coverage, including financial risk protection, access to quality essential health care services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all.’¹⁵³ As with education, the UK Government recognised the importance of child health in its 2019 Manifesto, committing to ‘end the

preventable deaths of mothers, new-born babies and children by 2030.’¹⁵⁴ Despite these commitments, hundreds of millions of children around the globe do not have access to healthcare. Millions more lack access to safe drinking water, adequate nutrition, and water, sanitation, and hygiene (WASH) facilities – all factors affecting children’s health. Without proper planning, climate change-related displacement and migration threatens to weaken health systems, exacerbate health challenges for children around the globe, and stall progress toward global health commitments.

Guiding documents	Relevance for climate change-related displacement and migration
Ottawa Charter for Health Promotion (1986)	Established in 1986, the Ottawa Charter for Health Promotion is rooted in the principle ‘that health is influenced by many other overlapping and intersecting social, political and economic factors, not just by biological factors, individual behaviours or even access to health services.’ ¹⁵⁵
Rio Political Declaration on Social Determinants of Health (2011)	Adopted in 2011, the Rio Political Declaration on the Social determinants of health aims to reduce social and health inequities ‘through intersectoral action on the social determinants of health and wellbeing.’ ¹⁵⁶ Critically, the Declaration recognises that health inequities rise from a range of social conditions and it is essential to address health inequities across multiple sectors of government.
Political Declaration of the High-Level Meeting on Universal Health Coverage (2019)	Adopted in 2019, the Declaration re-affirms the rights of all people to the highest attainable standard of health and re-establishes the commitment to achieve universal health coverage by 2030. Article 15 specifically recognises the need to address the adverse impacts of ‘climate change, natural disasters, extreme weather events as well as other environmental determinants of health.’ ¹⁵⁷

Without proper planning, climate change-related displacement and migration threatens to weaken health systems, exacerbate health challenges for children around the globe, and stall progress toward global health commitments.



THE SCALE OF THE CHALLENGE

Like other people on the move, displaced or migrating children in the context of climate change often face compounding and intersecting vulnerabilities that can contribute to poor health outcomes, including poverty, economic instability, food and water insecurity, and limited education. That climate change-related displacement and migration tends to occur within or between developing countries with already weak health systems only adds to the challenges that children face.

In 2021, heavy rains flooded tents and cut off access at Kafr Losin camp in northwest Syria, exposing displaced children to severe winter conditions. The conflict in Syria has forced more than 6 million out of their homes in search of safety.

Health risks for children in humanitarian and emergency settings are especially high and, as set out above, such settings often emerge following weather-related events that can be linked to climate change. According to the World Health Organization (WHO), 'a single emergency can set back development gains in public health and other sectors by decades.'¹⁵⁸ Children affected by climate change-related displacement and migration are at heightened risk of missing out on humanitarian aid due to

gaps in coordination between various sectors, including health and emergency response sectors, lack of legal protection status, and a lack of international focus on health needs for internally displaced children, particularly those displaced by climate change.

While more robust research and data is needed on this issue, the evidence is clear that children affected by climate change-related migration and displacement are highly vulnerable to social determinants of health that can contribute to poor health outcomes and especially at risk of falling through the cracks when it comes to accessing health services and treatment. As this form of movement is only predicted to increase in the coming years, the international community and governments must strengthen health systems, close systemic gaps in access to health services, and proactively plan to ensure that displaced and migrating children are not left behind.

Health risks for children in humanitarian and emergency settings are especially high.



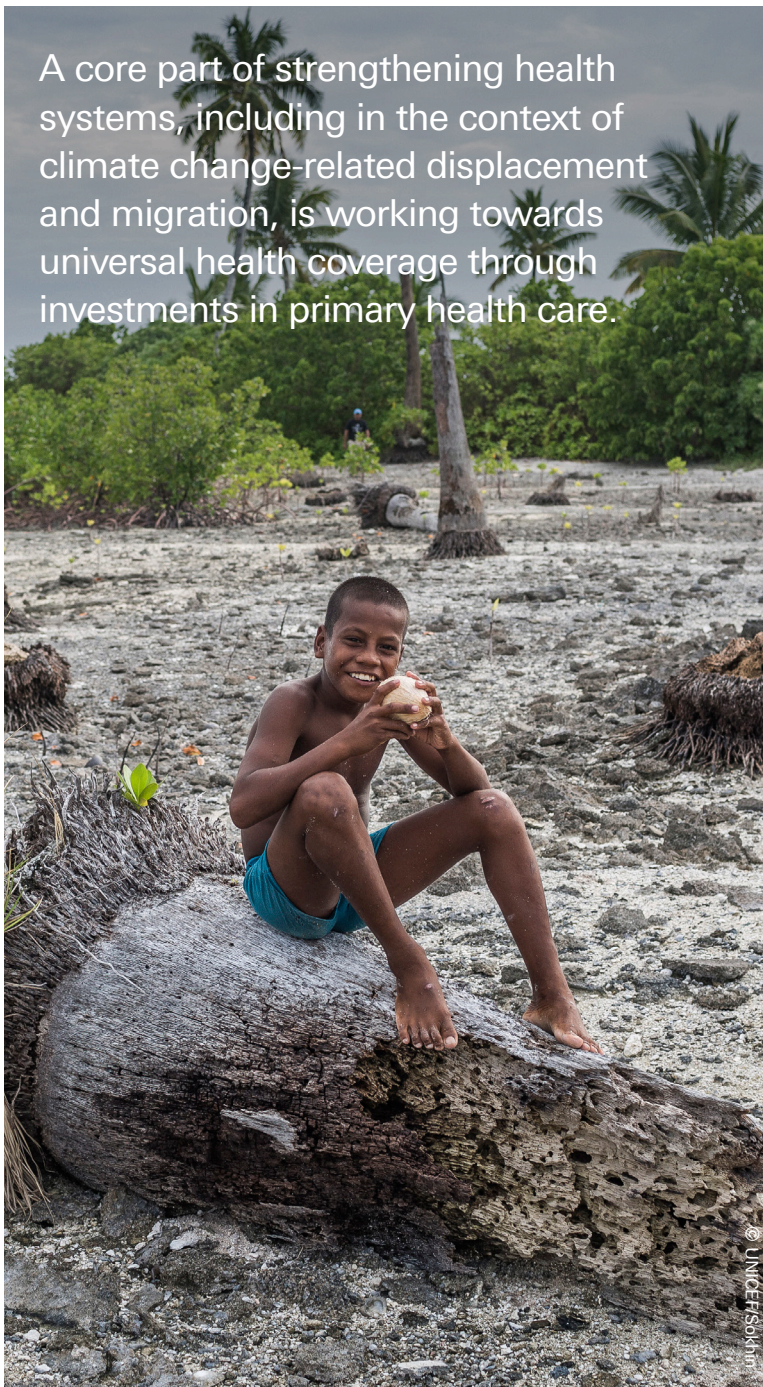
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BARRIERS AND EMERGING SOLUTIONS

Climate change-related displacement and migration has already impacted health systems, children's access to health services, and children's health. Understanding the multitude of health challenges that displaced and migrating children face is essential to strengthening health systems and ensuring that services are accessible to all. A core part of strengthening health systems, including in the context of climate change-related displacement and migration, is working towards **universal health coverage** through investments in primary health care. This is the foundation for all health system strengthening efforts.

Most of the village where Tekua, age 10, lives has been abandoned because of sea-level rise and erosion on Abaiang Atoll, Kiribati.

A core part of strengthening health systems, including in the context of climate change-related displacement and migration, is working towards universal health coverage through investments in primary health care.



Disruption in weather-related emergencies

After major climate events such as floods, hurricanes, or cyclones, children may be displaced to nearby camps or informal settlements. In these settings the quality of medical care may be limited and not tailored toward children. For example, in 2010 and 2011 a major super-flood in Pakistan displaced nearly 20 million people, impacting nearly 46 of the country's 135 districts.¹⁵⁹ Uprooted from their homes, many children were forced to settle in plastic tents in crowded camps. A key informant on the ground during this time noted that while the Government of Pakistan sent doctors to these sites, doctors were not specialised in children's health and elderly members of the community were often prioritised.¹⁶⁰

Lack of child-specific health services following disasters is of particular concern given that children are especially susceptible to injury and illness during and in the aftermath of disasters, in part due to their stage of physical development and immature immune systems.¹⁶¹ In post-disaster contexts, children are at greater risk of sanitation-related illnesses, vector-borne diseases such as malaria, malnutrition, heat stress, and respiratory disease.¹⁶² Research from India indicates that children under five who experienced even a small or moderate disaster within the past month, including droughts, earthquakes, extreme temperatures, floods and storms, showed between a 9-18% increase in acute illness, including diarrhoea, fever, and respiratory illness.¹⁶³

In humanitarian and emergency settings, children are at risk of missing out on routine healthcare services, including lifesaving vaccinations. They are also at risk of falling ill to vaccine-preventable diseases, such as measles and polio, due to overcrowding, inadequate nutrition, and poor access to safe drinking water and sanitation.¹⁶⁴ These challenges have only been exacerbated in the context of COVID-19: half of all countries in which UNICEF has humanitarian operations have reported a reduction in access to healthcare among displaced and refugee populations since the pandemic.¹⁶⁵

While there has been international focus on targeted vaccination campaigns in formal refugee camps, less attention has been paid to internally displaced children. A Save the Children report notes that 'children who are

internally displaced are often invisible to governments or humanitarian agencies, often overlooked or undercounted in health surveys or censuses.¹⁶⁶ Indeed, in Syria (where nearly one third of the population has been internally displaced), only one in 51 children under 12 months old and one in five children under five have complete vaccination coverage.¹⁶⁷

Although some humanitarian aid may be provided to children in the immediate aftermath of a disaster, children who move to different parts of the country may not benefit from this aid, affecting health outcomes. This was observed in Bangladesh following major cyclones, with families who fled to large cities noting that they did not benefit from aid programmes received by those who stayed closer to the site.¹⁶⁸ This gap in immediate relief could have numerous health consequences for affected children and their families, including food insecurity, malnutrition, and gaps in access to routine care.

In 2021, heavy rains and floods destroyed homes and displaced families in Aden, Yemen. It also damaged water and sanitation facilities, helping to spread cholera.



Emerging solutions

Similar to the education sector, the health sector should develop **DRR** strategies to assess climate change risks and strengthen their capacity to prepare for disasters. The WHO's Health Emergency and Disaster Risk Management (Health EDRM) Framework offers a useful foundation for this work. This framework stresses the importance of utilising 'a systemic approach that takes account of the risks, capacities and the availability of resources to implement risk management measures at local, subnational and national levels.'¹⁶⁹ Specifically, it focuses on strengthening surveillance for early warning signs of disaster; strengthening emergency preparedness; and building more resilient health facilities that are 'safe, secure and sustainable, and that can continue to function in emergency or disaster situations.'¹⁷⁰ Health systems should, for example, develop **contingency plans** to build temporary health facilities, deliver necessary supplies, and deploy health personnel, including child health specialists, during and after disasters.

One example of this approach is the Government of Fiji's *Climate Change and Health Strategic Action Plan 2016–2020*, which incorporates climate change considerations, including the impact of disasters, into health sector planning and capacity building.¹⁷¹ Similarly, it is important for countries to align their **National Adaption Planning (NAP)** process with health sector planning, prioritising the health and wellbeing of children.¹⁷²

Another promising intervention in the context of disaster displacement is the development of **mobile clinics**. In Yemen, where 11.3 million children are in need of humanitarian assistance, regular destructive cyclones have exacerbated humanitarian challenges in recent years.¹⁷³ In October 2020, Cyclone Luban displaced thousands of people, many of whom settled in crowded displacement camps where they were vulnerable to disease. In this context, UNICEF rapidly deployed two mobile clinics in areas with high concentration of displaced families, to provide children and families with integrated health and nutrition services.¹⁷⁴

Economic barriers

As discussed previously, families affected by climate change-related displacement and migration are likely to face substantial economic strain after displacement. As a result, these populations may be unable to afford medicines or smaller out-of-pocket expenses associated with accessing services. For instance, a study of climate displaced people living in Khulna City, Bangladesh, found that 93% of respondents did not have the money to access medical treatment.¹⁷⁵ Health expenses can also push populations into poverty: the World Bank and WHO estimate that 100 million people are pushed into extreme poverty every year due to out-of-pocket health expenses.¹⁷⁶ Economic challenges can also lead families to seek work in exploitative industries, further compounding both health challenges and access to services.

Families affected by climate change-related displacement and migration are likely to face substantial economic strain after displacement.



Emerging solutions

Affordable access to public primary care provision for all migrant and displaced families, with no or low out-of-pocket expenses, can help address economic barriers to healthcare. Indeed, a growing body of research shows that restricting access to primary care costs more money than it saves, as the earlier a health problem can be detected the lower the cost of effective treatment.¹⁷⁷ Moreover, the COVID-19 pandemic has demonstrated the public health benefits of ensuring universal access to health services and information to prevent the spread of disease. As Director General of the International Organization for Migration António Vitorino states, 'if 2020 has taught us something, it is that ill health is a universal issue that does not distinguish based on nationality; so, to be truly effective, neither should our health coverage.'¹⁷⁸

Several countries have taken important steps to ensuring undocumented migrants have access to free or affordable healthcare. In Thailand, for example, the Ministry of Public Health has worked to expand health coverage for irregular migrants from three neighbouring countries (Cambodia, People's Democratic Republic of Laos, and Myanmar) by offering a 'one stop service' intended to both legalise the undocumented status of migrants and enrol them in a contributory insurance scheme.¹⁷⁹ In 2018, Spain passed a law granting undocumented migrants the same access to free healthcare as those with Spanish nationality, though there have been barriers to implementing the measure.¹⁸⁰ And in France, children of undocumented parents have access to free State Medical Assistance immediately, without having to meet heavy administrative requirements.¹⁸¹

Afghanistan has more than 1.1 million displaced people. It faces one of the world's most acute internal displacement crises, as it suffers from protracted conflict, ongoing insecurity and natural hazards such as droughts, floods and earthquakes.

Legal barriers

Because children affected by climate change-related displacement and migration are not offered legal protection under international law, those who cross borders irregularly will likely be classified as undocumented migrants. And while the UNCRC guarantees the right to health for children regardless of migration status, in practice legal status can often influence the extent and scope of children's access to services.¹⁸² In several countries in the European Union, for example, undocumented migrant children must become permanent residents before they can access routine, non-emergency health services.¹⁸³ Moreover, as with education, even if children do have access to services, parents and caregivers may fear that sending their children to the doctor could lead to detection, detention, and deportation. Similarly, families may avoid social welfare programmes for fear of missing out on future eligibility for residence status. In the United States, nearly half of adult immigrants reported opting out public health insurance programmes for fear it would disqualify them or a family member from green card eligibility.¹⁸⁴

Internally displaced families may also face legal obstacles to accessing care. In some countries, such as India, social welfare benefits – including access to healthcare – do not transfer automatically between provinces and may prevent displaced or migrating children from accessing health services once they move.¹⁸⁵

Emerging solutions

Governments should uphold the commitment made in the UNCRC to ensuring that all children have access to healthcare, regardless of their migration status, and **remove all legal constraints** to doing so.

For example, in addition to expanding access to affordable public primary care, governments could implement **firewalls** to separate immigration enforcement from public service provision. This would in turn ensure that irregular migrants do not fear that accessing healthcare will lead to arrest. In Italy, for instance, national law explicitly forbids healthcare workers from reporting irregular migrants to immigration authorities.¹⁸⁶ And some cities in the United States have adopted sanctuary laws framed around privacy rights for migrants in the areas of health and education.¹⁸⁷

Mother and child stand on their barren field. Drought and sand storms have destroyed much of the crop in southern Madagascar, leaving children in danger of severe malnutrition.



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While the UNCRC guarantees the right to health for children regardless of migration status, in practice legal status can often influence the extent and scope of children's access to services.

Sociocultural barriers

Healthcare workers also may feel unprepared to support displaced or migrating populations, particularly when they are working in a low-capacity health system. Healthcare providers in Greece, for example, reported feeling unsupported and unprepared to manage linguistic and cultural barriers when working with refugee and migrant populations. Some healthcare workers also said that they would prioritise low-income Greek nationals over migrant populations, given the limited capacity of the Greek health system.¹⁸⁸

Xenophobia and discrimination can also be barriers to accessing health services for migrant and displaced populations. In South Africa, for example, migrants, refugees, and asylum seekers, including children and pregnant women, reported that they were refused services for both routine and emergency services because they lacked South African identity documents or simply because they were foreign.¹⁸⁹

In the context of COVID-19, discrimination as a barrier to accessing care only intensified, as hostility towards migrant populations has increased. According to a UNICEF survey, 39% of UNICEF country offices reported increased tension toward migrant and displaced populations as well as returnees as a result of the pandemic, with this figure rising to nearly 50 per cent of countries in fragile contexts, where many populations affected by climate change-related displacement and migration are likely to reside.¹⁹⁰

Emerging solutions

Building migrant- and child-friendly healthcare services can help break down sociocultural barriers for children affected by climate change-related displacement and migration. This includes, for example: training healthcare workers to provide culturally appropriate care; ensuring health information is available in the native language of migrant and displaced populations; investing in on-site or distance translation services; and working to reduce xenophobia directed toward displaced populations, particularly among health care sector workers. For example, UNICEF has worked with the European Union to launch the 'RM [Refugee and Migrant] Child Friendly Health Initiative' aimed at strengthening migrant and refugee health during COVID-19. The initiative included several measures to strengthen European health systems and plan them to the needs of migrant and displaced children, including by ensuring that health workers were equipped with skills and knowledge to support migrant children.¹⁹¹

Samira, 8, learns at a UNICEF-supported centre in Athens, Greece. The centre is an oasis of learning and safety for refugee and migrant children aged 3 to 17. At the moment, 300 children from 32 countries learn Greek, English, chemistry or natural sciences. Samira has been visiting the centre with her twin brother since they were forced to flee Afghanistan.



Administrative barriers

As with education records, when families are displaced or migrate in the context of climate change, their health records may be destroyed or lost. This may lead to disruptions in routine or episodic care, including disruptions to immunisation routines, and may prevent displaced children from accessing care entirely.¹⁹² After Hurricane Katrina hit the southern United States in 2005, schools that absorbed displaced children in Alabama reported that poor access to students' medical records led to substantial disruption in continuity of care for displaced students, including delays in diagnosis and treatment, and issuing of prescription medicine.¹⁹³ Administrative burdens and lack of medical health records may be particularly challenging when children are displaced to areas where they do not speak the local language.

Emerging solutions

To address administrative challenges associated with lost or missing health records, health systems and programmes should move toward the development of **cloud-based medical record systems**. For example, the Global Health Institute at the American University in Beirut and a healthcare software company, Epic, collaboratively developed a cloud-based mobile Electronic Health Record (EHR) system called *Sijilli* ('My record'), designed to capture basic healthcare information of refugee populations. Based on health information collected by medical professionals, a globally accessible, *Sijilli* EHR, was developed.¹⁹⁴ This type of initiative may also be useful for children affected by climate change-related migration and displacement who lose access to their medical records.



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Sayed, 13, helps his dad bake bread at a camp for internally displaced people on the outskirts of Herat, western Afghanistan. Mahdi and his dad were displaced by war and drought. They arrived in the camp three years ago and have been baking bread for hundreds of families who cannot afford to cook for themselves.

Geographical barriers

While many children affected by climate change-related migration and displacement end up in cities, others may be forced to move to more remote geographical areas that are further away from health clinics and subsequently have difficulty accessing services. A study examining parental healthcare-seeking behaviours for children displaced by climate change in rural Bangladesh found that only 21% of households displaced by climate change lived within a five-kilometre radius of a healthcare provider, compared to 89% of non-displaced households.¹⁹⁵ In part due to this geographic disadvantage, children in families affected by climate change-related migration and displacement were more likely to get sick and less likely to be treated by a trained physician outside the home than children from similar socioeconomic backgrounds in non-displaced households.

Similarly, populations living in areas vulnerable to climate change impacts but unable or unwilling to move may face dwindling healthcare options, as medical facilities may be destroyed, doctors may move away, and private healthcare facilities may have less incentive to work in disaster-prone areas and areas with high levels of poverty.¹⁹⁶ This may also mean that immobile populations and populations left behind have to travel further to access care, or risk not accessing care at all.

Emerging solutions

When planning, governments and health care planners should consider the geographical distribution of healthcare facilities and **address geographical gaps in access**. For example, community clinics and non-governmental organisation (NGO) healthcare service providers could be relocated to more remote areas where displaced populations have resettled or where immobile populations with few healthcare options remain.¹⁹⁷ Introducing the delivery of **home-based or call-based service** provision by community health workers in these remote, displacement-prone areas can also address this gap.¹⁹⁸

Digital and mobile phone-based health solutions can also help address geographical barriers in low-income countries. For example, UNICEF's digital RapidPro platform has reached over 85.5 million mothers, community health workers, health facility staff, and vaccinators in over 18 countries, providing access to information for new mothers, coordinating vaccination campaigns, and managing the availability of lifesaving resources.¹⁹⁹ UNICEF's *Approaches to Digital Health* provides a strategic framework for the development of digital health programmes catered to the needs of children.²⁰⁰

Stevanus, an emergency room nurse, shows the RapidPro app on his smartphone at Pondok Indah Bintaro Hospital in South Tangerang, Indonesia. As part of training, health workers are encouraged to use UNICEF's RapidPro platform to collect data on the perceptions of the COVID-19 vaccine.



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ADDITIONAL CHALLENGES AND VULNERABILITIES

In addition to the barriers identified above, girls, children experiencing poor mental health and trauma, and those living in urban settlements face unique and additional challenges in accessing healthcare.

Gendered impacts

Women and girls have unique health needs that are often overlooked in the context of displacement. Already facing numerous barriers to accessing care, girls affected by climate change-related displacement and migration are likely to face additional barriers, including a lack of access to gender-sensitive and child-friendly information and services, and stigma surrounding sexual and reproductive health and rights.²⁰¹ This can lead to major health consequences.

For example, unable to afford contraception or access reproductive health counselling, girls in displacement may be at risk of unintended pregnancies.²⁰² During pregnancy, evidence shows that internally displaced women and girls are both at risk of missing out on antenatal care and enduring pregnancy complications due to malnutrition, violence, and poor hygiene conditions.²⁰³ Indeed, research on women

and girls affected by climate change-related displacement in Bangladesh found that the proportion of women who received the WHO's recommended four antenatal care visits in their most recent pregnancy was 40% among non-displaced women, 20% among women who have been displaced one to two times, and 16% among women who have been displaced three to four times. Moreover, displaced women and girls were significantly less likely to use any antenatal care service than older women.²⁰⁴ Consequently, pregnant women and adolescent girls, in particular, are at heightened risk of maternal mortality and morbidity. Children born in these settings are also at increased risk of complications, illnesses, and premature death.²⁰⁵

Menstrual hygiene management may pose additional hurdles for girls affected by climate change-related migration and displacement. Evidence shows that during humanitarian emergencies, women and girls often lack access to materials for menstrual management, private facilities for changing and disposing of menstrual waste, space for washing reusable menstrual materials, and menstrual health and hygiene information. Moreover, lack of privacy in emergency camps has been linked to increased experience of stress, embarrassment, and gender-based violence for women and girls.²⁰⁶



Women and girls have unique health needs that are often overlooked in the context of displacement.

A UNICEF worker discusses menstrual hygiene with girls at the KBC-1 camp for internally displaced people in Kutkai, Myanmar. Women and girls in camps lack access to menstrual hygiene products or, if they are available, the sharp rise in the price of sanitary pads makes it impossible to buy due to poverty.

Mental health and trauma

In addition to physical health challenges, the mental health impacts of climate change-related displacement and migration must be considered. While more research is needed on child-specific mental health impacts, **emerging evidence suggests that mental health and trauma may be a critical consequence of this form of displacement and migration for all groups.**

During displacement, children may experience trauma related to acute weather events, food and water insecurity, visible destruction of their home and land, and reduced social cohesion due to economic strain and competition for resources.²⁰⁷ Symptoms of Post-Traumatic Stress Disorder (PTSD) and depression after disasters have been well-documented among adults, but fewer studies have looked at the mental health impacts of disasters on children. One study that observed children before and after a major flood in Bangladesh documented a sharp increase in aggressive behaviour and enuresis (involuntary urination) after the flood, suggesting that exposure to disaster may be linked to specific developmental challenges and psychiatric disorders among children.²⁰⁸

Moreover, research generally indicates that life-threatening events are a predictor of PTSD in children, and children who are separated from their home and community after such events are especially likely to exhibit negative behavioural and emotional responses.²⁰⁹ Indeed, consistently high rates of PTSD, depression, and anxiety disorders are observed in children displaced by violence.²¹⁰

Climate change-related displacement and migration can also disrupt long-term community or familial ties, which can lead to negative mental health outcomes through

social isolation, reduced social and material support, and a reduced sense of belonging.²¹¹ In Tanzania, Maasai families who moved to cities to provide support for their families during droughts reported experiencing poorer mental health outcomes (including feelings of stress, unhappiness, and loneliness) than members of their community who did not migrate.²¹²

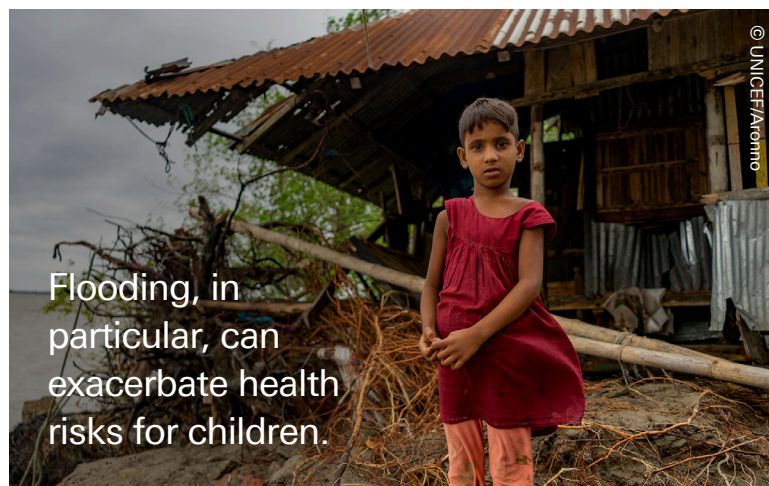
Planned relocation projects can also lead to adverse social outcomes that impact mental health. Without proper planning, relocated communities may experience landlessness, joblessness, social isolation, community disarticulation and food insecurity.²¹³ In the Pacific Islands, where identity and culture are strongly tied to land, planned relocation projects have resulted in increased intergenerational tensions and adverse mental health outcomes.²¹⁴

Urban settlements

Families displaced by climate change who move to large cities face a distinct set of health challenges. **Many families affected by climate change-related displacement and migration settle in informal settlements and squats where they live in overcrowded conditions with poor ventilation and limited access to WASH facilities.** Children living in these conditions face an increased risk of water and vector-borne diseases and heightened vulnerability to heat stress.²¹⁵ A study of families displaced due to climate change to informal settlements in Khulna City, Bangladesh, found that 60% of those living in urban squats suffered from diarrhoea for an average of 14 years.²¹⁶ This finding is particularly concerning for children under five, as diarrhoea is the leading cause of malnutrition and the second leading cause of death in this age group.²¹⁷

Moreover, the informal settlements and poorer urban neighbourhoods in which many of these families reside are often situated in areas with high vulnerability to climate change, such as low-lying plains, coastal zones, unstable slopes, and drylands.²¹⁸ In these contexts, families may be exposed to ongoing climate change hazards, including flooding, water shortages, sea-level rise, and extreme weather events, in settings with poor infrastructure to protect them from these hazards.²¹⁹ Flooding, in particular, can exacerbate health risks for children. Evidence shows that rates of diarrhoea and respiratory diseases increase during and after floods, which may lead to higher rates of malnutrition, stunting, and wasting in children.²²⁰

A girl stands outside the battered remains of her house in Khulna, southwest Bangladesh. In May 2020, millions of children were affected by Cyclone Amphan.



Flooding, in particular, can exacerbate health risks for children.

Using community-generated data to protect displaced children in poorer urban neighbourhoods in India

Like many countries in Asia, India is prone to a variety of sudden and slow-onset climate change events, including flooding, monsoons, tsunamis, storm surges and drought. India consistently has one of the highest absolute numbers of displacements due to disasters in the world; in 2019 alone, there were five million new disaster-related displacements.²²¹ Like in other contexts, these dynamics have led to rapid urbanisation, with 404 million people expected to move to India's urban centres between 2014 and 2050.²²²

One part of India where these dynamics are evident is in Bihar, one of the most disaster-prone states in the country. In rural areas of Bihar, there has been a decline in agricultural production and farming output due to the recurrent impacts of disaster and changing climate conditions. In response, many communities largely dependent on agriculture are moving to secondary cities.²²³ Families displaced to these cities are often forced to reside in informal settlements built on the outskirts, where they have inadequate access to water and sanitation facilities and are acutely susceptible to climate change events such as floods and storms. In the city of Patna alone, there are over 13,000 households living in poorer urban neighbourhoods, including over 11,000 children.²²⁴

UNICEF has worked with Patna community members, including children and adolescents who have been displaced, to better understand the challenges they face. Together with Gorakhpur Environmental Action Group (GEAG), UNICEF has worked with children and youth to map out areas in their community that are most vulnerable to waterlogging, a form of flooding. Based on the community's records, coupled with scientific data, GIS maps were generated to demonstrate areas susceptible to waterlogging and the likely duration of waterlogging events under three different rainfall scenarios. Collecting this data is critical to informing both health and education planning, as waterlogging can inundate schools and contribute to negative health outcomes.²²⁵

In addition, a two-day participatory stakeholder workshop was held in the city of Patna 'to map children's vulnerabilities and propose resilience strategies that address the current and future risks of the city.'²²⁶ The workshop connected interdisciplinary teams from multiple sectors across five priority areas: WASH, health, nutrition, education and child protection. Given the interconnected complex nature of these challenges, this demonstrates that UNICEF can play a critical role in bringing together various sectors and engaging with communities to map out and design solutions to support the rights of children affected by climate change-related displacement and migration.

Girls eat a nutritious lunch at their school in Bihar, eastern India.



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RECOMMENDATIONS TO THE UK GOVERNMENT

Ensuring children can continue to realise their rights to education and health as climate change-related displacement and migration increases is the role of all UNCRC duty-bearers around the world, including the UK. Without urgent action, displaced and migrating children will engage with systems unprepared to support their needs, putting their futures at risk. **But by preparing now, governments – including the UK – can ensure these same systems are adapted and built to minimise disruption and ensure no child is left without access to education or health services.**

Addressing climate change-related displacement and migration is also critical to achieving the UK Government's Manifesto commitments: with girls disproportionately affected by the challenges ahead, supporting systems strengthening in the context of climate change and related migration and displacement is critical to delivering 12 years of quality education for every girl. And in order to end preventable child deaths, the UK Government must recognise and support children under-five who are at increased risk as their families are on the move due to the effects of climate change.



Core recommendation

The UK Government should support the rights and needs of displaced and migrating children in the context of climate change by **facilitating cross-sectoral collaboration through the establishment of a technical facility on climate change-related displacement and migration and child rights.**

This facility should comprise practitioners, experts, academics, youth, civil society, and government representatives from across the health, education, migration, and climate sectors, providing a platform to share knowledge and best practice on systems strengthening in the context of climate change-related displacement and migration.

The facility should be launched at COP26, aligning with the UK Government's priorities on adaptation and resilience.



In addition to establishing the technical facility, the UK Government can support the rights of children affected by climate change-related displacement and migration by:

■ Addressing and limiting climate change

Fully realise its commitment to achieve net zero emissions by 2050 and encourage other high-income countries to make a similar pledge at COP26.

■ Supporting data and evidence collection

Invest in data and evidence for children affected by climate change-related displacement and migration by joining the International Data Alliance for Children on the Move and investing in collection of climate change-related data through this platform, by COP26.

■ Raising awareness and championing children affected by climate change-related displacement and migration

Use the UK's role as a leading international donor to champion the rights of children affected by climate change-related displacement and migration, ensuring they are highlighted in key COP26 outputs and discussions.


At the systems-level, the UK Government should use the emerging solutions laid out in this report to inform and inspire their work on system strengthening, resilience, and preparedness. Concretely, these emerging solutions can be promoted by the UK Government through:

	EDUCATION	HEALTH
Committing to long-term systems strengthening in education and health programming	Connect UK Aid to long term systems strengthening results through all plans, programmes, and approaches	Connect UK Aid to long term health systems strengthening results through all plans and approaches, including the publication of the Ending Preventable Deaths Action Plan and Health Systems Strengthening Framework
Investing in the long-term resilience and sustainability of systems	Deliver a successful Global Partnership for Education replenishment in 2021, reaching US \$5 billion, and using the Global Education Summit to advance education resilience	Prioritise funding for Primary Health Care that strengthens health systems in bilateral programming and invest in multilaterals that centre Health System Strengthening in their strategies
Championing DRR and disaster preparedness in education and health systems	Work with countries to embed DRR and other emerging solutions for education into National Adaptation Plans (NAPs) and national climate change strategies	Work with countries to incorporate health sector planning into NAPs and Health-NAPS

CONCLUSION

Climate change is having, and will continue to have, an impact on children and their rights. As global temperatures increase, children and their families will increasingly feel its impacts, and – in the most severe cases – be forced to leave their homes. With the future patterns of climate change set out, education and health systems can and must be built to withstand the shocks we know are coming.

This year, 2021, offers a poignant opportunity for the UK Government to put the rights of children affected by climate change-related displacement and migration front and centre of global policymaking. With key education and health events throughout the year, as well as COP26 in November 2021, the UK Government has the chance to lead a course to deliver resilient education and health systems that address the needs of these children.

 **The opportunity is clear and the need urgent. The UK Government must now act to support the right to education and health, for every child.**

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Front cover

A girl cycles past buildings damaged by strong typhoons and floods in Le Thuy, Quang Binh, central Viet Nam. In October 2020, Viet Nam experienced a succession of six typhoons. Unprecedented extreme rainfall caused widespread flooding to much of central Vietnam. People and children faced increased risk of disease, especially girls and women with limited access to clean water and sanitation.

Homes were destroyed or badly damaged, food stocks lost or depleted, and children and families had no access to clean water for drinking, washing and cooking. Many people moved to evacuation centres, which also became flooded.

Climate change is increasing the frequency and severity of such storms, forcing children and families to move in search of safety.

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