WALKING INTO THE EYE OF THE STORM: HOW THE CLIMATE CRISIS IS DRIVING CHILD MIGRATION AND DISPLACEMENT

Save the Children

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Cover photo Malawi suffers frequent droughts and floods, Save the Children



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The Climate Crisis is one of the greatest emergencies of our time. As Save the Children's "Born into the Climate Crisis" report makes clear, it is a crisis that profoundly and disproportionately affects children, especially those from low and middle-income countries, who have "inherited a problem not of their own making".

Climate Change is deeply inter-connected with another crisis of global proportion – that of forced migration and displacement. In 1990, the Intergovernmental Panel on Climate Change (IPCC) stated that the **greatest single impact of climate change could be on human migration** – with millions of people displaced by shoreline erosion, coastal flooding and agricultural disruption. The most recent data shows this gloomy prognosis to be true: according to the Internal Displacement Monitoring Centre (IDMC), two-thirds of *new* internal displacements in 2020 were triggered by climate change.

Since IPCC's report, there have been numerous studies looking at the impact of the Climate Crisis on migration and displacement. Yet "there is still a huge demand for advancing the knowledge base concerning the interactions between environmental change (and...) migration and ... particularly...for the specific vulnerability of children, adolescents and youth."¹.

"Walking into the Eye of the Storm" seeks to respond to this knowledge gap and provide a new, child-focused perspective on how the Climate Crisis is driving migration and displacement. It places children's voices at the heart of the study, speaking directly to 239 children, from 5 different countries and continents living in different types of climate conditions. We wanted to learn from them, and hear if and how the Climate Crisis is affecting their dreams and their lives.

The answer was unequivocal. The Climate Crisis is not tomorrow's problem. It is having a huge and devastating impact on children's lives – and mobility decisions – right **now**. Children told us that they and/or their friends are moving now. And this experience is being repeated across the world, at scale, in different climatic zones.

UNICEF (2014) Migration and Youth: Challenges and Opportunities Chapters 16 and 17 It is apparent, from this research and other Save the Children studies such as 'Why Children Stay', and on Predictive Analytics, that effective policy and programming responses must be based on more nuanced analysis of the drivers and decision-making related to (child) migration. Which is also, again, why listening to the voices of those most affected is critical. There is no one size fits all approach. Investing in better data and analysis must be prioritised if we are to meaningfully respond to the enormous challenge that lies ahead.

We hope that this report provides a practical synthesis of our key findings and 'new' information of the impacts of the Climate Crisis on migration and displacement from a child's perspective. The study highlights the scale and immediacy of the climate migration crisis and reminds us of the urgent need to work together, across sectors, to **proactively** prepare for the challenges ahead. We look forward to hearing from colleagues and friends from across the world on how we can make such collaboration a reality.



Steve Morgan Director Migration and Displacement Initiative Save the Children International







"Even last year and in 2018, a lot of houses collapsed due to heavy rains. If it rains too much, our fields will be flooded so the harvest will not be good, in which case people will be forced to find [other] solutions to feed their families. But that is not possible all the time so the [only] solution is to leave this very hostile area."

Boy aged 14, Mali Globally, an estimated 1.2 billion children live in an area at high risk of flooding, severe drought, or other climate threats that pose a serious risk to lives and livelihoods²

Each year, growing numbers of vulnerable children are forced to flee their home to avoid climate-related catastrophes, often at great risk to their safety.

Millions of other children are trapped, unable to leave areas that will experience repeated climate-related disasters, despite the potentially devastating impact this will have on their lives.

At the same time, millions more children are displaced due to conflict, in some cases fuelled by climate-related factors.

2 This estimate is based on calculations and child population estimates used in table 6.



"I am worried like everyone else because often the rain brings very strong winds. The consequences are numerous: houses fall, the sheet metal canvases are blown off by the wind. I am also worried about the animals because before we could easily find grass around the village; now we go very far to look for grass for the animals and often it is in the far fields and people are afraid to leave. We see that the animals are starving and many of us are starving too."

Boy aged 15, Mali

A perfect storm for the world's most vulnerable children

Discussions about climate change often focus on the future, but millions of children are experiencing its devastating impacts *now*. The scale of the crisis is huge, and growing fast. It is children that will bear the brunt of climate change, yet its impact on them is understudied, their voices are not being heard, and current solutions are woefully inadequate. It is a perfect storm that we must stop in its path – before it is too late.

This study collates the findings of more than 420 research reports exploring the relationship between climate change and child displacement and migration, and the views of 125 global, regional and national experts in these fields. Importantly, it also shares the perspectives of 239 children in Fiji, Iraq, Mali, Mozambique and Peru, who live in high-risk climate settings or have relocated due to climate change – **bringing children's voices to the dialogue as a starting point for age-responsive policy and practice**.

This report considers children's vulnerability to key climate threats, and how those threats are driving child displacement and migration, in six high-risk settings: low-lying coastal areas, river floodplains, drylands, mountainous areas, cyclone zones and urban areas. It also provides examples of effective governance and responses.

Our findings about the scale and impact of climate change on children's migration and displacement are deeply concerning and highlight the need for immediate global action that is informed, integrated, inclusive and sustainable.

Climate change is <u>already</u> driving migration and displacement

Climate change is often seen as a 'multiplier' – something that increases the likelihood of displacement and migration but is not the main factor. However, our research shows that climate change is **directly driving migration and displacement**, through more intense, extreme weather events such as floods, cyclones and wildfires that disrupt services, damage infrastructure and destroy livelihoods. **Many of the children we interviewed described their decision to migrate** as **a matter of survival**. This is not something that 'might' happen in the future – it is happening right now. Over the last decade, displacements due to extreme weather have risen steadily, and become more recurrent and protracted. In 2020 alone, they caused 30 million people (including around 10 million children) to be displaced within their country – three times more than the number of people newly displaced by conflict and violence that year.

Extreme weather events get headlines – but don't underestimate slow-onset change

Much focus is directed towards extreme weather events – because they can wreak havoc on the lives of children but we mustn't overlook slow onset crises. Climate change also **contributes to migration**, through slow-onset processes such as drought, extreme temperatures, rising sea levels, and salinisation of agricultural land. Such events can prompt the decision to move, even if they are not the only factor.

The impact of slow-onset climate change is rarely captured in migration and displacement data, but it should not be under-estimated. For example, twice as many people were affected by slow-onset droughts than sudden storms in 2020 (EM-DAT). Slow-onset climate change is likely to become an increasingly important factor in future displacements and is already playing a significant role in some contexts. Migration triggered by slow-onset climate changes is also becoming increasingly permanent.

High-risk settings



Low-lying coastal areas



River floodplains



Drylands



Cyclone, hurricane and typhoon zones



Mountainous areas



Urban areas

3 Save the Children (2021) Born into The Climate Crisis



Born into the Climate Crisis

As part of Save the Children's increased focus on how the Climate Crisis affects children, we recently released a global flagship report quantifying the risk children born in 2020 face due to the climate crisis, looking at a range of issues in addition to climate driven migration and displacement.

Born into the Climate Crisis shows that the climate crisis is fundamentally reshaping our world, with grave implications for the rights of current and future generations of children.

The report highlights that under the original Paris Agreement emission reduction pledges, a child born in 2020 will experience on average **twice as many** wildfires, 2.8 times the exposure to crop failure, 2.6 times as many drought events, 2.8 times as many river floods, and 6.8 times more heatwaves across their lifetimes, compared to a person born in 1960. The Walking into the Eye of the Storm and Born into the Climate Crisis reports collectively provide a stark reminder of the challenge ahead – and why urgent action is required now.

Children are inherently more vulnerable to the impacts of climate change

Children are poised to flee more wildfires, face food shortages as a result of crop failure, experience increasing floods, and brace for rolling, relentless heatwaves around the world compared to their elders³.

Our study underscored existing findings that children are **more likely to be physically affected** by climate-related events than adults – because anatomically, immunologically, physiologically and metabolically, they are more vulnerable. They are more sensitive to malnutrition arising from climate-induced food insecurity, and to infections and waterborne diseases that can increase due to climate-related water impacts such as scarcity; they are less able than adults to regulate their body temperature, so more vulnerable to extreme heat; and more likely to suffer from asthma and respiratory conditions, which are increasing as a result of more dust storms and rising temperatures.

The children we interviewed nearly all identified climate change as a **critical issue for their generation** and a key driver in decisions to move or migrate, with or without their parents' consent. As many as 300,000 children migrated alone or without their families in 2017, which is five times more than in 2012.

Being on the move can also **significantly harm a child's mental health**, particularly if they have experienced an extreme event or become separated from their family. They are also at **greater risk of violence** as well as child marriage, child labour, trafficking, begging, prostitution or joining armed militias.

However, there is no one size fits all solution. Policy makers must understand that the context is nuanced. In some cases, despite the risks of leaving home, migration is the preferred or possibly the **only** option to ensure that the best interests of the child are met. This study reveals that while climate change is clearly driving **increased** migration and displacement, there are also rare examples where it is **preventing** families from moving, even when migration is the most appropriate response.





"Life hasn't improved much [since moving to the city]. I have accepted. Sometimes I go without the things I need like food or stationery."

Boy aged 17, Fiji

"We miss our parents, and in some cases, they send us to the people who will take care of us and not to school, and we must work for them."

Adolescent aged 14–17, Peru Some of the children interviewed mention that **climate risks increased their poverty levels, making it harder for them to cope with shocks, denying them the financial resources to move, and leaving them** "trapped" in high climate risk locations. Some children were skipping meals, not attending school, engaging in child labour, child marriage, street begging, or resorting to sex work.

A more sophisticated analysis and understanding of the drivers of migration is essential, together with more integration of migration thinking into climate planning and vice versa. Save the Children's research shows that when a child feels safe and feels their aspirations are likely to be met locally, they are less inclined to migrate. In the context of climate change, children continuously weigh up the risks of migrating versus the risks of staying and being exposed to climate threats. The point at which migration becomes the best-case alternative is determined by the local context and individual circumstances (e.g. severity/immediacy of the climate risk, the need to find better livelihood opportunities, to escape violence or have better access to services).

We are failing to sufficiently integrate migration thinking into climate planning and vice versa.

A lack of disaggregated data on gender, disability, age or other socio-economic factors limits the sector's ability to respond effectively to children who have migrated or been displaced by climate change. Our study reveals that climate change drives migration and displacement in much the same way for boys and girls. But, children are not a homogenous group. Gender, age, disability, race, sexual orientation, income, age, and other socioeconomic factors shape a child's vulnerability. Children impacted by inequality and discrimination are more likely to experience the impacts of climate change most acutely. Investing in better data and analysis is a pivotal step in developing more effective and durable responses, and must be prioritised.

Risky migration to urban centres

Rural to urban migration is not a new phenomenon. However, it is clear that children are increasingly migrating **from rural areas to urban centres** to avoid **climate threats** and to find employment, often travelling alone and undertaking casual work in return for shelter and other essentials, which leaves them vulnerable to exploitation. Once at their destination, many migrant children live in unsafe, informal settlements, where access to services may be limited.

Worryingly, this migratory journey is often a case of 'out of the frying pan, into the fire'. The cities, urban centres and other locations that children typically migrate to are often just as hazardous as the places they have left, if not more so – often densely populated and located in low-lying coastal areas or on river floodplains.



"The changes in weather affect me very much. Access to food is a problem. The plantation is ruined because of flooding and drought. We all go out to work then to replant our crops. The water flooding [from the sea] ruins our drinking water sources. The cyclone causes our school to close down."

Girl aged 16, Fiji

"Some children live right on the coast. It's dangerous, but they won't leave because that's their land."

Girl aged 14, Fiji

"None of the stakeholders are supporting children's sustainability after displacement. Before and during mobility, there is much, but after there are gaps. We have to look into funding children's mobility projects sustainably."

Save the Children Senegal Many of the child migrants we consulted for this study told us that they resorted to child labour, begging, prostitution, crime, or joining armed groups in order to cope in their new location – and they also highlighted the **negative impacts of displacement on their host communities**, such as overcrowded schools and a rise in informal settlements.

Loss of cultural identity and increasing intergenerational tensions

In addition to the risks they face in their new location, children and families who are displaced or migrate as a result of climate change may also **experience a profound loss of cultural identity as a result of leaving their homeland**, as well as conflict over land and shared resources in their new location, and lack of access to services. The link between home and cultural identity can be so strong that some parents or grandparents may choose, despite the possible danger, to stay in high climate-risk locations because of their ancestral ties and deep sense of cultural obligation to the land – leaving children to move alone, weakening their cultural identity and increasing intergenerational tensions.

Lack of global and national regulations that provide protection for displaced children

Climate-related child migration and displacement does not attract the funding or attention it deserves. Although there is an emerging focus on the link between climate change and displacement, it remains largely 'child-blind' with a notable gap in research and analysis focused on children. Yet, as we mention above, it is children that will bear the brunt of climate change.

There are currently no global policy frameworks that comprehensively address the needs and rights of people who are displaced by climate change, let alone the specific needs of children. Yet, just as the 1951 Refugee Convention provides protection for refugees, there is an opportunity to develop a regulatory framework for climate related displaced populations. Or alternatively, we must ensure that existing global norms and standards are sufficiently agile and robust to effectively respond to/encompass such emerging challenges.

There is emerging good practice in some regions and in countries including Fiji, where an inclusive planning framework has been developed for climate-related government-led relocations. However, **most national policies on displacement do not consider climate-related events to be a trigger for displacement**, so do not offer guidance on child migration that results from climate change. What is more, **the voices of children are largely absent from national policies on migration, displacement and climate**. This needs to change.

A need for sustainable solutions

Government responses to climate-related displacement tend to focus on disaster preparation before sudden weather events, incentivising young people to stay in rural areas (even if there is a slow-onset climate risk), and returning children and families to their home after disasters, rather than supporting them to move and adapt to climate change. Government relocation of entire communities following coastal erosion, mudslides or flooding is also occurring in some countries. Children and their families often move to areas that are equally high-risk, and get little support to build their resilience and integrate in their destinations. It is clear that many current responses to climate-related migration and displacement are not sustainable or fit for purpose – and with the scale of the crisis growing, urgent action is needed before it is too late.

Summary of our recommendations

Programming

We are failing to sufficiently integrate migration

thinking into climate planning and vice versa. For optimum integration, programmes should be designed and implemented with both climate and migration expertise. All programme implementers and designers should adopt a set of key principles and guidelines to ensure that programming is integrated, inclusive, informed, coordinated and sustainable.

Programme implementers and designers focused on the Climate Crisis should:

- Adopt a 'hotspots' approach that focuses not just on a country or regional approach but on high climate-risk settings and supports the most vulnerable and at-risk children and families to prepare for displacement or migration.
- Incorporate climate expertise and associated risks into child migration and displacement programming (e.g. linking mobility with climate change) rather than addressing them in isolation, to ensure coherent decision-making and service provision for children founded on long-term scenario planning.
- Design and deliver tailored, child-focused programmes (e.g. access to different financial services, landscape regeneration) that meets the specific needs of girls, boys, children with disabilities, and children of different ages, ethnicities and religions, as well as children of diverse genders and sexual orientation, at all stages of climate-related displacement planning and action, particularly child-centred adaptation.

"I would like to help. I could offer information [about migrating to the city], and also share my experiences [as a migrant], my challenges and how I overcame these."

Boy aged 17, Fiji



Programme implementers and designers focused on migration and displacement should:

- Develop long-term, child focused durable solutions⁴ that can adapt to changing mobility patterns, growing numbers of protracted, permanent and repeated displacements, and an increasing number of government relocations.
- Provide continued support throughout the migration journey with a focus on high climate risk places of origins as well as destinations, notably urban and peri-urban areas in low-lying coastal areas, on steep slopes, or on river floodplains.
- Prepare for proactive, planned and childresponsive movement (e.g. timely relocation of communities downstream of glacial lakes) within national responses to climate-related migration and displacement, not just reactive support for unplanned displacement.
- Prioritise holistic support before, during, and after climate-related migration and displacement, which supports for a child's protection, their continued education, and psychosocial support.

4 Save the Children has developed the Durable Solutions for Children Toolkit, as an important step in ensuring that children are at the heart of future responses and solutions to displacement.

Research

The humanitarian-development sector should:

- Continue to amplify the voices of children at risk of or affected by climate-related displacement.
- Build on its predictive analytics expertise to carry out long-term scenario planning for child migration and displacement in high-risk climate settings alongside responses for improved early or anticipatory action.
- Establish partnerships with migration and displacement specialists and national governments to advance the collection and sharing of disaggregated data on climate-related child migration and displacement.
- Research the influence of technology on climaterelated migration and displacement through distribution of information such as cyclone warnings that shape decisions to move, and resources that can mitigate the impacts of moving.
- Build a database of good practice responses to climate-related child displacement in high-risk settings.

"To stay in the community and face climate change head on, we need to be informed more about climate change and teach other adolescent children environmental education, to teach their parents. At school, they should teach us that trees should not be cut down – and yet trees are cut down and not replaced."

Adolescent aged 12–16, Peru

"Response is very reactive with little planning and almost no investment in the implementation phase."

Universidade Eduardo Mondlane (UEM) Mozambique

More detailed advocacy messages for governments, donors, the private sector and multilateral agencies can be found in our new climate advocacy report <u>Born into The</u> Climate Crisis (2021)

5

Policy and Governance

Governments should:

- Protect the rights and needs of children affected by climate-related migration and displacement
 - by ensuring that legislation, policies, strategies, and plans holistically address climate change, mobility, humanitarian and development needs; promote migration and displacement as a positive adaptation strategy; and close the gap between policy and implementation.
- Increase climate finance to mobilise at least \$100 billion annually, including adaptation, resilience of communities to the slow-onset impacts of climate change and sudden shocks that specifically benefit the children most affected by inequalities and discrimination.
- Create a new climate finance mechanism to address loss and damage by 2023.
- Scale up government social protection systems (e.g. cash-plus approaches) to address the impacts of climate shocks on children and their families, with the ambition to move to universal child benefits to improve child well-being, reduce poverty and build resilience.

The humanitarian-development sector should⁵:

- Strengthen its technical and financial capacity to deliver strategic, flexible, sustainable, integrated and holistic approaches to climate-related child migration and displacement in multiple high-risk settings.
- Develop policies and governance processes that enable capacity development and access to flexible climate finance to address the underlying root causes that lead children to be disproportionately impacted by climate-related migration and displacement in an uncertain context.
- Strengthen coordination, collaboration and knowledge sharing across sectors and countries to break down silos and address climate-related child migration and displacement holistically.
- Leverage global, regional and national advocacy opportunities including COP26, the 1.5°C campaign and national and regional forums, to champion the rights and support the political agency of children affected by climate-related displacement.
- Advocate with donors and governments to ensure that the needs and rights of children affected by climaterelated displacement are addressed through policies, planning and programming, and that there is sustained and flexible funding for long-term, durable solutions.
- Establish forums for children to share their experiences of climate-related displacement, support each other, and contribute to decision-making and planning processes.
- Support children to challenge existing narratives around climate-related displacement.

ACRONYMS

Flooding

Seasonal variability

Rising temperatures

Storm surge

Mudslide

Strong wind

Cyclone/hurricane/ typhoon

AP	Asia Pacific		
COP	UN Climate Change Conference of the Parties		
COVID-19	Coronavirus disease 2019		
DRR	Disaster risk reduction		
ESA	East and Southern Africa		
FAMOD	O Fórum das Associações Moçambicanas de Pessoas com Deficiência		
FGD	Focus group discussion		
GBV	Gender-based violence		
GCM	Global Compact for Safe, Orderly and Regular Migration	Climate threats	kev
GDP	Gross domestic product		
ICIMOD	International Centre for Integrated Mountain Development	10	
IDAC	International Data Alliance for Children on the Move	TAT	
IDMC	Internal Displacement Monitoring Centre	TA	
IDP	Internally displaced person	Drought	
IFRC	International Federation of Red Cross and Red Crescent Societies	\sim	
IOM	International Organisation for Migration	\bigcirc	
IPCC	Intergovernmental Panel on Climate Change		
ISIL	Islamic State of Iraq and the Levant	Extreme precipitation	Sea
JCMC	Iraq's Joint Coordination and Monitoring Centre		
KII	Key informant interview	201	
LAC	Latin America and the Caribbean		
LGBTQIA+	Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Asexual/Ally + other non-heterosexual and non-cisgender people	Extreme temperatures	Risi
MDI	Migration and Displacement Initiative	\frown	
MEEE	Middle East and Eastern Europe	Jappen Land	
MSCS	Congregação das Irmãs Missionárias de São Carlos Borromeo, Scalabrinianas	Sea level rise	
NGO	Non-governmental organisation	Sea level rise	
OAU	Organisation of African Unity		
PNG	Papua New Guinea	$\rightarrow \leftarrow$	
RCP	Representative Concentration Pathway	0000	
RDC	Rede da Crança	Glacial melt	
SAMOA	Small Island Developing States Accelerated Modalities of Action		
SC	Save the Children	a ter	
SDSMAS	Serviço Distrital de Saúde Mulher e Acção Social		
SIDS	Small Island Developing States	Wildfire	
UEM	Universidade Eduardo Mondlane		
UNCCD	UN Convention to Combat Desertification	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
UNFCCC	United Nations Framework Convention on Climate Change		
UNICEF	United Nations Children's Fund	Construct	<u> </u>
UNMGCY	United Nations Major Group for Children and Youth	Coral reef bleaching	Cy
WCA	West and Central Africa	bleaching	

B<u>ox 1</u>

Definition of climate-related child migration and displacement

Climate-related child migration and displacement includes:

- Children who are displaced by climate events (unplanned movement)
- Children who migrate because of climate threats (planned movement)
- Children who are relocated to avoid climate threats or resettled after climate events (assisted by the state)
- Children who are unable to move despite climate risks (left behind or choose to stay)



Study context

Displacement (the forced, unplanned movement of people from their homes) has been described as one of the greatest challenges of the 21st century (Nansen, 2015). Weather-related displacements have been rising steadily over the last decade as a result of increasing frequency and intensity of weather events. **Sudden weather events can damage livelihoods and critical infrastructure and disrupt basic services.** In 2020, more than 30 million new internal displacements were triggered by weather-related events such as floods, storms, and wildfires – three times more than the number of internal displacements triggered by conflict in the same year (IDMC, 2021a). This figure includes approximately 9.8 million children (UNICEF, 2021a).

Climate change is recognised as the ultimate 'threat multiplier' that increases the likelihood of displacement and migration alongside other factors. Projections show that, over the 21st century, climate change is set to significantly increase displacement of people in high climate-risk settings (IPCC, 2014b). Weather-related disasters are increasingly triggering repeat displacements, leading to or contributing to protracted crises, and overlapping with conflict (IDMC, 2021a).

Slow-onset climate processes such as drought, desertification, sea level rise, and salinisation of agricultural land can also contribute to migration. These long-term hydro-meteorological processes affect physical, ecological, and human systems, for example by increasing water scarcity or food insecurity (CARE, 2020). Slow-onset climate changes compound communities' existing vulnerabilities, erode their coping capacities, and can influence their decision to move (MPI, 2020). Yet, the impact of slow-onset processes is not captured in migration data, and migrants themselves may not recognise climate change as the main reason for their move, instead citing socioeconomic factors. Evidence does however suggest that slow-onset processes will be increasingly significant drivers of migration and displacement in the future (WB, 2018). Children are disproportionately impacted by climate change, (Watts, 2021; Sheffield 2011)⁶ yet significant gaps exist in the evidence base on climate-related child migration and displacement, including children's unique vulnerabilities and how it impacts them. Although there is an emerging focus on the link between climate change and migration and displacement, it remains largely 'child-blind' with a notable gap in research and analysis focused on children. In order to understand and respond effectively to children's specific vulnerabilities and needs in this area, we need to hear directly from them – yet children's voices are consistently missing from the discussion.

This study brings children's voices to the dialogue as a starting point for age-responsive policy and practice. It sets out children's vulnerability to key climate threats, and how those threats are driving child migration and displacement, in six high-risk settings (low-lying coastal areas, river floodplains, drylands, mountainous areas, cyclone zones and urban areas). It also stocktakes emerging governance frameworks and responses in each setting, by synthesising existing literature and sharing the views of children who live in these settings and experts in climate change, child migration and displacement.

Study objectives and scope

Save the Children's Migration and Displacement Initiative (MDI) commissioned this study to bring together findings from the available research and evidence on the intersection between climate change and child migration and displacement, and to fill key gaps through primary research with children and experts. The study's objectives are to:

- Improve knowledge and understanding of the impacts of climate change on child migration and displacement
- **Provide research, advocacy, policy and programming recommendations** for climate-related child migration and displacement.

The study scope included seven thematic research areas (see Figure 1).



6

A recent UNICEF/UN Women paper (2019), Gender and Age Inequality of Disaster Risk highlighted the diverse ways that women, children and other groups impacted by inequality and discrimination can be differentially impacted by climate-related disasters and threats including cyclones, floods, and drought.

Figure 1

Study research areas



Study approach and strategy

The study included a desk-based review of over 420 research reports. The early findings from the literature review were synthesised in an inception report, which identified key gaps in the available research, data and evidence base – including the lack of child perspectives in existing studies.

This desk-based research was complemented by illustrative primary research to capture the perspectives of children, as well as the views of global, regional and national experts, and Save the Children staff. Consultation took place across five regions: Asia Pacific (AP), East and Southern Africa (ESA), West and Central Africa (WCA), Middle East and Eastern Europe (MEEE), and Latin America and the Caribbean (LAC).

Table 1Groups who were consulted

	Save the Children staff	Climate change experts	Migration and displacement experts	Government bodies	Donors	Civil society organisations	UN agencies	Research organisations	Youth organisations	Children
Global consultations	✓	✓	✓		✓	✓	✓	✓		
Regional consultations	✓									
National consultations	✓	√	~	✓		√	v	√	✓	✓

Focus group discussions (FGD) or one-to-one semi-structured interviews were held between January – July 2021 with 239 children (aged 8–18 years old) in Fiji, Iraq, Mali, Mozambique and Peru, who either lived in areas at high risk of climate change or had moved, been displaced or relocated as a result of climate change.

In addition, 125 experts took part in key informant interviews (KII) between January and July 2021. A list of the experts who took part in the study can be found in Annex 1.

Table 2 Types of consultation

Global consultations	Regional consultations	National consultations
 20 key informant interviews with 25 participants 1 global workshop with 15 participants 	 5 regional workshops with 48 participants 	 37 key informant interviews (in Fiji, Iraq, Mali, Mozambique, Peru) 27 focus group discussions with 180 children: Iraq (40), Mali (40), Mozambique (50), Peru (50) 59 semi-structured one-to-one interviews with children in Fiji

High-risk settings approach

Although there are clear regional effects of climate change (as can be seen by El Niño, for example), climate can vary considerably across regions and detailed regional climate models are lacking in some areas.⁷ Instead, this study focuses on the climate threats that exist in certain high-risk settings, for example, low-lying coastal areas or floodplains, and how they are driving child migration and displacement.

This approach allows practitioners to draw on the most appropriate study findings, depending on the high-risk settings that are present in their country or region. During the research, Save the Children staff identified that drylands, urban areas, and low-lying coastal areas are priority settings in all five regions where the organisation operates, while floodplains and cyclone zones are priorities in four regions, and mountain settings are priorities in three regions.

Table 3 High-risk settings



Case studies were selected from across the five regions that illustrate the climate threats in each of these high-risk settings: Fiji (low-lying coastal areas, cyclone zone); Iraq (drylands); Mali (drylands); Mozambique (river floodplains, cyclone zone); Peru (mountainous areas⁸, low-lying coastal areas). Urban areas are an important feature in all five case studies, and the Iraq and Mali case studies also highlight the impact of climate-related risks in conflict zones. The case studies are shared in Annex 2.

/ This is attributed to a need to downscale global climate models, combined with uncertainties associated with future climate conditions. (see https://www.gfdl.noaa.gov/ climate-model-downscaling/)

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In Peru specifically, some of mountainous or highland areas intersect with rainforest. These areas are included in the "high-risk" mountainous setting in the case study, although rainforests alone are not defined as 'high-risk' settings in this study.

Impact pathways

This study examines the 'impact pathway' of climate-driven child migration and displacement, in other words:

- The key climate threats that are present and their effects
- How children are vulnerable to those climate threats and effects
- How these factors combine so that climate change acts as a **driver** of child migration and displacement
- What this climate-driven child migration and displacement looks like the patterns and **trends**
- The **impact** that child migration and displacement has on children and communities
- What **governance** frameworks exist for climate-related migration and displacement
- Effective and sustainable responses before, during and after climate-driven child migration and displacement.

At each step along the pathway, we highlight variations in different high-risk settings, for example, the different threats in low-lying coastal areas and drylands, or the different trends in floodplains and mountainous areas.

Figure 2

Impact pathway model applicable to all settings

Before moving/unable to move		During	A	After			
Climate threats	Child vulnerabilities	Migration drivers	Mobility patterns	Mobility impacts			
Sudden onset weather events (e.g. cyclones, floods) and slow onset climate	Exposure, sensitivities and coping capacity of children to changes	Climate risks manifest as direct or compounding drivers of child mobility	Planned e.g. migration and location	Impacts on children during/after movement and for host communities			
processes (e.g. sea level rise, drought) Resulting changes	Socio-economic effects (e.g. livelihoods,		Unplanned displacement	Impacts on children left behind/ unable to move			
to ecosystem goods and services e.g. natural resources	education, food and water security, health)		Stay in high-risk location				
\uparrow	\uparrow	\uparrow	\uparrow	\uparrow			
	Climate-related child mobility response						
	Climate-related child mobility governance						

1 CLIMATE THREATS

There are two kinds of climate threat: sudden-onset weather events and slow-onset climate processes. Even under the most optimistic scenarios, global temperatures are set to rise markedly over the coming decades, leading to a range of impacts such as increased flooding, increased periods of drought, and more intense storms. The impacts won't be the same everywhere – they will be different in drylands and river floodplains, for example – but will have a significant effect on both our ecological and human systems.



Box 2 Climate threats in Mali

Mariam was temporarily displaced from her community near the river Niger after heavy rain in 2020.

"One morning last August, people were about to leave for the fields when we saw that the sky was suddenly very cloudy. I have hardly ever seen such a heavy rain. It destroyed everything in its path. Houses collapsed, animals were swept away, and the water in the wells became unsuitable for drinking. By the grace of God, nobody died or was injured. We owe a lot to our neighbours who urged us to leave the house. [Without them] we were probably going to die because as soon as we got out, the house collapsed. We lost the few pieces of furniture we had when the house collapsed."

Mariam

12 years old, Mali

1.1 Changing climate threats

The future -30 years ahead - is going to be much worse than now. We can already see the negative impacts of climate change today on children... but looking into the future, we realise that children who are not yet born will be exposed to much worse conditions.

Save the Children International, KII

Table 4 IPCC climate change projections

Weather type	Projected impact
Ĩ	Increase in average temperatures of between 1 C and 5.75°C by the end of the 21st century. ^{9,10} Increase in intensity and frequency of temperatures including heat waves
	Increase in annual average rainfall in the form of extreme, more frequent heavy rainfall events and flooding. Increase in rainfall variability, amplifying the frequency of droughts.
	Increase in mountain and glacial melting
J J J J J J J J J J J J J J J J J J J	Sea level rise between 28cm and 1.01m by the end of the 21st century. A 10cm sea level rise over this period would expose an additional 10 million people to flooding.
	Increased intensity of tropical cyclones with higher precipitation rates and wind speed.
P A	Drylands will experience drier, warmer, more extreme, erratic and variable conditions. The frequency of droughts will likely increase by the end of the 21st century in presently dry regions.
10-10-10-10-10-10-10-10-10-10-10-10-10-1	Abrupt and irreversible change in composition, structure and function of marine, terrestrial and freshwater ecosystems including wetlands and warm water coral reefs.

9

2020 was the warmest year on record for global land temperature and the second warmest year on record for both global land and ocean surface temperature since recordkeeping began in 1880, averaging +1.59°C and +1°C above the 20th century average, respectively (NOAA, 2021).

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Increase in average temperatures of between 1.2 and 1.9° C in the near term (2021–2040), 1.2–3.0°C in the mid-term (2041–2060), and 1.0–5.7°C in the long-term (2081–2100)



"We are seeing huge changes in the amount of water we are receiving on a daily basis. There is not enough water to drink or wash. It becomes worse day by day."

Adolescent¹² aged 8–12, Iraq

"In the summer, there are many floods where we live. We don't produce anything."

Boy aged 16, Mozambique

"Access to food is a problem. The plantation is ruined because of flooding and drought... The water flooding [from the sea] ruins our drinking water sources. The cyclone causes our school to close down."

Girl aged 16, Fiji

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The IPCC has developed a catalogue of pathways or scenarios, depending on global greenhouse gas emissions. Even under the most optimistic scenario (where emissions are significantly reduced to limit global average temperature increases to 1.5°C above pre-industrial levels, which is the central objective of the Paris Agreement but unlikely to be achieved), significant climate changes will result.

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In some instances, the gender and/or age of the child was not recorded. In these cases, the child is defined as an adolescent if 10 years or older and a young child if less than 10 years old. In this specific case, the child is between 8–12 years old so we have categorised them as an adolescent. Rising levels of greenhouse gas emissions in the atmosphere are associated with two kinds of significant climate changes: sudden-onset weather events, and slow-onset climate processes (IOM, 2008; IPCC, 2014c; ADB, 2015; WMO 2020, IPCC 2021).

- Sudden-onset weather events such as flooding, cyclones, hurricanes, typhoons, glacial lake outburst floods, heatwaves, mudslides and wildfires, can trigger sudden unplanned displacements as individuals need to flee their home quickly in search of security.
- Slow-onset climate processes such as drought, glacial retreat, sea level rise, saltwater intrusion, desertification, and ocean acidification, can gradually affect ecosystems and in turn, people's lives and livelihoods, which can compound existing vulnerabilities and trigger migration (IOM 2008).

These two types of climate change can be deeply intertwined. For example, sea level rise is linked to coastal erosion, which in turn makes coastlines more vulnerable during sudden-onset storms or surges. These connections are referred to as cascading hazards (Nature 2018).

Even under the most optimistic emissions scenario, according to the Intergovernmental Panel on Climate Change (IPCC) global temperatures will increase significantly over the coming decades¹¹ leading to a range of climate impacts, which are shown in *Table* 4.

1.2 Impact on ecological and human systems

Changing climate threats are already having significant effects on physical and ecological systems, by increasing soil salinity, reducing water quality, and damaging trees and crops (IOM, 2017). For example, in Peru, glacial melt – one of the most significant changes associated with rising temperatures – is reducing freshwater supply to water-scarce coastal settlements.

Such changes to ecosystem services and functions have direct consequences for human systems including food production, water supplies and health care (UNICEF, 2015), which can indirectly contribute to migration and displacement, as well as conflict.

While doing fieldwork in Senegal, I spoke with four generations of a farming family. When the great-grandfather worked the land, the area was forested and enough to live on. During the grandfather's time, the trees died because of major droughts, and he had to travel to town occasionally to supplement his income. The father's turn came, and the rains washed away all the topsoil since there were no longer any roots to avoid erosion. The father then pointed to his children, 'they now have nothing'.

UN Framework Convention on Climate Change (UNFCCC), KII

1.3 Climate threats in different high-risk settings

Climate threats vary by setting, for example, the specific threats facing low-lying coastal areas are different to the threats facing drylands. The key threats for each high-risk setting are outlined in *Table 5*, along with the relevant IPPC projections and expected effects on ecological systems.

During this study, Save the Children staff identified that low-lying coastal areas, drylands and urban zones are priority high-risk settings in all five regions, while floodplains and cyclone zones are priorities in four regions, and mountainous areas are a priority in three regions.

Table 5

Threats identified in KIIs, IPCC projections and likely effects in high-risk settings

High-risk setting	Key climate threats	Projections (intermediate scenario) ¹³	Ecological effects	WCA region	LAC region	AP region	ESA region	MEEE region
Low-lying coastal areas	 Rising sea levels Rising sea surface Stronger storm surges Ocean acidification 	 Sea level rise increase 28–101cm by 2100 Increased intensity of storm surges Annual large coastal flood events 	 Coastal erosion Land submergence Soil salinisation Coral bleaching Damaged coastal/ marine ecosystems Landslides 	~	~	~	✓	~
Floodplains	 Erratic rainfall Increase in heavy rainfall events Decrease in overall precipitation Flash flooding 	 Water stress in some areas Flooding in some areas 	 Land erosion Soil depletion Pollution Mudslides Damage to floodplain ecosystems 		~	~	~	~
Drylands	 Erratic and extreme rainfall Extreme temperatures Desertification Wildfires Dust/sandstorms Flash floods 	 Longer, more extreme, out-of-season drought More extreme floods 	 Changes to seasonal patterns Water shortages Land degradation Soil erosion Drought 	~	~	~	~	~
+ + Cyclone, hurricane and typhoon zone	 More frequent, intense tropical typhoons Heavy precipitation Flooding Sustained winds above 74mph 	 More frequent and more destructive (category 4 and 5) storms Rising risk of flooding/ storm surges 	 Coastal erosion Land salinisation Damage to ecosystems 		V	✓	✓	✓

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The IPCC developed a catalogue of Representative Concentration Pathways (RCPs) and more recently Shared Socio-economic Pathways (SSP) for projecting possible future climate changes. These range from optimistic scenarios (that are unlikely to be achieved) through to more pessimistic scenarios.

High-risk setting	Key climate threats	Projections (intermediate scenario) ¹³	Ecological effects	WCA region	LAC region	AP region	ESA region	MEEE region
Mountainous areas	 Glacial melt Extreme temperatures Glacial lake outburst floods Rain on snow floods¹⁴ 	 50% decrease in annual snow cover 18–36% global glacier mass losses Increased permafrost thaw 	 Glacial lake overflow Mudslides Water insecurity Water contamination Drought (from loss of glacial ice) 		~	~	~	
Urban areas	 Extreme temperatures (heatwaves) Extreme rainfall Flash floods 	 Increased risk of flooding/submergence for low-lying coastal/ delta cities 	 Water shortages Water contamination Air pollution Flooding Landslides 	~	~	~	~	*

1.4 Gaps in climate threat data and knowledge

Gaps remain in the sector's knowledge of climate threats and how they contribute to child migration and displacement. The uncertainty, non-linearity and interplay between different impacts of the Climate Crisis make it challenging to predict and map local climate threats.

In the recommendations section, we make a number of recommendations for greater collaboration across specialisms and silos, and for improving the collection, reporting and sharing of data on climate-related child migration and displacement in all high-risk settings, in order to close these knowledge gaps.

2 CHILD VULNERABILITIES TO CLIMATE THREATS

Globally, an estimated 1.2 billion children¹⁵ live in an area exposed to climate threats such as flooding, severe drought, or recurrent cyclones. As well as being on the frontline of the Climate Crisis, they are more sensitive to its impacts – more prone to malnutrition as a result of climate-induced food insecurity; to waterborne diseases as a result of water contamination; and more affected by the loss of schools and health care centres that comes with catastrophic cyclones and floods. What's more, recurrent crises coupled with factors such as conflict have reduced many children's capacity to cope – making them highly vulnerable to the effects of climate change.



Box 3 Child vulnerabilities in Mali

Issa lives in a small community north-east of the capital of Bamako in Mali. He fears that he will need to drop out of school because of the droughts.

"Nowadays in addition to drought, famine and disease, I fear for my studies under these conditions. Every year, our parents are worried about the winter period. If they cannot feed us properly, we will have to drop out of school and go elsewhere to look for work to help our parents. Harvests aren't like they used to be. Each year, it either rains or the droughts take over when the rains stop early before the harvest is even ready."

lssa

15 years old, Mali

15 This estimate is based on the calculations and child population estimates used in table 6.

2.1 Child exposure to climate threats

Globally, an estimated 1.2 billion children live in an area where they are exposed¹⁶ to climate threats such as flooding, severe drought, or recurrent cyclones.

- More than half a billion children live in areas with an extremely high risk of flooding, for example in low-lying coastal areas, on floodplains or in cyclone zones.
- In addition, more than 1 billion children live in urban areas, many of which are located in low-lying coastal areas or on floodplains with high exposure to climate threats (UNICEF and IDMC, 2019). In Mozambique, an estimated 11.3 million children live along riverbanks or on lowland floodplains. Similarly, in Fiji, an estimated 303,000 children live in low-lying coastal areas.
- Almost 160 million children live in drylands, where they are exposed to high or extremely high drought severity (Oxfam, 2017). It is projected that by 2040, almost 600 million children (about 1 in 4 of the world's children) will live in areas under extremely high water supply stress (UNICEF, 2020a).
- 115 million children are at high or extremely high risk from tropical cyclones (Oxfam, 2017).
- An estimated 222 million children live in mountainous regions. In Peru, approximately 2.7 million children live in the Andean highlands (exposed to heavy rains, drought, strong winds, and intense cold fronts) with approximately 93,000 children living downstream of glacial lakes, exposed to outburst floods.¹⁷

Within each of these high-risk settings, children report that climate change is already having a substantial impact on their lives and that the Climate Crisis is a critical issue for their generation.

In Iraq, heavy rainfall prevented the children that we consulted from attending school for much of the winter in 2018 and 2019 – yet the lack of rain in 2021 had a critical impact on the productivity of farms, affecting food security. In Mali, children highlighted increasingly variable rainfall patterns, leading to dramatic fluctuations between extreme wet and dry conditions. In Peru, children living in mountainous areas noted that cold fronts had intensified in recent years and confirmed an increase in major flooding and prolonged drought, particularly in low-lying coastal areas.

Children are disproportionately affected by the Climate Crisis, yet despite their high exposure to climate threats, there is little data disaggregated by age, gender or disability, beyond broad estimates. This is urgently needed so that the sector can provide more tailored and targeted support to those children at highest risk.

Child migrants living in informal urban settlements are not a priority for governments. They are largely invisible. For example, the government in Indonesia has facilitated the relocation of businesses and important landmarks from low-lying areas of Jakarta, but the settlements remain in dangerous locations [for children].

Ocean & Climate Platform, KII

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Physical exposure to hazards is defined as geographical location, housing quality, capacity to receive warnings and to evacuate.

17

A recent inventory identified 45,557 glacial lakes in the Peruvian Andes (Wood et al., 2021). One of the deadliest glacial lake outburst floods in history was in 1941, when flooding from Lake Palcacocha destroyed a third of the city of Huaraz and killed over 1,800 people. Today, Lake Palcacocha has increased in volume and Huaraz city has over 120,000 residents (Frey et al., 2018).

2.2 Children's sensitivity to climate change

Research shows that as well as being highly exposed to climate threats, children are often more sensitive to its impacts. Children are anatomically, cognitively, immunologically, physiologically, metabolically and psychologically different – and often, more vulnerable – than adults (Stanberry et al., 2018; Watts, 2021). They are more sensitive to under-nutrition and malnourishment (Mitchell, 2016) arising from climate-induced food insecurity; more sensitive to certain vector and waterborne diseases such as malaria; less able to regulate their body temperature; less physically strong; and their mental health is more vulnerable (World Bank, 2018; Philipsborn and Chan, 2018; Rema and Oliva, 2016; UNICEF, 2015; Kousky, 2016).

In Costa Rica, children are reportedly more vulnerable to water contamination, which can occur due to sea level rises, storm surges, and flooding (UNMGCY, KII) and experts in Iraq confirmed that waterborne diseases arising from low rainfall and water scarcity were disproportionately impacting children.

Recent research in Peru highlighted that increased sensitivity of children to under-nutrition and repeated infections as a result of El Niño-induced droughts and floods affected children's body mass and height (Danysh *et al.*, 2014).

Children – in particular infants and small children – lack the capacity to adequately regulate their body temperature, so are especially vulnerable to heat extremes and heat stress. They are also more likely to suffer from asthma and respiratory conditions, which are increasing as a result of more dust storms and rising temperatures (UNICEF, KII).

Nevertheless, children are not a homogenous group. Characteristics including gender, education, disability, poverty and ethnicity, shape a child's vulnerability to climate threats. This is discussed in more detail in section 2.5.



Figure 3

Child sensitivities to climate changes



2.3 Children's capacity to cope or adapt

Recurrent crises coupled with factors such as conflict reduces children's capacity to cope with climate change. Socioeconomic, political and cultural factors also have a role to play. For example, children with access to resources, services and institutions and the ability to understand and act on information, are better able to cope (Brown et al., 2019).

Existing studies focus on coping capacities at a community or household level; however, our study has identified a range of **individual factors that shape children's capacity to cope** with climate threats. In Fiji, the experts we consulted noted that indigenous children, whose families own land and who belong to a community structure, are initially better able to cope than children who are growing up in informal urban settlements (UNICEF, KII; GIZ, KII). However, as the impacts of the Climate Crisis intensify, food security becomes a significant factor for children in rural and maritime areas, who have limited access to services and rely heavily on these ecosystems for their livelihoods and survival – so their coping mechanisms may be undermined.



"After the last cyclone, many children could not afford to go to school anymore. Parents asked them to stay home."

Girl aged 14, Fiji

"Sometimes the head of the family makes the decision that we need to skip meals and we eat only twice or once a day."

Girl aged 18, Fiji

"Our lives change, frosts and excessive rains cause animals and crops to be lost... older children go to look for work to support the family."

Adolescent aged 14–17, Peru Children must weigh up the risks of migrating versus the risk of staying and being exposed to climate threats. The point at which migration becomes the best case alternative is determined by the local context and individual circumstances. Children may be pushed to leave in search of better livelihood opportunities, to escape violence, avoid climate risks and to have better access to services. But what motivates children to stay, even when faced with considerable adversity is often overlooked in existing research. There are rare cases where children are prevented from moving even when migration is the most appropriate response – increasing their poverty levels and leaving them 'trapped'.

Children that we consulted told us they resorted to extreme coping mechanisms when faced with climate change. For example, skipping meals to ensure there is sufficient food for other family members (Fiji); not attending school to reduce costs or so that they can work to support their family (Fiji and Iraq); engaging in child labour to increase household income (Iraq, Mali, Mozambique and Peru); child marriage (Iraq) and resorting to street begging or sex work (Peru).

While most studies focus on why children *migrate*, it is an often-overlooked fact that far more people, including children, actually *stay* in their communities of origin. So to better understand the nuanced context in which children choose to migrate, Save the Children is investigating what encourages children, in communities with high rates of outward migration and traditional cultures of mobility, to stay at home. Phase 1 of the research took place in Ethiopia, Burkina Faso and Zambia¹⁸ – all of which have high levels of migration from rural to urban areas. Phase 2 is taking place in The Northern Triangle of Central America (El Salvador, Guatemala and Honduras).

Many children in Fiji face significant protection issues and have no voice. They are trapped in a cycle of violence and poverty, with climate risks added onto that. It's a cycle that is very difficult to break.

UNICEF, Fiji, KII

A frequent coping mechanism is child labour because parents don't have enough [income]. Depending on the zone, kids will work in agriculture, as shepherds, petty trade, or migrate at a young age.

Famine Early Warning Systems Network (FEWS NET), Mali, KII

Overlapping crises, such as floods combined with conflict or repeating disasters, can be particularly detrimental and overwhelm the coping capacity of children and their families (see *Box 3*). For example, more than six million children live in fragile security contexts that are also extremely high flood-occurrence zones (UNICEF, 2015).

In Mozambique, two years on from the devastation caused by Cyclones Idai and Kenneth, thousands of children and their families are still aid dependent and living in makeshift shelters, which were then destroyed by floods (Sieroka, 2020). Poor, rural families with low levels of education have had little capacity to adapt between disasters. An estimated 308,000 children have been displaced by conflict in the north, where terrorists have been operating since 2017 (IDMC, 2021).

18 https://resourcecentre.savethechildren. net/node/14277/pdf/why_children_ stay.pdf

Box 4 Climate change – a catalyst for conflict

Conflict, like climate change, is a threat multiplier that can interact with climate threats in high-risk settings and exacerbate child vulnerabilities. Globally, 420 million children (more than 1 in 6) live in

a conflict zone. There is evidence that conflict and climate change can fuel each other as resources become increasingly scarce and communities must navigate the uncertainty of variable climatic conditions.

In Iraq, climate risks combined with a fragile security environment is undermining the coping capacities of children and their families: In Mali, the impact of climate change, which has undermined traditional livelihoods, combined with a fragile security state has resulted in a large number of children adopting perilous coping strategies, including joining armed militias (FEWS NET, KII).

Climate change has already increased the risk of violent armed conflict in past decades (Ryan, 2019) and is predicted to increase the risk of conflict in the future (ICRC 2020, IDMC 2020g), which in turn increases the probability of migration and displacement.

"Many children and their families were expelled from their farmland in Jurf al-Sakr. Our lands experienced drought and were further destroyed by the Popular Mobilisation Forces".

Adolescent girl aged 13–17, Iraq

2.4 Climate risks for children

The impact of recurrent floods, droughts, cyclones and other climate changes is severe and far-reaching, affecting health, food security, education, safety and livelihoods. As noted in section 2.2, children's additional sensitivity to certain impacts mean that they face a particularly wide range of risks that can drive child migration and displacement, including:

- **Health risks**, e.g. loss of life/injury during extreme weather events; malnutrition, dehydration and heat exhaustion; increased risk from water, vector borne and diarrhoeal diseases; and mental health issues
- Education risks, including temporary or permanent loss of learning or access to education
- Protection risks, e.g. increased violence and risk of exploitation both during and after movement due to climate threats
- Economic risks, notably loss of family income, which can contribute to food insecurity and lead to child labour and other protection risks.

In Mozambique, 67,500 children faced famine following Cyclones Idai and Kenneth in 2019 (IDMC, 2020a). Furthermore, at least 47 schools were affected by heavy rain and flooding in early 2020 (UNOCHA, 2020a). Such climate risks can directly drive migration and displacement or exacerbate other drivers such as poverty, employment, and education – particularly when there are repeated events with little time for recovery in between.

Cyclones and floods lead to loss of productivity and food insecurity. This has great impacts on livelihoods and household income, and great impacts on children as seen through low levels of education in Mozambique and some negative coping mechanisms, such as early marriage.

UEM, Mozambique, KII



"The drought affected our area, and we could not produce anything. We had nothing to sell and no money to go to school."

Boy aged 16, Mozambique

"I am worried like everyone else because often the rain brings very strong winds. The consequences are numerous: houses fall, the sheet metal canvases are blown off by the wind. I am also worried about the animals because before we could easily find grass around the village; now we go very far to look for grass for the animals and often it is in the far fields and people are afraid to leave. We see that the animals are starving and many of us are starving too."

Boy aged 15, Mali

2.5 Age and gender inequalities of climate change risks

Gender, age, disability, race, sexual orientation, income, and other socioeconomic factors shape a child's vulnerability (UNICEF & UN Women 2019) and highlight the importance of intersectional¹⁹ analysis and responses. Girls, children living with disabilities or chronic health conditions, indigenous children, orphaned children, LGBTQIA+ children, and/or homeless children, are at particular risk (UNICEF, 2015). Girls, for instance, may be more vulnerable than boys given that their role in many cultures is closely linked to resource needs in the household (SC, 2020b). However, there is not enough disaggregated data to draw concrete conclusions on gender, disability, or age-related vulnerability to climate-related migration risks to inform policy and programming. This results in a continued reliance on 'anecdotal' evidence.

This study indicates that children impacted by inequality and discrimination are more likely to experience the impacts of the Climate Crisis most acutely. In Fiji, children living in urban informal settlements were identified as most at risk. Unlike their peers in rural areas, they have no land to retreat to, often lack a supportive community network, and are invisible in relocation policy frameworks (Oxfam, KII; GIZ, KII).

In addition, children living with disabilities were identified as particularly vulnerable to climate risks in all five case study countries (Fiji, Iraq, Mali, Mozambique and Peru). This was supported by a review of existing literature, which shows that children with disabilities, in particular, face heightened protection risks and barriers to inclusion, and are likely to have specific, additional needs related to forced displacement and migration in the context of disasters and climate change (UNHCR, 2021).

[Some] children living with disabilities may find it hard to verbalise or understand what is happening to their environment. Sudden-onset events can be especially stressful and scary, especially if they do not understand what is happening. They might also struggle physically to get to safety or help their families.

UNICEF, Fiji, KII

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Everyone has a series of identities, roles, advantages and disadvantages, some of which may increase their risk from climate changes and disasters. These factors can intersect to increase a child's risk further.

2.6 Child vulnerabilities and risk in different high-risk settings

Children's vulnerabilities to climate threats and risks, vary by setting. The key vulnerabilities and risks for each high-risk setting are outlined in *Table 6*.

Table 6

Climate-related child vulnerability and risk by high-risk setting²⁰

	Child exposure	Child sensitivities	Child climate risks
Low-lying coastal areas	An estimated 240 million children exposed to coastal flooding ²¹	 Children are more sensitive to: Soil and water salinisation Injury/death from storm surges 	 Food and water insecurity Loss of family land, homes, livelihoods and assets
Floodplains	 530 million children (1 in 4 of the world's children) live in flood risk areas Children are more sensitive to: Direct flood impacts (e.g. injury or drowning) Short- and long-term trauma following floods 		 Death and injury Water contamination Water and vector borne diseases Loss of life and family assets Reduced access to services (e.g. education and health)
Drylands	Almost 160 million children are exposed to high or extremely high drought severity 820 million children are currently highly exposed to heatwaves	 Children are more susceptible to: Heat extremes Dehydration Nutritional and water shortages 	 Malnutrition Water insecurity Loss of family land, homes, livelihoods & assets
+ + + Cyclone, hurricane and typhoon zone	400 million children are at high or extremely high risk from cyclones	 Children are more vulnerable to: Injury or death from strong winds Psychological trauma following cyclones 	 Death and injury Damage to family property and assets Access to services

20 Sources: Ericson, 2006 cited in IPCC, 2019; Pringle, 2018; UNICEF, 2015; UNICEF, 2018b; UNICEF, 2020a; UNICEF, 2021d; FAO, 2014; SC 2020d; Boston Children's Hospital; SC 2019.

21 Source: UNICEF 2021d

	Child exposure	Child sensitivities	Child climate risks		
Mountainous areas	767 million people live in mountainous areas This includes an estimated 222 million children	Children are more susceptible to:Water shortagesDehydrationExtreme cold conditions	 Death and injury Water insecurity Access to services 		
Urban areas	More than 1 billion children live in cities By 2050, this will be 70% of the global child population	 Children are more sensitive to: Poor air quality (e.g. from wildfires) Heat extremes 	 Heat exhaustion Respiratory issues such as asthma Water contamination 		



"It is children with disabilities who suffer the most. When disaster comes, they are not able to move fast or on their own."

Adolescent boy aged 13–16, Mozambique

"We know that those children with disabilities have the worst part, many have hearing disabilities from bad colds, but some that are healthy are not well treated. Children from other highland communities are seen as plagued, there is lots of discrimination."

Adolescent aged 14–17, Peru **Urban and peri-urban areas are particularly vulnerable to hydro-meteorological threats** as a result of their location coupled with poor planning and/or infrastructure. Yet, host considerable numbers of children (1 billion) including a large number of internally displaced children (UNICEF & IDMC, 2019).

Cities around the world are historically located in low-lying coastal areas. Coastal cities are extremely densely populated and looking ahead, this is where the social and economic threats of climate change will be concentrated in the future.

Ocean & Climate Platform, KII

2.7 Gaps in child vulnerability data and knowledge

Gaps remain in the sector's knowledge and understanding of child vulnerability to climate change, specifically, in relation to children's capacity to cope with climate change. There is little information available about how children currently deal with, or could deal with, the effects of climate threats by reducing their vulnerabilities or building their resilience. As noted in section 1, there is not enough disaggregated data to perform meaningful analysis, for example, on gender-, disability- and age-related vulnerability to climate change.

In the recommendations section, we make recommendations for better collection, reporting and sharing of disaggregated data, and for developing a repository of good practice responses for all high-risk settings, to share knowledge and close data gaps.

3 CLIMATE-DRIVEN CHILD MIGRATION AND DISPLACEMENT

Climate change has long been thought of as a 'threat multiplier' that makes it more likely that a child or family will migrate or be displaced when other factors are in play. But increasingly, more intense and frequent climate disasters such as floods and cyclones are directly driving displacement, by forcing families and communities to abandon their home for survival, whether temporarily or permanently. Slow-onset climate changes such as drought and sea level rise are also driving migration, as children and families decide to move in search of food, water, shelter or livelihoods. In 1990, the IPCC has cited migration as the single greatest consequence of climate change. But millions of children who face climate risks remain trapped in high-risk locations, unable to move due to lack of funds, social networks, fear or family or ancestral ties, placing them in even greater risk.



Box 5 Climate-driven migration and displacement in Mali

Seydou has already been displaced on multiple occasions due to flooding in Mali. Changing weather patterns are likely to result in permanent displacement.

"The bad harvests mean that one day, people will be forced to leave this area for a more fertile and wealthy area. In our region, for many years now, families have not been able to make a yield on the crops. They are therefore faced with a food insecurity situation that affects the smallest and fragile children."

Seydou 14 years old, Mali
3.1 Climate change as a direct driver of displacement

A clear manifestation of climate change is the unplanned displacement of children and families following sudden-onset climate disasters. In Fiji, an estimated 58,000 children have been displaced by floods and cyclones since 2008; in Mozambique, 685,000 people were displaced by cyclones in 2019 and future annual displacements from weather-related events are estimated at just under 42,000 people each year.

In the past, this kind of displacement has primarily been internal and short-term (Podesta, 2019). However, this study has confirmed that within highly exposed and vulnerable populations, **displacement can become both chronic and prolonged** (WMO, 2016). Protracted displacement is becoming widespread, increasingly driven by sudden-onset climate threats such as flooding (e.g. in Mozambique) or climate threats in combination with conflict (e.g. in Iraq and Mali). It is also increasingly being driven by slow-onset threats such as low rainfall and drought (e.g. in Iraq).

Climate displacement is a foreseeable reality. Increasingly, risks are outpacing resilience. If we do not address the climate crisis some people will have no choice but to move, as their lands will become inhabitable.

United Nations Office for Project Services (UNOPS), KII

3.2 Climate change as a driver of migration

Sudden-onset weather events tend to make the headlines, but the impact of gradual climate changes such as drought should not be under-estimated. Although the impact of sudden-onset weather events can be severe and losses – in terms of lives, land and assets – can be high, there is increasing evidence that the accumulated losses from small, recurrent climate changes are already significant in some high-risk settings (UNISDR, 2015). Over the past 30 years, twice as many people have been affected by slow-onset droughts than by sudden storms (EM-DAT) and slow-onset climate change is likely to become an increasingly significant factor in future displacements.

There are a few cases, primarily linked to sea level rise, where slow-onset climate change is the sole factor driving migration (Podesta, 2019). However, increasingly, slow-onset climate changes are indirectly driving migration through the loss of agricultural productivity, loss of capital, wages and income, increasing food prices, and stressed ecosystems (JRC, 2018).

Climate change does not create migration; it is a multiplier of risk.

Aga Khan Foundation (AKF), Mali, KII

Slow onset events set the stage for specific triggers of mobility, such as loss of territory or livelihoods, food and water. They may lead to displacement, however the scale of such processes, for instance sea level rise, glacial retreat, desertification, land and forest degradation, remains unknown.

Internal Displacement Monitoring Centre (IDMC), KII



"I had to move because we were short of food. I have six siblings and our crops were damaged by Cyclone Yasa; our kava plantation was all washed away."

Boy aged 13, Fiji

"There was a cyclone that knocked down many houses and I decided to leave home and look for work in order to build a better house."

Boy aged 17, Mozambique

"Even last year and in 2018, a lot of houses collapsed due to heavy rains. If it rains too much, our fields will be flooded so the harvest will not be good, in which case people will be forced to find [other] solutions to feed their families. But that will not be possible all the time so the [only] solution is to leave this very hostile area."

Boy aged 14, Mali

"We go to the city to work. Even though accommodation is expensive, we get to work, although not very much. We miss our community, but now the land does not give much. If there is a frost or drought, the crops are lost – and even worse, the animals die."

Adolescent aged 14-17, Peru



We found the strongest link between hazards and mobility in the Peruvian highlands. People are already migrating within the country due to climate impacts... Worsening climate impacts will make it harder for Peruvians to adapt where they live; simultaneously, migration in dignity that preserves people's wellbeing will become more difficult to achieve.

Potsdam Institute for Climate Impact Research and International **Organisation for Migration (2021)**

In 2012, water scarcity was identified as a key driver of migration in Iraq by IOM, and in 2019 water shortages displaced 15,000 people in the south of Iraq (IOM, 2019; IDMC, 2020c). In many cases, land and livestock owners rented out their lands or sold their herds to finance migration, and young boys in particular migrated in search of more certain livelihoods (IDMC, 2020c). This was confirmed by the experts in Iraq that we interviewed for this study, including UNICEF who noted:

We expect there has been more than one million internally displaced people (IDPs) due to climate change implications... families are losing their source of income as a result of drought. Urbanisation is increasing and people are leaving their rural villages and abandoning farming and livestock.

UNICEF, Iraq, KII

The drivers of mobility are complex, interrelated and highly dependent on context (Oxfam, 2017; Care, 2020; Nobre et al., 2019). As well as directly driving displacement and indirectly driving migration, climate processes and events also act as a threat multiplier for other crisis drivers including conflict and environmental degradation (for example, pollution or deforestation) (ICRC, 2020), which can make child migration and displacement more likely.



"Some children move from their home due to the cost of cultivating land due to the lack of rain and the dry season."

Adolescent girl aged 13–17, Iraq

"Copra farming is one of the most important things in our life. It is our source of income... but due to climate change, there can be loss of income... I decided to move for a better education and a better life."

Girl aged 15, Fiji

3.3 Children's perspectives on what drives migration and displacement

Multiple studies have shown that people do not always perceive climate change as the cause of their migration or displacement; they are more likely to attribute it to livelihoods or another socioeconomic factor, without realising that climate change may be a root cause. This was confirmed by a survey carried out by the Mixed Migration Centre, which found that only 1–2 percent of respondents identified environmental factors as a direct driver of migration.

However, children do identify climate threats as drivers of migration and displacement. The children we interviewed for this study – across each of the six high-risk settings – identified climate threats alongside other issues such as food insecurity, as a key factor in their (or their family's) decision to move (see *Table 7*). For example, in Mozambique, children highlighted that weather-related events had undermined their and their family's ability to grow food and earn a living, which influenced their decision to move. Similarly, in Mali, food insecurity resulting from rainfall variability and drought was the most commonly cited driver of migration. In Peru, children noted that the loss of crops due to heavy rain, flooding, drought, and frost had caused them to leave their communities to find work.

Climate change appears to drive migration and displacement in much the same way for boys and girls. **All displaced and migrant children move to seek a better quality of life**. In Mozambique, Iraq, Peru and Mali, boys that we interviewed noted that climate changes were driving them to seek alternative livelihoods in other locations, while girls from Fiji, Mozambique, Peru and Mali also highlighted alternative livelihoods as a key driver, alongside the need to support their families, and education opportunities.



3.4

Drivers of child migration and displacement in different high-risk settings

Across all six high-risk settings, children identified climate threats and the subsequent ecological and socio-economic effects as key drivers of displacement or migration.

Table 7

Drivers of child migration and displacement identified by children in each high-risk setting

Ecological setting	Threat	Ecological effect	Socioeconomic effect	Reason for moving
Low-lying coastal areas	Cyclones	Reduced productivity of copra (dried coconut kernels)	Loss of family income	Migrated for a better education and life (Girl, aged 15, Fiji)
	Salinisation*	Water scarcity	Water insecurity	Migrated for a better life (Girl, aged 15, Fiji)
	Warming ocean*	Loss of fish stocks*	Loss of fishing income	Migrated to support family (Boy, aged 17, Fiji)
Floodplains	Flood	No crops	No food	Migrated in search of a livelihood to support family (Boy, aged 14, Mali) Displaced in search of a livelihood (Girl, aged 17, Mozambique)
	Flood	Land and property damage	Loss of family livelihood	Displaced in search of a livelihood and shelter (Adolescent, Mali)
	Drought	No crops	Loss of income	Migrated in search of a livelihood (Boy, aged 18, Mozambique)
Drylands	Lack of rain/ drought	Crop damage/ irrigation	Cost of cultivating land	Migrated to support family (Boy, aged 18, Mozambique) Displaced in search of a livelihood (Adolescent girl, Iraq)
	Lack of rain/ drought	No crops	No food	Migrated in search of a livelihood and to support family (Boy, aged 14, Mali)
	Lack of rain	Water stock depletion	Water insecurity	Displaced in search of a better life (Child, aged 8–12, Iraq)
	Flash flood	Land and property damage	Loss of family livelihood	Displaced in search of shelter (Adolescent boy, Iraq)
	Salinisation	Crop damage	Loss of livelihood	Displaced in search of a livelihood (Adolescent girl, Iraq)

Ecological setting	Threat	Ecological effect	Socioeconomic effect	Reason for moving
+ Cyclone, hurricane and typhoon zone	Cyclone	Crop damage	Food insecurity	Displaced/migrated to secure food (Boy, aged 13, Fiji)
	Cyclone	House damage	Lack of shelter	Migrated to look for work to build a better house (Boy, aged 17, Mozambique)
Mountainous areas	Torrential rain and flooding	Crop damage	Loss of livelihood	Migrated to find new work as flooding prevented work in agriculture (Adolescent, Peru)
	Frost	Loss of livestock and crops	Food insecurity	Migrated for work as the "land does not give much" (Adolescent, Peru)
	Drought	No crops	Food insecurity	Head of family migrated to look for a livelihood (Adolescent, Peru)

*Assumed – not explicitly stated by children



"Lack of transportation money, as well as lack of information were the key challenges I faced to prepare for my move."

Boy aged 15, Mozambique

"I don't think about leaving. It would be hard for us to adapt to a new environment away from the coast because we mostly depend on the sea for our source of income."

Girl aged 14, Fiji

"I would not consider moving from here because my parents do not have any money, though I would like to live in a less dangerous area that is less cold."

Adolescent aged 12–17, Peru

3.5 Child agency in migration and displacement decisions

Children often have agency in their decision to move. The children we consulted for this study either made the decision to move themselves or in consultation with their families. In some cases, they migrated alone without their parents' consent. In Mozambique and Mali, the majority of children made the decision to move by themselves, working en route to their destination to pay for their journey.

However, children's agency can be constricted by family expectations (PC, 2013; IOM, 2013) or a lack of alternatives (SC, 2008). Case study findings from Iraq suggest that children, in particular girls, have little agency in decisions to migrate, which are generally made by their fathers or brothers.

Many of the children we interviewed described their decision to migrate as a matter of survival, rather than a choice, reinforcing that climate change is a key driver of migration and not just a risk multiplier. For example, in Mozambique, many children said that they had to move to help their family, to look for work or to build a better house, because of flood or cyclone damage. In Fiji, loss of crops following a cyclone – which led to food insecurity – was a strong push factor for children to migrate, with a long-term goal of supporting families left behind. Case study findings also suggest that incentives for young people to stay in some high-risk areas are reducing, as conditions deteriorate. When a 'tipping point' is reached, for example, they experience a lack of food, destruction of their shelter, or a loss of livelihood, children decide to move either alone or with their families.

3.6

Barriers and enablers for child migration and displacement

A number of barriers can prevent children from moving, even when the Climate Crisis is pressuring them to do so. These include personal and household characteristics (Foresight, 2011) and factors that exacerbate existing child vulnerabilities, such as the COVID-19 pandemic (Sydney, 2020). In some cases, COVID has acted as a barrier to moving, while elsewhere (e.g. some Pacific Islands) it has encouraged families to return to their home villages.

Financial barriers, lack of social networks and disabilities can prevent the most vulnerable children from moving, while placing them at even greater risk. For example, in Fiji, Mozambique, Mali and Peru, the cost of moving was the most commonly cited barrier, as well as a lack of information or support from adults, fear of moving, and a shortage of social networks, which can leave children trapped in high-risk locations despite awareness of the risks to their future.

On the other hand, family, social support networks, cultural ties and sponsorship or information from employers or others, can enable children to move. However, if children rely on the support of employers or strangers to migrate, they are at increased risk of exploitation and trafficking (Verdasco, 2013; confirmed by KIIs in Fiji and Mali).

Ultimately, the decision about whether or not to move as a result of climate change depends on children's vulnerability to climate risk drivers; their capacity to cope or adapt; whether there are other mobility drivers (e.g. conflict), and whether there are barriers to moving. In this respect, climate related mobility can be interpreted as a barometer of a child's vulnerability and their resilience (IOM, 2015).

3.7

Gaps in data and knowledge of climate-driven child migration and displacement

Key gaps in data and knowledge of how the Climate Crisis drives child migration and displacement include:

- The absence of slow-onset climate threats in migration datasets, and long-term trend analyses.
- A lack of disaggregated, qualitative data on how climate change influences children's migration decisions.
- Limited understanding about children's agency, the role of gender, and the role of technology in shaping children's decisions to move or migrate due to climate change.

In the recommendations section, we make a number of recommendations for long-term scenario planning, improving the collection, reporting and sharing of disaggregated data and researching the influence of technology on children's decisions to move as a result of climate change.

4 CLIMATE-DRIVEN MIGRATION

Historically, conflict has been the primary cause of cross-border displacement and migration but in recent years, more new internal displacements have been driven by climate change. In 2020, there were 30 million new weather-related displacements – the highest figure for 10 years – and 3 in 4 internal displacements were climate-driven. As well as growing in number, displacements due to climate change are becoming cyclical and more protracted, with fewer families returning to their home following climate disasters. Increasingly, children are migrating from rural areas to urban centres to avoid climate threats and find work, and some governments are relocating entire communities. But cities are often located in low-lying coastal areas or on river floodplains, with their own climate threats.



Box 6 Child migration and displacement patterns case study

In 2019, Ana fled Nanjua with her four children as cyclone Kenneth devastated her village in Mozambique.

They took refuge in the evacuation centre and spent three months sleeping outdoors, before moving into tents. After a year, they were allocated new land and some building materials.

They are now resettled but this year because of the lack of rain, her family are not producing any food and do not know if they will have enough food to eat. Since they no longer receive any emergency support, they exchange dry firewood for food at the resettlement centres for those displaced by the attacks in Metuge.

During the displacement, Ana's children were bullied, sent home from school and told to return to their community. Now her children go to a new school in Metuge, but it is far away and dangerous for the children to travel there.

4.1 Scale of climate-driven child migration and displacement

Although conflict remains the primary cause of cross-border displacement and migration, the latest data shows that in 2020, more people were displaced by climate and weather-related events than by conflict. IDMC reported 30 million new weather-related displacements in 2020, the highest annual figure for ten years. This included an estimated 9.8 million children (UNICEF, 2021c). By the end of 2020, 42% of the 55 million people who were internally displaced were children under the age of 18 (UNICEF, 2020a).

Climate change is already the most significant contributor to internal displacement patterns, and this trend is predicted to continue (World Bank, 2018). It is difficult to accurately and reliably predict climate-related migration data, however estimates from the World Bank suggest that in sub-Saharan Africa, Southeast Asia and Latin America, more than 143 million people could migrate internally due to climate change by 2050 (World Bank, 2018).

There has been a considerable increase in migration and displacement data collection over the past five years, but there are still major gaps (IOM, Fiji KII). In Iraq, for example, the Government's Joint Coordination and Monitoring Centre (JCMC) provides monthly reports on population movements and displacements (IOM, 2020b). However, one expert that we consulted noted that there is no supporting system to provide information to migrants and direct them towards assistance.

Table 8 Headline facts

Climate-driven migration and displacement in 2020

- 3 in 4 (74%) of the 40.5 million new internal displacements in 2020 were weather-related (of the rest, 24.2% were conflict and violence related and 1.8% were due to geophysical disasters, e.g. earthquakes)²²
- An estimated 9.8 million children were internally displaced in 2020 by weather-related threats – equivalent to almost 26,900 every day (under the age of 18)²³
- At the end of 2020, 23.1 million children were internally displaced (42% of 55 million displaced people)

4.2 Duration of climate-driven child migration and displacement

Displacements from sudden-onset weather events tend to displace large numbers of people but are usually short-lived (ODI, 2016; Flavell *et al.*, 2020). Experts we consulted in Fiji and Peru noted that such events generally result in immediate, short-term displacement to evacuation centres, or to the homes of relatives. Similarly, in Mozambique, it was noted that most weather-related displacements do not exceed three months, with families moving together to evacuation centres, which are often schools (MCSC & RDC, KII). However, children highlighted that even if displacements are short-lived, the impacts can be ongoing and far-reaching. Once the emergency has passed, many children and their families return to their origin communities to live in temporary shelters, where they may struggle to meet basic needs once they are no longer receiving assistance.



Box 7 Challenges of returning home post-displacement in Fiji

Elenoa lives in a rural coastal village in Fiji. She describes the challenges of returning home following displacement by Tropical Cyclone Yasa, in December 2019.

"After the cyclone, we returned home. Every household belonging was badly destroyed. We had to live in a tent. We had very little to eat for a few months. It was hard for me to see what had happened to my village."

Elenoa 13 years old, Fiji

'Semi-permanent', protracted or permanent displacement is increasingly common following sudden-onset weather events and has a significant impact on children. It can result in a loss of education, limited access to basic services, and increased protection risks.

Semi-permanent displacement is a strategy adopted by internally displaced persons (IDPs) in some countries such as Mozambique, where communities regularly return to high-risk floodplains on a temporary basis, for planting and harvesting (Schraven *et al.*, 2020). This was confirmed by the experts we consulted, who noted that displacement locations can sometimes become "permanent second zones to live in" (UEM, KII). The children we consulted in Mozambique described living in a school for several months, before moving into makeshift tents nearby to allow classes to resume (FGD). In Peru, it is also increasingly common for households to live across multiple locations following climate-related displacements. However, in some instances, families choose to return to high-risk locations despite being aware of the risks, because they are unable to secure a livelihood in their new location.

In Fiji, the high climate risks associated with returning to origin communities has resulted in some protracted displacements. For example, children from Tukuraki village in Fiji, spent five years displaced in temporary shelters following devastating storms and mudslides in 2012, before being relocated to a new lower-risk site (IDMC, 2020a).

There is evidence that slow-onset climate changes are disrupting seasonal mobility patterns. Circular or seasonal migration is increasingly used as a coping strategy in places with high climate variability or recurrent weather events (Oxfam, 2017). For example, in Asian mountain settings, families are increasingly moving to urban centres during winter months in search of more certain livelihoods (ICIMOD, KII). In Mali, seasonal child migration to urban areas from dryland farming communities (following harvesting, until the next rains come) is increasingly becoming long-term as seasonal weather patterns become less predictable (IIED, KII) and pastoralist families are moving further to find pasture (FEWS NET, KII). In Peru, although migration has long been a way of life in mountainous areas, seasonal and circular migration is increasingly permanent as children move away from dwindling opportunities in rural areas. Households are increasingly adapting by living in multiple locations or staying away for longer (IPCC, 2019c).

Many households [in the Peruvian Andes] are organised trans-locally (across multiple locations) and membership is fluid, as individuals move in and out in response to household shocks, and the exigencies of schooling and work.

Crivello 2015

ÎN

"In the future, if a big flood or a big drought arrives, we will have to leave our area and go to another locality where there is less of a problem... Almost every year, heavy rains cause significant material damage in the village of Barbé. Here, many houses are built with $banco^{24}$, and that is why they do not withstand heavy rain ... We believe that if this continues, sooner or later people will be forced...to live their lives far from the risk of floods and droughts. The fields also do not produce much, we are seeing more and more strong winds blowing in some localities. In the fields, we see advances compared to the desert. During our young childhood, the surroundings of the village were rich in animals."

Adolescent

aged 9–17 years, Mali

24

Banco is a material made by mixing mud with water and rice husks, and it is used in Mali for construction

25

Also known as 'managed retreat' and involves the strategic relocation of people, assets, and activities to decrease risk (Hanna et al. 2021).

26 Spiritual and cultural connections to ancestral lands in Fiji (and other Pacific Islands and Territories) lead many households to refuse to shift their houses, even in the face of increasing climate risks. There is also increasing evidence of cross-border seasonal migration from high climate-risk countries impacted by slow-onset climate changes such as sea-level rise, which is promoted through regional and bilateral agreements (Oxfam, 2016). However, in the case of seasonal worker migration schemes in the Pacific (to New Zealand or Australia), spouses and children are excluded from joining and left behind (IOM, Fiji, KII).

Migration triggered by slow-onset climate changes is increasingly

permanent. Child focus group participants from Mali noted that because climate change is impacting livelihoods in rural communities, households are increasingly dependent on child migration to urban centres – and because of the lack of livelihoods in their origin communities, many children do not want to return home. Elsewhere, desertification, recurrent droughts and erratic rainfall are undermining resource availability and livelihoods, and driving children and families to move permanently from their places of origin. In Iraq, displacement has become "chronic, cyclical, and protracted" (IDMC, 2021a), which was confirmed by child focus group participants and the experts we consulted.

Many of the children we consulted believe they will have to move away from their homes permanently in the future because of climate change. In Mozambique, the majority of children expressed concerns about increasing erratic rainfall patterns and increasingly unbearable temperatures. In Fiji and Mali, children described their current situation as untenable and said that they expected to move in the not-too-distant future.

Permanent planned relocation²⁵ of entire communities as a result of coastal erosion, flooding or mudslides is already occurring in many countries, although often considered a last resort option. Governments in several Asia Pacific countries (e.g. Vietnam, Vanuatu and Papua New Guinea) have already relocated some vulnerable populations (IOM, 2016). In Fiji, six communities (720 households) have been moved to customary land close to their village of origin (generally 4–5 km inland) and a further 45 coastal communities have been identified as in need of urgent relocation (MoE, KII). As noted by a key informant from the Ministry of Economy, "relocation is not just a movement of people, but also a movement of livelihoods" (MOE, Fiji, KII).

However, child-centric evaluations of such relocations are missing and there are also issues such as loss of social and cultural identity,²⁶ land tenure and resource ownership, and intergenerational barriers to overcome (elders are reportedly more reluctant to move than children) (TO, KII; UNICEF, KII).

The ancestral land – the 'vanua' – is your identity. It determines your place in life. All cultural systems and all social interactions are dictated by your belonging to the 'vanua.' To lose one's land, is really to lose one's sense of direction as a person... We need to engage children and youth to make sure that the relocation is beneficial to them, to ensure that they feel they have a future in the new location.

Ministry of Economy Fiji, KII In some countries including Mozambique, displaced families are resettled by governments in new locations. For example, 89,000 people (including an estimated 46,280 children) were resettled following cyclones Idai and Kenneth in 2019 (IDMC, 2020a). Yet, the absence of long-term strategies to support livelihoods and ensure access to essential services in the new locations, has compromised the sustainability of such solutions. As a result, many families are choosing to return home to the floodplains, despite acknowledging future risks (Sieroka, 2020; NRC *et al.*, 2015). Although they highlighted significant challenges in their new location, none of the resettled children from Mozambique that we consulted envisaged returning home.

To be sustainable, state-led resettlement programmes must take a long-term approach and ensure that children are at the heart of future responses and solutions to displacement. This is discussed further in the recommendations section.

4.3 How and where children are moving

Currently, the vast majority of climate-related migrations and displacements are internal, with the exception of border regions and small atoll states. A smaller proportion of people move to neighbouring countries, and an even smaller number migrate further (CCEMA 2010; World Bank, 2018). One study suggests that geographical mobility patterns are unlikely to change in the future. Most migrants and displaced people will remain within their own country or region, and most are likely to head to urban centres (ODI 2016).

Children who took part in this study confirmed that **most climate-driven child migration is towards urban areas – which often have climate risks of their own**. For example, a key destination for children in Mozambique is Maputo, the capital city and economic hub in the south. Maputo is a rapidly expanding, high climate-risk coastal city (RDC, KII), where many vulnerable migrants are forced to settle in low-lying, marshland zones (UN Habitat, n.d) in the direct path of cyclones and sea surges.

In Mali, the experts we consulted for this study predict that cross-border migration will increase in future, in part driven by climate change (although this was not echoed by the majority of children). In Mozambique, cross-border seasonal migration is a common coping strategy. Similarly, Mali has some of the highest numbers of unaccompanied migrant children travelling across borders, often as far as Europe (Carrion *et al.*, 2018). Key informants predicted that increasing numbers of children will cross borders if they are unable to make a livelihood in urban areas (Direction Régionale Agriculture Mopti, KII).

So many youths are trying to get to Algeria, to get to Europe. They are horribly treated along the route. If they had ways of staying here, then they might not leave. In between harvests, there is nothing for them to do, and they also see that the granaries are empty. What is the incentive to stay?

Direction Régionale Agriculture Mopti Mali, KII



"I came alone, but if there are no better working conditions, I can cross the border."

Boy aged 16, Mozambique

"Many boys have left for the cities looking for a way to support their families."

Child aged 8–12, Iraq

"I moved alone, and I will return when I have enough money to move back and help my family."

Boy aged 13, Mozambique

Research findings suggest **there is an increase in the number of children migrating alone.** For example, 300,000 children migrated alone or without their families in 2017, which is five times more than in 2012 – and the figure is likely much higher now (IFRC, 2018). In Mozambique, most migrant children we interviewed reported travelling alone to an urban area, which aligns with the information shared with us by experts (e.g. UEM, KII) and in existing literature (e.g. Verdasco, 2013), which describes a tradition of children migrating to gain status as they approach adulthood. In Iraq, the children who participated in the study said that boys tend to leave on their own for the cities, which was confirmed by key informant interviews (e.g. MOP, KII).

In Fiji, children said they travelled to urban areas mostly unaccompanied, to live with relatives or alone. In Mali, the children we interviewed reported high levels of unaccompanied migration, with children aged between 12–18 years old walking until they find work, and then continuing onwards.

4.4 Which children are moving – and which are not

Existing studies on climate-driven child migration and displacement rarely disaggregate data by age, gender, or disability. Nevertheless, the literature predicts an increase in child migration as a result of both demographic and climate changes, as part of mixed migration flows²⁷ (MMC, 2020).

Our study confirms that although children of all ages are displaced by climate events and processes, **older children (>12 years old) are increasingly migrating as a result of climate change and climate variability.** Case study findings suggest that whereas child migration in the past was primarily made up of boys, both genders are now increasingly migrating to urban centres (e.g. in Mali). However, there is currently a lack of adequate data to track climate-related child migration trends.

Not all those living in high-risk settings are able to move; millions of children remain "trapped" and face "double jeopardy" because they are unable to move due to a lack of assets or other barriers (Foresight, 2011). Migration away from high-risk climate threats is a coping mechanism, so children who stay are acutely vulnerable. Yet, migration is expensive, and children and their families may lack the social, financial, physical, or political assets they need to move away.

Our review of existing literature suggests that **climate change will increasingly erode the ability of children and their families to move – so it will act as both a driver of movement and a barrier to movement, keeping the most vulnerable children trapped**. For example, in Mali, key informants noted that drought-affected communities can lack the resources to move to nearby urban areas, let alone to migrate long-distance. The experts we consulted in Mozambique highlighted that many children are trapped in high-risk locations because they are caring for elders or sick parents, or lack the money, education or skills to pursue new livelihood options (UEM KII) – leaving them highly exposed to exploitation (e.g. trading food for sexual services) (RDC, KII). In Fiji, many families exposed to sea level rise are choosing not to move due to ancestral ties and cultural obligations to the land (IDMC, MoE & UNICEF, KII).

Increasingly, climate change is likely to exacerbate poverty levels, making migration more difficult for those who lack the resources. Case study participants, particularly those from dryland settings, confirmed that drought-related poverty meant they lacked the resources to move long distances, so migration was either phased, or children and their families remained "trapped" in high climate risk locations. In the recommendations section, we recommend that programme implementers must prioritise programming for children unable to leave high-risk ecological settings.

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Mixed migration flows are complex migratory population movements including refugees, asylum-seekers, economic and climate migrants where multi-causal processes (including climate change) play a part. It comes down to cultural values and perception of risks. Some might believe that the risk of moving away from the ancestral land and breaking with their traditional obligations is greater than the risk of constant flooding.

Transcend Oceania, Fiji, KII

While environmental change is likely to make migration more probable, it could also make it less possible... there is a strong possibility that immobility will become the biggest and most relevant issue in the Horn of Africa when it comes to the link between environment and mobility.

MMC, 2020

To support our understanding of the causal drivers of migration and ensure that our responses to displacement are faster, better targeted and more cost-efficient, a more sophisticated analysis is essential. Save the Children is piloting a predictive analytics model which predicts the characteristics of displacement events, such as scale, geography and demography. The aim is to help children through stronger responses that more effectively meet the needs of displaced populations, and to provide an evidence base for long term planning and advocacy. Future work will build on Save the Children's predictive analytics expertise to carry out long-term scenario planning for child migration and displacement in high-risk climate settings.

4.5

Migration and displacement patterns in different high-risk settings

Research confirms that increasingly, migration and displacement patterns will be highly dependent on climate change scenarios and how they impact different high-risk settings.

For example, recent research in Peru highlighted that if temperature increases are limited to 2°C by the end of the 21st century, "climate impacts in Peru would add severe stress on migration patterns; however, it would allow for more time and options for adaptation" (PIK and IOM, 2021).

Under a more pessimistic long-term climate scenario with temperature increases of 4°C there could be, "extremely severe climate impacts in Peru, possibly rendering parts of the country uninhabitable." Impacts would include "a near-complete melt-off of glaciers, sea level rise of up to 0.7 metres in conjunction with more frequent El Niño events, as well as extreme heat stress in the Amazon Basin. These threats could arise simultaneously, result in parallel disasters, and trigger migration and displacement of an unprecedented scale" (PIK and IOM, 2021).

Table 9

Migration and displacement trends in different high-risk settings

High-risk setting	Climate-driven child migration and displacement trends		
Low-lying coastal areas	 Current displacement is mostly internal, short-lived but increasingly protracted Planned internal community relocations have started in Asia Pacific and are likely to increase (e.g. Fiji has identified 45 communities in urgent need of relocation) Future cross-border relocations are being explored for small atoll states (e.g. Kiribati has purchased land in Fiji) 		
Floodplains	 Current displacement is mostly internal, short-lived but increasingly protracted 10 million people were displaced by floods in 2020 (IDMC, 2021) Resettlement of displaced families is taking place (e.g. in Mozambique) but many families return to more fertile floodplain land despite the risks Repeated and longer displacements and permanent migration are evident 		
Drylands	 Seasonal migration patterns are being disrupted by slow-onset climate change Predicted increase in seasonal migration linked to more extreme wet and dry seasons associated with higher climate variability (IIED, KII) Increase in permanent migration to urban centres and cross border (e.g. from Mali) with recurring drought and desertification (IIED, KII) 		
+ Cyclone, hurricane and typhoon zone	 Current displacement is mostly internal, short-lived but increasingly protracted 14.6 million were displaced by storms in 2020 (IDMC, 2021) Predicted increase in internal and cross-border migration linked to more intense and frequent storms (IOM cited in Linares, 2020) 		
Mountainous areas	 Current displacement is short-distance, informal and "invisible" (ICIMOD, KII) Seasonal migration towards urban centres in the winter months is likely to increase and may result in permanent movement (e.g. Asia) Entire families are migrating, and cross-border migration is rising Relocations are already taking place (e.g. China) 		
Urban areas	 Migration from rural to urban or peri-urban areas is common and accelerating Government relocations and resettlements are often to urban areas Displacement is likely in cities on river floodplains or in low-lying coastal areas 		

4.6

Gaps in data and knowledge about child migration and displacement patterns

The lack of disaggregated data on child migration and displacement patterns, and unreliable predictions of future trends, are significant gaps that limit the sector's ability to respond effectively.

- Comprehensive global datasets do not yet exist for climate-driven displacements, internal and cross-border migrations, planned relocations, or climate immobility (Walker, 2021), although several initiatives have started to collect information across several countries (IOM 2020).
- A lack of gender and/or age disaggregated data (CARE, 2020; ODI, 2016a; UNICEF 2021c; UNFCCC, KII) makes it difficult to capture how and where children are moving, any differences by gender or age group, and whether children are moving with their family or alone. An increasing number of organisations are collecting and publishing disaggregated local data, but age groups are not standardised (IDMC 2021).
- Global estimates exist for protracted displacement following disasters (ODI, 2016a) but data to inform action and protection for children left behind is scarce and mobility data is lacking where conflict is linked to disaster displacement (IOM 2020).

Data collection is an important area to strengthen. In our context, we struggle to get data from communities and partners... issues of confidentiality, or reprisals from state authorities limit data quality. Getting relevant data on uncertainties is important. We need rapid assessments.

Save the Children Programme Partner, Gambia

• Predictions of future migration and displacement patterns are felt to be unreliable as "current patterns may change significantly as stressors increase and opportunities reduce" (MMC, 2020).

More data is needed on this topic, and even more data is needed to make visible the faces of the people directly affected by climate change: how are they perceiving and suffering the socioeconomic and social impacts of a changing climate on a daily basis, and how well prepared are they for an uncertain future?

PDD, UNICEF Symposium

Multi-stakeholder initiatives such as the International Data Alliance for Children on the Move (IDAC) are beginning to emerge, aimed at improving statistics and data for child mobility (UNICEF, 2021c). In the recommendations section, we make a number of recommendations for improving the collection, reporting and sharing of gender, age and disability disaggregated data across disciplines and countries, and building on the ongoing work of Save the Children's Migration and Displacement Initiative (MDI) to improve the use of predictive analytics for climate change scenario planning.

5 IMPACTS OF CLIMATE-RELATED CHILD MIGRATION AND DISPLACEMENT

THE FEEL

Planned migration can be a positive adaptation strategy that reduces children's exposure to climate threats now and in the future and improves food security, access to essential services and livelihood opportunities.²⁸ But children who migrate, are displaced, or are relocated as a result of climate change can also face wide-ranging negative impacts – such as hunger, fear, anxiety, loss of education and increased exposure to violence and exploitation – both during and after their move. Unaccompanied children, girls, and children from minority groups and low-income households, are affected the most – as well as children who are left behind.



Box 8 Child displacement impacts in Iraq

The girls from Iraq who took part in this study are from farming families that owned land in Jurf al-Sakhar, an area freed from ISIL in 2014. Drought and insecurity are preventing their safe return. They are living in protracted displacement in Latifiyah, a town south of Baghdad.

"Girls are prevented from completing school [while displaced] because it is not safe or because of the high costs. Girls who go to school struggle because there are no latrines for them in school. They have to go to nearby houses, and they get harassed on the streets. We heard from our relatives and saw that many young girls are forced to get married."

Adolescent girl aged 13–17, Iraq

28 Foresight, 2011; MPI, 2020; SC, regional workshops.

5.1 Impacts on children during migration or displacement

Children are particularly vulnerable during displacements. They often stay in evacuation centres or temporary accommodation, where essential services such as education, health care and child protection, may not be available. The children and experts we consulted highlighted the lack of protection during displacement as a key concern across all case study countries. In Fiji, IDMC highlighted the difficulty of protecting displaced children who chose to stay with relatives following a disaster instead of at a designated evacuation centre, while children in Fiji expressed safety concerns about the evacuation centres themselves.

Displacement does not always happen in evacuation centres – children may seek shelter at relatives – and this is where protection risks emerge. At times of displacement, children are the least empowered. They are just told what to do and are very vulnerable.

IDMC, Fiji, KII

In addition to adapting to the loss of their home, their assets and their social networks with limited access to support, displacement can undermine children's stability and resilience and have devastating impacts on their physical and mental health (UNICEF, 2020a). Children who are separated from their family during displacement, or are displaced for a protracted period, suffer the most and may resort to negative coping mechanisms (UNICEF, 2017b; IDMC, 2020a). As one key informant noted, *"children are not as resilient as we think"* (UNOPS, KII).



Litea lives in a low-lying informal settlement on the outskirts of Suva, the capital of Fiji. When the category 5 Cyclone Yasa was announced in December 2019, her family made the decision not to move to the evacuation centre.

"When Cyclone Yasa was about to hit Fiji, we were told to evacuate but my family decided it was not safe to move to the evacuation centre. We stayed home and prepared to hide under the bed if the winds picked up. A few days later, we learnt that a girl from my settlement was raped at the centre."

Litea

15 years old, Fiji





"Night-time is dangerous. My friend and I were assaulted."

Boy aged 17, Mozambique

"Many children travel without knowing the destination, they can be trafficked."

Boy aged 16, Mozambique



"Boys try to stay in groups to avoid being assaulted. It's dangerous in the streets."

Adolescent boy aged 13–18, Mozambique

"I traded work for a shelter during the move. I found a family that agreed to host me, and they gave me a job."

Boy aged 13, Mozambique

Child migrants are particularly vulnerable while in transit and can experience significant violation of their rights to health care, education, protection. This can stem from or be compounded by a lack of child migration data (especially for internal migrants), a lack of legal migration pathways, a lack of documentation, and a lack of information available to children on the move (Foresight, 2011; UNICEF, 2017a). In Mozambique, the top concerns of children we consulted who were moving short distances were **hunger** and **fear**, whereas children in transit to Maputo, the capital city, reported **protection concerns** arising from the lack of safe shelters on their route.

We do not want to discourage migration, but how do we ensure protection? How do we give children good information? I have not seen anything on awareness-raising at any level, including communities who are the first point of call.

Save the Children Programme Partner, Gambia

Many of the child migrants that we interviewed, adopted a range of coping mechanisms to counteract risks. For example, working in exchange for a safe place to sleep, moving in groups to reduce the risk of being assaulted, and relying on the generosity of strangers. Children told us that young unaccompanied migrants with a lack of work experience are most at risk – suggesting that child labour is a key coping mechanism for children on the move. This is substantiated by the fact that unaccompanied migrant children represent 27% of child labourers in Mozambique (IFTRAB, cited in Verdasco, 2013).

5.2 Impacts on children after migration or displacement

After migration or protracted periods of displacement, children may continue to face threats and rights violations, not unlike those they experience while on the move. Children who travelled unaccompanied are at greater risk of exploitation and overwork (AKF, KII Mali). Many migrant children live in unregulated and unsafe informal settlements, where access to basic services may be difficult and vulnerabilities may be heightened. For example, many children move to urban centres to find work – but they are often located in low-lying coastal areas or on floodplains, so they remain highly exposed to extreme weather events with limited coping mechanisms (Schraven, 2014).

In Mali, Mozambique, Peru and Iraq, child migrants told us that they resorted to negative coping mechanisms such as child labour, begging, prostitution, crime, or joining armed groups. They also confirmed that they faced serious protection risks such as child trafficking, smuggling or early marriage, as well as harassment and discrimination, which they attributed to competition for jobs, shelter and services, or perceived affiliations with militant groups (SC, 2016). Many children said they had to work to support their families or themselves, so were out of school.

Since climate change has reduced traditional activities, there is not a lot of work and armed groups can fill that gap, promising livelihoods, security, power and economic integration. Many armed groups provide loans and subsidies to their members.

FEWS NET, Mali, KII



"Life hasn't improved much [since moving to the city]. I have accepted. Sometimes I go without the things I need like food or stationery."

Boy aged 17, Fiji

"We heard from our relatives and also saw that many young girls are forced to get married."

Adolescent girl aged 13–17, Iraq

"There is only one water fountain, water does not always come out, and there is no school or electricity."

Adolescent girl aged 12–15, Mozambique



"It hurts a lot to see my siblings in tears because of my decision to move. After moving, I kept on thinking about them. No one knows how much they really mean to me."

Girl aged 17, Fiji

"We miss our parents, and in some cases, they send us to the people who will take care of us and not to school, and we must work for them."

Adolescent aged 14–17, Peru The economic instability, the malnutrition of families, the lack of income and basic services, all become a breeding ground for conflict because it supports a total discontent in the family. Youth have gone through these conditions of suffering, come to the city and face the lack of work and lack of opportunity. This makes boys join with other boys and initiate coping mechanisms like the consumption of alcohol and other vices, even crime, because they have been personally frustrated.

Regional Directorate of Agriculture of Ucayali (DRAU), Peru, KII

Our findings confirmed that displaced children and unaccompanied child migrants can experience significant psychological impacts following their move. Displaced children may experience post-traumatic stress, somatic stress and anxiety (UNICEF, 2020b). ICIMOD research with mountain communities found that children experienced severe trauma from witnessing disaster events, with long-term implications:

Children carry profound trauma from witnessing disaster events, with long term implications for mental wellbeing, aspirations and substance abuse. No help is generally available.

ICIMOD, KII

When we speak to children after a disaster, they use vivid imagery to tell us about their experience. After Tropical Cyclone Yasa, a child told us he could hear the monster – referring to the sound of the wind... It is important to be able to share. Some adults we talk to share stories of disasters from their childhood for the very first time. They carry this trauma with them.

Transcend Oceania, Fiji, KII

Children said that they missed their families after migrating alone, and experts in Peru highlighted frustrations linked to the gap between pre-migration perceptions and post-migration realities (Piura Transport, KII).

The children who are not ready to live in the city arrive in such a psychological state. Parents cannot control their kids who then become bandits or join armed groups; groups promise livelihoods. Children are exposed to child trafficking.

Association pour le Développement des Initiatives Communautaires (ADICOM), Mali, KII

Life does not always get easier following government resettlement.

Children from Mozambique noted that although government support is no longer available once they are resettled, they may continue to lack access to education and essentials such as food, water, electricity and safe spaces to play, and continue to have protection concerns. Children said they resorted to negative behaviours, such as child labour in order to cope with the situation.

5.3 Migration as an opportunity

Migration can be an influential driver of sustainable development for child migrants, those left behind, and host communities (IOM, 2018a) and as such, it is an important climate change adaptation strategy. Some of the children we interviewed highlighted improved access to education, transport, food, and social media networks.





"Life has improved since moving to the city. Before, I was not able to go on social networking in the village and now I know what is going on in the world. I now have access to school, transportation and the internet."

Adolescent girl aged 13–17, Fiji

Box 10 Child migration and displacement benefits and challenges in Fiji

Josefa has migrated with his family to an informal settlement in Suva, the capital of Fiji. He shares some of the benefits and challenges of migration.

"I come from Totoya, a small island in the Lau group. A year ago we moved to Suva. There was a conflict in my family because we kept running out of food and in the end, we had no choice but to move.

The good thing about moving to Suva is that we have better access to the hospital and schools... In Suva, we have no plantation, and the sea is far from where we live. My parents were both unemployed [at first] and food was one of the main problems [we faced], but my dad managed to get a casual job and it helped us."

Josefa 16 years old, Fiji

Children who are left behind by migrating parents can suffer from psychological, health, nutritional, social, and protection challenges (SC, 2017; UNICEF, 2010) **but may benefit from the money that their parents send home.** In addition to the loss of emotional security, children that we consulted voiced their concerns about protection when left with older brothers, and reliance on assistance from extended families or charities. Children from Peru noted that the absence of parents resulted in underperformance at school or dropping out of education altogether. However, children acknowledged there can be benefits, such as remittances sent home by their parents, which allow them to buy essential items. This is supported by existing literature, which confirms that children who are left may benefit from remittances sent by family members (MPI, 2020).

Remittances certainly play an important role, but at the end of the day children care mostly about emotional security. They do not want to be separated from their parents.

UNICEF, Fiji, KII

Migration can have positive impacts for host communities – it can fill labour gaps, foster innovation, and boost cultural diversity and national income. It may also have negative impacts – including overstretched resources and environmental degradation (ODI, 2017; IOM, 2018a; UNHABITAT, KII, UNICEF, 2020b).



"Fathers who migrate buy us all the materials we need. We do not need [to rely on] the help of the uncle, relatives, or the mosque. We don't have to work anymore."

Adolescent aged 8–12, Iraq

"The benefit of my father migrating to find work is that I can finish my education with his full support. I really miss my father's love. Some days I talk to my grandparents about it."

Girl aged 16, Fiji

"Money [can buy you] more clothes, a modern tablet [electronic device], but if there is no security they can rob us, it is a problem as we are more exposed."

Adolescent aged 12–17, Peru



The experts we consulted mostly identified negative impacts, including a rise in informal settlements, overcrowded schools, resurgence of diseases, and the financial burden for extended families expected to take care of children (Oxfam Fiji KII; MOE Fiji, KII). For example, schools in Iraq's urban areas are struggling to cope with increased demand and are implementing multiple shifts to accommodate more children (IOM, 2017b). In Fiji, there has been a resurgence of tuberculosis in crowded urban areas with high migrant populations (UNICEF, KII). It is clear that national policies and economic context play an important role in the outcomes of migration (UNESCAP, 2015); with the right interventions (e.g. urban planning), outcomes can be positive for both migrants and host communities.

Extractive industries and intensive farming activities attract a lot of rural-rural migrants in Western Africa. This puts a lot of environmental pressures on the host communities. We need solutions that not only address the rights of migrants, but also the rights of host communities.

IOM, KII



"During displacement, the girls are prevented from completing school because it is not safe, or because of the high costs."

Adolescent boy aged 14–17, Iraq

"The boys are worse off. We are forced to work to help our families. We work as daily workers in the markets and streets, and we face many problems."

Adolescent boy aged 14–17, Iraq

5.4 Amplifying inequalities: a disproportionate impact for vulnerable groups

A child's gender, age, nationality, legal status, ethnic or religious identity, disability, and social status will influence how they are impacted by climate-driven displacement or migration (UNICEF, 2017a; UN-OHCHR, 2018). Unaccompanied migrants (who are most often boys), girls, children from minority groups or low-income households, and children left behind by migrating parents are the most significantly affected and can suffer disproportionate impacts compared to adults (SC, 2017; AFK, KII Mali).

Gender

Internally displaced girls face increased risk of harassment, gender-based violence (GBV), sexual exploitation and forced marriage. They also have reduced access to gender-targeted (e.g. reproductive health) services and may drop out of school (UNICEF 2021c; SC, workshop; UNICEF/IDMC/Plan, KII).

Girls and women who are in refugee camps always feel harassed by authorities or NGOs. They isolate themselves to avoid exposure. They stop going to clinics for prenatal care and don't access other basic care and services.

UEM, Mozambique, KII

Boys, in particular, may be forced to work rather than go to school, to support their family.

In Asia, trafficking for sexual or labour services is especially prevalent during and after migration. Trafficking and smuggling networks are also common in Latin America, East Africa, and West and Central Africa (SC, workshops).



Age

Adolescent girls are more likely to travel unaccompanied and are more vulnerable to challenges such as forced marriage or sexual assaults as a result of their sexual maturity (IDMC, 2020b). They are also more likely to be engaged in hazardous labour (SC, 2008) or recruited by non-state armed groups (UNICEF & IDMC, 2019). Experts confirmed that older children are more likely to adopt negative coping mechanisms such as child labour, in some cases due to cultural expectations that they should help their families.

Most impacted are the older children. They feel they have an obligation to help their families recover. They are the children most likely to get involved in child labour post disaster or drop out of school.

UNICEF, Fiji, KII

Disability

People living with disabilities are among the "most vulnerable and socially excluded groups" in any displaced community, however they are often invisible in the child migration discourse (IOM, 2016b). Unplanned migration, in particular, puts children living with disabilities at increased risk of exclusion from education, a loss of health care, and exposure to exploitation and violence, including sexual violence (IOM, 2016b). Children from all our case study countries felt that children with disabilities were most at risk from climate risks and once displaced, suffered the greatest impacts. For example, children living with disabilities in Fiji highlighted difficulties accessing help and moving around in evacuation centres. Similarly, key informants from Peru noted that temporary shelters for displaced families were not equipped for children with motor disabilities (IFBS, KII).

5.5 Spotlight on urban areas

The impacts of child migration and displacement are primarily shaped by sociocultural, economic, and political factors rather than ecological settings. However, urban areas are a key destination for children who migrate to avoid climate risks; as many as 70% of Dhaka's slum dwellers are climate-induced migrants (IOM, 2020b) and protracted displacement is largely seen as an urban challenge in countries such as Mali and Somalia (SC, 2020a).

Urban migration can present benefits for children including access to job opportunities that are less dependent on the environment, which can reduce their vulnerability to the Climate Crisis. However, migrating to an urban area is a risky strategy for avoiding climate risks. Cities are often densely populated and located on floodplains or in low-lying coastal areas – so moving to them can actually increase children's exposure to climate risks. Many child migrants live in unsafe, informal settlements where access to basic services is compromised and vulnerabilities are heightened (IOM, 2020c).

We are currently not equipped to deal with population growth in informal settlements. Housing standards are inconsistent, and migrants are further exposed to disaster risks in these locations. Informal settlements host most of the (climate) displaced but are left out of the response.

IDMC, Fiji, KII

5.6

Summary of the impacts of climate-related child migration & displacement

The positive and negative impacts of climate-related child displacement and migration are summarised in *Figure* 4, according to the opportunities and challenges for the three global breakthroughs that Save the Children is working to achieve by 2030 (to ensure that every child can **learn**, **be protected** and **survive**) and the overarching principle of the Child Rights Convention (children's right to **equality and non-discrimination**).

Figure 4

A summary of potential impacts during/after mobility

	Learn	Be protected	Survive	Equality
	Right to education	Right to protection	Right to health and nutrition	Right to equality and non-discrimination
	Better access to schools	Safer environment	Better access to health services	Increased participation
acts	Improved access to skills and			
e imp	vocational training	Better access to protection services	Better WASH facilities	
Positive impacts	Exposure to digital technology			
	Disruption to education (e.g. loss of documentation	Violence, exploitation and child labour	Overcrowded, unsanitary conditions	Loss of identity
its	Drop out (to work)	New risks and conflict over resources	Poor shelter	
Negative impacts	Overcrowded schools	Family separation	Exposure to new risks	Discrimination/
	Discrimination / Loss of social bullying cohesion		Poor nutrition	stereotyping
		Stress and anxiety		

Source: focus group discussions and key informant interviews

5.7

Gaps in data and knowledge on climate-related migration and displacement impacts

Gaps remain in our knowledge of the impacts of climate-related migration and displacement on children and their origin and host communities.

- Relocation data and insight: more research is needed on the impacts of relocation on children, particularly from low-lying coastal areas (AP, workshop)
- How coping mechanisms vary in different high-risk settings: there is a lack of extensive research exploring climate-related coping mechanisms in different high-risk settings (for example, early marriage among girls in Kenya during a drought).

In the recommendations section, we make a number of recommendations for how we can improve our understanding of the impacts arising from climate-related displacement and migration, for example, by continuing to capture and share the perspectives of children affected by climate-related migration and displacement in each high-risk setting, as well as building a bank of good practice responses that mitigate the negative impacts of child migration and displacement and maximise the positive outcomes.

6 GOVERNANCE OF CLIMATE-RELATED CHILD MIGRATION AND DISPLACEMENT

The Climate Crisis is already impacting millions of children who live in high-risk locations. In 2020, an estimated 9.8 million children were newly displaced as a result of weather events such as floods, cyclones and storms (UNICEF, 2021c) and many more children migrated to avoid climate threats – often at great risk to their health, wellbeing, education and safety. Yet there are currently no global policy frameworks that comprehensively protect the needs and rights of people displaced by climate change, let alone the specific needs of children. There is, however, good practice at regional and country level – which must be built on to ensure that every child who has to move or migrate because of climate change, has their rights upheld and their voice heard.



Box 11

Climate-related child migration and displacement governance case study

Isabella lives in the coastal settlement of Callao in Peru, an urban centre within the Lima metropolitan area. Her community is in a low-lying coastal area facing the Pacific Ocean, which is impacted by storm surges, high waves, flooding, and sea level rise.

"I have participated in discussions on environmental issues with those who make decisions, for example, in the Callao Region we are summoned to participate on behalf of our school."

Isabella 17 years old, Peru

6.1 Global frameworks

There are currently no global policy frameworks that comprehensively address the needs and rights of people who are affected by climate-related migration or displacement. Although there are international agreements on climate change, disaster risk management, development, and human rights, they all address climate-related migration and displacement in different ways. This is confusing for national governments, who try to implement these agreements in line with their own development objectives (ODI, 2016b). The siloed approach continues at national level, where migration cuts across the agendas of different government agencies but is not fully integrated into key national policies or strategies.

A number of institutional frameworks and mechanisms are in place to protect the rights of migrants and those who are forcibly displaced. The Global Compact for Safe, Orderly, and Regular Migration (GCM) (UN, 2018), was voluntarily adopted by 163 countries, and specifically references climate change as a driver of displacement. In addition, new policy forums (such as the Platform on Disaster Displacement and the UNFCCC Task Force on Displacement) set the stage for more strategic and integrated treatment of climate-related migration and displacement, including consideration of the rights and protection of the most vulnerable. These new mechanisms call on countries to enhance their capacity to manage climate-related migration and displacement; address the drivers and impacts through integrated approaches that reduce the need for relocation; and support those who are forced to move.

As the governance architecture for migration and displacement evolves, there is an increasing opportunity to address the needs of the most vulnerable groups including children – a current significant gap. Although a strong international legal framework is in place to protect the rights of child migrants, significant implementation gaps remain (UNICEF, 2017a) and most climate-related migration and displacement scenarios fall outside almost all legal frameworks (Herzen, 2020).²⁹

Importantly, few international processes directly integrate child mobility considerations into climate and environmental conventions. This is despite growing acknowledgement that climate change is both directly and indirectly driving migration and displacement. IOM (2018c) highlights this gap and calls for more policy convergence and synergies to address the relationship between climate change, the environment, and migration and displacement, from different angles.

There are three global frameworks that address the impact of climate-driven migration and displacement in specific high-risk settings:

- UN Convention to Combat Desertification (UNCCD) for drylands
- Small Island Developing States Accelerated Modalities of Action (SAMOA) for low-lying coastal areas
- New Urban Agenda for urban areas.

However, these frameworks do not specifically address child migration and displacement.

29 Notably, the UNHCR definition of a refugee (https://www.unhcr.org/ what-is-a-refugee) is someone displaced as a result of "persecution" so does not include people displaced by climate change.

6.2 Regional frameworks

Each region faces unique challenges in relation to the governance of climate-related migration and displacement. However, there are some promising regional developments including:

- Latin America and the Caribbean: the 'Comprehensive Regional Protection and Solutions Framework' is a concrete application of the Global Compact for Migration for the region.
- Asia Pacific: some Pacific countries and territories (including Fiji) have endorsed the regional 'Framework for Resilient Development in the Pacific', which includes commitments relating to climate change, migration and displacement, and standards relating to the inclusion of high-risk groups including children.
- Africa: the 'Convention for the Protection and Assistance of Internally Displaced persons in Africa' (the Kampala Convention, which has been ratified by nations including case study countries, Mali and Mozambique) expands the refugee definition to indirectly include those who move because of sudden- and slow-onset weather events and processes, and explicitly recognises their protection and assistance needs.

However, there are barriers to translating these regional commitments into national frameworks, and to subsequent implementation of these commitments.

6.3 National frameworks

This study did not explore national governance frameworks in detail, however the experts we consulted highlighted that **few countries have a comprehensive policy framework in place to address climate-related child migration and displacement.**

Out of our five case study countries (Fiji, Iraq, Mali, Mozambique and Peru), Fiji is a notable exception. Fiji has developed inclusive planning guidelines for climate-related relocations, which account for children. However, the experts and children we consulted in Fiji called for climate-related child migration and displacement to be integrated into humanitarian and development legal and policy frameworks. They would also like to see more coherence between climate change, migration, and child rights policies, strategies and budgets at national and local level – to ensure that all action is climate-risk informed and considers child migration and displacement (SC regional workshops).

We cannot just be reactive each time a disaster strikes. We need to risk-inform development.

UNICEF, Fiji, KII

In Peru, the government has started to establish a comprehensive strategy for managing population movements relating to environmental and climate changes. It is currently preparing an 'Action Plan to Avert and Address Forced Migration due to the Effects of Climate Change' and has adopted the 'Law on Population Relocation for Areas with Very High, Unmitigable Risk' for areas with recurrent landslides, mudslides, flash floods, and river flooding.

There are repeated calls in existing literature for legal, policy, and planning frameworks that promote migration as a positive adaptation strategy and assist migrant and displaced people to search for durable solutions, rather than just seek to control the number of people who move or stay (IOM 2015; ODI, 2017). In four of the five case study countries (Fiji, Mali, Mozambique and Peru), some climate change or disaster risk management legislation, policies, strategies or plans recognise the impacts of weather-related disasters on migration and displacement, including relocation/resettlement as a potential adaptation strategy. For example, Mozambique's 'National Adaptation Programme of Action', Fiji's 'Climate Change Act', Mali's 'National Adaptation Plan for Action', and Peru's 'National Strategy on Climate Change'. Three national frameworks, all from Asia Pacific, were also highlighted by key informants as examples of emerging good practice (See *Table 10*).

Table 10National good practiceexamples highlighted by experts

Country	Details	Focus themes
Vanuatu	National Policy on Climate Change and Disaster-Induced Displacement (2018): includes strategic areas on physical and mental health, nutrition, food security and livelihoods, and highlights the need to include vulnerable populations (e.g. children).	All stages of responses to climate change and disaster-induced displacements
Philippines	Children's Emergency Relief and Protection Act (2016): founded on the experience and good practices of recent disasters and informed through consultation with children. This promotes child-focused actions to prevent displacement and protect displaced children.	Protection needs of children in emergency settings
Fiji	Planned Relocation Guidelines: A framework to Undertake Climate Change Related Relocation (2018): for communities adversely affected by sudden- or slow-onset weather events and climate processes. It promotes a consultative process (with specific mention of vulnerable groups, including children) to ensure long-term sustainability, protection, access to services, and wellbeing of concerned communities and includes a strong gender and social inclusion element.	Sustainability through livelihood creation and community engagement

6.4 Barriers to effective governance

The experts that we consulted for this study highlighted wide-ranging barriers to effective governance of climate-related child migration and displacement, including:

- Lack of data (UNDP, Iraq KII) including disaggregated data to track mobility flows (Piura transport, Peru KII) and inadequate monitoring systems
- Gaps in legislation (MOP, Iraq KII), lack of (awareness of) climate-related laws (UNDP, KII Iraq), inadequate social protection mechanisms (UNICEF, KII) and inadequate political commitments (UEM, Mozambique KII)
- Limited capacity (UEM & MSCS, KII) and funding (SC regional workshops) and insufficient leadership (IGP, KII, Peru) to implement plans leading to a gap between policy and practice
- Lack of coordination across silos, e.g. the need to integrate climate-related migration and displacement across development strategies and plans, not just disaster risk management (UNICEF, Fiji; UNDP, KII Iraq)
- Lack of standardisation (e.g. inclusive evacuation procedures could be standardised in Fiji (UNICEF, KII).

In many countries, there are many gaps between policy and practice. The government comes up with great policies that are approved at all levels, but when it comes to implementing at grassroots, there are huge gaps. For example, we have a migration policy in the Gambia that is not effectively implemented.

Save the Children Programme Partner, Gambia

Advocacy and capacity building are very much needed in this space. Donor, KII



Several KIIs highlighted **the need for Save the Children and the wider sector to build its own capacity in this area**; to support staff to integrate climate-related migration and displacement into its own policy, planning and programming across all relevant areas of its work; to provide guidance on implementing relevant policy frameworks (e.g. the Global Compact for Migration); and to work with others to share examples of good practice (SC, Mozambique).

I think it is equally important to address the issue of Save the Children International operational capacities, platform, policies, around climate change as an in-house exercise before focusing on the needs on the ground and programming around it.

SC Egypt, workshop

Regional and national coordination mechanisms were identified by key informants as essential for ensuring coordinated and coherent responses at each stage of migration and displacement, including before, during and after moving. For instance, in the Pacific, the Technical Working Group on Human Mobility has been established (Save the Children Australia is one of its members) under the regional Framework for Regional Development. Similar coordination mechanisms could be established in other regions and at national level.

6.5 The absence of children's voices

Despite some emerging good practice, the voices and needs of children are largely absent from national migration and displacement (as well as climate and disaster risk management) policies and strategies. Participants from four of the five regional Save the Children workshops confirmed that children and youth are not included in relevant decision-making, planning or responses. For example, key informants noted that despite a strong gender equality and social inclusion component in the Planned Relocation Guidelines in Fiji, children and youth remain largely "invisible" in the final decision-making process, a gap that is being discussed in the upcoming ministerial review of relocation criteria (MoE, KII Fiji).

It is very difficult to shift at the national level where anyone who is either seen as young or inexperienced is not deemed worth listening to. Political leadership is very bad at making room for the youth voice.

UNMGCY, KII

Children interviewed in Fiji highlighted **the need for platforms where displaced or migrant children could share their experiences and access support**³⁰. UNFCCC also highlighted the importance of creating more platforms and spaces where children can learn and engage with these issues (UNFCCC, KII).

Not enough is being done to support children with their protests, they need capacity building, so we can do programming together.

Plan International, KII

Save the Children, in collaboration with Plan International have developed a guidance paper "<u>A COP Fit for Children:</u> <u>How to support children's participation</u>" setting out how organisers of COP can make the climate summit inclusive for all children.



"We need child workshops so we can share what we go through and get support."

Boy aged 13, Fiji

"I would like to help. I could offer information [about migrating to the city], and also share my experiences [as a migrant], my challenges and how I overcame these."

Boy aged 17, Fiji

30

6.6 Gaps in climate-related child migration and displacement governance

Further to the list of barriers to effective governance discussed in sections 6.4 and 6.5, *Table 11* highlights key gaps in governance frameworks for migrant and displaced children impacted by the Climate Crisis.

Table 11

Remaining gaps in governance frameworks

Area	Details of the gaps that exist	Regions
Policy/legislative	 Absence of legally binding policy and legislative frameworks that comprehensively address the protection needs of child migrants and offer guidance on climate-related migration and displacement. 	All regions
Children's voices and recommendations	 Absence of children's voices, experience and perspectives across migration and displacement policy frameworks. 	All regions
Migration	 Absence of comprehensive regional agreements on migration. 	AP, ME, WCA
Loss and damage	• Absence of a 'loss and damage' financing facility to support countries that are most affected by the Climate Crisis.	All regions
Relocation	 Absence of global policy/legislative and financing frameworks for climate related community relocations and post-displacement resettlement. 	All regions (except Fiji)
Transhumance migration	• Absence of coordinated response to transhumance migration in the context of climate change (as seen in West and Central Africa).	esa, wca
Climate-related migration and displacement • Frameworks lag behind in recognising the link between climate change and migration and displacement.		ME, Caribbean

In the recommendations section, we outline a number of policy and governance recommendations for Civil Society Organisations (CSOs) and governments, to ensure that the rights and needs of children affected by climate-related migration and displacement are protected and addressed through legislation, policies, strategies, financing plans and programmes, which are child-focused, holistic, integrated and sustainable.



7 RESPONSES TO CLIMATE-RELATED CHILD MIGRATION AND DISPLACEMENT

Current responses to climate-related child migration and displacement are not sustainable or fit for purpose. Despite the scale of the issue and the severity of its impacts, climate-related child migration and displacement does not attract the funding or the attention it deserves. Government responses tend to focus on disaster preparation before sudden weather events, incentivising young people to stay in rural areas, and returning children and families to their home after disasters. But children need support to engage in the climate change discussion, to build their resilience and life skills, information to help them migrate safely, and support to integrate in their new community – to ensure that they can adapt and build a better future, whether they choose to move or stay.



Box 12 Support for children in Fiji

Tomasi lives in a rural coastal settlement, near Rakiraki in Fiji. He shares his thoughts on how children can play an active role in educating communities in the face of increasing climate changes.

"Children need to learn more about climate change. They can then do advocacy through our community, our schools or our youth and women groups. Children can spread information."

Tomasi 12 years old, Fiji

Few governments and development partners have comprehensive policies or programmes in place to ensure that they deliver sustainable, holistic solutions to climate-related migration and displacement (Thomas, 2017) and respond to the specific needs of children.

7.1 Current responses

A range of responses are possible before, during and after children move as a result of climate threats.

Figure 5

Opportunities to respond to climate related child migration and displacement





"To stay in the community and face climate change head on, we need to be informed more about climate change and teach other adolescent children environmental education, to teach their parents. At school, they should teach us that trees should not be cut down – and yet trees are cut down and not replaced."

Adolescent aged 12–16, Peru

"Children should have some information about the route before they leave."

Boy aged 16, Mozambique

Governments and development partners tend to focus on:

Before displacement or migration

- **Disaster risk management** such as early warning systems, risk mapping, raising awareness of climate risks, and disaster preparedness. These actions build resilience in situ but do not facilitate migration as a positive strategy and with the exception of organisations such as Save the Children and UNICEF, do not focus on children.
- Incentivising children to remain in rural areas, despite the climate risks. For example, investing in technology in rural schools, or providing supporting to establish sustainable rural livelihoods.

During displacement or migration

• Short-term humanitarian support following climate disasters that meets the immediate needs of children and families, for example relocation to temporary evacuation shelters.

After displacement or migration

- Returning children and families to their homes after disasters (e.g. in Iraq) rather than supporting them to move as a positive adaptation strategy.
- Resettling displaced families in new communities with little support to integrate or find new livelihoods (e.g. in Mozambique).
- Planned community relocations as a last resort (e.g. in Fiji and Peru).

Response is very reactive with little planning and almost no investment in the implementation phase.

UEM, Mozambique, KII

None of the stakeholders are supporting children's sustainability after displacement. Before and during mobility, there is much, but after there are gaps. We have to look into funding children's mobility projects sustainably.

SC, Senegal

Climate-related migration and displacement is an urgent issue but does not attract the funding it deserves (MSCS, FAMOD & SDSMAS, KII). Although the experts that we consulted highlighted increased attention of donors (MMC & DRC, KII), there is a need for further evidence-based advocacy and compelling case studies that showcase how climate change is driving child migration and displacement in different high-risk settings (World Bank, KII).

Climate mobility is not a huge draw for funds. The absence of a clear link between climate change and mobility is a major barrier to decision making and action in this space.

IOM, Fiji, KII


"Teach children to find work. I wish I could learn some skills."

Adolescent boy aged 13–18, Mozambique

"We need a school, a mosque, energy, a hospital, and water fountains."

Adolescent girl aged 12–15, Mozambique

"Children who are displaced need toilets, clothes, mosquito nets, and mats."

Adolescent boy aged 12–16, Mozambique

"We need stationery. The schools that we attend need rehabilitation and clean drinking water. We need latrines to be separated. Many girls are going to nearby houses when they need the bathroom."

Adolescent girl aged 13–17, Iraq

Build better understanding of the links between climate change and migration/displacement – the lack of evidence puts the donors off investing in this area of work.

IDMC, Fiji, KII

In part, this is the result of inadequate commitment, leadership and prioritisation of the issue. In Iraq, for example, resources have been prioritised for conflict issues and therefore the budget for climate change issues is marginal (MHE, KII). Recent progress has been made in Fiji with the establishment of the Climate Relocation and Displaced People's Trust Fund for Communities and Infrastructure, a government initiative funded through a mix of overseas aid (e.g. from New Zealand) and government funding.

7.2 The responses that children need

The children that we consulted said they needed information and safe shelters to help them migrate safely, continued access to education and essential services while in transit and at their destination, and support to build their resilience and skills so that they could find employment at their destination. Children in Peru also wanted support to build resilience in their origin community, through climate awareness, environmental management, and risk reduction.

Girls highlighted the importance of support to continue their education, as well as safe access to critical services such as toilets and drinking water. Boys generally emphasised the importance of support to build new skills that would help them to find employment in their destination (urban areas). Children who were unable to move or left behind by migrating parents, said their priority was to be supported to build their resilience in origin communities.

Many of the children we interviewed had been displaced for long periods (e.g. in Iraq) or resettled following displacement (e.g., Mozambique), but their basic needs had not been met. These children highlighted the importance of accessing essential services including water, electricity, education and protection services.



Box 13 Adapting infrastructure in Peru to address the impacts of climate change

"To face climate change, we community members need water wells, sheds for livestock, and ensiled [conserved] pastures."

Teresa 13 years old, Peru

Walking into the Eye of the Storm: How the climate crisis is driving child migration and displacement

7.3

Priority responses before, during and after migration and displacement

Before displacement or migration

Priorities for CSOs include:

- Addressing the root causes of children's climate and mobility vulnerability and ensuring child-responsive, risk and mobility-inclusive resilience building
- Supporting gender and age-responsive risk preparedness and early warnings
- Ensuring child-responsive and inclusive displacement preparedness e.g. safe evacuation spaces and facilities, early warning systems
- Supporting migration as an adaptation strategy and preparing families or children for planned mobility (e.g. supporting children to acquire skills, multiplying the benefits of internal remittances to rural areas)
- Implementing information campaigns to inform children on safe migration pathways and migration rights
- Supporting awareness raising to increase knowledge of climate change, climate risks and environmental management
- Ensuring safe shelters with more resilient construction materials
- **Reducing risks** by supporting reforestation (for shade/to reduce desertification), drainage systems (to prevent disease spread), and improving the resilience of housing and community infrastructure
- **Providing agriculture inputs and resources** including seeds and tarpaulin to cover harvests and protect from rain, livestock inputs, and improving resource availability (e.g. water resources).

Table 12

Suggested priority responses before child migration or displacement

Programme objectives	Suggested priority responses for CSOs		
Mitigate climate threats	 Advocate for limiting or slowing climate change (e.g. increasing use of renewable energy sources, energy efficient technologies, planting trees/mangroves) Support children's own climate crisis advocacy and campaigning to adopt measures to protect the environment 		
Increase awareness and understanding of climate threats, risks and mobility	 Map high-risk ecological settings as a precursor to programme design Use climate projections to support forward planning (e.g. drought monitoring mechanisms) Support child-led community and school risk and needs assessments Support education and awareness raising for children in high-risk settings (e.g. children's clubs, workshops, theatre etc.) Support child-focused and child-led advocacy to increase awareness of the links between climate change and migration and displacement 		

Programme objectives	Suggested priority responses for CSOs				
Prevent or mitigate the likelihood of	 Advocate with government for nature-based solutions that target the threat and reduce risk impact (e.g. tree/mangrove planting by children) 				
risks materialising	 Advocate with NGOs and local government for non-structural measures that reduce exposure to risk (e.g., reducing development in hazard prone locations through planning, behavioural change) 				
	• Advocate with NGOs and local government for resilient infrastructure in high-risk settings (e.g. cyclone resilient schools, flood resilient houses, water storage)				
Prepare families and children	Support child-responsive early warning systems				
if there is a high risk of displacement	• Support preparedness planning (e.g. evacuation drills in schools, youth brigades)				
or displacement	• Ensure standardisation and inclusivity of evacuation procedures and infrastructure (e.g. evacuation centres, camps), with a focus on protection and minimising risk of family separation				
	 Support establishment of referral pathways 				
Decrease vulnerability and increase resilience	 Promote child-centred adaptation and disaster risk reduction targeting groups impacted by inequality and discrimination (e.g. disabled children) using local knowledge and skills 				
	 Build shock-responsive services to ensure inclusivity and accessibility, including for immobile children 				
	 Provide targeted support for children living in high-risk settings to build resilience in situ (e.g. vocational training) and give children a voice in community decision-making 				
	• Support those who do not wish to move (e.g. advocate for pastoralist lifestyle)				
	 Support high-risk communities with managing their resources (e.g. agricultural diversification) 				
Prepare families or children for planned mobility	 Promote and support migration as a safe option for families before they are forcibly displaced (e.g. youth employment pathways) 				
	 Prepare children in high-risk locations for migration/displacement (e.g. share information, skills training, language support) 				
	 Provide targeted support to children impacted by inequality and discrimination (e.g. children with disabilities) 				
	 Advocate for safe migration routes 				

During displacement or migration

Priorities for CSOs include:

- Facilitating child access to essential services (e.g. education, health care, psychosocial support)
- **Providing child-friendly spaces** for temporary safe learning and psychosocial support for displaced children (IDMC, IFRC, PLAN, workshop).
- Sharing information on the migration route (e.g. safe routes) and helping to share child migrant experiences
- Providing safe shelters (for children travelling alone)
- **Providing basic facilities** including access to toilets, energy, drinking water, food assistance
- Providing basic goods including clothes, mosquito nets, mats, stationery

Table 13

Suggested priority responses during child migration or displacement

Programme objectives	Suggested priority responses for CSOs			
Support informed child mobility	 Ensure access to information and legal services in a language that children understand 			
Ensure rights of children to key services and items during mobility	 Facilitate access to services (e.g. health care, education, psychosocial support) including route-based programming with linked up services 			
	• Support access to essential items (e.g. food, water, clothes, shelter, medicine)			
	• Advocate and programme for continuity of education, and collaborate to ensure services are provided			
	 Provide key services, including participation platforms for children displaced in emergency settings 			
Ensure protection of children	• Support mechanisms for displaced or migrating children (including the most vulnerable groups) to ensure protection and safeguarding, including across borders (e.g. safe shelters, case management referrals)			

After displacement and migration

Priorities for CSOs include:

- **Providing livelihood support, vocational skills and life skills training** to help children adapt to new situations and build future resilience
- **Providing psychosocial support** and support to address protection risks in new destinations
- Supporting dialogue, knowledge exchange, and platforms for climate displaced or migrant children to articulate their needs, responses, share experiences, and advocate for child-focused policies
- **Resilience building** in urban areas for migrant/displaced children in informal settlements (PLAN, MMC, KII).
- **Providing protection** against child labour and child marriage, including separate facilities for girls and boys and information on how to get help
- **Supporting access to services** including protection, religious support, education, health care, and school rehabilitation
- Providing support to return to origin communities.

Table 14

Suggested priority responses after child migration or displacement

Programme objectives	Suggested priority responses for CSOs		
Facilitate access to services	 Work with service providers in destination and transit areas to integrate the needs of children (e.g. education, health, WASH) 		
	 Provide psychosocial support for children who witness disaster events and for separated children, and to help children to cope with integration and challenges in their new locations 		
	• Provide protection support for child migrants facing violence in destinations		
	 Advocate for specialised support for vulnerable children (e.g. children living with disabilities) 		
Facilitate access to	• Provide better information for children moving to urban areas		
information	• Advocate for settlement in low-risk areas beyond the major hubs		
	Build understanding of climate risks in destination locations		
Support access to	Build access to livelihoods training for children and increase access to opportunities		
livelihoods	 Support life skills training and empowerment programming (e.g. financial literacy, leadership skills) 		
	 Provide economic support (e.g. cash transfers) 		
Support integration and reintegration	• Support sensitisation activities and language support (e.g. facilitating meet-ups, buddy systems in schools to reduce discrimination) in destinations		
	 Ensure community/urban plans in destinations reflect the needs, priorities, and identities of migrant families 		
	• Meaningfully engage children in recovery post-displacement		
Support host communities	 Increase interventions in urban centres to support schools in host communities (e.g. support schools to absorb child migrants through teacher training/ flexible curriculum) 		
	• Support child-centric risk reduction in host communities		
	• Support urban resilience (e.g. peri-urban agriculture projects for children)		
Support children's participation	 Provide platforms for child migrants to articulate their needs, responses, share experiences and advocate for child-focused policies 		
	 Advocate for the inclusion of child voices in migration policies and relocation/ resettlement plans 		

7.4 Priority responses in different high-risk settings

Responses in settings that are primarily impacted by sudden-onset weather events (e.g. cyclone zones, floodplains) will need to focus on **ensuring age and gender-responsive awareness raising, early warnings, and preparedness of children and youth who are displaced**.

Conversely, in settings primarily impacted by slow-onset climate changes (e.g. drylands, mountainous areas, low-lying coastal areas), responses will include **building resilience and supporting adaptation in situ, supporting migration** (both temporary and planned), and facilitating permanent relocation where climate changes exceed capacities to minimise risk and adapt.

Of course, some settings (e.g. low-lying coastal areas) may experience sudden-onset weather events such as storm surges, and slow-onset climate changes such as sea level rise.

In urban settings, the case study findings show that countries are not equipped to deal with population growth in informal settlements and peri-urban areas; with limited access to services and inconsistent infrastructure standards (e.g. poor housing), child migrants are highly exposed to disaster risks in these locations. Priority responses will include **increasing awareness of climate risks in their destination, ensuring children have access to essential services (e.g. health care, education and protection), and supporting integration into host communities.**

Disaster displaced populations face a multitude of protection and assistance needs, which are often linked to the type of natural hazard leading to the displacement and the forced nature of the movement.

AP Regional Exchange, 2020

Experts shared a range of good practice responses in different high-risk settings (see *Table 15*). These included child-led climate risk assessments in high-risk floodplain areas in Bangladesh (IDMC webinar, 2021e); mobile schools that support nomadic communities in dryland areas of Somalia (UNICEF, KII); education in emergency kits for children displaced by cyclones in the Pacific (UNICEF, KII); urban resilience programmes for climate migrants and slum dwellers in Bangladesh (IDMC webinar, 2021e); and support for migrant youth to start businesses in urban destinations (e.g. UNDP). More comprehensive research is required to build a compendium of good practices for each high-risk setting.

The experts we consulted also confirmed the importance of adopting nature-based approaches including green recovery.³¹ For example, building coastal resilience and providing eco-based solutions in low-lying coastal areas of West Africa (IOM, KII) and planting mangroves with children through the DRR clubs in Fiji (SC, Fiji, KII)

31 This term is used for economic recovery measures that are aligned with long-term climate, environmental, and sustainability objectives.

Table 15

Priority responses from experts in different high-risk settings

High-risk setting	Focus response areas				
Low-lying coastal areas	 Awareness raising with children on conservation, restoration, and protection of ecosystem services and resources (e.g. mangrove and coral reef planting) Preparing communities for coastal risks (e.g. child-focused training programmes and awareness campaigns) Advocating for child-focused and participatory relocation planning as a positive adaptation strategy 				
Floodplains	 Ensuring age-responsive early warning and preparedness for flooding (e.g. awareness and education campaigns targeted at children) Supporting awareness raising to counter negative coping mechanisms that exacerbate environmental risks (e.g. cutting down of trees on riverbanks) Preparing children for temporary displacement including providing safe spaces or temporary learning spaces Supporting child-centric planned resettlement of high-risk communities Providing follow-up psychosocial and other support post-displacement as many children returnees are affected by long-term impacts (e.g. food security, trauma, loss of appropriate shelter or education materials, protection issues) 				
Drylands	 Supporting access to essential services in peri-urban/urban areas during seasonal migration/or protracted displacement and access to critical information (e.g. drought forecasts) Supporting seasonal migration of families/children (e.g. access to education, protection support) and permanent migration as a positive adaptation strategy Providing information and support to children moving to urban areas Building long-term child-centred adaptive strategies including nature-based solutions, livelihood diversification, capacity development and access to microfinance Providing post-migration support, through accelerated learning courses for younger children and access to economic and technical information, financial resources and consultation services for adolescents and youth Advocating for inclusive policies (e.g. supporting pastoralist communities by advocating for open passages and access to water sources) 				
+ Cyclone, hurricane and typhoon zone	 Supporting child-responsive early warning and preparedness Preparing children for temporary displacement e.g. providing safe spaces or temporary learning spaces Providing follow-up psychosocial and other support post-displacement as many children are affected by long-term impacts (e.g. food security, trauma, loss of appropriate shelter or education materials, protection issues) 				

High-risk setting	Focus response areas				
Mountainous areas	 Supporting awareness raising with children on climate risks (e.g. glacial lake outburst floods) 				
	• Building resilience of communities in origin communities e.g. livelihood strengthening, diversification of programming, disaster risk reduction				
	• Supporting development of emergency preparedness plans for downstream schools/communities in case of glacial lake outburst floods				
	• Supporting children who are left behind (i.e. as many mountain communities are dwindling in numbers, schools are closing down) or working in urban areas to support their family				
	• Promoting flexible approaches to managing risks e.g. households living across multiple locations				
Urban areas	• Supporting sustainable and durable solutions for children in urban areas (e.g. child migrants/displaced children in informal settlements who are often left out of responses)				
	• Building resilience of growing urban communities (e.g. investment in urban/peri-urban agriculture)				
	• Building resilience of child migrants in informal settlements (e.g. focus on integration, participation, adaptation to new climate risks, sharing information)				
	• Supporting essential service provision including protection services in host communities (e.g. schools, health clinics, WASH)				
	• Supporting climate risk awareness and education for children moving to high-risk urban locations				

7.5 Gaps in current climate-related child migration and displacement responses

Climate-related child migration and displacement is an urgent issue that requires coordinated, integrated and holistic responses. Current responses are not sustainable or fit for purpose. Specifically, we identified the following key gaps.

Better coordinated responses are needed across countries, disciplines and silos

Ad hoc responses may increase vulnerability (Thomas & Benjamin, 2017) and there are calls for greater coordination across disciplines including climate change, migration, development and disaster risk management to respond to the needs of children before, during, and after migration or displacement (IOM, 2015; IFRC, 2018; Podesta, 2019).

In many of the case study countries, the experts we consulted highlighted that institutions work in isolation and that coordination mechanisms across key sectors are lacking (MSCS, KII). There is also a humanitarian-development divide (SC regional workshops); **migration is seen as an economic issue, so responses are led by the development sector, whereas displacement is seen as a humanitarian issue.** A lack of coordination between global, national, regional, and subnational responses, including with key municipal planners, was also highlighted (UN Habitat, KII). Protecting the displaced, especially vulnerable [people], and achieving durable solutions requires robust preparedness and sustained cross-sectoral partnerships and coordinated action long before a disaster strikes.

Asia-Pacific Regional Exchange, 2020

We need to see where we have synergies – for cumulative impact. We need to look at interventions that could go hand in hand, that have been done in one sphere that could impact another sphere... We need a more integrated response. We need to understand this longer-term vision.

SC, Senegal

Cross-fertilisation is a challenge. Migration and climate are not frequently linked. Providing services for migrants has not meant tackling root causes of why they are moving including climate change.

SC, Vietnam

Although disaster displacement is recognised as an issue, little conversation [between sectors and stakeholders] is taking place.

IOM, Fiji, KII

Responses need to be more holistic, integrated and support children before, during and after movement

Experts emphasised the importance of programming holistically and supporting route-based programming (SC, ESA, workshop), **to ensure that responses** address the unique underlying drivers and impacts on children; accommodate the range of child mobility patterns (Brookings Institution, 2014); support children before, during, and after mobility; and provide durable solutions that respond to long-term needs as well as immediate needs (SC, workshops).

They highlighted that migration and displacement responses are often an 'add-on' to disaster risk reduction and climate change responses, but should be 'mainstreamed' into these responses. Integrated responses to migration and displacement should also consider multiple threats, e.g. geological, biological, hydro-meteorological (SC workshop).

We have lots of community-based disaster risk reduction and climate adaptation. Some are designed to be child sensitive. The missing link is what about migration? We identify risk, mitigate, but briefly the idea of migration is taken into consideration. It is seen as a last resort for families that have tried to adapt. The migration element is the key piece missing and needs to be part of the bigger picture.

SC, workshop

Responses need to be more child-responsive and better informed by child participation

Experts confirmed the importance of increasing child participation in response planning (UNICEF, IFRC, World Bank, UNMGCY, KII) and amplifying children's voices in discussions about climate-related migration and displacement, including the voices of LGBTQIA+ children, children with disabilities and other groups impacted by inequality and discrimination. The need to empower children on the move as partners in the development of policies and programming was further emphasised in the global workshop (UNICEF, workshop).

There was a frustration among child experts that efforts to make room for the voices of children and youth are weak and tokenistic. In response to this gap, some organisations are getting more creative about how they can engage children, for example by using the Minecraft video game to engage children in urban planning (UNHABITAT, KII).



It is not enough to support children with protests, they need capacity building so we can do programming together.

Plan International, KII

Responses need to be more inclusive of children who are unable to move or are left behind

As one workshop participant noted, children who are left behind are not always included in responses. In Fiji, the government is increasingly providing support to families left behind by a migrating parent, for example through financial literacy courses and briefings on what labour migration schemes means for households (IOM, Fiji, KII).

In addition to migration and displacement, we shouldn't forget about immobility as well, which may also be the case in many instances. Many times, people choose not to move. They are culturally bound to the land (islands in the Pacific). Others are trapped and even if they want to move, they cannot.

UNICEF, workshop

The impact of the COVID-19 pandemic on livelihoods and food insecurity could both trigger future mobility and potentially 'trap' children and their families in high climate-risk settings. Many practitioners are moving beyond humanitarian interventions to support more durable development solutions, particularly given that an increasing number of children and their families will be trapped (Paoletti & Vinke, 2020).

Responses need to be better planned, longer-term, more durable, and adaptable to meet changing needs

The escalating number of protracted, permanent and recurrent child displacements, and an increasing number of community relocations, also make it essential to develop more durable, long-term solutions.

Experts highlighted the importance of changing the narrative to focus on **planned migration as an opportunity** and to support safe migration before families are forcibly displaced (UNICEF, workshop). This includes preparing children for migration and ensuring access to key services before, during and after they move (UNICEF, Plan International, IOM, KII).

During our recent symposium, much time was spent reframing migration, which is usually seen negatively. Threat perceptions are not helpful to provide people the help they need... the narrative and getting the language right is important.

UNICEF, workshop

Responses also need to include **better integration support** for child migrants in urban areas **and resilience building for** host communities. A large number of the children we consulted highlighted the need for continuity of education and support to avoid child labour (FGD, Iraq). One SC stakeholder from Vietnam also noted that there was a need to overcome the stigma associated with migrants, who are sometimes viewed as a "burden, overwhelming systems."

Experts also highlighted the importance of being able to **plan for future scenarios** based on climate projections.

We need skills, tools, indicators to prepare – for instance flood modelling can provide useful projections and timelines to prepare for displacement. This is very important for decision making.

Marshall Islands participant, PRP Webinar 2020



Child focus group participants in Mozambique

It is clear that millions of children are already experiencing the devastating impacts of the Climate Crisis – and that the number of children who will be displaced or driven to migrate because of climate change is growing fast. Current solutions are not sustainable or fit for purpose. The humanitarian-development sector, governments and other stakeholders must collaborate to address this crisis before it is too late.

As part of our study, global, regional, and national experts on climate change, child rights, migration and displacement – as well as 239 children in Fiji, Iraq, Mali, Mozambique and Peru – made the following research, advocacy, policy, governance, and programming recommendations for Save the Children, peer organisations, and other sector stakeholders.

Programming

Experts confirmed the importance of both mainstreaming climate-related child migration and displacement into ongoing programming and establishing targeted programming to support children before, during and after movement.

Programme designers and implementers focused on the Climate Crisis should:

- Adopt a 'hotspots' approach to programming that focuses on high climate-risk settings (rather than a regional approach) and supports the most vulnerable and at-risk children and their families to prepare for displacement, migration, or relocation. This would require the availability of comprehensive and detailed local data.
- Incorporate climate expertise and associated risks into child migration and displacement programming (e.g. linking mobility with climate change) rather than addressing them in isolation, to ensure coherent decision making and service provision for children that is founded on long-term scenario planning.
- Design and deliver tailored, child-focused programmes (e.g. access to different financial services, landscape regeneration), accommodating the specific needs and impacts of girls, boys, children with disabilities, and children of different ages, ethnicities, and religions, at all stages of climate-related migration and displacement planning and action, particularly child-centred adaptation.

Programme implementers and designers focused on **migration and displacement** should:

For optimum integration, programmes should be designed and implemented with both climate and migration expertise. All programme implementers and designers should **adopt a set of key principles and guidelines** (*Figure 6*) to support future programming for children affected by the Climate Crisis and **ensure that programming is integrated, inclusive, informed, coordinated and sustainable**.

- **Develop and implement long-term durable solutions**³² which are responsive to changing mobility patterns, the escalating number of protracted, permanent and repeated child displacements, and the increasing number of government community relocations.
- Prioritise holistic support before, during, and after planned and unplanned migration and displacement. This must include (a) protection support, (b) assistance to facilitate continuation of education, and (c) provision of post-mobility psychosocial support given the profound impacts of climate-related displacement, migration, and relocation on children.
- Provide continued support throughout the migration journey with a focus on high climate risk origins and destinations for children, notably urban and peri-urban areas in low-lying coastal areas, on steep slopes, or on river floodplains, which are playing host to increasing numbers of children displaced or migrating as a result of climate change.
- Prepare for proactive, planned and child-responsive movement that is timely and well considered (e.g. relocation of communities downstream of glacial lakes or away from low-lying coastal areas), not just reactive support for unplanned displacement.

Figure 6 Good practice principles

Principles for responding to climate-related child mobility					
1: Integrated	2: Inclusive	3: Informed	4: Coordinated	5: Sustainable	
Integrate climate risks into interventions	Ensure gender, age, and disability responsive action	Informed by evidence and data	Ensure a continuum of support across the mobility pathway	Promote locally owned and led long-term durable solutions	
Integrate mobility into ongoing interventions	Adopt intersectional approaches	Informed by children's needs and rights	Collaborate across the humanitarian/ development nexus	Address root causes of children's vulnerability	
Integrate the voices of children	Promote the participation and empowerment of children	Support education, awareness and information sharing	Secure multi- sectoral coordinated approaches and mechanisms	Promote ecosystem-based and nature-based solutions	

32 Save the Children has developed the Durable Solutions for Children Toolkit, as an important step in ensuring that children are at the heart of future responses and solutions to displacement.

Research

This study has contributed to closing several research gaps by reviewing the links between climate change and child migration and displacement; identifying variations across different high-risk settings; and collecting case studies that illustrate how children are impacted in different ecological settings. In addition to this, we recommend that:

The humanitarian-development sector should:

- Continue to amplify the voices, perspectives and knowledge of children at risk of or affected by climate-related migration and displacement in a range of high-risk settings, to help close remaining knowledge gaps.
- Build on ongoing predictive analytics work by Save the Children's Migration and Displacement Initiative (MDI), to carry out long-term climate change scenario planning for child migration and displacement in a range of high-risk settings. Responses based on early and anticipatory action alongside predictive analytics will also allow actors to act early and proactively instead of reactively, post-crisis.
- Establish partnerships with migration and displacement specialists and national governments (including national statistical offices) to:
 - Advance the collection, reporting and sharing of sex, age, and disability disaggregated child migration and displacement data (quantitative and qualitative)
 - Inform understanding of climate-related migration and displacement patterns and impacts
 - O Identify high-risk children before, during, and after migration and displacement.
- Research the influence of technology on climate-related child migration and displacement including:
 - How technology is shaping children's decision making, through access to online information (e.g. cyclone warnings, migrant networks, and safe routes)
 - How technology can help to mitigate the key impacts of climate threats, for example by increasing access to essential documents, or by supporting the provision of mobile education.
- Build a database of good practice responses to support children before, during and after climate-related migration and displacement in a range of high-risk settings, drawing upon intersectional research and analysis to close key gaps, including for children with disabilities.





Policy and governance

Several priority areas are recommended including advocacy campaigns that promote the voices and agency of children affected by climate-related migration and displacement, and forums for child advocacy, awareness raising, and knowledge sharing.

CSOs and governments need to increase their readiness and capacity to deliver holistic, sustainable solutions for children and families affected by climate-related migration and displacement.

Governments should:

- Protect the rights, needs and priorities of children affected by climate-related migration and displacement by ensuring that key legislation, policies, strategies, and plans³³:
 - Adopt a child-focused approach
 - Increase coherence between climate change, mobility, humanitarian, and development frameworks
 - O Promote mobility as a positive adaptation strategy
 - Close the policy and implementation gap.
- Increase climate finance to mobilise at least \$100 billion annually, including adaptation, resilience of communities to the slow-onset impacts of climate change and sudden shocks that specifically benefit the children most affected by inequalities and discrimination
- Create a new climate finance mechanism to address loss and damage by 2023
- Scale up government social protection systems (e.g. cash-plus approaches) to address the impacts of climate shocks on children and their families, with the ambition to move to universal child benefits to improve child well-being, reduce poverty and build resilience.

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Urgent and tangible steps towards scaling up climate action and emissions reduction efforts for government and other decision makers are outlined in more detail in Save the Children's latest report: Born into the Climate Crisis: Why we must act now to secure children's rights (2021) The humanitarian-development sector should:

- Strengthen its technical and financial capacity, and its knowledge base on climate-related child migration and displacement, to deliver strategic, flexible, sustainable, integrated and holistic approaches across the humanitarian-development divide, across multiple high-risk settings, and across current and future programming.
- Build a policy and governance environment that enables capacity development and access to climate finance in order to address:
 - The uncertainty of future climate, migration and displacement projections
 - The underlying root causes that lead children to be disproportionately impacted by climate-related migration and displacement (e.g. social and political norms, inequalities, discrimination, intergenerational differences).
- Strengthen coordination, collaboration and knowledge sharing:
 - Across traditional disciplines and silos (e.g. disaster risk reduction, climate change, urban, humanitarian, recovery, development, gender, welfare and social inclusion)
 - Across existing coordination mechanisms
 - Across and between countries
 - O Support the development of global collaboration mechanisms.
- Leverage advocacy opportunities (e.g. COP26, the 1.5°C campaign, platforms and conferences, multi-year alliances, private foundations) to champion the rights of children affected by climate-related migration and displacement (including their right to access critical services and protection), to uplift their voices, and to support child political agency.
- Advocate with donors and governments to ensure that the need and priorities of children affected by climate-related migration and displacement are addressed through child-responsive policies, planning and programming, and to mobilise sustained and flexible funding for long-term, durable solutions.
- Establish forums for children to share their experiences of climate-related displacement and migration, to voice their concerns, to support each other, and to participate in decision-making and planning processes.
- Support children to challenge existing narratives around climate-related migration and displacement.

REFERENCES

Abadie L. M. (2018). Sea Level Damage Risk with Probabilistic Weighting of IPCC Scenarios: An application to major coastal cities. Journal of Cleaner Production, 175, 582–598, doi: 10.1016/j.jclepro.2017.11.069.

Aburn A. & Wesselbaum D. (2017). Gone with the Wind: International migration. University of Otago; cited in MMC (2020). Weak Links: Challenging the climate and mixed migration paradigm in the Horn of Africa and Yemen. MMC Briefing Paper, February 2020.

ADB (2013). The Emergence of Pacific Urban Villages: Urbanisation Trends in the Pacific islands

ADB (2014). Country partnership strategy: Fiji, 2014–2018. Poverty Analysis (summary)

ADB (2015). <u>Global Increase in Climate-Related</u> Disasters. Working paper, November 2015.

ADB (2021). Asian Development Bank and Fiji: Factsheet

Asia Pacific Regional Exchange (2020). Recommendations on Managing Risk and Addressing Disaster Displacement: Challenges, effective practices and solutions. Asia-Pacific Policy Brief.

Barbier E.B. (2015). Climate Change Impacts on Rural Poverty in Low-Elevation Coastal Zones. Estuarine, coastal and shelf science

Boston Children's Hospital (non-dated). Post-Traumatic Stress Disorder (PTSD) Symptoms and Causes

Bower E. & Weerasinghe S. (2021). Leaving Place, Restoring Home: Enhancing the evidence base on planned relocation cases in the context of hazards, disasters, and climate change. Platform on Disaster Displacement (PDD) and Andrew & Renata Kaldor Centre for International Refugee Law.

Brookings Institution (2014). Climate Change and Internal Displacement

Brown et al. (2019). Gender and Age Inequality of Disaster Risk. UNICEF and UN Women.

CARE (2020). Evicted by Climate Change: Confronting the gendered impacts of climate induced displacement

Carrion A. et al. (2018). Young and on the move in West Africa. Save the Children and Mixed Migration Centre (MMC).

Carrivick J.L. & Tweed F.S. (2016). A global assessment of the societal impact of glacier outburst floods. Global and Planetary Change, 144.

Central Intelligence Agency (CIA) (2021a). The World Factbook: Mozambique. Accessed on 7 May 2021.

CIA (2021b). The World Factbook: Mali. Last updated 15 June 2021.

CIA (2021c). The World Factbook: Peru. Last updated 15 June 2021. Chaplin, D., Twigg, John., and Lovell, E (2019). Intersectional approaches to vulnerability reduction and resilience-building

Cheriton O. M., Storlazzi C. D. & Rosenberger K. J. (2016). Observations of Wave Transformation Over a Fringing Coral Reef and the Importance of Low-Frequency Waves and Offshore Water Levels to Runup, Overwash and Coastal Flooding. Journal of Geophysical Research: Oceans, 121 (5), 3121–3140, doi: 10.1002/2015jc011231.

Chin N.P. & Dye T.D. (2016). <u>The Health</u> and <u>Wealth of Mountain Communities</u>. Maternal Child Health Journal 20, 2413–2414 (2016). Accessed on: 1 June 2021.

Climate Central (2019). Flooded Future: Global vulnerability to sea level rise worse than previously understood Published: 29 October 2019. Accessed on: 14 March 2021.

Climate Change, Environment and Migration Alliance (CCEMA) (2010). Climate Change, Environment and Migration: Frequently Asked Questions

Climate Risk Index (CRI) (2018). Global Climate Risk Index 2020: Who Suffers Most from Extreme Weather Events? Weather-Related Loss Events in 2018 and 1999 to 2018

Convention on Biological Diversity (CBD) (2006). Project Biodiversity in Drylands

Cortes, Ailin Benitez et al. (unpublished). 'Children On the Move and Climate Change'. Save the Children and the Graduate Institute Geneva.

Crivello G. (2015). There's no Future Here: The time and place of children's migration aspirations in Peru. Geoforum 62.

Danysh H.E., Gilman R., Wells J., Pan W., Zaichik B., Gonzalvez G., Alvarez, M. & Checkey W. (2014). El Nino adversely affected childhood stature and lean mass in Northern Peru. Climate Change Response, vol. 1, article 7.

Centre for Research on the Epidemiology of Disasters (CRED) International Disaster Database (EM-DAT).

Ericson J.P., Vorosmarty C.J., Dingman S.L., Ward L.G. & Meybeck M. (2006). Effective sea-level rise and deltas: causes of change and human dimension implications. Global and Planetary Change, 50, 63–82; Cited in IPCC, (2019) Sea Level Rise and Implications for Low-Lying Islands, Coasts and Communities. In: IPCC Special Report on the Ocean and Cryosphere in a Changing Climate.

Fiji Bureau of Statistics (2017). 'Fiji Bureau of Statistics Releases Census 2017 Results'

Fiji Government (2017). 5-year & 20-year National Development Plan: Transforming Fiji

Flavell A. et al. (2020). Migration, environment and climate change: Literature review. German Environment Agency (Migration, Environment and Climate Change Series). Food and Agriculture Organisation (FAO) (2014). Mountains and the Sustainable Development Goals: Call for Action

FAO (2016). Iraq: Agriculture and Livelihood Needs Assessment in the newly liberated areas of Kirkuk, Ninema and Salahadin.

FAO (2018). Iraq: Humanitarian Response Plan

Foresight (2011). Foresight: Migration and global environmental change: future challenges and opportunities. The Government Office for Science, London.

Frey H. et al. (2018). Multi-Source Glacial Lake Outburst Flood Hazard Assessment and Mapping for Huaraz, Cordillera Blanca, Peru Front. Earth Sci., 21.

German Agency for International Cooperation (GIZ) (2019). <u>Human Mobility</u>, Climate Change and Gender: <u>Compendium of</u> best practices, lessons learnt, and tools for Pacific practitioners

Giles C. & Mwai P. (2021). Mozambique Conflict: What's behind the unrest? BBC online, 29 March 2021.

Global Compact on Refugees (GCR) (2020). <u>MIRPS at a Glance</u>. Accessed on 10 November 2020.

Global Migration Group (GMG) (2014). Migration and Youth: Challenges and Opportunities

Hanna C., Glavovic B. & White I. (2021). 'When climate change and other emergencies threaten where we live, how will we manage our retreat?' The Conversation.

Herzer Risi L. & Burkett M. (2020). Reorienting Perceptions of Climate Change, Migration and Displacement. Wilson Centre.

Huddleston B., Ataman E. & Fè D'ostiani L. (2003). Towards a GIS-based analysis of mountain environments and populations. Rome: FAO.

Immerzeel W.W., Lutz A.F., Andrade M. et al. (2020). Importance and vulnerability of the world's water towers. Nature 577

Imperial College London (ICL) (2021). The impact of climate change on mental health and emotional wellbeing: current evidence and implications for policy and practice. Grantham Institute Briefing Paper No 36.

Inquerito Integrado a Forca de trabalho (IFTRAB) (2010). 'Inquerito Integrado a Forca de trabalho 2004/205 Relatorio Sobre o Trabalho Infantil em Mocambique'. Instituto Nacional de Estatistica. Cited in Verdasco (2013) Strengthening child protection systems for unaccompanied migrant children in Mozambique. UNICEF.

Instituto Nacional de Estatistica (INE) (2021). Mozambique Demographics. Accessed on 17 February 2021. Intergovernmental Panel on Climate Change (IPCC) (2014a). Climate Change 2014: Impacts, adaptation, and vulnerability

IPCC (2014b). Synthesis Report: Summary for policymakers

IPCC (2019a). Sea Level Rise and Implications for Low-Lying Islands, Coasts and Communities. In: IPCC Special Report on the Ocean and Cryosphere in a Changing Climate.

IPCC (2019b). Desertification. In: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems.

IPCC (2019c). <u>High Mountain Areas</u>. In: IPCC Special Report on the Ocean and Cryosphere in a Changing Climate.

IPCC (2021). Climate Change 2021: The Physical Science Basis

IDMC (2017). Global Disaster Displacement Risk. A baseline for future work. October 2017.

IDMC (2019a). Protecting and supporting internally displaced children in urban settings

IDMC (2019b). Nothing to Put in Your Mouth: Seeking durable solutions to drought displacement in Ethiopia 'No Matter of Choice: Displacement in a changing climate' thematic series.

IDMC (2019c). Assessing the impacts of climate change on flood displacement risk. Methodological Paper.

IDMC (2019d). Global Report on Internal Displacement 2019. Cited in UNICEF (2020). Lost at home: The risks and challenges for internally displaced children and the urgent actions needed to protect them

IDMC (2020a). Internal Displacement 2020: Mid-year update

IDMC (2020b). Women and girls in internal displacement. 'Hidden in Plain Sight' thematic series.

IDMC (2020c). When Canals Run Dry: Displacement triggered by water stress in the south of Iraq. 'No Matter of Choice: Displacement in a changing climate' thematic series.

IDMC (2020d). No Land, No Water, No Pasture: The urbanisation of drought displacement in Somalia. 'No Matter of Choice: Displacement in a changing climate' thematic series.

IDMC (2020e). Global Report on Internal Displacement 2020

IDMC (2020f). Becoming an Adult in Internal Displacement: Key figures, challenges and opportunities for internally displaced youth. 'Hidden in Plain Sight' thematic series.

IDMC (2020g). '10 Ways to Tackle Climate Displacement in the Run Up to 2030.' Expert Opinion.

IDMC (2020h). Sudden-Onset Hazards and the Risk of Future Displacement in Fiji: Risk profile

IDMC (2020i). A decade of displacement in the Middle East and North Africa

IDMC (2021a). Global Report on Internal Displacement 2021

IDMC (2021b). Fiji Risk Profile: Sudden onset hazards and the risk of future displacement in Fiji

IDMC (2021c). Hot, wet and deserted: Climate change and internal displacement in India, Peru, and Tanzania

IDMC (2021d). Mali country information

IDMC (2021e). Displacement in a Changing Climate: Investing in solutions. Webinar. Online Expert Forum Series; Dated 21 January 2021.

IDMC (2021f). Mozambique country information

IDMC (2021g). Iraq country information

International Committee of the Red Cross (ICRC) (2020). When Rain Turns to Dust: Understanding and responding to the combined impact of armed conflicts and the climate and environment crisis on people's lives

International Federation of the Red Cross (IFRC) (2018a). Alone and Unsafe: Children, migration and sexual and gender-based violence

IFRC (2018). Disasters and Displacement in a Changing Climate: The Role of Asia Pacific National Societies

IFRC (2020). Mozambique Floods: Early Action Protocol Summary

International Organisation for Migration (IOM) (2008). Migration and Climate Change. IOM Migration Research Series No. 31.

IOM (2015). IOM Outlook on Migration, Environment and Climate Change

IOM (2016a). The Effects of Climate Change on Human Mobility in the Pacific and Possible Impact on Canada

IOM (2016b). Disability and unsafe migration: data and policy, understanding the evidence. Data Briefing Series Issue No. 7, December 2016.

IOM (2016c). Ocean, Environment, Climate Change and Human Mobility. IOM and Ocean and Climate Platform (OCP)

IOM (2017). Marshallese perspectives on migration in the context of climate change. Policy Brief Series issue 1, vol. 5.

IOM (2018a). Migration in the 2030 Agenda: A guide for practitioners

IOM (2018b). Mapping Human Mobility and Climate Change in Relevant National Policies and Institutional Frameworks. The Warsaw International Mechanism for Loss and Damage Associated with Climate Change Impacts. Task Force on Displacement, Activity I.1.

IOM (2018c). Mapping Human Mobility (Migration, Displacement and Planned Relocation) and Climate Change in International Processes, Policies and Frameworks. Task Force on Displacement. Activity 11.2. IOM (2019). Assessing Water Shortage-Induced Displacement in Missan, Muthanna, Thi-Qar and Basra

IOM (2020a). COVID-19 Analytical Snapshot: Economic impacts on migrants

IOM (2020b). Human Mobility and Adaptation to Environmental Change. World Migration Report 2020, Ch. 9.

IOM (2020c). <u>Children and Unsafe Migration</u>. World Migration Report 2020, Ch. 8.

IOM (2020d). Africa Migration Report: Challenging the narrative

IOM (2020e). Migration in the Intended Nationally Determined Contributions (INDCs) and Nationally Determined Contributions (NDCs)

IOM (2020f). Environmental Migration. IOM Migration Data Portal. Last updated on 27 October 2020.

IOM (2020g). Urban Displacement in Iraq: A preliminary analysis

IOM (2020h). Migration Governance Indicators: Republic of Iraq Profile 2020

IOM (2021a). Green Recovery and Nature-Based Solutions in Response to the Socioeconomic Impacts of COVID-19 Facing Africa: Building back better with migrants and youths. Africa Regional Forum on Sustainable Development-Side Event Draft Concept Note.

IOM (2021b). Mozambique Accessed on 15 February 2021.

IOM (2021c). Urban displacement in Iraq: overview

John Hopkins University (JHU). Coronavirus Resource Center: Peru. Accessed 10 July 2021.

Joint Resource Centre (JRC) (2018). International Migration Drivers: A quantitative assessment of the structural factors shaping migration. JRC Science for Policy Report: European Commission

Kawa H., Born C. & Nordqvist P. (2018). Iraq: Climate related security risk assessment. The Expert Working Group on Climate Related Security Risks. Stockholm International Peace Research Institute

Kousky C. (2016). Impacts of Natural Disasters on Children. The Future of Children 26(1), Spring 2016.

Linares A. (2020). 'We're defeated': Climate migrants fleeing storm-stricken Central America struggle to find refuge. NBC News, published on 5 April 2021.

Lu D. & Flavelle C. (2019). Rising Seas Will Erase More Cities by 2050, New Research Shows. The New York Times, published on 20 October 2019.



Magnan A.K., Garschagen M., Gattuso J.P., Hay J.E., Hilmi N., Holland E., Isla F., Kofinas G., Losada I.J, Petzold J. Ratter B., Schuur T., Tabe T. and van de Wal, R. (2019). Integrative Cross-Chapter Box on Low-Lying Islands and Coasts. IPCC Special Report on the Ocean and Cryosphere in a Changing Climate [H.-O. Pörtner, D.C. Roberts, V. Masson-Delmotte, P. Zhai, M. Tignor, E. Poloczanska, K. Mintenbeck, A. Alegría, M. Nicolai, A. Okem, J. Petzold, B. Rama, N.M. Weyer (eds.)].

Maplecroft Climate Change Vulnerability Index (CCVI) (2014). 31% of global economic output forecast to face climate change risks by 2025

Martin S. (2013). Environmental Change and Migration: What we know Migration Policy Institute.

Matoso (2015). Understanding patterns of climate resilient economic development: Maputo, Mozambique. Overseas Development Institute (ODI).

Max Planck Institute (2021). 'Extreme Temperatures, Heat Stress and Forced Migration'.

Migration Policy Institute (MPI) (2020). Climate Impacts as Drivers of Migration. Published on 23 October 2020. Accessed 6 November 2020.

Ministry of Development Planning and Aid Coordination (MDPAC) (2014). 'Integrating Climate, Environment, Disaster and Gender Risk into Development' (unpublished). Ministry of Health and Medical Services (MOHMS) (2016). Fiji Adolescent Health Situational Analysis 2016

Mitchell (2016). Children in a changing climate: How child-centered approaches can build resilience and overcome multiple barriers to adaptation. Mainstreaming children's vulnerabilities and capacities into community-based adaptation to enhance impact

Mixed Migration Centre (MMC) (2018). Mixed Migration Review 2018

MMC (2020). Weak Links: Challenging the climate and migration paradigm in the Horn of Africa and Yemen. MMC Briefing Paper, February 2020.

Moloney A. (2020). Water-related conflicts set to rise amid demand growth and climate impacts. Thomas Reuters Foundation. Published on 2 September 2020.

Nansen Initiative (2015). Disaster-induced cross-border displacement

National Oceanic Atmospheric Administration (NOAA) (2020). Study: Climate change has been influencing where tropical cyclones rage. Accessed on 18 May 2021.

NOAA National Centers for Environmental Information (2021). State of the Climate: Global climate report – annual 2020. Accessed on 28 June 2021. Nicholls R.J., Wong P.P., Burkett V.R., Codignotto J.O., Hay J.E., McLean R.F., Ragoonaden S. and Woodroffe C.D. (2007). Coastal Systems and Low-Lying Areas. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 315–356.

Nobre G.G. et al. (2019). Migration and displacement risks: connecting dots, understanding trends

Norwegian Refugee Council (NRC), Internal Displacement Monitoring Centre (IDMC) & United Nations Office of the High Commissioner for Refugees (UNHCR) (2015). Disasters, climate change and human mobility in Southern Africa: Consultation on the draft protection agenda. Background Paper (4–5 June 2015). Stellenbosch, South Africa

Nurse L., Mclean R., Agard J. & Briguglio L. (2014). Small Islands. Cited in Climate Change (2014). Impacts, Adaptation and Vulnerability Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.

O'Brien G., Dickens C., Baker C., Stassen R. & van Weert F. (2020). Sustainable Floodplains: Linking e-flows to floodplain management, ecosystems and livelihoods in the Sahel of North Africa Sustainability 2020, 12, 10578. Overseas Development Institute (ODI) (2016). Climate Induced Migration: Closing the policy gap

ODI (2017). <u>Climate Change, Migration and</u> Displacement: The need for a risk-informed and coherent approach

Oxfam (2016). The Future is a Choice: The Oxfam framework and guidance for resilient development

Oxfam (2017). "Uprooted by climate change: Responding to the growing risk of displacement."

Pacific Resilience Partnerships (PRP) (2020). Webinar 5: Stories of Resilience, Recovery and Solutions in Contexts of Internal Displacement. Dated 3 December 2020.

Paoletti E. & Vinke K. (2020). <u>Developing</u> a risk framework to address the nexus between climate change, migration and COVID-19

Pérez, Rodrigo Narro. How scientists are using drones to lower the risk of catastrophic flooding from large glacial lakes. The Conversation. Published 6 June 2021.

Philipsborn R. P. & Chan K. (2018). <u>Climate</u> Change and Global Child Health. Paediatrics 141(6). June 2018.

Podesta J. (2019). The Climate Crisis, Migration and Refugees. The Brookings Institution.

Population Council (PC) (2013). Girls on the Move: Adolescent girls and migration in the developing world

Potsdam Institute for Climate Impact Research (PIK) & IOM (2021). Assessing the evidence: Climate change and migration in Peru

Price R.A. (2018). Environmental risks in Iraq. K4D Helpdesk Report. Brighton, UK: Institute of Development Studies.

Pringle P. (2018). Effects of Climate Change on 1.5° Temperature Rise Relevant to the Pacific Islands. Pacific Marine Climate Change Report Card: Science Review 2018, pp 189–200.

Ray, Siladitya. Peru's Covid-19 Fatalities Are Nearly Three Times Higher Than Originally Thought, Marking World's Worst Death Toll Per Capita. Forbes. Published 1 June 2021.

Rema H. & Oliva P. (2016). Implications for Climate Change for Children in Developing Countries. The Future of Children 26(1). Spring 2016.

Republic of Philippines (2016). Republic Act No.10821 – An Act Mandating the Provision of Emergency Relief and Protection for Children Before, During, and After Disasters and other Emergency Situations

Ryan D. (2019). Does Climate Change Cause Armed Conflict? Stanford University.

Save the Children (SC) (2008a). Children on the Move in Southeast Asia

SC (2016). Uncertain Futures: The impact of displacement on Syrian refugees and Iraqi internally displaced youth in Iraq

SC (2017). Social Cost of Migration on Children Left Behind

SC (2019). Stop the War on Children: Protecting children in 21st century conflict

SC (2020a). Protection Beyond Reach: State of play of refugee and migrant children's rights in Europe

SC (2020b). 'Children on the Move and Climate Change'. The Graduate Institute Geneva (unpublished).

SC (2020c). Stop the War on Children: Gender matters

SC (2020d). Digital Safeguarding for Migrating and Displaced Children: An overview of the current context and trends, potential risks and practical next steps

SC (2021). Born into the Climate Crisis: Why we must act now to secure children's rights

Schraven B. (2014). Environmental Degradation, Climate Change, Migration and Youth. Migration and Youth: Challenges and opportunities, Chapter 15. Global Migration Group.

Schraven B, Adaawen S, Rademacher-Schulz C & Segadlo N. (2020). Climate Change Impacts on Human (Im) Mobility in Sub-Saharan Africa: Recent trends and options for policy responses GIZ.

Sheffield P. & Landrigan PJ. Global climate change and children's health: threats and strategies for prevention. Environ Health Perspect. 2011 Mar;119(3):291–8.

Sieroka M. (2020). Development Diaspora: Marginalisation in Mozambique's climate-induced displacement policy 10 August 2020.

Stanberry L. et al. (2018). Prioritizing the Needs of Children in a Changing Climate PLOS Medicine 15(7).

Strauss B. H., Kulp S. & Levermann A. (2015). Mapping Choices: Carbon, climate, and rising seas – our global legacy. Climate Central, Princeton.

Sydney C. (2020). Covid-19, a risk multiplier for future distress migration and displacement? IOM Environmental Migration Portal. Accessed on 11 November 2020.

The Pacific Community (SPC) (2015). Trends in Neonatal and Infant Mortality Rates in the Pacific Island States. Cited in Save the Children (2019). 'Child Rights Situation Analysis'.

Thomas A. & Benjamin L. (2017). Policies and Mechanisms to Address Climate-induced Migration and Displacement in Pacific and Caribbean Small Island Development States

UN (n.d.). World Day to Combat Desertification and Drought, 17 June. Accessed on 30 May 2021. **UN (2018).** 73/195. Global Compact for Safe, Orderly and Regular Migration

United Nations Development Programme (UNDP) (2020a). Human Development Report 2020: Fiji

UNDP (2020b). Human Development Report 2020: Iraq

UNDP (n.d.). Climate Change Adaptation Country Profiles: Fiji Accessed on 23 March 2021.

United Nations Environment Management Group (UNEMG) (2011). Global Drylands: A UN system-wide response

United Nations Environment Programme (UNEP) (2020). Locust Swarms and Climate Change Published 6 February 2020.

United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) (2015). Asia Pacific Migration Report 2015: Migrants' contributions to development

United Nations Framework Convention on Climate Change (UNFCCC) (2015). The Paris Agreement

UN Habitat (n.d.). Climate change assessment for Maputo, Mozambique

United Nations High Commissioner for Refugees (UNHCR) (2021). Disability, Displacement and Climate Change International Disability Alliance.

United Nations International Children's Emergency Fund (UNICEFa) (n.d.). Peru: what we do Accessed July 2021.

UNICEFb (n.d.). Country profiles: Mali

UNICEFc. (n.d.). Mali: what we do

UNICEF (2008b). 'Protect Me With Love and Care: A child protection baseline report for Fijj'. Cited in UNICEF (2017). <u>Situation Analysis of</u> Children in Fiji

UNICEF (2010). UNICEF Working Paper: Children Left Behind. Accessed on 10 November 2020.

UNICEF (2012). Monitoring the Situation of Children and Women, Multiple Indicator Cluster Survey, 2011. Cited in SC (2019). Child Returns in Iraq: Prospects for durable solutions

UNICEF (2013). Child-centred disaster risk and vulnerability assessment: Mozambique

UNICEF (2014). Situation Analysis of Children in Mozambique 2014

UNICEF (2015). Unless we act now: The impact of climate change on children

UNICEF (2015b). Child Sensitive Social Protection in Fiji: Assessment of the Care and Protection Allowance

UNICEF (2017a). A Child is a Child: Protecting children on the move from violence, abuse and exploitation **UNICEF (2017b).** No place to Call Home: Protecting children's rights when the changing climate forces them to flee

UNICEF (2017c). Global Programme Framework on Children on the Move

UNICEF (2017d). <u>Situation Analysis</u> of Children in Fiji

UNICEF (2017e). Child Poverty in Iraq: An Analysis of Child Poverty Trends and Policy Recommendations for the National Poverty Reduction Strategy 2017–2021

UNICEF (2017f). In Search of Opportunities: Voices of Children on the Move in West and Central Africa

UNICEF (2018a). Key Drivers of the Changing Prevalence of Child marriage in Three Countries in South Asia

UNICEF (2018b). Advantage or Paradox? The challenge for children and young people growing up urban

UNICEF (2018c). Deep Inequality Continues to Shape the Lives of Children in Iraq Press release. Accessed on 19 May 2021.

UNICEF (2020a). Lost at Home: The risks and challenges for internally displaced children and the urgent actions needed to protect them

UNICEF (2020b). Refugee and Migrant Response in Europe Situation Report #35 (January – March 2020).

UNICEF (2020c). COVID-19 Effects are Hitting Children the Hardest Published on 12 June 2020.

UNICEF (2020d). Assessment of COVID-19 Impact on Poverty and Vulnerability in Iraq

UNICEF (2021a). Futures At Risk: Protecting the rights of children in a changing climate

UNICEF (2021b). Healthy Environment for Healthy Children: Global Programme Framework

UNICEF (2021c). Humanitarian Action for Children: Mali

UNICEF (2021d). The Climate Crisis is a Child Rights Crisis:: Introducing the Children's Climate Risk Index

UNICEF & IDMC (2019). Protecting and supporting internally displaced children in urban settings

UNICEF & UN Women (2019). Gender and Age Inequality of Disaster Risk

United Nations Office for Disaster Risk Reduction (UNISDR) (2009). Relationship between Natural Disasters and Poverty: A Fiji Case Study. Cited in UNICEF (2017). Situation Analysis of Children in the Pacific Island Countries

UNISDR (2011). Global Assessment Report on Disaster Risk Reduction 2011

UNOCHA (2020a). Mozambique: Floods 2019

UNOCHA (2020b). Humanitarian Needs Overview: Iraq

UNOCHA (2021). Aperçu des Besoins Humanitaires: Mali

United Nations Office for the High Commissioner for Human Rights (UN OHCHR) (2018). The Slow Onset Effects of Climate Change and Human Rights Protection for Cross Border Migrants

UN-OHCHR (2021). The Right to Education for Girls in Post-ISIL Iraq. Published on 24 January 2021.

United States Agency for International Development (USAID) (2017a). Climate Change Risk Profile: Iraq

USAID (2017b). Climate Change Risk Profile: Peru

USAID (2018). Climate Risk Profile: Mozambique Factsheet Accessed 17 February 2021.

USAID (2019). Climate Risks in Food for Peace Geographies: Mali

USAID (2019b). Mali Country Profile

UN Women (2016). Global Database on Violence Against Women: Mali

Verdasco A. (2013). <u>Strengthening child</u> protection systems for <u>unaccompanied migrant</u> children in Mozambique UNICEF.

Watts et al. (2021). The 2020 report of The Lancet Countdown on health and climate change: responding to converging crises, The Lancet. Vol. 397, Issue 10269, pp 129–170.

Wong P.P., Losada I.J., Gattuso P., Hinkel J., Khattabi A., McInnes K.L., Saito Y. and Sallenger A. (2014). Coastal Systems and Low-Lying Areas in Climate Change 2014: Impacts, Adaptation and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp 361–409.

Wood J., Harrison S., Wilson R., Emmer A., Yarleque C., Glasser N., Torres J, Caballero A., Araujo J, Bennett G., Diaz-Moreno A., Garay D., Poma C., Reynolds J., Riveros C., Romero E., Shannon S. & Villafane H. (2021). <u>Contemporary glacial lakes in the</u> <u>Peruvian Andes</u>

World Bank (WB) (n.d.). Climate Change Knowledge Portal: Mozambique Accessed 17 February 2021.

WB (2017). Climate Vulnerability Assessment: Making Fiji climate resilient

WB (2018). Groundswell: Preparing for internal climate migration

WB (2021). The World Bank in Peru: Overview Last updated April 2021.

World Economic Forum (WEF) (2019). Flooding is predicted to displace 50 million people a year by 2100. What's being done? Published on 13 December 2019.

World Meteorological Organisation (WMO) (2016). Disaster-related displacement in a changing climate. Bulletin No. Vol.65 (1).

WMO (2020). State of the Global Climate 2020

World Risk Index (WRI) (2019). World Risk Report 2019. Bündnis Entwicklung Hilft and Ruhr University Bochum – Institute for International Law of Peace and Armed Conflict (IFHV).

World Travel & Tourism Council (WTTC) (2018). Travel & Tourism Economic Impact 2018: Fiji

You D., Lindt N., Allen R., Hansen C., Bise J. & Blume S. (2020). Migrant and Displaced Children in the Age of COVID-19. How the pandemic is impacting them and what we can do to help. Migration Policy Practice Vol. X., Number 2.





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