unesco

# Learning at risk

## The impact of climate displacement on the right to education

Global report

Education 2030

**UNESCO – a global leader in education**

Education is UNESCO's top priority because it is a basic human right and the foundation for peace and sustainable development. UNESCO is the United Nations' specialized agency for education, providing global and regional leadership to drive progress, strengthening the resilience and capacity of national systems to serve all learners. UNESCO also leads efforts to respond to contemporary global challenges through transformative learning, with special focus on gender equality and Africa across all actions.

**The Global Education 2030 Agenda**

UNESCO, as the United Nations' specialized agency for education, is entrusted to lead and coordinate the Education 2030 Agenda, which is part of a global movement to eradicate poverty through 17 Sustainable Development Goals by 2030. Education, essential to achieve all of these goals, has its own dedicated Goal 4, which aims to ***"ensure inclusive and equitable quality education and promote lifelong learning opportunities for all."*** The Education 2030 Framework for Action provides guidance for the implementation of this ambitious goal and commitments.

unesco
United Nations
Educational, Scientific
and Cultural Organization

Education 2030

Published in 2023 by the United Nations Educational, Scientific and Cultural Organization,
7, place de Fontenoy, 75352 Paris 07 SP, France



ISBN 978-92-3-100642-5

https://doi.org/10.18356/9789231006425



Cover photo: bysora/Shutterstock.com*
Inside icons: Puckung/Shutterstock.com*, Flat.Icon/Shutterstock.com*, Fourleafl over/Shutterstock.com*
Graphic design: UNESCO
Cover design: UNESCO

Printed by: UNESCO

*Printed in France*

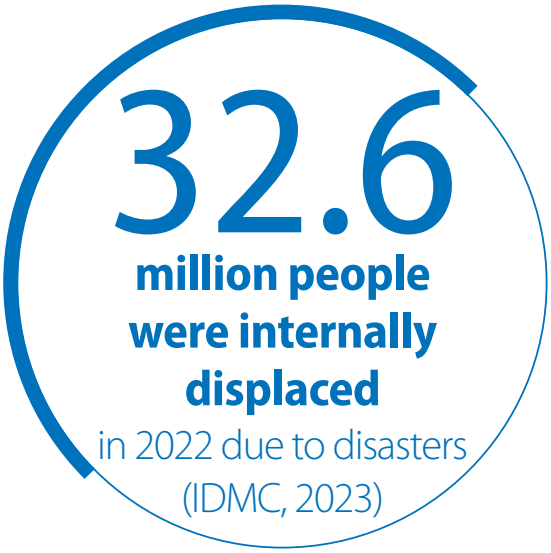
CLD 2078.23

SHORT SUMMARY

# How climate displacement the impacts the right to education

The growing impacts of climate change and displacement on education can no longer be ignored. The increasing number of people displaced due to climate change faces unique vulnerabilities, especially in terms of access to education. This challenge is not only attributed to the often limited political and legal recognition of these displaced persons, but also stems from the global community's lack of awareness of the diverse obstacles they encounter in seeking access to education.

This global report, which concludes the "Initiative on the impact of climate change and displacement on the right to education", aims to provide guidance to policy-makers worldwide on how to better respect, protect and fulfil the right to education of climate-displaced people. It provides an overview of climate-induced barriers to education, and global policy guidance on how to ensure the protection of the right to education of these populations.




The report will inform UNESCO's Initiative on "The evolving right to education within a lifelong learning perspective" which is investigating how the right to education, as enshrined in international normative instruments, could be strengthened to meet modern needs in our rapidly changing societies.

unesco

*"Since wars begin in the minds of men and women it is in the minds of men and women that the defences of peace must be constructed"*

# Learning at risk

## The impact of climate displacement on the right to education

Global report

# Acknowledgements

This report was produced by the Section of Education Policy of the Education Sector of UNESCO. It is part of a global "Initiative on the impact of climate change and displacement on the right to education" launched by UNESCO in 2020.

Under the leadership of Borhene Chakroun, and the supervision of Gwang-Chol Chang, and under the close technical guidance of Rolla Moumné, it was drafted by Allissa Kizer and Agathe Charles-Bray, with contributions from Elise Rondin and Sharlene Bianchi.

This report is based on three UNESCO regional synthesis reports:

- "Asia-Pacific regional synthesis: climate change, displacement and the right to education" authored by Jonghwi Park, Ying-Syuan (Elaine) Huang, Fumiko Noguchi and Philip Vaughter.

- "Central America and the Caribbean regional synthesis: climate change, displacement and the right to education" authored by Andrea Furnaro and David Knaute.

- "South-Eastern Europe regional synthesis: climate change, displacement and the right to education" authored by Allissa Kizer, Arsen Mkrtchyan and Agathe Charles-Bray.

It was prepared with the support and review of Adelin Pierre, Andrea Furnaro, Antonio Diaz Aranda, Arsen Mkrtchyan, Diana Ortiz Parra, Hazel Shirinda, Jonghwi Park, Malek Abidi, Mathilde Treguier, Mouneshwar Soundur and Nour Mohamed.

# Table of contents

# List of figures



# List of tables

# Executive summary

Climate change, and its effects, have been highlighted more frequently and with more urgency in media across the globe during the past decade. This phenomenon – which is threatening livelihoods, biodiversity, sustainability, and human settlements – is only expected to worsen. In 2023, with the return of El Niño phenomenon[1], scientists are expecting the effects of climate change to be further exacerbated – with unprecedented heat waves, drought, wildfires, and intensified severe weather events (Mahdawi 2023).

Current and upcoming effects of climate change directly affect human mobility within and across countries. This often-forced mobility has immediate repercussions on the fulfillment of human rights, notably the right to education.

This report aims to examine the barriers to education as a result of climate change and climate displacement, taking into account the policy implications of heightened human mobility. The comparative analysis contained is based on research undertaken in four regions around the globe (Central America and the Caribbean, Asia-Pacific, South-Eastern Europe and East Africa).

The key conclusion of the analysis is that climate change poses direct and indirect threats to the fulfillment of SDG 4 and the right to education in all four regions studied.

While the Asia-Pacific region is statistically the most impacted by internal displacement resulting from climatic change episodes, all four examined regions exhibit patterns of both internal and international climate-induced displacements, unique to their regional contexts and each with their own associated barriers to education. However, despite regional differences, the comparative analysis revealed that these patterns of displacement also share – to some extent – similarities, allowing them to be grouped into broader common categories:

- Temporary displacement following sudden onset events;
- Permanent, spontaneous internal displacement following repeated sudden and slow-onset events;
- International displacement as a result of both sudden and slow-onset events; and
- Trapped populations – otherwise described as those who would be internally displaced but do not have the means to find mobility out of their current hazard-prone areas.

Particularly in the Asia-Pacific region, and to a lesser extent in Central America and the Caribbean, government-planned relocation was also recognized as a displacement pattern.

While the displacement patterns and associated barriers to education vary between countries and between regions, this report identifies some of the most common trends and challenges.

1 El Niño occurs on average every two to seven years, and episodes typically last nine to 12 months. It is a naturally occurring climate pattern associated with warming of the ocean surface temperatures in the central and eastern tropical Pacific Ocean (WMO, 2023)

Following sudden-onset events, the most direct barrier to education identified amidst temporary displacement is the destruction of schools, learning materials and infrastructure presenting educational disruptions for sometimes months at a time.

When looking at various forms of displacement, one significant yet indirect barrier to education emerges: The loss of livelihoods due to climate change, which either creates or exacerbates poverty. Events like severe flooding, droughts, and heatwaves have pronounced effects on those dependent on agriculture and tourism. Specifically, in Central America and the Caribbean, people working in the tourism sector face substantial disruptions to their income sources and are pushed deeper into poverty as they lose valuable assets. Such poverty prevents families from covering auxiliary educational fees even when access to education itself is free, such as costs of uniforms, books, supplies, transport and more.

While these are the most evident barriers to education as a result of climate change and climate displacement, there are nevertheless other obstacles that pose significant challenges to guaranteeing access to education for all. These include language barriers upon displacement, discrimination, legal barriers upon internal and international displacement, lack of capacity in schools in receiving areas and lack of teachers, educators and other educational personnel trained to support the psychosocial needs of climate-displaced persons.

After identifying these common trends and challenges, this report concludes with policy guidance supported by promising policy practices already in force, to help ensure the right to education for all and achieve SDG 4 in the face of climate change and displacement.

In particular, it emphasizes the importance to adopt comprehensive policies and legislation refining definitions of internally displaced persons to include climate displaced people, and establishing clear definition of climate refugees. In the realm of Disaster Risk Reduction and Management policies, education should be prioritized alongside essential provisions like food and shelter, and particular attention should be paid to vulnerable groups. In addition, empowering affected communities requires the establishment of post-disaster social safety net programmes, ensuring financial support for displaced families' education-related needs as well as the creation of social networks for children through schools. International cooperation is also essential, utilizing funding for resilient infrastructure, climate-resistant crops, and creating a dedicated fund for climate-displaced persons' education. Strengthening education resilience to climate change and related displacement involves leveraging global responses to the COVID-19 pandemic for distance learning, integrating climate change literacy into curricula and preparing schools to provide education in the language of climate displaced students. Finally, enhancing education management requires preparing schools for influx, identifying alternative shelters, and simplifying administrative procedures for climate-displaced persons' education access.

# List of acronyms and abbreviations

| | |
|---|---|
| **ASEAN** | Association of Southeast Asian Nations |
| **BANBEIS** | Bangladesh Bureau of Educational Information and Statistics |
| **CDPs** | Climate-displaced persons |
| **CIIDP** | Climate-induced internally displaced persons |
| **FAO** | Food and Agriculture Organization |
| **IDMC** | Internal Displacement Monitoring Centre |
| **ICRC** | International Committee of the Red Cross |
| **IIEP** | UNESCO International Institute for Educational Planning |
| **IMF** | International Monetary Fund |
| **IOM** | International Organization for Migration |
| **IPCC** | Intergovernmental Panel on Climate Change |
| **SDGs** | Sustainable Development Goals |
| **TVET** | Technical and Vocational Education and Training |
| **UIS** | UNESCO Institute for Statistics |
| **UNDP** | United Nations Development Programme |
| **UNDRR** | United Nations Office for Disaster Risk Reduction |
| **UNESCO** | United Nations Educational, Scientific and Cultural Organization |
| **UNICEF** | United Nations Children's Fund |
| **UNODC** | United Nations Office on Drugs and Crime |
| **UNU-IAS** | United Nations University Institute for the Advanced Study of Sustainability |
| **WFP** | World Food Programme |

# Terminology

Recognizing the lack of international agreed upon definitions in this context, the report will use the following working definitions for these terms:

**Climate-displaced persons** are understood as those who move for reasons relating to climate change. This phenomenon is referred to as climate displacement and covers all forms of human movement, whether internal or cross-border, and whether voluntary to some extent, or forced. Movement may be temporary or permanent and the climate change related trigger may be a slow or rapid onset environmental hazard.[2]

**Climate risk** in this context can be defined as resulting from "interactions between climate-related hazards with the exposure and vulnerability of the affected human or ecological system to the hazards" (IPCC 2020). Climate-related hazards can be slow in their onset, such as sea level rise and changes in temperature and precipitation, while others happen more suddenly, such as storms and flooding. Exposure is the presence of people, livelihoods, environmental services and resources, infrastructure or economic, social or cultural assets in places likely to be affected by a climate hazard, and vulnerability is the propensity or predisposition to be adversely affected by that hazard (IPCC 2014).[3]

**Disaster Risk Management (DRM)** is understood as the application of disaster risk reduction policies and strategies to prevent new disaster risk, reduce existing disaster risk and manage residual risk, contributing to the strengthening of resilience and reduction of disaster losses (UNDRR, 2023A).

**Disaster Risk Reduction (DRR)** is aimed at preventing new and reducing existing disaster risk and managing residual risk, all of which contribute to strengthening resilience and therefore to the achievement of sustainable development. In line with the Sendai Framework for Disaster Risk Reduction 2015-2030, disaster risk reduction strategies and policies should be aimed at preventing the creation of disaster risk, the reduction of existing risk and the strengthening of economic, social, health and environmental resilience (UNDRR, 2023B).

**Internally displaced persons (IDPs)** are people or groups of people who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of armed conflict, or to avoid the effects of armed conflict, situations of generalized violence, violations of human rights, or natural or human-made disasters and who have not crossed an international border (UNESCO 2023a).

2 The singular use of displacement terminology is intended to simplify the discussion. A distinction is often made between climate displacement and climate migration. 'Displacement' is used to depict a situation where people are forced to leave their home or place of habitual residence and 'migration' indicates that the movement was voluntary, to a degree (OHCHR, 2017, pp. 3-4; Nansen Initiative, 2015, paras. 16, 20; UNICEF, 2018, p. 6). However, there is growing consensus that the line between forced and voluntary movement is difficult to draw, as in almost all scenarios there are multiple causes that drive movement (UN Human Rights Council, 2018, para. 16). In the context of the right to education and its universal application it is not necessary to make this distinction. Nevertheless, the verb migrate is still of practical use, alongside terms such as human mobility and human movement, where referring to the physical act of moving from one place to another.

3 For a more detailed exploration of the terms 'climate risk' and 'vulnerability', see technical papers 3 ("Assessing vulnerability for climate adaptation") and 4 ("Assessing current climate risks"), UNDP, 2004.

**Internal displacement** refers to each forced movement of a person within the borders of their country. They can be induced, for example, by conflict, violence, natural disasters or the effects of climate change. Often, these people face recuring or overlapping crises and are displaced several times consecutively (IDMC 2023).

**Planned relocation** is a solutions-oriented measure, involving the State, in which a community is physically moved to another location and resettled there with the conditions necessary for rebuilding their lives (UNESCO 2020).

**School-age population** is the population of the age group theoretically corresponding to a given level of education as indicated by theoretical entrance age and duration (UIS).

**Seasonal migrants** or circular migrants, are members of the household who leave for part of the year to work, but are still considered household members (UNESCO 2023a).

**Spontaneous migrants** are individuals or households who make the choice to permanently migrate internally, as opposed to migrating as part of government-planned relocation (UNESCO 2023a).

**Trapped populations** are those who are unable to migrate to safe locations and remain trapped in locations vulnerable to the impacts of climate hazards. Often, slow onset environmental changes can heighten vulnerability by reducing the very resources that are needed to migrate.[4]

**Vulnerability** in this context refers to the propensity or predisposition to be adversely affected by climate hazards and encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of ability to cope and adapt (IPCC 2014). Different circumstances can give rise to different forms of vulnerability, whether they be socio-economic, social, environmental or institutional and can contribute to the 'trapped' status of certain populations.

4 The Foresight Report (2011) brought light to the concept of 'trapped populations', and describes a situation where "those with lower wealth or capital face a double set of risks from future environmental change: their reduced level of capital means that they are unable to move away from situations of increasing environmental threats; yet, at the same time, this very lack of capital makes them even more vulnerable to environmental change." Other interpretations are also possible, for example a situation where certain members of the household are left behind when others migrate, as is often the case for women and children in Bangladesh (Islam and Shamsuddoha, 2017).

# Chapter 1

## Introduction

## Context and rationale

For the past several decades, scientists have warned the world that the effects of global warming and climate change would be serious: intensified storms, increased flooding, disastrous drought and famine, loss of marine biodiversity and land disappearing under water. Only recently, however, has the international community drawn attention to the fact that climate change will not only have effects on the earth itself, but on human mobility as well (ECDPM 2019).

These past warnings are today's reality, with millions of people displaced by natural disasters each year – both internally and across borders. The numbers are only rising with 23.7 million internal displacements taking place in 2021 as a result of natural disasters (IDMC 2022). This number increased to 32.6 million the following year (IDMC 2023). This illustrates that the catastrophic effects of climate change are no longer isolated emergencies but have become the new global norm – a reality that is only intensifying with every year.

While there has been significant literature regarding the nexus between climate-induced displacement and other rights[5] – such as the right to legal residency abroad – there is little information on the specific linkages between climate change, displacement and the right to education.

From a lifelong learning perspective, the right to education is a human right for all persons, without discrimination. While the protection of the right to education for certain vulnerable and marginalized groups – such as refugees, indigenous communities, among others – has been much discussed, the specific group of persons affected and displaced by climate change has been largely overlooked. This is crucial as children and young people are among the most vulnerable to the effects of climate change, and the disruption to their education caused by climate change could have dramatic long-term consequences for their lives. Weather-related disasters led to 43.1 million displacements of children between 2016 and 2021, representing approximatively 20,000 child displacements a day (UNICEF 2023).

Addressing the needs of these populations is important as they also face significant and specific barriers to education, such as:

- Schooling infrastructure destroyed by floods and prolonged school closures;
- Lack of teachers and education personnel in host areas to cope with high pupil-teacher ratios due to migration, but also lack of teachers forced to leave areas affected by natural disasters;
- Language barriers for persons displaced in other regions;
- Risk of dropout to pursue economic activity following climate-induced poverty; and
- Lack of legal residency rights for persons displaced internationally, and even internally in some cases, as a result of climate change.

5 See for example: Refugees International, "Climate, Migration, and Displacement – What are the Implications for Human Right Law?", 2020 ; Environmental Justice Foundation, "Protecting Climate Refugees – Securing international protection for climate refugees", last consulted in August 2023 ; Council on Foreign Relations, "Climate Change Is Fueling Migration. Do Climate Migrants Have Legal Protections? », 2022.

The barriers to education faced by climate-displaced persons are affecting a larger portion of the global population each year. Indeed, while research shows that climate change is increasing the frequency and intensity of disasters, those displaced by climate change are not limited to those immediately displaced by disasters which have occurred for centuries. A growing number of populations are now also displaced by the long-term consequences of climate change, such as loss of territory (i.e. sea-level rise); lack of food and water (i.e. desertification); and loss of livelihoods (i.e. drought and flooding destroying agriculture; coral bleaching impacting tourism).

Therefore, to fully realize SDG 4 and protect and fulfil the right to education for all, it is critical to ensure this growing, but politically invisible population, can continue to access quality education no matter where they find themselves.

## Understanding the issue at stake

The intricacies of the nexus between the right to education and climate displacement were explored in depth for the first time in UNESCO's policy paper titled 'The impact of climate displacement on the right to education' (UNESCO 2020), which is further explained in Chapter 2. For ease of reference, a summary of the key takeaways from the aforementioned policy paper is provided below:

### What is climate displacement?

The effects of climate change go far beyond global warming and rising sea temperatures. They entail rapid-onset weather events such as intensified monsoons, flooding, drought, and wildfires, as well as slow-onset environmental changes such as rising sea levels and desertification. These climatic events force people to migrate- either to a new location within their own country (internal displacement) or cross-border migration (international displacement). Whether populations are displaced suddenly due to an extreme event or are undergoing planned relocation, climate displacement entails the mass migration of populations affected by climate change forcibly leaving their homes that have become uninhabitable.

### Who is and will be the most at risk of being displaced?

Climate change does not affect everyone equally; populations of certain geographic locations, professions, socio-economic status, gender and age will be more prone to climate displacement than others. Certain geographic regions, such as the Asia-Pacific region, have long experienced the challenges of escalating natural hazards (flooding, monsoons, slowly disappearing islands). Furthermore, those populations whose livelihoods depend on agricultural productivity are at heightened risk. From a socio-economic perspective, the poorest of the poor face the most severe vulnerabilities, as they lack the financial resources which might permit them to legally migrate to safer areas – sometimes rendering them a trapped population.

Approximately 80% of individuals displaced by the impacts of climate change are women (OHCHR 2022), underscoring their heightened vulnerability in the face of environmental disruptions. Indeed, in many low and middle-income countries, women play a crucial role in agriculture, a sector

severely affected by the climate crisis, and are often primarily responsible for the livelihoods of their households. When climate change disrupts agricultural systems, women find themselves unable to provide for their families, forcing them to seek alternative means of survival, often by moving. In addition, the increased frequency and intensity of meteorological phenomena have pushed millions of people into food insecurity, with pregnant women being among the most impacted by malnutrition. In addition, climate change has played a role in the proliferation of vector-borne diseases such as malaria, further endangering the health of mothers (UNHCR 2022b). It should also be considered that the number of women displaced by climate change does not include women whose ability to move is hindered by social or cultural norms that prevent them from making such a decision without the consent of a male figure (IOM 2023b)

Children are also undeniably among the most vulnerable to climate displacement, as they face a perilous combination of factors that expose them disproportionately. Alarming statistics reveal that around half a billion children live in areas prone to frequent and severe flooding, while almost 160 million children live in areas facing high or extremely high levels of drought (IOM 2023a). This exposure makes them vulnerable to the devastating consequences of extreme weather events, particularly the risk of displacement. The high probability of children being displaced could also be explained by the fact that when women are forced to migrate, they often take their children with them as they are socially and culturally considered responsible for the household and the children. Between 2016 and 2021, the Internal Displacement Monitoring Centre reported 43.1 million children were internally displaced because of weather-related disasters. This number is significant, as it constitutes a substantial portion of the 135 million total internal displacements noted globally during that timeframe. On average, this means approximately 20,000 children were displaced daily (UNICEF, 2023)

## What are the applicable international human rights frameworks?

International human rights law provides a large body of provisions and obligations for States to protect and fulfill the right to education, beginning with Article 26 of the Universal Declaration of Human Rights which establishes that "everyone has the right to education." Other international conventions – such as the 1960 Convention against Discrimination in Education – enshrine the right to equality of opportunity and treatment in education, including for foreign nationals, the obligation to provide free and compulsory primary education, to make secondary and higher education equally accessible to all, and much more.

There is also a growing body of international policy[6] that calls on states to provide certain rights for those displaced, notably: the strengthening of the resilience of education systems in countries affected by climate change, calling for increased preparedness, solidarity, and responsibility to respond to climate displacement, and facilitating orderly, safe, regular and responsible migration.

However, the crux of the interplay between climate displacement and the right to education is that while climate-displaced persons have the same right to education as each and every person, they have no specific right under international law to enter or remain in another State; under the 1951 Refugee Convention, persons displaced by climate change do not fall within the legal definition of a

6 The Paris Agreement (2015), Nansen Initiative (2015), The New York Declaration (2016), The UNESCO Declaration of Ethical Principles in relation to Climate Change (2017), The Global Compact for Migration (2018)

"refugee," and therefore are not guaranteed legal residency abroad. If gaining the legal right to simply migrate internationally is uncertain, protecting and fulfilling their right to education in the receiving country is even more precarious. With this in mind, copious barriers to the right to education for climate-displaced persons become clear.

## What are the dimensions of climate displacement and their expected impacts on education?

While their motives for migrating might differ, climate-displaced persons face similar barriers to the right to education as refugees. Climate-displaced persons often live in poverty and are already highly vulnerable. When forced to leave their homes, these people might find themselves without official documentation verifying their qualifications or in some cases their identity. Following migration, the government might place them in education outside of the formal system, lacking qualified teachers and certified examination procedures. Even if they can access the schooling system, cultural, linguistic and technological barriers often lead climate-displaced persons to drop-out. Regardless, such an abrupt migration often leaves learners facing xenophobia, violence, discrimination, and trauma of displacement – all of which impede quality access to continued education. The right to education of girls and women is often disproportionately affected by climate change, in particular, because of their existing societal roles, responsibilities, and cultural norms (e.g. if a family is impoverished as a result of a displacement induced by climate change, and does not have the financial means to send all their children to school, they will often send the boys to school while the girls will stay at home to help look after the house and the household) (UNESCO 2023c).

Furthermore, in the case of circular migration (migrating only during certain seasons due to cyclical, annual weather patterns), parents might hesitate to enroll their children in the local schooling system, knowing that their displacement is only temporary.

Internationally climate-displaced persons face further complications. To recall, such persons do not fall under the legal definition of a "refugee" according to international law, and are therefore neither guaranteed the right of residency in the receiving country nor the right to access the national education system.

# Chapter 2

## Synthesis context and study methods

In order to build evidence on the real barriers to education that exist on the ground and develop guidance for climate-displaced persons' right to education, UNESCO launched in 2020 the **Initiative – "The impact of climate change and displacement on the right to education"- with three main milestones:**

1. A policy paper containing a literature review and general guidance;

2. In-depth country case studies with empirical data collection in four regions (Asia-Pacific, Central America and the Caribbean, East Africa, and South-Eastern Europe), and regional synthesis reports based on these country case studies;

3. This global report containing policy guidance and tailored practices for countries around the globe.

## UNESCO's policy paper

To launch this Initiative, UNESCO published a working policy paper in December of 2020 to provide an overview of the expected impacts of climate change and displacement on the right to education based on a literature review of existing research. It provides a summary of:

- The definition and scope of climate displacement;
- Who will be affected;
- International human rights law and other frameworks related to climate displacement and education; and
- The expected barriers to education as a result of climate change and displacement, culminating in preliminary guidance for action.

This policy paper was a landmark publication given that no research had ever been published on the specific nexus between the concrete impacts of climate displacement on the right to education, analyzed within the framework of international human rights law.

## Deep-dive country case studies and regional synthesis reports

While the policy paper was a notable first step in bringing attention and knowledge to this topic, it is important that any policy guidance developed must be backed by empirical research and data collection to confirm the expected impacts on education as postulated in the policy paper. Therefore, UNESCO undertook a series of country case studies in different regions around the globe, with the following three subsequent-steps:

1. **Preliminary background reports** based on a desk review;
2. Regionally-**commissioned deep-dive country research and case studies**; and
3. **A regional synthesis report** for the regions studied – analyzing and summarizing regional trends, converging and diverging patterns, and policy guidance at the regional level.

The regions and countries studied were as follows:

1. **Asia-Pacific region:** Bangladesh, India, Indonesia, Viet Nam, and Tuvalu;
2. **The Central American and Caribbean region:** the Bahamas, Cuba, the Dominican Republic, Guatemala, and Jamaica;
3. **South-Eastern European region:** Bosnia and Herzegovina, Moldova, and Serbia.

Simultaneously, background reports were compiled for the East African region, specifically focusing on Kenya, Somalia, and Uganda. The regional analysis in the annex of this global report is based on these reports.

For all regions, the countries selected were chosen based on certain defined variables, such as:

- Presence and severity of climate change impacts;
- Existing evidence of climate-induced human mobility;
- Amount of literature readily available on the impacts of climate change on mobility;
- Representativeness of other countries in the region.

As different research institutions or independent researchers were commissioned for each regional synthesis report – with the aim of selecting the most well-informed, locally-based, and tailored research – the methodology and study design slightly varied from region to region. All methods of data collection included, inter alia, questionnaires; surveys; focus-group discussions; national consultations; and more.

The targets of the data collection ranged from local individuals most affected by climate change – among which some were already displaced, to officials from the Ministries of Education, regional education personnel, climate experts, disaster risk reduction (DRR) experts, and more.

The regional synthesis reports, with country case study summaries in annex, elaborated and published by UNESCO are available here:

- Asia-Pacific regional synthesis report (co-published by the United Nations University Institute for the Advanced Study of Sustainability UNU-IAS)
- Central America and the Caribbean regional synthesis report
- South-Eastern Europe regional synthesis report

## Global report

The final objective of this Initiative is to provide global policy guidance, ensuring that everyone affected by climate change is guaranteed their right to education. As the culmination of this project, this global report - drawing from initial background reports, regional research, individual country case studies, and, notably, regional synthesis reports - seeks to:

- Analyze the main converging and diverging trends amongst the four regions;
- Summarize the most common impacts of climate change and climate displacement on the right to education at a global level; and
- Provide global policy guidance on how to ensure the right to education in the face of climate change and displacement, with promising examples of implementation practices outlined in the country case studies.

To support the comparative analysis and global guidance, summaries of the findings from each of the four regional studies can be found in the annexes. For the sake of consistency, all the annexes are structured in the same manner, examining successively:

- How climate change is driving displacement in the studied region
- Climate displacement patterns and associated barriers to education
- Policy guidance for the studied region

It is important to note that, in addition to the country case studies and regional synthesis reports, this global report was also guided and informed by an international seminar held by UNESCO virtually on 24 May 2022, which brought together national and international experts, including government personnel, UNICEF, IDMC, IIEP, Amnesty International, and the Green Hope Foundation.[7] Similarly, this report is informed by the expert discussions that took place at the different regional events organized in 2023 to mark the launch of the regional synthesis reports:

- On 9th May 2023, a virtual seminar was held focusing on the impact of climate change and displacement on educational rights in the South-Eastern European region;
- The side event at the 79th Commission Session of UN ESCAP on "Climate Change and the right to education" that took place on 17th May 2023; and
- On 22nd June 2023, a virtual event was conducted to discuss the effects of climate change and displacement on educational rights in the Central American and Caribbean region.

As mentioned above, this global report is the final step of UNESCO's Initiative on "The impact of climate change and displacement on the right to education". With the launch of this report, UNESCO seeks to raise awareness and commitment among country representatives to take this issue into consideration, to be inspired from the examples of promising practices and to implement the policy guidance of this report in a context specific manner that takes into account the perspectives of multiple stakeholders, through a human rights-based and gender transformative approach.

7 The official report of the seminar, including key conclusions, can be found here: https://unesdoc.unesco.org/ark:/48223/pf0000381853

# Chapter 3

## A global comparative analysis

The Asia-Pacific, Central American and the Caribbean, East African, and South-Eastern European regions are among the most vulnerable in the world in the face of climate change. While it is clear, from the regional research carried out as part of UNESCO's Initiative, that each region experiences different climate displacement patterns and different associated barriers to education, some **overall common trends and challenges** seem to emerge which are present in the majority of countries in all regions, notably the following:

## Sudden-onset disasters and school disruptions

All countries studied, regardless of the frequency or intensity, experience sudden-onset disasters either in the form of cyclones, monsoons, hurricanes, flooding or landslides. Every country studied has documented instances of schools being damaged or destroyed by sudden onset disasters, leading to disruptions in education. Additionally, most of these countries use schools as emergency shelters, which can delay the re-opening of schools for regular instruction and thus have an impact on the right to education and in particular continuity in learning.

## Economic barriers, role of the agriculture sector and risk of food insecurity

Countries with a significant portion of their population working in agriculture are more exposed to drought-driven food insecurity and malnutrition, creating obstacles to access to education. These barriers can be both economic - when families working in agriculture lose their means of subsistence, preventing them from paying the costs associated with education and/or causing them to send their children to work to support the family at the expense of sending them to school - and physical, if pupils are not in physical condition to attend classes or assimilate learning properly. This is exemplified by countries such as Guatemala, which faces severe malnutrition issues due to drought-induced famine.

Countries whose food security depends on other countries and imports, due to their own inability to produce food, can be considered having low resilience to the effects of climate change, as they will be deprived of food if exporting countries are affected by the effects of climate change. Regions like South-Eastern Europe, with high GDP, strong food security, and the ability to import food, are well equipped to mitigate climate-related food insecurity, thus limiting the impact on education. However, such regions still have a moderate percentage of the population living in poverty – diminishing individual households' financial ability to adapt to the damage of climate disasters on education, but also on other aspects of their lives which could ultimately turn into a financial barrier to education. While such rates of poverty have existed for some time, the regional studies showed that climate change – particularly for those employed in the agricultural and tourism industries – has a great potential to increase poverty due to damage to crops and livestock, failed harvests and destroyed infrastructure.

## Language barriers

The studies from all regions showed that the already vulnerable populations are the ones most likely to be affected by and displaced by climate change – notably, indigenous populations and minorities. Evidence demonstrated that when these highly vulnerable populations are displaced – not only internationally, but also internally from one region or district to another – language barriers play a significant role in educational access and success. This is especially true in Guatemala, the Dominican Republic, Viet Nam, India (notably for Bangladeshi migrants), the Bahamas (for Haitian migrants) and for the displaced Roma populations in South-Eastern Europe. Indonesia serves as a notable example of linguistic challenges tied to displacement. As one of the world's most linguistically diverse countries, boasting over 700 languages and dialects, even a short-distance internal displacement can disrupt access to education in a leaner's native language. In contrast, countries like the Bahamas, Cuba, the Dominican Republic, and Jamaica primarily have one dominant language, so this issue is less pronounced. However, challenges do arise, such as when French-speaking Haitians move to neighboring countries like the Dominican Republic or the Bahamas. For these individuals, adjusting to schooling in English or Spanish can pose a significant hurdle – and thus limited their full realization of the right to education.

## Urbanization and limited school capacity

Climate change is not the sole factor leading the rural-urban movement in the countries studied, but it certainly contributes as rural population's livelihoods become more unsustainable. Given the large influx of rural migrants to urban hubs – particularly in Bangladesh, the Dominican Republic, Guatemala, the Republic of Moldova, Somalia, Tuvalu, and Viet Nam, schools might not have the capacity to provide quality education and access to all students in need, nor enough teachers specifically trained in how to provide the psychological and academic support to students who have lived through climatic hardships and traumatic events.

## Lack of coordinated policy and response

Except Bangladesh, none of the countries studied had a policy – be it included in educational policy or disaster risk reduction policy – that specifically and explicitly focuses on the right to education for persons displaced due to climate change. Notably, Bangladesh developed a policy to protect various rights for climate-induced internally displaced persons (CIIDP), in which CIIDPs have their right to education ensured. Outside of this, however, the Asia-Pacific and Central American and Caribbean regions have a Safe Schools Initiative, part of which includes measures to minimize the damage to schools caused by flooding, hurricanes, and landslides. Nevertheless, these measures will not necessarily help ensure educational continuity following disasters if governments do not actively identify alternative spaces to be used as emergency shelters. In South-Eastern Europe, the lack of coordinated policy and response is perhaps the most evident in Bosnia and Herzegovina and the Republic of Moldova, countries that are both operating under a fractured, decentralized governance system and in which responses largely take place only at the local level.

## The legal and policy barrier

More generally, the concept of climate displacement remains invisible in national policy in all regions. Outside of Bangladesh, the only exception is Cuba, who is the sole state studied that recognizes natural disasters as a reason to grant refugee status. The Kampala Convention – for the African signatories – does include natural or human-made disasters as a reason to qualify a person as internally displaced legally, however, the Convention does not guarantee the right to education for IDPs. Bosnia and Herzegovina does have a legal definition of IDPs, however, this definition excludes climate change as a driver of expulsion from the place of habitual residence, specifying that the movement is a result only of fear of persecution or actual conflict. Therefore, those experiencing climate displacement do not fall under the definition of IDPs nor any policies that might be dedicated to such populations. Even more so, the Republic of Moldova does not have any legal definition of IDPs. Until all states develop a political or legal definition of climate displacement, developing targeted actions and legal rights for climate-displaced persons – including the right to education – will not in itself be sufficient to enable the realization of the right to education.

In addition, because of their population size, socio-economic and demographic factors, economic development or human capital, the countries studied also meet specific regional trends and challenges:

## Risk of second displacement

Certain regions, such as South-Eastern Europe, face unique barriers to education, notably the risk of secondary displacement. This risk arises due to the high number of IDPs from previous conflicts and ongoing migration flows. These populations, already in precarious positions, face the added risk of being displaced a second time, affecting educational continuity.

## Cultural barriers, nomadic pastoralism

In some regions, cultural practices, like nomadic pastoralism in East Africa, exacerbate education barriers. Nomadic pastoralists, who, along with their families and children, constantly move along with their herds, face challenges in maintaining educational consistency, particularly when climate change disrupts traditional migratory routes. As drought and pasture lands worsen, children from these communities are at heightened risk of educational disruption.

In conclusion, while regional vulnerabilities to climate change and their impacts on education differ, these common trends and challenges underscore the need for targeted strategies and international cooperation to ensure continued access to quality education for climate-displaced individuals.

# Chapter 4

## Global policy guidance and promising practices

Taking into account the barriers to education – both the diverse barriers more present in certain areas as well as the common barriers experienced in each region – the following are policy guidance, aimed at Member States and policy-makers worldwide, that span across multiple fields, from law and policy, to school-level, to cross-sector collaboration and financing. Such policy guidance aims to improve the preparedness and resilience of education systems to the effects of climate change and displacement in all patterns, be it temporary displacement, permanent migration, cross-border displacement, or planned relocation.

Where possible, each policy pointer is underpinned by promising practices identified through the country case studies undertaken in each region. For each pointer, excerpts from these regional studies are included. These excerpts showcase promising practices, providing examples of how the suggested policies might be implemented at country-level, particularly, in countries that grappling with climate change and displacement.[8]

## Adopting comprehensive policies and legislation:

- **Develop a clear, legal definition of an "IDP" in the national framework, that includes climate-displaced persons.** If the legislation does define "IDP," expand the definition to include persons displaced, both temporarily and permanently, by climate change.

    - **Official definition in Bangladesh**: Under the National Strategy on the Management of Disaster and Climate Induced Internal Displacement, the official definition of climate-induced internally displaced persons is the following: "Persons, group of persons, households, or an entire community who have been forced or obliged to flee or to leave their homes or places of habitual residence temporarily or permanently or who have been evacuated as a result of disasters caused by sudden and slow-onset climatic events and processes, and who have not crossed an internationally recognized State border" (Ministry of Disaster Management and Relief 2015). Having this comprehensive definition permits the government to create a strategy focused on this uniquely vulnerable population and renders them visible in the eyes of the government.

- **Create a policy initiative**, along with the necessary government personnel support, that is **dedicated specifically to uphold the fundamental rights of IDPs, including the right to education.** This policy should be separated from initiatives to aid refugees to give IDPs a clear voice.

    - **The National Strategy on the Management of Disaster and Climate Induced Internal Displacement (NSMDCIID) 2015, Bangladesh:** In 2015, recognizing the specific and unique needs of persons displaced by climate change in Bangladesh, the government adopted the NSMDCIID 2015 to set out a comprehensive and realistic rights-based framework that respects, protects and ensures the rights of climate-induced internally displaced persons (CIIDPs) in different stages of displacement. Paragraph 2.2.7 specifically "Ensure[s] the rights to education of the CIIDPs especially children and youths. No DCIIDP student will be denied access to a school on grounds that they have no school

8 While some practices have been selected here to give concrete examples, others are available in the annexes.

records (children can be tested to find their eligibility for appropriate grade)" (Ministry of Disaster Management and Relief 2015). This is the only example found throughout the countries studied in which a policy specifically protects the right to education of climate-displaced persons and can serve as a model for other national policy initiatives.

- **Establish a clear definition of climate refugees in the national framework,** and a legally binding framework to ensure CDPs' access to education on equal footing as refugees.

    - **The inclusion of natural disasters in Cuba's migration policy:** Quite exceptionally, Cuba is the only country studied in the Americas that considers natural disasters as a reason for recognizing refugee status at the national level. According to Art. 80, D-5 (b) of the 1978 Migration Law Regulations, Cuba understands "refugees" as part of the category "temporary resident". Therefore, a temporary conditionality is explicitly established. The term refugee is defined as "those foreigners and persons without citizenship whose entry is allowed in the national territory, because they had to flee their country due to a social disaster/calamity, armed conflict, cataclysm or other natural phenomena and who will remain temporarily in Cuba in so far as the normal conditions in their country of origin are re-established." This migration sub-classification was used to help Haitian refugees who sought asylum in Cuba between 1991 and 1994 (UNHCR, n.d.). However, it is less clear how this categorization can be used for CDPs affected by slow-onset climate disasters and to protect CDPs on a long-term basis. Despite the lack of data on how it has been implemented to date, this categorization is an interesting proposal that should be put into practice and used as a promising example.

- **In upcoming educational policy reforms, include a section on education in emergencies**, explicitly laying out a plan for alternative education continuity post-disaster that would include climate-displaced persons.

- In upcoming DRR and DRM reforms, explicitly **include ensured access to education in the systematic response plans** with the same urgency as providing food, shelter, and health. In the case that a centralized DRM/DRR/climate change coordination platform, committee or governmental body exists, **add a member of the Ministry of Education as a permanent seat.**

    - **Intersectoral roundtables for disaster risk management in the Dominican Republic:** Disaster risk prevention policy in the Dominican Republic has increasingly incorporated education as a key focus, particularly in expanding the population's education on climate change and its impacts, as well as on disaster prevention and response measures as mitigation strategies. The Ministry of Education is part of the National Council for Disaster Prevention, Mitigation and Response and the National Technical Committee for Risk Prevention and Mitigation. These are promising inter-sectorial instances to promote the right to education of CDPs. However, up to now, the participation of the Ministry of Education is limited to the incorporation of educational content and there is no mention of education for CDPs (UNESCO 2023b).

- **Develop a strategy to use education to combat human trafficking** amidst temporary displacement and spontaneous migration.

    - **A children's group in Sundarbans, India:** Save the Children India and local partners work to support out-of-school children who dropped out because of climate change related displacement in an area that has been targeted by human traffickers. The group also provides lessons on how to keep an eye out for human traffickers. If an unknown person enters the village, they confront a possible trafficker to find out why they are there. If possible trafficker seems out of place, they report the possible trafficker to their teacher, who then contacts authorities. Collectively the children serve as a kind of vigilante group for their peers, checking in with other children's families when they do not show up to school and also looking out for children talking to strangers, or leaving their homes wearing new clothes, something they would not do unless they were leaving the village/ town, possibly with a trafficker. In the 80+ villages where the programme now operates, trafficking rates have dropped nearly to zero (UNESCO 2023a).

- **Ensure that relocated communities are close enough to former livelihoods or create livelihood opportunities** to avoid poverty becoming a barrier to their children's education.

    - **One house one family at a time project in Bangladesh:** In 2015, Displacement Solutions (DS) and local partner Young Power in Social Action (YPSA) identified a range of viable land parcels that are suitable relocation sites for climate-displaced families in Sitakund, Bangladesh. They developed affordable houses that provide all the basic amenities, including a kitchen and washing facilities, a tube well to provide safe drinking water, and a solar heating and energy system for the house. The homes are provided at no cost to the families, and legally held in trust by YPSA to ensure that these homes will remain permanently within the social housing sector. YPSA and other partners provide ongoing support for livelihood opportunities, healthcare, and education in the area (UNESCO 2023a).

- **Prioritize appropriate responses to already vulnerable groups of learners** such as women, children, youth, and ethnic, religious, and linguistic minorities.

    - **EmPower:** EmPower in Viet Nam is implemented from 2019-2022 in partnership with the Ministry of Agriculture and Rural Development, Ministry of Natural Resources and Environment, Ministry of Labor, Invalids and Social Affairs, Viet Nam Women's Union and other strategic partners to address gender equality in climate change and disaster risk reduction. It aims to strengthen the knowledge, capacity, and leadership of women's NGOs to engage in climate change and DRR processes. It also promotes women's entrepreneurship in renewable energy in the central highlands (UNESCO 2023a)

## Enhancing education systems and infrastructure:

- **Prepare schools in receiving areas to accommodate the influx of CDPs after a disaster** through increased structural capacity and data-informed resource allocations.

- **Identify public buildings, other than schools, to be used as dedicated emergency shelters** following flooding and disasters or, if schools are used as shelters, identify other structures to be used as schools.

    - **Alternative learning spaces in Cuba:** After Hurricane Matthew, the government expressly prioritized getting children, including those displaced, back to school as soon as possible. Cuba has stood out from other island nations, such as Jamaica and the Dominican Republic, for its success in terms of the quick restart of school activity. For example, after Hurricane Matthew hit, the vast majority of schools still intact were being used as evacuation centres and shelters. However, other infrastructures, such as family shelters and institutional buildings, were used as alternative learning spaces to ensure continuity of learning (UNESCO 2023b).

- **Simplify administrative procedures for CDPs in accessing education,** notably through flexible, exceptional registration and documentation requirements.

    - **Indonesia Zoning System:** The aim of Indonesia's zoning system is to equalize the quality of public schools, reduce the time and cost of transport and eliminate the dichotomy between desirable and less desirable schools. Under this regulation, public schools are required to accept at least 5% of prospective students who may be transferred during the school year due to household relocation or "natural/social disaster". In practice, however, registering households in a new residence after migration and transferring internally displaced children to a new school are often cumbersome and time-consuming processes. In addition, internal migrants may be prevented from accessing schools due to the uneven distribution of schools across areas to meet demand (UNESCO 2023a).

- **Improve the digitalization or streamlining of academic records** with the explicit aim of facilitating the reintegration of CDPs after disasters.

    - **Tent Special Training Programmes in India:** The *Migration Card Initiative* allows state governments to track interstate and intrastate migration of 'school-going' children. Based on this data, intra-state migrant children are accommodated and educated in seasonal hostels at their domiciles while the inter-state migrant children are covered under Tent Special Training Programmes in temporary schools near the parents' worksites. Further, some cards record the educational level of children and their respective grades, which allows pupils to sit for a placement exam at an appropriate level. The initiative resulted in a significant decrease in the overall dropout rates for classes one to seven between 2004-05 (18.79%) and 2012-13 (7.08 %) (Gujarat Council of Elementary Education 2013).

- **Prioritize school/teacher relocation** to ensure the right to education of relocated persons as well as communities in receiving areas.

- **Create an education management information system, based on a unique identification number,** to facilitate their reintegration into school in case of displacement and **use intersectoral and multi-source data to inform education planning and project resource allocation** for CDPS as well as for schools and students in disaster-prone areas.

    - **The Bahamas' Educational Management Information System (EMIS):** This system, which is expected to be a ground-breaking planning instrument for the Ministry of Education, has been progressively rolled out since 2020. It will support the issuance of an individual identification number for each student, facilitating their school enrolment in times of displacement and/or when they lack access to legal documentation. The EMIS will also provide data on school location, infrastructure, and assets, easing disaster preparedness and response and the long-term planning of infrastructure resilience in the education sector.

- **Create a registry and database of IDPs in the country, with adequate safeguards, t**o identify, track and evaluate the needs of all IDPs as their situation evolves.

    - **An IDP Registry in Serbia:** The Commissariat for Refugees and Migration of the Republic of Serbia has a legal mandate for, among others, the following activities: IDP registration, provision of accommodation for them at collective centers, as well as humanitarian support for the displaced people, on an individual basis or collectively. Most importantly, the Commissariat is responsible for extending full protection to IDPs in their exercising of their basic rights and fundamental freedoms. The Commissariat is also the distinct state body authorized to conduct IDP registration, as well as manage and stream data related to IDP situation in the country. It also serves as the focal point that directly collaborates with UNHCR and jointly with them publishes reports on IDPs needs, using the previously collected information, which is then reflected in *the special Registry of Vulnerable IDP Households* (Mkrtchyan 2021).

## Empowering Disaster-Affected Communities:

- **Consider setting up a social safety net programme for families displaced following disasters**—who can be identified should an IDP registry be created— to ensure financial ability to afford transport to and from school, meals, books, and supplies and uniform replacements.

    - **Social safety net programmes in Bangladesh:** More than 200 social safety net programmes are currently being implemented in Bangladesh by different Ministries of the Government. These programmes primarily aim to reduce vulnerability of the poor sections of the community. Many of these safety net programmes support students who are in difficulties, such as ensuring the distribution of meals to students in need through

a voucher system and partnerships with local food caterers. The system was prolonged and further developed as a response to school closure in the context of COVID-19. Governments also provided food and cash support for few months under social safety net programmes to displaced persons who are placed in government shelters or waste lands (UNESCO 2023a).

- **Use schools as a starting point to create social protection networks for children** and develop community resilience through education and training.

  - **Child-Friendly Spaces in the Bahamas:** From the perspective of mental health, the creation of Child-Friendly Spaces in the Bahamas has demonstrated its potential to be an adaptive and cost-effective solution to improve displaced students' ability to adapt and integrate in the context of adversity and trauma, while avoiding protracted disruptions in education services. Child Friendly Spaces operated in a participatory manner where integrated play, recreation, education, health, and psychosocial support can be delivered, helping students overcome their emotional stress and protecting them against physical harm, abuse, violence, and exploitation. Programmes by the Goodness Tour, who taught art, songwriting and film-making classes in shelters in Nassau following Hurricane Dorian, were an excellent way to engage children (The Goodness Tour, 2020; UNESCO 2023b).

## Strengthening education resilience and climate literacy:

- **Build upon alternative pedagogies and distance learning approaches** developed globally in response to the COVID-19 pandemic to ensure learning continuity when schools are inaccessible following disasters.

  - **The Bahamian Virtual School:** During Hurricane Dorian, this programme allowed secondary school students with access to computers and the internet to attend virtual classes with students from other parts of the country. This programme not only shows the potentialities of virtual learning to attend to the needs of CDPs but also that preparing distance learning materials in advance of displacement and migration can build the resilience of education systems ahead of disasters. Access to new learning content and teaching methods through full-time virtual education in Bahama concerned approximately 171 high school students (UNESCO 2023b).

  - **Cuba's TV education:** Cuba has made significant efforts to ensure educational continuity during the COVID-19 pandemic, especially through distance education, particularly using Cuban Television (UNICEF, 2021). Favouring television education over internet education has to do with the recognition that there is a low level of coverage of internet use in the country. While no remote education strategies have been developed that directly address the needs of CDPs, Cuba's TV education system offers valuable learning for countries where ensuring access to the internet can be a barrier.

- **Increase funding for TVET programmes to upskill and reskill agricultural workers,** ultimately creating resilience in the face of climate change, fewer climate-driven livelihood losses and less poverty.

    - **"Quédate" (Stay) programme in Guatemala:** To improve access to education for the population vulnerable to irregular migration to the United States of America, in 2016, the Social Welfare Secretariat (Secretaría de Bienestar Social or SBS), with the support of the Ministry of Education, implemented the "Quédate" Training Centre. The goal is to prevent irregular migration and support returnee adolescents through technical training. This initiative operates training centers that provide free formal and technical education to improve the employability of beneficiaries in their home regions and therefore preventing climate-driven loss of livelihood and associated, subsequent displacement (SBS, 2017). Although there are currently no data on the effectiveness of this programme, it is a promising idea that should be implemented and replicated.

- **Enhance people's climate change literacy among displaced and host populations in particular (but also more broadly among all members of society)** taking into account cultural context to enable engagement with climate action.

    - **Education on climate displacement and its framing as an adaptation mechanism in Cuba:** An important advantage of the Cuban model for preventing and reducing the risk of xenophobia and violence against CDPs has to do with the population's broad environmental education and awareness of the risks of environmental displacement, which leads to greater acceptance and empathy. The case of Cuba also offers a valuable approach to understanding climate displacement not only as a negative effect of climate change but also as a mechanism of adaptation that can improve the lives of populations at risk. This view has been included in Cuba's climate policy Tarea Vida, particularly in its programme for the early relocation of coastal communities (UNESCO 2023b).

    - **Legal and policy measures on climate change education and displacement in Kenya and Uganda:** Kenya's ten-year climate change learning strategy (2021) places a strong emphasis on knowledge and capacity development across society, with a particular focus on educational institutions. The main objective for the education sector is to enhance the understanding, interpretation and practical application of climate change among learners, teachers, trainers and facilitators by 2030. Key actions include integrating climate change into all levels of education, improving teacher capacity, creating relevant teaching materials, using non-formal education and promoting collaboration between research and industry for climate literacy (OHCHR, 2021).

      On the other hand, Uganda's National Climate Change Act, passed in 2021, recognises the importance of educating government agencies and the general public on climate change issues. In addition to integrating climate change into school curricula, the Act is interesting in that it encourages collaborative efforts between government departments, lead agencies, individuals and private entities to improve climate change education and

awareness programmes. It also empowers local government committees to conduct education and awareness campaigns in their areas, disseminating climate knowledge and mitigation strategies to even the most remote areas (Republic of Uganda, 2021).

- **Integrate comprehensive Education for Sustainable Development into curriculum, pedagogy and teacher training,** adapted to each country's specific situation and socio-economic characteristics and elaborated with the participation of youth, so that students can become an active part of the solution in mitigating and fighting the effects of climate change.

    - **DRR trainings and sensibilization for students in Bosnia and Herzegovina:** The 2003 "Law on Protection and Rescue of People and Material Goods from Natural and Other Disasters" reserves a right for children in primary schools to receive their first exposure to DRR and related concepts. Moreover, the 2012 Law on Rescue and Protection in Emergency Situations prioritizes DRR trainings for citizens in the collective sense, with a special reference to the primary and secondary education levels.

- **Create mechanisms to financially support teachers in regions with CDPs, as well as consider supporting volunteers or contract teachers** as temporary solutions to address the educational needs of CDPs.

    - **Sarva Shiksha Abhiyan (Education for All) in India:** The interventions put forward by Sarva Shiksha Abhiyan can be used to overcome the linguistic and cultural challenges that CDPs face. Sarva Shiksha Abhiyan, together with Rashtriya Madhyamik Shiksha Abhiyan (RMSA), lays provisions for seasonal hostels in source villages and schools at destination sites in addition to involving teaching volunteers. Under this scheme, seasonal boarding schools have been established for migrant children, which can also be used to support CDPs. Sarva Shiksha Abhiyan provides teaching volunteers who speak the mother tongues of the migrant children to counter the linguistic barriers faced by the children (UNESCO 2023a).

- **Improve preparedness to address the linguistic needs of climate-displaced population,** by for example preparing educational material in the languages of expected CDPs.

    - **Language support projects in India:** *Project Roshni* is a state-level initiative that can be an example for the issue of the diverse linguistic and cultural backgrounds of CDP children. This is a pilot project in Ernakulum district of India for migrant children to learn Malayalam, English, and Hindi through code-switching as a learning tool, in 90-minute morning classes before school. Project Changathi is also the state-level initiative implemented by the Kerala State Literacy Mission. This literacy programme targeted migrant children to learn Malayalam. A special textbook called 'Hamari Malayalam' is published for these students and study centres at schools, libraries, workplaces, and shelters of migrant workers (UNESCO 2023a).

## Reinforcing international cooperation:

- **Pursue bilateral or multilateral agreements for migration with aid partner countries** based on the principles of equitable responsibility and burden sharing, through, for example, granting the right to education for both children and adults on an equal footing as nationals.

    - **New Zealand's Pacific Access programme:** Considering that mass migration due to the effects of climate change may be imminent in the Pacific region, New Zealand has begun implementing a multilateral, regional cooperation scheme in the form of the Pacific Access Category visa. Launched in 2002, this programme provides the opportunity for indefinite, permanent migration to New Zealand to work, live, and study for residents of the countries of Kiribati, Tuvalu, Tonga, and Fiji – who are some of the Pacific Island countries most vulnerable to climate change hazards. However, this programme has some shortcomings given that there are quantitative and qualitative limitations on who can migrate via this visa: only 75 Tuvaluans are accepted each year; they must be able to read, write, and speak English, and have a job offer with sufficient remuneration in New Zealand (Immigration New Zealand, 2021).

    - **Falepili Union treaty between Australia and Tuvalu:** Australia and Tuvalu have collaboratively established a bilateral treaty aimed at granting specific rights within Australia to individuals displaced by climate-related factors from Tuvalu. Formulated in 2023, this agreement outlines a distinctive human mobility pathway, allowing Tuvaluan citizens to reside, pursue education, and engage in employment opportunities in Australia. Furthermore, the treaty ensures access to essential Australian services, encompassing education, healthcare, vital income, and family support, with the overarching goal of preserving the dignity of those affected by displacement. Emphasizing mutual cooperation, the treaty also incorporates Australia's commitment to providing assistance to Tuvalu in response to significant natural disasters, as articulated by the Australian government in 2023. (Australian government, 2023A and 2023B).

- **Use funding from international organizations and partners to increase the resilience of physical infrastructure such as schools**, through retrofitting, ensuring new schools are built according to relevant building codes to withstand climate threats and develop zoning policies for school construction.

    - **The Comprehensive Safe School Framework (CSSF) in Indonesia and Viet Nam:** The Government of Viet Nam adopted the CSSF as part of the ASEAN Safe Schools Initiative (ASSI). The goal of ASSI is to provide direct capacity and financial support to schools in preparing for extreme weather events and becoming more resilient to the effects of climate change. A wide range of activities include constructing a safe learning environment for students, training for teachers and education staff, and raising awareness and building capacity for children on DRR and CCA. Similarly, since 2009, the Government of Indonesia has maintained and monitored the 'disaster-prepared schools' against the CSSF as well as implemented DDR curriculum in these schools. This initiative was later scaled up as 'disaster-safe schools' in 2015.

- **The "Build Back Better" Principle in Serbia and Bosnia and Herzegovina:** Through this principle, the two countries seek to improve construction requirements and modernize existing vital infrastructure to make it more resilient to natural disasters. It proposes disaster-proof construction and modernization protocols and specific resilient materials. The principle is based on a three-pronged approach, namely 1) "build back stronger", which aims to put in place more resilient structures, 2) "build back faster", which aims to reduce bureaucracy (where possible) and use various arrangements (such as pre-approved contracts) to facilitate the recovery response, 3) "build back more inclusively", which takes into account the acute needs of the most vulnerable people (who would certainly also include those previously displaced). It's a promising idea, but there is still no example of its application to educational infrastructures. To confirm its benefits, this idea needs to be put into practice, and the necessary implementation mechanisms put in place.

- **Work with international organizations such as the FAO and the WFP to implement the utilization of flood-resistant and drought-resistance crop varieties,** ultimately diminishing the risk of climate-driven livelihood losses and slow-onset displacement thereafter.

  - **National Adaptation Plan for a more resilient agricultural sector in Somalia:** Somalia's National Adaptation Plan sets out a series of compelling actions for the period 2021-2030 to strengthen the resilience of agriculture to climate change. Key initiatives include research into drought-resistant varieties and distribution of these to farming communities, development of irrigation systems, promotion of a weather-based insurance scheme, investment in veterinary services to combat climate-related diseases, sustainable management of grazing areas, improvement of livestock infrastructures and services, and access to agro-weather information services (UNFCCC, 2021). These actions not only protect livelihoods, but also combat food insecurity and malnutrition, which is a major step forward in the fight against the adverse effects of climate change and population displacement on education.

- **Develop a comprehensive, joint financing strategy to create a fund for climate-displaced persons and their right to education**- financed by both the Ministry of Education and the departments concerning disaster risk reduction and management while also leveraging private partnerships and international aid donors.

  - **Tuvalu Survival Fund (TSF):** Recurring hazards and major disasters contribute to persisting funding gaps for recovery and reconstruction in many areas. In 2015, Tuvalu was hit by Tropical Cyclone Pam (a category 5 cyclone) and lost over a third of the country's GDP at the time (Tuvalu Coastal Adaptation Project, n.d.). In response, the Tuvaluan government established the Tuvalu Survival Fund (TSF) in 2016 to specifically finance climate change programmes and to respond quickly to climate-related disasters such as tropical cyclones (IMF, 2018). This can be an example for other disaster-prone areas to support trapped populations in their recovery.

# Chapter 5

## Conclusion and way forward

Climate change is a phenomenon with no boundaries; its effects are being seen across the world, from Asia-Pacific to South-Eastern Europe and in between. However, the four regions studied in the context of this global report are certainly among those the most affected and can be considered the world's climate change "hot spots," with increasingly erratic rainfall leading to deadly flooding; intensified cyclones and hurricanes; and drought that is leading people to new destinations within their countries - such as in India - as well as across borders - such as between Somalia and Kenya.

While the effects of climate change are similar across regions, the patterns of displacement vary greatly due to the regions' specific socio-economic characteristics and labour activities. Therefore, as displacement patterns are different from region to region, so are the barriers to education encountered. From the risk of secondary displacement and educational disruption in Bosnia and Herzegovina, to nomadic pastoralism shifts and difficulty in accessing rural education in Uganda, to language barriers upon displacement in Guatemala, to administrative barriers to accessing schools in Viet Nam. Hence, each region and each country encounter their unique constraints to fully realizing SDG 4 in the face of climate change.

Despite regional differences, two major obstacles to education stand out across all regions:
(1) schools, and their infrastructures, are often damaged or destroyed by sudden events like floods and cyclones/hurricanes.
(2) an indirect but significant challenge is the economic strain caused by climate-related issues. As families lose their livelihoods to climate change, they face increased poverty. This often leads to struggles with school fees and a higher likelihood of students dropping out to help support their families financially.

In this context, policy guidance and actions should take into account governance, data and evidence, legal and financing as well as international assistance, cooperation and monitoring.

**Governance:** In order to address both the common barriers to education as well as the regional specificities, it is imperative that actions taken should be intersectoral and multi-faceted. In particular, the stakeholders and actions taken in the fields of education and disaster risk reduction cannot afford to remain in silos if real change is to be realized.

**Data and evidence:** An evidence-based legislative and decision-making process is required. Before each country adopts specific measures to ensure the right to education in the face of climate change in their jurisdiction, they will need to invest in data and monitoring initiatives to gauge the real patterns of displacement and the real barriers to education of their leaners on the move to develop tailored policy plans.

**Legal:** Simultaneously, policy-makers can begin implementing the legal guidance contained in this global report, notably creating or expanding a definition of an IDP which includes those displaced by slow and rapid-onset climatic events and, subsequently, elaborate a policy targeting the fulfillment of human rights for IDPs – such as that of Bangladesh.

**Finance:** Lastly, implementing data and monitoring initiatives; changes to the legislative framework; and policy guidance at the school level to increase resilience will be futile without a funding mechanism. It will be of the utmost importance moving forward that each country develop an internal, joint financing mechanism between the departments of education and disaster risk reduction, and where needed international aid donors.

**International assistance, cooperation and monitoring:** States who are in a position to provide international assistance alongside international actors have an important role in supporting national efforts in terms of financial and technical assistance. Existing funding mechanisms (such as the Smart Education Financing Initiative, UN Global Education First Initiative, etc.) could be leveraged to cater to the education-related challenges faced by those affected by climate change. In addition, global and regional networks that address education in the context of climate change, displacement and emergencies should also be strengthened and mobilized (such as the Inter-agency Network for Education in Emergencies (INEE)). Finally, international mechanisms such as the SDG4-Education 2030 High-Level Steering Committee and the UN human rights monitoring bodies could take into account specific features and aspects in relation to the impact of climate change and displacement on the right to education in their actions.

Through data and monitoring, building resilient education systems and infrastructure, effectuating legal and policy changes in national systems, elaborating bilateral and regional initiatives to help ensure legal residency for those displaced internationally, working jointly through intersectoral efforts, developing a financing strategy with a dedicated fund for those displaced by climate change and enhancing international cooperation - nations across the globe can aid the pursuit of SDG 4 for all: ensuring the right to education amidst climate change and climate displacement.

The Transforming Education Summit in 2022 offered a global platform to draw attention to the needs of children, youth and adults displaced by climate change. The urgency to address the global climate crisis was reflected in Our Common Agenda's policy brief 10 on 'Transforming Education' which called for a significant response from the education sector. In this context, the UNESCO's Initiative on the impact of climate change and displacement on the right to education supports such efforts and through this report  which offers policy guidance that are informed by the four action areas of the Greening Education Partnership (greening schools, greening curriculum, greening teachers and education systems' capacities, and greening communities) that was established to contribute to the transformation of education by addressing the global climate and environmental crisis.

By leveraging current and future high-level political commitments and initiatives, such as the periodic Conference of the Parties (COP) and the upcoming Summit of the Future, to put this issue on the government's agenda, the effectiveness of measures taken to safeguard the right to education for climate-affected populations will be significantly enhanced.

In a world where the number of people displaced by the climate continues to grow, it is urgent and imperative to explicitly recognize the fundamental right to education. Quality, inclusive education must be recognized as an essential lifeline for those escaping the devastating effects of climate change and natural disasters. These challenges are not abstract, but a harsh reality, disproportionately affecting already vulnerable communities. Ensuring inclusive and qualitative education is paramount, as displaced people, whether young or old, often face considerable barriers, including discrimination, language disparities and financial constraints. By providing education that is not only of high quality but also culturally relevant, we give these people the means to rebuild their lives and contribute to the sustainable development of society.

UNESCO's Initiative on the evolving right to education within a lifelong learning perspective, which aims to redefine education rights framework as a powerful tool for adaptation and resilience in a world undergoing major changes including environmental, is a decisive step in this direction. Indeed, it recognizes the dynamic nature of education in the context of climate change alongside other revisions to the normative framework that are being explored in the context of this global conversation - such as strengthening rights to lifelong learning, expanding provision of early childhood care and education, higher education, digital education, and incorporating rights to mother-tongue instruction - that all are also expected to have positive impacts for climate-displaced and affected populations.

Ultimately, this recognition of the right to education for climate-displaced people is a matter of human rights and practical necessity, offering hope for a more inclusive and resilient future in the face of an increasingly uncertain world.

# References


Australian government. *Australia-Tuvalu Falepili Union*. 2023A. https://www.dfat.gov.au/geo/tuvalu/australia-tuvalu-falepili-union

Australian government. *Australia-Tuvalu Falepili Union treaty*. 2023B. https://www.dfat.gov.au/geo/tuvalu/australia-tuvalu-falepili-union-treaty

Council on Foreign Relations. *Climate Change Is Fueling Migration. Do Climate Migrants Have Legal Protections?*. 2022. https://www.cfr.org/in-brief/climate-change-fueling-migration-do-climate-migrants-have-legal-protections#:~:text=This%20more%20limited%20classification%20of,how%20to%20legally%20define%20them

ECDPM. *Human mobility and climate change: migration and displacement in a warming world*. The Centre for Africa-Europe Relations. 2019. https://ecdpm.org/work/the-complex-link-between-climate-change-and-conflict-volume-8-issue-4-autumn-2019/human-mobility-and-climate-change-migration-and-displacement-in-a-warming-world#:~:text=Climate%20change%20is%20shaping%20human%20mobility,-Globally%2C%20the%20impacts&text=As%20the%20impacts%20of%20climate,some%20parts%20of%20the%20world.

Environmental Justice Foundation. *Protecting Climate Refugees – Securing international protection for climate refugees*. Last consulted in August 2023. https://ejfoundation.org/what-we-do/climate/protecting-climate-refugees?gclid=Cj0KCQiAq5meBhCyARIsAJrtdr73KtsDBVPiDFn-QRTN77-7wg6Er5AcFaJrY1fbj_8CaWLRuct8irEaAotlEALw_wcB

Gujarat Council of Elementary Education. *Gujarat Council of Elementary Education (Sarva Shiksha Abhiyan) Annual Report 2013–14*. 2014

ICRC. *Climate Change and Conflict: Somali Herders*. 2021. https://www.icrc.org/en/document/somalia-herders-climate-change-conflict-crisis

IDMC. *Disaster Displacement in Asia and the Pacific*. 2022. https://www.internal-displacement.org/disaster-displacement-in-asia-and-the-pacific-2022

IDMC. *Global Report on Internal Displacement 2023*. 2023. https://www.internal-displacement.org/sites/default/files/publications/documents/IDMC_GRID_2023_Global_Report_on_Internal_Displacement_LR.pdf

Immigration New Zealand. *Pacific access category resident visa*. 2021. https://www.immigration.govt. nz/new-zealand-visas/apply-for-a-visa/about-visa/pacific-access-category-resident-visa

International Monetary Fund (IMF). *Tuvalu: 2018 Article IV consultation*. 2018. https://www.imf.org/en/ Publications/CR/Issues/2018/07/05/Tuvalu-2018-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-46051

IOM. *Children and Youth, Migration, Environment and Climate Change*. 2023a. https://environmentalmigration.iom.int/children-and-youth-migration-environment-and-climate-change#:~:text=A%20significant%20number%20of%20these,or%20extremely%20high%20drought%20severity.

IOM. *Gender, Migration, Environment and Climate Change*. Consulted in 2023 (2023b). https://environmentalmigration.iom.int/gender-migration-environment-and-climate-change

IPCC. *Summary for policymakers*. Authors: 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.). 2014. 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. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1-32.

IPCC. *The Concept of Risk in the IPCC Sixth Assessment Report: A Summary of Cross-Working Group Discussions*. Authors: Reisinger, Andy, Mark Howden, Carolina Vera, et al. 2020. Intergovernmental Panel on Climate Change, Geneva, Switzerland. pp15. Risk-guidance-FINAL_15Feb2021.pdf (ipcc.ch)

Islam, M. and Shamsuddoha, M. *Socioeconomic consequences of climate induced human displacement and migration in Bangladesh*. International Sociology, vol. 32, issue 3, pp. 277 - 298. 2017.

Mahdawi, Arwa. *Warning of unprecedented heatwaves as El Nino set to return in 2023*. The Guardian. 2023. https://www.theguardian.com/environment/2023/jan/16/return-of-el-nino-will-cause-off-the-chart-temperature-rise-climate-crisis

Ministry of Disaster Management and Relief Bangladesh. *National Strategy on the Management of Disaster and Climate Induced Internal Displacement*. November 2015. https://faolex.fao.org/docs/pdf/bgd168107.pdf

Mkrtchyan, Arsen. *Climate Change, Natural Hazards, Migration, and the Right to Education in Southeast Europe*. Study commissioned by UNESCO. 2021.

OHCHR. *Republic of Kenya – Submissions on the general comment on children's rights and the environment with a special focus on climate change*. 2021. https://www.ohchr.org/sites/default/files/2021-12/kenya-2021-12-14.docx

OHCHR. *Summary of recommendations from the OHCHR expert meeting on the slow onset effects of climate change and human rights protection for cross-border migrants*. Geneva, Switzerland. 2017.

Refugees International. *Climate, Migration, and Displacement – What are the Implications for Human Right* Law ?. 2020. https://www.refugeesinternational.org/reports/2020/5/7/climate-migration-and-displacement-what-are-the-implications-for-human-rights-law?gclid=Cj0KCQiAq5meBhCyARIsAJrtdr4Bc793Z-i_kX8zguJ-50x8iZqWhSRa0JJ0L-cYuFqxngFq6uteB9gaApJhEALw_wcB

SBS. *Centros de Formación Quédate*. Gobierno de Guatemala. 2017. https://www.sbs.gob.gt/centros-de-formacion-quedat

The Goodness Tour. *The Goodness Tour Bahamas: Abaco Sisters The First Step Origin Story. 02/05/2020 on Facebook.* 2020. [online] Available at: https://www.facebook.com/ watch/?v=625314501594472

The Republic of Uganda. *The National Climate Change Act*. 2021. uga208305.pdf (fao.org)

Tuvalu Coastal Adaptation Project. *Climate change and Tuvalu*. n.d. https://tcap.tv/climate-change

UIS Statistics. http://data.uis.unesco.org n.d.

UNDP. *Adaptation policy frameworks for climate change: developing strategies, policies and measures.* B. Lim, E. SpangerSiegfried (eds.) Cambridge University Press, Cambridge, United Kingdom. 2004. F

UNDRR. *Disaster Risk Management*. 2023A. https://www.undrr.org/terminology/disaster-risk-management#:~:text=Disaster%20risk%20management%20is%20the,and%20reduction%20of%20disaster%20losses.

UNDRR. *Disaster Risk Reduction*. 2023B. https://www.undrr.org/terminology/disaster-risk-reduction

UNESCO. *39C/Resolution 86. Declaration of Ethical Principles in relation to Climate Chang*. 2018. https://unesdoc.unesco.org/ark:/48223/pf0000260889.nameddest=86

UNESCO. *Asia-Pacific regional synthesis: climate change, displacement and the right to education.* 2023a. https://unesdoc.unesco.org/ark:/48223/pf0000385187/PDF/385187eng.pdf.multi

UNESCO. *Central America and the Caribbean regional synthesis: climate change, displacement and the right to Education.* 2023b. https://unesdoc.unesco.org/ark:/48223/pf0000385183/PDF/385183eng.pdf.multi

UNESCO. *South-Eastern Europe regional synthesis: climate change, displacement and the right to education*. 2023c. https://unesdoc.unesco.org/ark:/48223/pf0000385287

UNESCO. *The Impact of Climate Displacement on the Right to Education (No. 12; Working Papers on Education Policy)*. 2020. https://unesdoc.unesco.org/ark:/48223/pf0000374966

UNESCO. *Webinar: the impacts of climate change and displacement on the right to education; synthesis report*. 2022. https://unesdoc.unesco.org/ark:/48223/pf0000381853

UNFCC. *Updated Nationally Determined Contribution – The Federal Republic of Somalia*. 2021. Microsoft Word - Final Updated NDC for Somalia 2021.docx (unfccc.int)

UN General Assembly. *New York Declaration for Refugees and Migrants (A/RES/71/1)*. 2016.https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_71_1.pdf

UN General Assembly. *Global Compact for Safe, Orderly and Regular Migration "Global Compact for Migration" (A/CONF.231/3)*. 2018a. https://refugeesmigrants.un.org/sites/default/files/180713_agreed_outcome_global_compact_for_migration.pdf

UNHCR. *Buenas Prácticas. Protección de Refugiados en América Latina: Buenas Prácticas Legislativas.* N.d. https://www.acnur.org/buenas-practicas.html

UNHCR. *Gender, Displacement and Climate Change* .2022b. https://www.unhcr.org/fr-fr/en/media/gender-displacement-and-climate-change

UNICEF. *Educación en tiempos de COVID-19. La experiencia cubana*. UNICEF Cuba. 2021.

UNICEF. *No place to call home: protecting children's rights when the changing climate forces them to flee.* London. 2018.

UNICEF, Patrick J McGovern Foundation. *Children displaced in a changing climate - preparing for a future already underway*. 2023. https://www.unicef.org/media/145951/file/Climate%20displacement%20report%20(English).pdf

UN. *Paris Agreement*. UN Climate Change Conference (COP21). 2015. https://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf

WMO. *World Meteorological Organization declares onset of El Niño conditions*. 2023. https://public.wmo.int/en/media/press-release/world-meteorological-organization-declares-onset-of-el-ni%C3%B1o-conditions

# Annexes

# Annex A

## Findings from the Asia-Pacific region[9]

9 This annex is a summary of the Asia-Pacific regional synthesis (UNESCO 2023a) and contains excerpts from the publication.

In 2020 alone, 30.7 million internal displacements were induced by natural disasters (IDMC 2021) – disasters which the scientific community acknowledges are more intense as a result of climate change (Berardelli 2019). Of this total, **21,4 million displacements took place in Asia-Pacific** (IDMC 2022), rendering it the region by far the most impacted by natural disasters and climate change in the world[10]. Country case studies were carried out in **Bangladesh, India, Indonesia, Tuvalu, and Viet Nam** to examine not only specific vulnerabilities to climate change and the related mobility, but also the impacts of climate change on the right to education in the Asia-Pacific region**.**

Based on these five country case studies, a regional synthesis report has been elaborated and published in April 2023 which identifies the five principal climate displacement patterns in the region along with the main barriers to education encountered during each type of displacement. This annex aims to summarize the main findings of the regional synthesis report, briefly analyzing how climatic risks and regional vulnerabilities are driving displacement, and the barriers to education at both national level as well as from a comparative, regional perspective.

**Table 1: Key takeaways of the Asia-Pacific regional synthesis report**

| Key takeaways |
| --- |
| ■ The Asia-Pacific region faces a wide variety of climate hazards and weather extremes every year. Weather-related disasters, such as monsoons, cyclones, and flooding, are becoming more frequent and intense as a result of climate change. The region is also impacted by the slow-onset effects of climate change including drought, sea level rise, and salinization.<br><br>■ These effects of climate change are now driving human displacement – either directly by destroying human settlements or indirectly through climate-driven loss of livelihood and subsequent forced migration.<br><br>■ Through the study, five major displacement patterns have been identified in the region: (1) temporary displacement following sudden-onset disasters; (2) permanent migration to urban settlements; (3) government-planned relocation; (4) cross-border migration; and (5) trapped populations.<br><br>■ Each displacement pattern entails different barriers to education, with lacking financial resources as the key factor across all patterns hindering access to quality education during and after displacement. The loss of property and assets due to weather-related disasters and displacement can take years, if ever, for families to recover or receive support for their loss. Many families are thus forced to prioritize economic security than their children's education.<br><br>■ Climate change and climate displacement exacerbate existing educational inequalities and barriers to education and more adversely affects the financially disadvantaged, girls and women, rural communities, though with pre-existing health risks, and the disabled. |

10 "There is medium confidence that higher warming and associated changes in frequency and intensity of slow-onset events (such as drought and sea level rise) and rapid-onset events (such as cyclones and flooding) will increase displacement in the future (…)" (IPCC 2022).

**Key takeaways**

- For those facing forced migration –– within and cross-border, administrative barriers, lack of documentation, residency requirements, and language barriers impede full access to quality education.
- Among the five countries studied in the region, Bangladesh is the only one to have a comprehensive national-level policy that explicitly ensures the right to education for those displaced by climate change, namely its National Strategy on the Management of Disaster and Climate Induced Internal Displacement (NSMDCIID). This Strategy could serve as a model for other countries in the Asia-Pacific region.

*Source:* UNESCO 2023a.

## How climate change is driving displacement in the Asia-Pacific region

### Monsoons and flooding

Due to its geographical nature, the Asia-Pacific region is exposed to various natural disasters such as monsoons, cyclones, flooding, severe drought, landslides, and avalanches, contributing to making it the region most affected by climatic disasters in the world. While certain climatic phenomena, such as yearly monsoons and flooding, have been a part of the history of Asia-Pacific for centuries, the effects of climate change have rendered cyclones, monsoons, and flooding a nearly constant event that threatens lives, settlements, and livelihoods as opposed to being welcomed as in the past.

Monsoons, for example, have been a part of everyday life in India for millennia. A weather pattern that shifts the winds, monsoons are an annual meteorological event that brings heavy rains during certain periods of time (National Geographic 2021). In India and Bangladesh, for example, there is a summer monsoon which brings rain to the whole of the country (lasting normally from June to September), and the winter monsoon from October to November- bringing rain to Southeast India (Wells 2020). Just as the ancient Egyptians depended on the annual flooding of the Nile to nourish the surrounding soil, India has long depended on the annual monsoon to render its agricultural land fertile. Agriculture today still depends on this yearly rainfall, but so do other industries- such as the generation of hydroelectric power (National Geographic 2021).

While in the past monsoons were welcomed, today presents a different story: as climate change warms sea and surface temperatures, monsoons have become and will continue to become intensified- rendering this yearly weather event something that brings massive deluges of rainfall that destroy agricultural land, flood cities, demolish homes, and displace millions (Chandrashekhar 2019). The monsoon season in 2023, for example, saw unprecedented rainfall that have affected several states of India and killed more than 2000 people and damaged close to 110 000 households in India alone (Reliefweb 2023c). While overall annual rainfall has declined over the past decades, the number of extreme events has such as the above have increased, leading to a shifting and erratic climatic pattern in all countries studied.

## Cyclones

Not only are monsoons intensified by climate change and resulting in displacement, but so are the severity and frequency of cyclones. For example, in 2023 alone, tropical storm Egay affected a total of 3.6 million people, while in parallel, more than 1.1 million people were affected by tropical cyclone Goring and typhoon Hanna (Reliefweb 2023a and 2023b). Before that, in the year 2020, Cyclone Amphan had already, triggered nearly five million evacuations across Bangladesh, India, Myanmar, and Bhutan in May of 2020, making it the largest disaster displacement event of the year globally (UNESCO 2023a). Just the year before, Cyclone Fani hit Odisha, India resulting in the forced evacuation of 1.2 million people in a mere 24 hours (Panda 2020). As with flooding, tropical cyclones have always been a regular part of life in the Asia-Pacific region. However, the frequency, intensity, and damage of tropical cyclones have increased in recent decades. The scientific community is beginning to draw more concrete links between an increase in cyclones and rising levels of sea temperature- rendering climate change an indirect cause of this new reality which clearly displaces millions yearly (Sun et al. 2017).

## Loss of livelihood

The effects of climate change and subsequent disasters displacing humans directly after sudden-onset events, but also indirectly through repeated loss of livelihoods following catastrophic flooding and/or severe, prolonged drought and temperature rises. In Bangladesh, for example, thousands of people yearly decide to move from rural lands now consistently inundated with flooding or degraded from riverbank erosion, or riddled with drought- rendering it impossible to continue gaining revenue from agriculture and livestock- into the slums of its capital Dhaka in search for economic activity, where living conditions are hardly any better and families in slums remain at sustained risk of flooding (Ahmed 2014).

Similarly, patterns of spontaneous migration can be observed in Viet Nam, where people decide (though this term should not necessarily be taken to mean totally voluntary) to move from flooding hot-spots to urban hubs in search of work outside of agriculture. This pattern is particularly notable in the well-known case of the migration corridor between the Mekong Delta River, where exorbitant flooding have become a common occurrence, to Ho Chi Minh City (Entzinger and Scholten 2015).

## Slow-onset events

Asia has experienced a more rapid increase in relative sea levels compared to the global average, leading to the erosion of coastal regions and the gradual withdrawal of coastlines. The Intergovernmental Panel on Climate Change projects a high likelihood of ongoing regional sea level rise in Asia. (IPCC 2022). Yet slow onset events – notably drought and sea level rise – also displace populations. In India, for example, 90% of all Maharashtra residents had to flee in desperate search for water, while 55% fled Bundelkhan for the same reason (Climate Guide, 2019). On the contrary to water shortage, sea level rise elsewhere is completely swallowing up lands and settlements, leading to forced displacement. Tuvalu is perhaps the greatest example of slow-onset effects of climate change leading to human mobility. With sea levels predicted to rise between 7 and 18 mm by 2030 (Saar 2019), and 46% of the central built area of Fogafale already below sea level, there is a very high probability that the sea will swallow this atoll island nation within the next few decades (UNDP 2020).

While India is often in the media following sudden-onset displacement events, it too is seeing the risks of sea level rise and coastal erosion. A country with extensive coastline and several major cities lying along the coast, approximately 170 million people are at risk due to sea level rise and coastal erosion. The concrete effects of sea level rise are already being seen, with 235 square kilometers of land lost to coastal erosion between 1990 and 2016 (Panda 2020).

The village of Satabhaya, in the Kendrapada district, serves as a concrete example of displacement due to sea level rise. Satabhaya, comprising of multiple villages, has been slowly disappearing since the 1980s - leading to involuntary, forced displacement. Following the complete submersion of one of the villages in 2011, the government began planned relocation in 2011 and established a resettlement colony 12 kilometers away in 2016. This resettlement plan included the relocation a total of 571 families, which some refer to as India's first "climate refugees" (Panda 2020). What is interesting is that India receives much media attention for bearing the blunt of many extreme weather events when, in reality, the first example of permanent climate displacement is a result of slow-onset sea level rise and coastal erosion.

## Planned relocation

Recognizing the growing population at risk of flooding, monsoons, and landslides, national governments are now contemplating or currently undertaking planned relocation projects. Viet Nam began government-planned relocation some time ago (Chun 2015), with education access improving in some cases due to the safer location of communities and education access actually hampered in other cases. Relocation efforts have been initiated in some Pacific small islands, primarily benefiting a limited group of well-educated, English-speaking Tuvaluans. However, it is essential to prioritize the social and cultural integration of indigenous populations being relocated. This is crucial because their distinctive cultural identity and deep connection to their land may pose challenges when it comes to their adaptation to new migration destinations (Holliday, 2020). Most notable is Indonesia's plan to relocate their capitol city – Jakarta – to another island entirely by 2045, moving millions of people from the flood-prone island of Java to East Kalimantan in the island of Borneo, given that parts of the densely populated capital have sunk up to 4 meters since 1978 (Van de Vuurst & Escobar 2020). This will serve as the world's largest planned relocation project to adapt to the effects of climate change and therefore presents unique opportunities to, if proper planning and implementation are accompanied, serve as a global model on how to ensure the right to education amidst climate displacement. In the absence of such planning, and while data from Indonesia's Directorate General of Early Childhood, Primary and Secondary Education shows that the number of students and teachers in East Kalimantan (the host province) is far lower than in Jakarta, the province's indigenous populations and relocated students risk having their learning disrupted, and tensions between these two groups could increase, undermining a safe and respectful school environment. (Koswaraputra, 2021)

## Climate displacement patterns and associated barriers to education

Between the multitude of effects described above, certain persistent patterns of mobility have been identified through research conducted in the Asia-Pacific region. While this will be described below in further detail, the below chart describes the main climate displacement patterns and the associated barriers to education. It is important to note that certain barriers to education apply in all displacement patterns and will also be expanded upon.

**Table 2: Climate displacement patterns and associated barriers to education in the Asia-Pacific region**

| | General profile of CDPs at risk | Main barriers to education |
|---|---|---|
| **Temporary displacement due sudden onset disasters** | Children and youth living in remote and/or disaster-prone areas;<br>Low-income households in disaster-prone areas | • Inconsistent and disintegrated disaster response policy and measures across government sectors, thereby delaying students' return to learning<br>• Issues associated with inadequate school buildings and disaster management<br>• School closures, or unstable schooling in the school that are used as emergency shelters<br>• Lack of resources and capacity of schools<br>• Lack of emotional and counselling support for displaced children and youth, resulting in low engagement and motivation for learning in school |
| **From seasonal to permanent migration (spontaneous migration)** | Children and youth experiencing frequent migration;<br>Low-skilled migrants working in climate-sensitive professions | • Complex administrative procedures for school enrolment<br>• Pre-existing inequalities becoming structural barriers for CDPs to assessing and enjoying their right to education<br>• Unresponsive education practice leads to various barriers to learning |
| **Government planned relocation** | Marginalized groups, such as less educated women, Indigenous people | • Persistent gender-specific risks<br>• Pre-existing inequalities faced by Indigenous communities<br>• De-prioritization or exclusion of school/teacher relocation in the national relocation master plan. |
| **Cross-border migration** | Stateless migrants;<br>Children and women international migrants;<br>Migrants on a short-term visa | • Lack of international policy frameworks to protect cross-border CDPs and their right to education<br>• Strict immigration quotas and regulations neglecting CDPs' needs<br>• Compounding barriers to accessing education and lifelong learning |
| **Trapped populations** | Vulnerable groups who lack the physical capacities and financial resources to migrate to safer grounds | • Pre-existing inequalities exacerbated by climate change impact |

*Source:* Adapted from UNESCO 2023a.

## Temporary displacement following sudden-onset events

As aforementioned, the frequency, intensity, and duration of monsoons, flooding, and cyclones have markedly increased over the past two decades mainly due to the effects of climate change. As a result, the most common displacement pattern in all five countries studied is temporary displacement following sudden-onset events. This temporary displacement can range from a few days to a few months- sometimes even longer.

The most prominent barrier to education follows sudden-onset disasters, and the most direct impediment to education, is school damage and school closures resulting from flooding and infrastructural decimation. In India, for example, following the 2017 monsoon, Save the Children reported that over 7,000 schools were damaged or destroyed by flooding (Watt 2017). In a devastating flood in Pakistan in 2022, over 27,000 schools were fully or partially damaged, impacting more than 2 million enrolled children (UNICEF 2022). According to an elaborate study undertaken in Bangladesh using geospatial mapping and surveys, 1.23 million students are living within 5 kilometers of climate-change hotspots- at direct risk of flooding and school destruction (UNESCO 2023a).

Not only is flooding a direct barrier to education, but poor building management, poverty, and disaster risk management (DRM) policies increase vulnerability. In Bangladesh, 57% of schools in disaster-prone areas are made of non-concrete materials, particularly in economically disadvantaged areas (BANEBIS 2015).

Perhaps one of the less acknowledged barriers to education following sudden-onset disasters, yet one of the most prominent, is the use of schools as temporary shelters. With millions of people temporarily displaced at once, governments urgently search for shelter amongst public institutions for their displaced residents- oftentimes selecting schools. Yet if schools are being used as shelters, educational activity is unable to continue – proving that climate change is also an indirect barrier to education in this sense.

Lastly, the psycho-social aspect cannot be ignored. Research in the region found that, in Viet Nam for example, 80% of teachers identified difficulty moving on from a traumatic event as one of the most prominent barriers to education among their CDP students (UNESCO 2023a). Without proper emotional counseling and support present during and after temporary displacement, quality education is put at risk and learning barriers much more present.

## Spontaneous migration

While these five displacement patterns exist to some extent in all five countries studied, certain countries experience some displacement patterns more than others. For example, in Bangladesh and Viet Nam, where people have traditionally used seasonal migration as a form of adaptation to climate change, large numbers of people are now resorting to spontaneous migration in the wake of unprecedented repeated disasters. In this case, spontaneous migration refers to an individual or family's decision to permanently relocate elsewhere (normally from disaster-prone rural lands to urban hubs) as opposed to only seasonally migrating or taking part in government-planned relocation (UNESCO 2023a).

In this case, the urban hubs receiving large numbers of spontaneous migrants must deal with an influx of students searching to re-enroll in new schools – students who often have sensitive needs following repeated traumatic experiences after disasters. The study found that complex administrative procedures upon attempted enrollment, existing inequalities such as poverty, and rigid educational practices are all barriers to education upon climate-induced spontaneous migration (UNESCO 2023a).

Perhaps one of the most poignant examples of administrative barriers to education following spontaneous migration is that of Indonesia's zoning policy for internal migrants. The aim of Indonesia's zoning system is to equalize the quality of public schools, reduce the time and cost of transport and eliminate the dichotomy between desirable and less desirable schools. Under this regulation, public schools are required to accept at least 5% of prospective students who may be transferred during the school year due to household relocation or "natural/social disaster". In practice, however, registering households in a new residence after migration and transferring internally displaced children to a new school are often cumbersome and time-consuming processes. In addition, internal migrants may be prevented from accessing schools due to the uneven distribution of schools across areas to meet demand (UNESCO 2023a).

Students displaced by climate change and forced to migrate to other provinces or cities within their own countries can also face another indirect barrier to education that becomes evident: the language barrier. Indonesia is one of the most linguistically diverse countries in the world, with approximately 700 different languages and dialects spoken. While Bahasa Indonesia- the official Indonesian language- is spoken by 94% of citizens, it is the **primary** language of only 20% of the population. On the contrary, Jawa (Javanese) is spoken by over 30% of the population, making it the most common primary language in Indonesia (Translators without Borders 2021). If portions of the population are forced to migrate to other provinces or islands, it is quite possible that the language of instruction will not be in their own primary language, given that there are over 700 languages in Indonesia. This could present a major barrier to pursuing quality education, and could potentially lead to higher dropout rates among migrants. Similarly, India is home to 19,500 languages and dialect spoken as mother tongue. It is therefore very likely that climate displaced people will move in an area that does not offer education in their mother tongue, even in case of internal displacement (The Indian Express 2018). Even when they manage to learn the local language or one of the main languages of instruction (such as Hindi or English), they are most likely to be in less advantageous learning conditions in comparison to local students (UNESCO 2023a).

## Planned relocation projects

Recognizing the growing population at risk of flooding, monsoons, and landslides, national governments are now contemplating or currently undertaking planned relocation projects. Viet Nam began government-planned relocation some time ago, with education access improving in some cases due to the safer location of communities and education access actually hampered in other cases. For example, while planned relocation can provide a safer environment, the permanency and success of such planned relocation largely depends on the population's ability to still make a living. This is why, when nearly 2000 households were relocated in the Tan An commune to a location further away from the coast, the planned resettlement largely failed. Given that the resettlement was

a significant distance away from the coastal fishing waters, many households found that they were not able to access their livelihood nor find land that was fertile enough for agriculture. As a result, many either returned to their location of origin or chose to pursue economic activity in urban settings (Entzinger and Scholten 2015)- putting their children's education back at the same risk of those who experience sudden-onset disasters or administrative barriers and discrimination upon spontaneous migration.

Again, the most notable example of planned relocation is Indonesia's plan to relocate their mega capital city – Jakarta – to another island entirely, moving millions of people from the flood-prone island of Java to the island of Borneo. However, when contacted for information, government officials of Indonesia gave little to no information on how education was incorporated into the relocation plan. It will be of the utmost importance for the government to ensure that a sufficient amount of schools are built in the new capital; highly trained teachers are included in the relocation; proper transport is constructed to ensure physical access to schools; and that families in the new location have access to sustained livelihoods so that they can continue affording their children's education while the livelihoods and identity of the existing indigenous inhabitants are ensured and protected.

## International migration

Of the countries studied, Tuvalu is perhaps the most covered in the media concerning international migration, often referring to as "disappearing islands" and serving as a model for future international migration. However, it is in fact India and Bangladesh that are dealing with the most international migration, with – according to estimates – a growing number of Bangladeshis crossing the border into India as climate change continuously destroys their land and livelihoods (UNESCO 2023a). This brings with it a plethora of barriers to education, notably language barriers and documentation/ residency barriers.

It is clear that Bangladeshis arriving in India will face major barriers to education should they not speak the local dialect of the relevant language – preventing enrollment, integration, and success into local schools. The same could be true for Tuvaluans attempting to access schooling in Fiji, Australia, or New Zealand. Yet the currently inevitable barrier to education is that laws and policies in receiving countries that exclude non-citizens from accessing national education systems could potentially impact CDPs who lack legal ways to migrate internationally, as CDPs are not recognized as refugees under the 1951 Refugee Convention. Indeed, without the provision for a legal status, CDPs may avoid enrolment in school for fear of deportation (OHCHR 2014), especially when immigration authorities use harsh enforcement practices, such as detention centers (UNESCO 2020). If the right to legally enter a foreign territory is already not guaranteed, the right to education therein is even more precarious.

## Trapped populations

While climate displacement is often viewed from a negative perspective, due to the many barriers to basic human rights it presents, it can serve as a form of adaption. Yet not everyone has the luxury of mobility- particularly those who are already the most vulnerable, economically disadvantaged, and socially marginalized; these, generally and with a few exceptions, are the populations that remain trapped in their homes despite the presence of deadly disasters or gradually increasing climate threats. It is important to note that some populations choose to remain despite imminent threats due

to cultural ties to land and community – examples of which were found in all five countries studied. Despite that they remain "trapped" by choice, the barriers to education for this population apply to all trapped – by choice or by incapacity.

Trapped populations face many of the same barriers to education as do those temporarily displaced by sudden-onset disasters, such as school closures, decimation of school infrastructure, loss of materials, etc. Yet the most notable barrier to education is that **pre-existing inequalities are exacerbated by climate change**. In many rural and remote under-served areas, vulnerability to economic and climate shocks are compounding each other, locking the communities into a spatial poverty trap of permanent disruption, economic precarity and slow productivity growth. Yet, protecting the right to education of people in these areas is challenging. Many field studies in different parts of the world indicate a household's poverty as the greatest factor in determining whether children of school age are sent to work and how these children's income contribution is important for a household's basic food security (Thorsen 2012). Results from the Bangladesh country case study show very clearly, through empirical results, that families will send their children to school only once economic stability is ensured; de facto, in this region, the right to education comes only after economics.

Poverty is already one of the greatest barriers to education globally. However, being trapped in disaster zones and cyclically in poverty is greatly exacerbated by climate change and, therefore, so are the barriers to education for trapped populations.

## Policy guidance for the Asia-Pacific region

Based on the barriers to education identified as a result of climate change and climate displacement, the Asia-Pacific regional synthesis report contains guidance aimed to guide Member States and policy-makers on how to ensure the right to education from a practical and legal standpoint in national and regional legislation- some applying to all displacement patterns, and others tailored to specific types of displacement patterns. The policy guidance is summarized below, with examples of best practices in the region contained thereunder to demonstrate how such guidance could come to fruition.

### Policy guidance for all displacement patterns

- Strengthen governance with clear communication and implementation guidelines to ensure timely responses

- Prioritize appropriate responses to already vulnerable groups of learners, including women, children, youth, and ethnic, religious and linguistic minorities

- Support teachers (prioritize teachers in providing aids just like prioritizing medical staff in COVID-19), including through teacher training on climate change issues and potential responses that they can pass onto students, as well as through targeted teacher training on hybrid learning pedagogies, teaching at the right levels, assessment of learning losses, and more

- Provide financial support for education-related expenses (e.g., learning materials, uniforms)
- Enhance people's climate change literacy among displaced and host populations taking into account cultural context to enable engagement with climate action
- Mainstream climate resilience and adaptation into policy and planning for development

## Policy guidance for temporary displacement following sudden-onset disasters

- Plan and implement holistic and inclusive remote learning to mitigate school closures
- Identify public buildings other than schools to be used as emergency shelters
- Prepare schools in receiving areas for accommodating the influx of CDPs after a disaster through increased structural capacity and resource reserves
- Consider creating a cash transfer programme for those students most financially disadvantaged to encourage them to return to schools after disasters

## Policy guidance for spontaneous migration

- Simplify administrative procedures for CDPs in accessing education, notably through flexible, exceptional registration and documentation requirements
- Implement TVET programmes and informal adult learning programmes in target cities such as Dhaka and Ho Chi Minh city to encourage upskilling and lifelong learning

## Policy guidance for government planned relocation

- Adopt a gender-responsive approach to redressing unequal access to resources across and within relocated communities, including education support and lifelong learning opportunities for girls and women
- Take into account Indigenous peoples and Indigenous knowledge in educational planning
- Prioritize school/teacher relocation to ensure the right to education of relocated persons as well as communities in receiving areas
- Ensure that relocated communities are close enough to former livelihoods or create livelihood opportunities to avoid poverty becoming a barrier to their children's education

## Policy guidance for cross-border migration

- Establish the concept of "climate refugee" or an equivalent concept, and a legally binding framework to ensure CDPs' access to education on equal footing as refugees
- Pursue bilateral agreements for migration with aid partner countries based on the principles of equitable responsibility and burden sharing, through, for example, granting the right to education for both children and adults on equal footing as nationals
- Ensure any bilateral agreements do not have strict quotas or language/education restrictions that inadvertently prevent the most vulnerable from migrating
- Place CDPs' identity and cultural heritage at heart when handling issues related to climate migration

## Policy guidance for trapped populations

- Use schools as a starting point to create social protection networks for children and develop community resilience through education and training
- Develop social safety net programmes and cash transfer programmes for trapped populations who are continually financially disadvantaged after multiple disasters in order to mitigate school dropout
- Increase the awareness of vulnerable populations about their legal rights
- Continue efforts of 'Education for All' and SDG4
- Focus on capacity building and lifelong learning that help secure people's livelihood, which in turn may increase the likelihood of their children's enrolment in school

# Annex B

## Findings from the Central American and Caribbean region[11]

11 This annex is a summary of the Central American and the Caribbean regional synthesis (UNESCO 2023b) and contains excerpts from the publication.

Outside of the Asia-Pacific region, Central American and Caribbean countries are some of the most severely impacted by climate change and climate displacement, notably vulnerable due to the large number of small island developing states (SIDS), the prevalence of poverty in certain Central American countries, and a large population reliant on rain-fed agriculture amidst growing drought and flooding.

As a result of multiple factors – climate itself, compounded by the aforementioned vulnerabilities- parts of Central America and the Caribbean experienced unprecedented climate displacement for instance in 2020, with 937,000 internal displacements in Honduras, 639,000 in Cuba, and 339,000 in Guatemala (IDMC 2021). A large part of these displacements can be attributed to the most active Atlantic hurricane season on record.

In order to investigate the nature and extent of the impacts of climate change and climate displacement on the right to education in Central America and the Caribbean, UNESCO undertook five country case studies in the region- ones in **the Bahamas, Cuba, the Dominican Republic, Guatemala, and Jamaica**, selected due to the already existing evidence of climate displacement and their representativeness of other countries in the region. Based on these country case studies, and as was the case with the Asia-Pacific region, a regional synthesis report was developed, containing policy guidance at both the national and regional level to ensure the right to education for climate-affected populations is protected and fulfilled.

This annex aims to summarize the main findings of the regional synthesis report through examining how climate change is affecting and driving displacement in the region, examining how these effects lead to barriers to education, and lastly providing operational policy guidance for policy-makers.

**Table 3: Key takeaways of the Central American and Caribbean regional synthesis report**

| Key takeaways |
|---|
| • The Central American and Caribbean region faces climate-related hazards on an annual basis –notably hurricanes and flooding, but also slow-onset impacts of climate change, such as more frequent and intense drought, and sea level rise and salinization.<br>• Climate change is already driving human displacement – either directly by affecting human settlements or indirectly through climate-driven loss of livelihood and subsequent forced migration.<br>• Particularly among the Caribbean countries, out of the six displacement patterns identified, internal displacement following sudden-onset events and internal displacement following slow-onset events are the most common. Drought and climate-driven loss of livelihoods (particularly in agriculture, fishery, and tourism) are the leading causes of slow-onset, permanent internal displacement.<br>• International migration is more common in Central American countries and, for the purposes of this study, notably Guatemala as a result of drought.<br>• Each type of displacement pattern entails different barriers to education. However, in all patterns, one of the major barriers to education is a lack of financial resources following disasters and/or displacement due to climate-related events. Families often prioritize education only after achieving economic security following loss of assets during disasters and displacement.<br>• Another major finding is that climate change and climate displacement exacerbate existing educational inequalities and barriers to education and more adversely affects the financially disadvantaged, irregular migrants, girls and women, rural communities, indigenous communities, and the disabled.<br>• For those facing permanent migration and cross-border migration, administrative barriers, lack of documentation, residency requirements, and language barriers (particularly for Haitian migrants, notably in Dominican Republic but not only, and for the indigenous communities in Guatemala) impede full access to quality education. |

### Key takeaways

- None of the countries studied has an overarching national strategy that expressly enshrines the right to education for persons displaced by climate change or climate-related triggers. However, Cuba is the only country studied that does grant refugee status to those displaced by disasters resulting from natural hazards in national legislation- eliminating the residency-related barriers to education for those displaced by climate change.
- The Central American and Caribbean region already contains a number of regional forums and platforms for multilateral cooperation on a number of issues, including migration and climate change. If leveraged properly, existing platforms could lead to the development of regional initiatives to expressly ensure the right to education of all climate-displaced persons in the region.

*Source:* Adapted from UNESCO 2023b.

## How climate change is driving displacement in the Central American and Caribbean region

The region, due to its geographic location, is prone to multiple effects of climate change: hurricanes that are intensified and more frequent due to higher air and water temperatures; sea level rise leading to coral bleaching, beach erosion, and salinization; periods of intense, erratic rainfall followed by prolonged and severe drought; and rising surface temperatures. While all of these effects can affect the agricultural sector, tourism, water supply, energy production, and human health- sometimes leading to indirect climate displacement, both slow and sudden onset events are also displacing human settlements.

The regional synthesis report found that there are six prevalent displacement patterns in the region. They are summarized in the table below, with each "T" representing a different type of displacement patterns. Later in the annex, this categorization will be used to identify barriers to education that are common or specific to one or more of these displacement patterns.

**Table 4: Climate displacement patterns in the Central American and Caribbean region**

| Internal displacement | Cross-border displacement |
|---|---|
| T1. Internal displacement due to sudden-onset hazards,<br>T2. Internal displacement due to slow-onset events (including climate-related economic migration),<br>T3. Planned relocation,<br>T4. Climate-induced trapping ('trapped' populations, unable to migrate due to poverty or other factors, or unable to return to their place of origin following a situation of climate displacement) | T5. Cross-border displacement due to sudden-onset disasters (primarily sub-regional displacement in the context of the Caribbean),<br>T6. Cross-border displacement due to slow-onset events (which is difficult to qualify as such given the multi-faceted dynamics leading to international migration in both Central America and the Caribbean) |

*Source:* UNESCO 2023b.

## Internal displacement due to sudden-onset hazards

The Caribbean is one of the regions most infamous for internal displacement following sudden-onset hazards, notably Atlantic hurricanes and severe flooding. Hurricanes have been a well-known, frequent phenomenon for centuries in the region. However, evidence shows that climate change is increasing the severity and frequency of hurricanes due to increased ocean temperatures (Probst et al. 2020). As a result, 2020 was the year with the most active hurricane season ever recorded, with 31 hurricanes and tropical storms- notably Eta and Iota which caused significant damage to infrastructure, agriculture, and human settlements in Guatemala, Cuba, and the Dominican Republic (ibid).

Sudden-onset events such as hurricanes often lead to internal displacement due to the rapid and unpredictable nature of the disasters and while people often must flee their homes, they do so within their own borders. Perhaps the most well-known example was Hurricane Dorian (2016), a category 5 hurricane which displaced at least 9,840 people- the majority of whom concentrated themselves on the capital island following catastrophic destruction of settlements and infrastructure (UNICEF 2019). But the phenomenon of internal displacement following sudden-onset events can be found in each country studied in the Regional Synthesis.

For example, 1.7 million people were displaced in Cuba following Hurricane Irma in 2017 (IDMC 2021); Hurricanes Maria and Irma (2007) displaced more than 67,000 in the Dominican Republic (IDMC 2021); Eta and Iota (2019) displaced 250,000 in Guatemala (IDGT 2021); and Dean displaced up to 300,000 in 2007 in Jamaica (Helps 2007).

## Internal displacement due to slow-onset events

While internal displacement due to sudden-onset events is rather easy to quantify due to the direct cause, internal displacement due to slow-onset events is more difficult to identify and assess. Often times, internal displacement due to events like drought, repeated and continuous flooding, salinization, and sea level rise indirectly leads to displacement due to climate-driven loss of livelihoods. Therefore, what might initially appear as economic migration can actually be climate-driven. A similar situation occurs with international migration, where it tends to be perceived as economic migration, resulting in reduced humanitarian attention.

The biggest correlation between rural-urban movement and slow-onset climate events becomes clear after a literature review and focus-group consultations: urbanization, most often those working in agriculture who lose their revenue and livelihood due to climate-driven factors such as drought and flooding and subsequently move to urban hubs in search for work. Perhaps the greatest example of this indirect displacement pattern is that of Guatemala- experiencing one of the highest rates of urbanization, with the urban population expected to grow from nearly 55% of the total population in 2025 to almost 70% in 2050 (United Nations 2018). When juxtaposing this fact with the reality that drought has already reduced bean and rice yields by 50% since 2014 (USAID 2017), one can pose the question if there is more than just a correlation between climate-driven loss of livelihood and food insecurity with higher rates of urbanization; it is possible that climate is the indirect cause of urbanization- with families losing their agricultural revenues and moving towards urban Guatemala to earn a living.

Not only can drought-associated losses result in internal climate displacement, but so can sea level rise. In Cuba, for example, sea level rise is expected to displace over 41,000 persons by 2050 (Tower 2020). In the Dominican Republic, nearly 100,000 persons live less than 0.5 metres above sea level (UNESCO 2023b). Thus, sea level rise poses an imminent threat of displacement to a large portion of the population.

## Planned relocation

One of the growing governmental responses to internal climate displacement is planned relocation – uprooting entire villages and moving them to a location that has a lower climate risk, especially in the case of flooding and sea level rise. Planned relocation can be both reactive (normally following disasters) or preventative in nature. One example of a reactive planned relocation was the relocation of an entire island in the Bahamas – Ragged Island – following Hurricane Irma, when the government declared the island uninhabitable (UNESCO 2023b).

Perhaps the greatest example of reactive planned relocation in all of the Caribbean region is the case of the Dominican Republic's Lake Enriquillo. While many first think of flooding in areas along the coast, due to rising sea levels and hurricanes, the engulfment of agricultural land surrounding Lake Enriquillo proves that the effects of climate change in the Dominican Republic are much more intricate. The largest lake in all of the Caribbean, Lake Enriquillo lies in western Dominican Republic, close to the border of Haiti. Previously, it was surrounded with rich agricultural land and many villages dependent on raising crops and livestock for income. Now, some of those villages have completely disappeared; in less than 10 years, the lake has doubled in size, risen 37 feet, and engulfed 40,000 acres of farmland (Kushner 2016).

There are many theories as to why Lake Enriquillo has expanded so greatly, and so quickly, but some believe that the main cause is climate change. With sea temperatures rising, there would be greater evaporation, subsequent formation of more clouds, and that these clouds increasingly drop their heavy rainfall on the steep mountains surrounding the lake, resulting in runoff and down into Lake Enriquillo. These effects of climate change have been devastating for the surrounding villages, notably Boca de Cachon. After the lake completely swallowed the village, the government announced a $24 million dollar project to build a new Boca de Cachon on lands further away from the lake. While the residents now have stable housing in the new village, they have no agricultural land or livestock and no means of earning a living (Kushner 2016).

As opposed to the cases in the Bahamas and the Dominican Republic, some planned relocation projects are preventative- anticipating the sea level rise and constant flooding that could engulf villages in the future. Such was the case in Cuba, when the government relocated 40 families from Playa Rosario to a new settlement eight miles away (Pickett, 2017).

## Trapped populations

While climate change can clearly lead to internal displacement following both slow and rapid onset events, it can also affect populations without it resulting in human mobility. On the contrary, certain populations without the means to adapt often remain trapped populations- those forced to stay in their usual place of residence despite the occurrence of extreme weather or slow-onset events. One such example that is notable in the region is that of the Haitian-Bahamian community in Abaco following Hurricane Dorian. As many Haitians arrive in the Bahamas illegally, and as a result of persistent exclusion and discrimination, they often live in informal settlements that are quickly demolished, unable to stand up to Hurricane 5 force winds (UNESCO 2023b).

While the case of the Haitian-Bahamian community might be the most pronounced, trapped populations exist in all countries studied- such as when a landslide, proved by storm Eta in 2020, left 50 people missing in Guatemala (AP Noticias, 2021) or when over 2,000 people were isolated due to flooding in Jamaica following Hurricane Michele in 2001 (UNESCO 2023b). Clearly, even when climate change does not result in internal displacement- be it temporary or permanent, it nevertheless has severe impacts on people's physical safety and settlements.

## Cross-border displacement caused by sudden-onset and slow-onset events

As the effects of climate change continue to worsen, the Central American and Caribbean region is not only experiencing internal climate displacement, but patterns of international displacement as well. For example, following Hurricane Stan in 2005 which affected nearly 500,000 people sparked a large exodus from Guatemala to the United States of America (SIINSAN, 2018). More recently, and on a smaller scale, Hurricane Dorian displaced between 600 and 700 Bahamians to the United States (UNESCO 2023b).

However, more people in Guatemala have left the country due to slow-onset events as opposed to rapid-onset disasters- notably severe, prolonged drought, subsequent food insecurity, and severe malnutrition in the Dry Corridor. While most internationally displaced end up in the United States, there are an important number of Salvadorians migrating to Guatemala (making up 90% of migrants in the country), whose mobility is often motivated by climate-driven loss of livelihoods (IOM, 2019).

The Dominican Republic is also seeing an increase in cross-border displacement, notably large numbers of Haitians arriving in the Dominican Republic. Such populations are often considered economic or political migrants, though slow-onset events such as drought could be contributing to the displacement (UNESCO 2023B). Once arrived in the Dominican Republic, the Haitian community often find themselves living in informal settlements not able to withstand flooding and hurricanes, they find themselves at risk of future, secondary displacement.

## Climate displacement patterns and associated barriers to education

Taking into account the displacement patterns explored above and the pre-existing vulnerabilities in the region, multiple barriers to education as a result of climate change and climate displacement become evident. Such categories of barriers can be grouped into five categories according to the 5A framework on the right to education[12], which focuses on availability, accessibility, acceptability, adaptability, and accountability. The barriers to education – grouped according to the 5A framework as well as to the different types of displacement (previously identified in the table on page 33, which has been reproduced below) – are summarized in the table below. As can be seen, many barriers to education are present in all displacement patterns. However, certain displacement patterns present specific and unique barriers to education which would require tailored policy responses. All analyses below are based on findings drawn in the 2023 UNESCO Central America and the Caribbean regional synthesis report.

**Table 5: Barriers to education according to the 5As and the 6 types of climate displacement**

| Internal displacement | Cross-border displacement |
|---|---|
| T1. Internal displacement due to sudden-onset hazards,<br>T2. Internal displacement due to slow-onset events (including climate-related economic migration),<br>T3. Planned relocation,<br>T4. Climate-induced trapping ('trapped' populations, unable to migrate due to poverty or other factors, or unable to return to their place of origin following a situation of climate displacement) | T5. Cross-border displacement due to sudden-onset disasters (primarily sub-regional displacement in the context of the Caribbean),<br>T6. Cross-border displacement due to slow-onset events (which is difficult to qualify as such given the multi-faceted dynamics leading to international migration in both Central America and the Caribbean) |

| 5As | Main barriers to education | Type of climate displacement | | | | | |
|---|---|---|---|---|---|---|---|
| | | T1 | T2 | T3 | T4 | T5 | T6 |
| **Availability**. Education must be available. It is the duty of governments to ensure that educational institutions, physical resources, personnel, and programmes are available in sufficient quantity and quality, and with the necessary facilities to function properly for both people on the move and host communities | • Interruption of education during disasters and destruction of educational infrastructure, or important damages if used as shelters for long periods of time | | | | | | |
| | • Loss in teaching time affecting the quality of education | | | | | | |
| | • Limited availability of educational infrastructure in rural and remote areas | | | | | | |
| | • Suspension of special educational services after disasters | | | | | | |
| | • Teacher shortages, especially in remote areas | | | | | | |

12 As outlined by the UN Committee on Economic, Social and Cultural Rights (ESCR Committee), education in all its forms and at all levels shall exhibit the following interrelated and essential features: availability, accessibility, acceptability and adaptability of education. The original 4As framework on the right to education, which is the most common analytical framework used for interpreting and understanding the normative content of the right to education, is based on these four core dimensions of education. In recent years, there has been an evolution towards adding accountability as a fifth dimension, so that it is referred to as the 5As framework. In advocating the fulfillment of the right to education, the 5As framework is to be considered to encourage States to adopt and implement solid legal and policy frameworks protecting the right to education for all.

| 5As | Main barriers to education | Type of climate displacement | | | | | |
|---|---|---|---|---|---|---|---|
| | | T1 | T2 | T3 | T4 | T5 | T6 |
| **Accessibility.** Education should be freely accessible to all, physically and economically, without legal discrimination, including migrants, refugees, returnees, asylum seekers, and host communities. | • Costs of supplies, books, uniforms, and transportation limiting access to education to displaced families | | | | | | |
| | • Lack of legal documentation affecting internally and internationally displaced students | | | | | | |
| | • Low digitalization of academic records affecting internally and internationally displaced students | | | | | | |
| | • Safety risks associated with inadequate school buildings and disaster management | | | | | | |
| | • Problems in the recognition of degrees, certificates, and knowledge | | | | | | |
| **Acceptability.** The form and content of education should be appropriate and coherent with the needs of people on the move and host communities, with relevant curriculum and other educational materials and approaches that value difference, ethnic plurality, and intercultural dialogue. | • Language barriers affecting the right to education of indigenous communities and internationally displaced populations | | | | | | |
| | • Destruction of teaching materials, supplies, and equipment reducing capacity to teach required learning contents | | | | | | |
| | • Lack of teachers' capacitation on the phycological and educational needs of CDPs | | | | | | |
| | • Lack of official and continuous measures to attend to the health and psychosocial needs of climate-displaced students | | | | | | |
| | • Increased risks of discrimination and violence against CDPs that are part of indigenous communities, from Haiti and Central America, and women | | | | | | |
| **Adaptability.** There is an enabling environment and institutional capacities in the education sector to respond to the diverse needs of people on the move and host communities | • Lack of prioritization to the development of tailored policies for CDPs | | | | | | |
| | • Lack of enough public funding in the educational sector, especially after disasters | | | | | | |
| | • Lack of institutional coordination and capacities to attend the educational needs of CDPs | | | | | | |
| | • Lack of coordination capacities to reassign students and teachers after extreme weather events | | | | | | |
| **Accountability.** Education must be accountable, in relation to transparency, social management, and affected populations' participation, as well as responsibility for the actions and public policies undertaken in the response | • Lack of enough mechanisms to allow the participation of CDPs in the design and implementation of educational policies | | | | | | |
| | • Accountability issues associated with a lack of enough and transparent information about climate displacement and climate impacts in the educational sector | | | | | | |

*Source:* UNESCO 2023b.

## Barriers to education for all displacement patterns

One of the most prominent barriers to education as a result of climate change – applicable to all displacement patterns – is a **lack of financial resources** and costs of supplies, books, uniforms, and transportation limiting access to education to CDPs. Following disasters and upon displacement, many families lose their goods, land, and other livelihoods- leading to economic hardship and subsequent inability to pay for school fees. Even when school is tuition-free, there are still substantial associated costs, including buying uniforms, books, supplies, and transportation to and from school.

Another major barrier is **limited availability of educational infrastructure** in rural and/or remote areas. One general barrier to education, even outside of climate change, is the lack of capacity and schooling infrastructure- particularly in rural and remote areas. As climate change displaces persons in Central America and the Caribbean, be it temporarily or permanently, displaced students struggle to find schools nearby with adequate infrastructure (both in terms of quality and quantity of classrooms, equipment…) to absorb an influx of new students. This barrier is particularly acute in remote regions, as infrastructure is already limited yet remote regions are the most affected by climate change and climate displacement.

Furthermore, there is often a lack of official and continuous measures to attend to the **health and psychosocial needs** of climate-displaced students- including a lack of teachers and teacher training on the specific needs of climate-displaced persons. While poverty is one of the most prevalent barriers to education amidst climate change and displacement, there are many non-monetary challenges as well, including impacts on students' mental health. However, few measures are taken to address such challenges. In Guatemala, for example, initiatives to provide psycho-social support are ad-hoc - taking place temporarily after disasters as opposed to a permanent aspect of the country's educational policy. Furthermore, teachers are often unaware of such special needs of climate-displaced students. In the Dominican Republic, for example, one of the main barriers identified concerning teaching methods was a lack of learning methods and techniques tailored to the needs of the migrant population in general, but particularly those of climate-displaced persons.

In addition, **language barriers** are a particularly important challenge for climate-displaced persons, especially for indigenous populations. Indeed, these populations are highly vulnerable to the effects of climate change due to their close ties with the land and agriculture, their pre-existing political and economic marginalization, and their often rural and isolated location. Any forced displacement resulting from slow- or rapid-onset events could lead to mobility that would leave indigenous populations in a community that does not speak or teach in their language, thus creating an obstacle to education but not only as it can also have an impact on their employment opportunities, livelihoods and social integration (UNESCO 2023b). In Guatemala, despite the presence of over 25 spoken languages – 22 of which correspond to forms of Maya - the official language of Guatemala, and therefore of the education provided, is Spanish, which disproportionately affects access to education for these indigenous populations. Similarly, Haitian migrants in the Dominican Republic or in the Bahamas, displaced following Hurricane Dorian, experienced language barriers when attempting to access education in New Providence following the forced move from Abaco.

While the number of nature of barriers to education as a result of climate change and displacement are numerous and varied, the aforementioned aspects present some of the most notable challenges to accessing education in the face of climate change. Others include:

- Increased risks of discrimination and violence against CDPs that are from Haiti, part of indigenous communities from Central America, and women, as well as economic migrants;
- Lack of enough public funding in the educational sector, especially after disasters, and lack of prioritization to the development of tailored policies for CDPs;
- Lack of institutional coordination and capacities to attend the educational needs of CDPs;
- Lack of enough mechanisms to allow the participation of CDPs in the design and implementation of educational policies; and
- Accountability issues associated with a lack of enough and transparent information about climate displacement and climate impacts in the educational sector.

## Barriers to education following sudden-onset events

While populations affected by sudden-onset events do experience the barriers to education described above, they also experience a set of unique educational challenges that others, such as those displaced due to slow-onset events, do not. The most notable is the interruption of education during disasters and destruction of educational infrastructure, or important damages if used as shelters for long periods of time. The most direct impact of climate on the right to education is events like storms, flooding, and hurricanes decimating schooling infrastructure partially or completely, as was seen following Hurricane Maria in 2018 which damaged a third of all primary and secondary schools in the Dominican Republic (ReliefWeb 2018).

However, even when schools remain standing and functional, they are often used as **emergency shelters**, which prevents their use as educational facilities and prolongs the resume of normal schooling activities even further following infrastructural damage during their use as shelters. This **loss of teaching time** in turn impacts the quality of education. Furthermore, destruction of teaching materials, supplies, and equipment reduces capacity to teach required learning contents. Extreme weather events have destroyed teaching materials, supplies, and equipment in the region, impacting teaching practices and the capacity to teach required learning contents.

Another barrier to education following sudden-onset events that has been identified in the region is **teacher shortages**, particularly in remote areas. For example, schools in the village of Nuevo Quejá (Guatemala)- constructed after storms Eta and Iota- had teaching rooms, yet many were unused due to a lack of enough teachers to provide services to its 258 students. Along similar lines, there is a lack of coordination capacities to reassign students and teachers after extreme weather events. The lack of digital documents to facilitate this process was identified as an important challenge in Guatemala and the Bahamas.

## Barriers to education amidst internal displacement

As with temporary displacement following sudden-onset events, permanent internal displacement also comes with its associated set of barriers to education, most prominently **low digitalization of academic records** affecting internally displaced students. This is particularly the case in Guatemala, as rural families must move to urban hubs to find sustainable livelihoods. When transferring schools, accessing academic records can be difficult due to low digitalization of credentials and could require traveling to the original place of residence. In the case of repeated disasters, sometimes academic records are completely destroyed or missing.

Outside of accessing school records, there are concerns surrounding **safety risks associated with inadequate school buildings and disaster management**, particularly when educational infrastructure has not been built, repaired, or maintained properly. In some instances, as is the case of the re-built village in Guatemala Nuevo Quejá, schools are built on unsuitable land and put students at risk of increased damage amidst flooding and landslides. For trapped populations, considering schooling in buildings that have been affected by disasters could risk children's physical safety in the case of school collapse and the cut off of sanitary water and electricity.

## Barriers to education upon cross-border displacement

One of the most problematic aspects of cross-border displacement as concerns the right to education is often the **lack of legal documentation** necessary not only to enroll in schools cross-border, but more basically the legal documentation needed to reside in the receiving country. To recall, persons displaced as a result of climate change are not recognized as refugees under the 1951 Refugee Convention and therefore do not have the right to legal residence abroad following rapid or slow-onset events. This can render enforcing the right to education in the receiving country even more difficult.

Yet even outside of documentation required for legal residency, there are numerous examples of strict **administrative procedures** requiring certain documents necessary for enrollment – such as passports, identity cards, and official school records- which some cross-border displaced persons do not have access to, as some of them might have been lost or destroyed during disasters and post-disaster movement. Children of Haitian migrants in the Bahamas, for example, face barriers to education upon attempted enrolment due to a lack of passports. In the Dominican Republic, the barrier is even more pronounced, where even the descendants of Haitian migrants face retrospective, discriminatory practices upon enrolment- also due to the discretionary application of policies that require specific documentation.

While problematic to a lesser extent, **recognition of degrees**, **certificates**, **and knowledge** was also identified as a barrier for Haitian migrants deported back to Haiti after Hurricane Dorian, as well as for Guatemalans attempting to undergo the costly process of having their foreign university degrees recognized.

## Policy guidance for the Central American and Caribbean region

Some barriers to education are present among all displacement patterns while other barriers are more unique to certain patterns, so must the policy guidance be tailored to the specific situations. The policy guidance, aimed at Member States and policy-makers of the Central American and Caribbean region, highlight guidance applicable to all forms of climate displacement, followed by more specific guidance for certain types of displacements, varying according to the nature of the event that caused the displacement, for example, or the nature of the displacement itself.

### Policy guidance for all displacement patterns

- Improve the access and readiness of educational infrastructure and services, targeting rural areas that can be important receptors of CDPs through increased funding and increased school capacity

- Facilitate the enrolment of CDP students through targeted measures (including financial support, increasing capacity to absorb additional children, flexible curriculum, relaxed administrative procedures, and flexible and non-formal learning opportunities)

- Support teachers and educational staff in addressing the educational and psychosocial needs of CDPs through targeted teacher training on hybrid learning pedagogies, teaching at the right level, assessment of learning losses, and more

- Cooperate with national, regional and international organizations providing support to CDPs to make these efforts permanent aspects of the educational policy, and build national and local capacities

- Prioritize appropriate responses to already vulnerable groups of learners such as women and girls, youth (secondary) and ethnic, racial, religious, and linguistic groups and minorities

- Give priority to meeting the specific educational needs of indigenous populations in the face of climate change, notably by ensuring that their traditional knowledge and values are included in educational curricula, particularly with regard to potential solutions based on this knowledge to strengthen ecosystem resilience, but also by ensuring that education is available in indigenous languages and that they can access education systems without discrimination, in the same way as other students.

- Explicitly integrate and address the relation between climate displacement and the right to education in national and regional educational, climate change, disaster management, and migration policies

- Strengthen the capacities of all relevant Ministries including Ministries of Education in their lead/coordination role to enhance inter-sectoral collaboration in support of CDPs, by, for example, ensuring a representative from the Ministry of Education is present within the Disaster Risk Reduction departments or ministries in a given country and vice-versa.

- Create mechanisms to ensure the active participation of (potential) CDPs pre-, during and post-crisis in the design and assessment of policies to support their education, making especial efforts to support the participation of vulnerable groups and irregular migrants to ensure accountability to the affected populations.

- Mainstream Education for Sustainable Development including climate change education in order to raise knowledge, awareness and action on the scientific and structural causes of these climate induced disasters to turn CDPs into active agents of change rather than passive victims of disasters

- Strengthen horizontal and vertical governance mechanisms to ensure timely responses at all levels (local, national, regional)

- Improve preparedness to attend the linguistic needs of climate-displaced population, by for example, preparing educational material in the languages of expected CDPs or by training/ supporting teachers in attending their needs such as Haitian Kreyol or in English, French or Spanish, depending on the country

## Policy guidance for displacement caused by rapid-onset disasters

- Prioritize the use of alternatives to educational infrastructure as shelter and the establishment of temporary facilities to ensure the continuity of education services during disasters

- Plan and implement timely remote learning tools and practices to mitigate school closures and destruction of teaching material, considering the learning experience gained during the COVID-19 pandemic.

- Create contingency plans for education services to reduce their suspension during disasters, including specificities for special education

- Improve national systems to respond to sudden increases in demand for additional teaching materials, supplies, and equipment, as well as teachers in regions receiving CDPs. This can be done by, for example, planning the availability of additional educational materials and creating protocols for their rapid delivery. Mechanisms can also be implemented to economically support teachers in regions with CDPs and support volunteer or contract teachers as temporary measures to attend CDPs.

- Improve national systems to respond and prepare schools for accommodating the influx of CDPs after a disaster by, for example, developing school-based contingency plans to respond to such influxes and creating financial support measures, such as grants for receptor schools.

## Policy guidance for internal displacement

- Improve educational infrastructure resilience, especially in at-risk areas of sudden and slow-onset disasters as well as in regions potentially receptors of CDPs by, for example, updating and implementing infrastructure assessments and monitoring mechanisms as well as updating building and zoning codes, through retro-fitting and aligning policy with the Comprehensive School Safety Framework.

- Improve the digitalization of academic records with the explicit aim of facilitating the reintegration of CDPs after disasters.

## Policy guidance for cross-border displacement

- Simplify administrative and legal requirements for cross-border CDPs in accessing education.

- Establish the concept of climate refugee (or an equivalent one) in the main regulatory bodies related to international migration of each country, as well as legally binding frameworks to ensure the access to education of CDPs that cross borders.

- Review procedures to facilitate the recognition of degrees and certificates of potential cross-border CDPs.

# Annex C

## Findings from the East African region

The East African region is frequently in the news for a variety of grave world affairs: conflict, terrorism, poverty, famine and more. Uganda, an East African state with a population of over 47 million, often brings to mind a complicated and saddening history of civil wars, child soldiers and shocking brutality. While Uganda's economic development and growth has been impressive, it is largely confined to Kampala, its capital city, leaving the rest of the country in moderate to severe poverty. Uganda ranks 166thon the Human Development Index, has a high rate of poverty – up to 82% in certain districts –, has an economy and labour force that still relies heavily on agriculture, and has a mean of only 5,7 years of schooling (UNDP 2021).

For the past 20 years, Somalia, a nation on the Horn of East Africa with a population of approximately 17 million inhabitants (The World Bank 2022), has been devastated by civil war and conflict. Between the changes in regime, inter-clan clashes and territorial conflict among various nationalist and Islamic groups, millions of Somalis were forced to flee – forcibly displaced by conflict into refugee camps, or internationally into neighbouring East African countries.

Kenya, an East African state with a population of over 54 million inhabitants (The World Bank 2022) and a diverse geographic topography, is generally regarded as one of the more developed African states with regard to economy, infrastructure, essentially services and political stability (Tamarkin 1978), classified as a lower-middle income country by the World Bank (World Bank 2021). Due to Kenya's political stability and relative wealth in comparison to its neighbours such as Sudan, Somalia, Ethiopia and Uganda – all of which are plagued with violence and a shortage of resources themselves – Kenya is a major destination for international refugees, hosting nearly 600,000 refugees and asylum-seekers in its many camps throughout the country and leading to conflict over the diminishing natural resources remaining (UNHCR 2023b).

While all of these issues are widely covered in national, regional and international news outlets, the countries of East Africa are facing an existential crisis that merits just as much attention: climate change, and its impacts that are leading to wide-spread climate displacement. Climate change is affecting all countries across the globe, but East Africa is one of the most vulnerable regions in the face of unprecedented climatic events. With prolonged droughts and water shortages, the large portion of the population employed in and reliant upon agriculture and nomadic pastoralism is finding themselves without a livelihood or food source, while erratic and torrential rainfall is leading to deadly floods that displace hundreds of thousands annually, a number that is growing rapidly and steadily. According to IPCC projections, with global warming of 1.7°C by 2050, there could be 6.9 million internally displaced people in East Africa, a figure that would rise to 10.1 million with global warming of 2.5°C by 2050 (IPCC 2022).

Whether inhabitants are forcibly displaced from their homes as a direct result of climate change, or indirectly finding themselves displaced by climate change due to loss of livelihood, East Africa must find a solution to ensure that its growing climate-displaced population has full access to their fundamental human rights – notably, the right to education.

It is worth noting that discussions have recently taken place to this effect as the African Climate Summit and African Climate Week were held alongside in September 2023 in Kenya, addressing the growing exposure to climate change and its associated costs in Africa, and serving as a platform to inform, frame and influence state commitments, pledges and outcomes. Some of the issues

addressed at these events overlap with those identified in this report's regional analysis (the effects of climate change on livelihoods, infrastructure, etc.).

Below are a few key highlights concerning the right to education for climate-displaced persons in the East African region following preliminary background reports on Kenya, Uganda, and Somalia – representative of most countries in the East African region:

**Table 6: Key takeaways of the study carried out in East Africa**

**Key takeaways**

- Infrastructural damage to schools and school closures following extreme flooding, linked to climate change, poses the most direct barrier to education and occurs in each country studied.
- Each country in the region is experiencing high rates of rural-urban movement as a result of climate-driven livelihood losses. Access to schooling upon arrival in urban slums is not guaranteed.
- Many East African countries have a culture of nomadic pastoralism, with climate change driving herding routes further and further away from their traditional patterns. Access to schooling upon movement in rural areas is not widely available, nor are teaching professionals.
- Climate change is driving more and more families to sign up as refugees in camps. Such refugee camps are already overcrowded and have limited schooling capacity for their residents.
- The East African region is experiencing a high level of not only internal climate displacement, but cross-border climate displacement. Legal and administrative barriers could prevent those displaced internationally from accessing education.
- Those countries which have ratified the Kampala Convention are obliged to protect and assist IDPs in the region, including protecting fundamental human rights. However, the ratification of this convention should be promoted in countries that are not yet state parties to it, and for those that are, the further implementation of such obligations in national law and practice should be encouraged.

## How climate change is driving displacement in East Africa

### Direct displacement following sudden onset events

Erratic rainfall and flooding

Just as many Asian countries experience seasonal monsoons and storms, East Africa and particularly Kenya, experience annual, seasonal rainfall patterns driven by the Inter-Tropical Convergence Zone (ITCZ), a low-pressure system that brings heavy rainfall to countries along the Earth's equator. This results in two wet periods – the "short rains" from October to December in southern Kenya, and the "long rains" which affect primarily northern Kenya from March to May (UNDP 2021). Also lying within the Inter-Tropical Convergence Zone (ITCZ), and experiencing monsoonal winds, the Somali Jetstream, and easterly waves from the Indian Ocean and Red Sea, Somalia experiences two rainy seasons – the Gu rain season which takes place from March to June, and the Deyr rain season taking place from October through the end of November (Climate Change Knowledge Portal 2021). Uganda has a very variable climate that is impacted by several meteorological patterns, including the large-scale Indian Monsoon, Congo air mass, Indian Ocean Dipole (IOD), and the Inter-Tropical Convergence Zone. In addition, a major driver of Uganda's inter-annual rainfall variability is the El-Nino Southern

Oscillation (ENSO), with El-Niño periods often bringing floods during the rainy seasons and El-Niña often resulting in drought (The World Bank Group 2020).

While these climatological phenomena have been present in East Africa for centuries, climate change is expected to impact both the volume, intensity and frequency of rainfall. Whereas previously annual rains were more evenly distributed amongst days in the rainy seasons, rainfall in East Africa has become increasingly and markedly more erratic, and this trend is predicted to continue as the effects of climate change worsen. Overall, annual rainfall is expected to increase, yet this increase will not be felt uniformly. While the number of days with minimal or no precipitation will augment, simultaneously, days with rainfall will be marked by extreme and severe precipitation events (Climate Change Knowledge Portal 2021). Due to the increasingly intense rainfall in short periods of time, East Africa – a region traditionally regarded as dealing primarily with drought – is experiencing more and more flash flooding and soil erosion, worsened when such heavy rains fall on drought-ridden, dry land that has seen no rainfall for months. These flash floods are now not only displacing tens of thousands at a time but leading to animal and human fatalities yearly (ICRC 2021).

An example of the deadly flooding in Somalia was seen in May and June of 2021, with the heavy Gu rains killing 25 people, nine of them children, with a total of over 160,000 Somalis affected by this single event as of May 2021 (ReliefWeb 2021a). While many predicted that the rains would die down towards the end of May, climate change showed its powerful ability to defy past patterns and, again, lead to unpredictable, erratic rainfall. As a result, by the end of June 2021, the Gu rains and subsequent floods had affected 400,000 Somalis, with over 101,000 officially displaced from their homes (ReliefWeb 2021b). During the 2023 rainy season, heavy rainfall and flooding hit parts of Somalia. At least 468,000 people were affected by the floods, 247,000 of whom were displaced from their homes (ReliefWeb 2023d).

In Kenya, by August of 2020, heavy rains – causing rising water levels in Lake Turkana – had already displaced 5,000 people living along the lake's shores; this number quickly rose to 24,320 displaced persons by October, resulting in loss of livelihoods and thousands of homes submerged (Floodlist 2020). At the same time, rising levels in Lake Victoria resulted in 300 displaced families by August, and a subsequent total of 7,000 displaced households by October due to the lake's backflows (Floodlist 2020). More recently, in April 2023, major flooding occurred in Mandera County, in the north-east of the country, affecting over 2,000 families. Similarly, the Nyando River burst its banks, flooding areas of Nyando sub-county, displacing 1,500 households in Nyando and a total of 2,700 in the county as a whole (Floodlist 2023).

Between the unprecedented rainfall in 2019 and 2020 alone, over 132,000 Ugandans were forcibly displaced due to the subsequent flooding, with 88% of the displaced persons residing in host communities, 10% in camp-like sites, and 2% in formal settlements (IOM 2020). In order to better analyze the effects of climate change and natural hazards on a sub-regional level in Uganda, the IOM undertook a Participatory Mapping of Population Mobility, during which group and plenary discussions among the local residents and stakeholders revealed that flooding was the predominant climatic hazard in the Katawki District – a hazard that has become more severe, frequent and disastrous. Participants stated that flooding results in displacement to the nearby areas of the Teso region and other parts of eastern Uganda, and that during extreme rainfall events and flooding, residents always migrate temporarily to educational and religious institutions (IOM 2021).

Cyclones

While regions such as the Caribbean and Southeast F habitually experience powerful hurricanes and cyclones, East Africa – while having the Indian Ocean as its eastern border – is not typically considered a cyclone hotspot. Nevertheless, considering the region's unprecedented erratic rainfall, East Africa is now also beginning to experience powerful cyclones never before seen as a result of climate change.

On November 22, 2020, Cyclone Gati – the strongest storm ever to hit Somalia since recorded history – made landfall in the eastern-most part of the country. Not only was Cyclone Gati the strongest storm ever to hit Somalia, but it also demonstrated other characteristics typical of storms affected by climate change: increasing in intensity from 65 km/hour to 185 km/hour in a span of a mere 12 hours, the cyclone exhibited the largest increase in intensity ever recorded over 12 hours in the Indian Ocean (Patel 2020). Dropping two years of rainfall over just two days, the historic storm left nine dead and affected 180,000 others (Hujale 2021). For a population already riddled with conflict, drought, starvation and millions displaced internally, Cyclone Gati pushed many into further devastation in desperate need of immediate assistance.

## Indirect displacement following slow onset events

Drought and famine

While, again, Somalia has for centuries dealt with dry seasons and rainy seasons, climate change has rendered such periods of drought more severe than ever before, beginning with the notorious drought of 2011, which was perhaps one of the first times that media worldwide highlighted the human cost of climate change related to drought. As the worst drought in over 60 years, the failed rains caused far more damage than slightly diminishing crop yields. As agricultural productivity came to a halt and livestock perished throughout the country, the UN declared six regions in Somalia in a state of famine, with some estimates stating that the famine claimed the lives of up to 258,000 Somalis (Seal & Bailey 2013) – half of them children under the age of five (Giovetti 2020). In addition to the quarter of a million lives lost, a further 170,000 Somalis fled to north-eastern Kenya in hopes of finding better conditions (ReliefWeb 2012).

In the face of such human disasters, Somalia has recently adopted its National Adaptation Plan (NAP) presenting a series of compelling actions for the period 2021-2030 to strengthen the resilience of agriculture to climate change (UNFCCC, 2021). Some of the key initiatives include:

- Research about drought-resistant varieties and provision of drought-resistant seeds and seedlings to farming communities;
- Developing irrigation systems including dams, channel & water reticulation system;
- Promote weather based insurance scheme for farmers and pastoralists;
- Investment in veterinary services to address climate related diseases;
- Build adaptation capacity in climate-resilient agronomic practices for smallholder farmers;

- Manage the grazing areas, and rangelands in a sustainable manner and enhancing the development of livestock infrastructures and services including feed storage;
- Improve access to agro-weather information services.

These actions not only protect livelihoods, but also combat food insecurity and malnutrition, which is a major step forward in combating the adverse effects of climate change and displacement on education. While the NAP is still in its early stages and it is therefore to soon to measure its effects, it is worth noting the efforts being made in this direction with the adoption in 2022 of the NAP Framework to address and coordinate Somalia's medium- and long-term adaptation needs in a coherent and coordinated manner in order to guide and advance Somalia's NAP process (UNFCCC, 2022a).

Rural-urban movement following climate-induced livelihood loss

One distinct migration pattern in Kenya is urbanization as an adaptive measure to climate change. Both pastoralists who have lost their livelihood due to sustained drought and those residing along lakes and rivers which have swollen immensely due to increased precipitation variability are flocking towards nearby cities and urban hubs in search of another means of living. When controlled and well-planned, urbanization can create a stronger work force and a reinforced economy.

However, the numbers and rapidity in which Kenyans are migrating to urban areas has left local and regional authorities struggling to secure sustainable development. As opposed to "mega-cities," Kenya's urban-rural migration patterns driven by climate change could result in "mega-slums" (Baker 2021). Not only would this impede migrant's access to basic services, but unplanned, informal housing settlements containing a dense population puts a large number of houses at risk when events like flash-flooding occur.

In Uganda, specifically in the district of Karamoja – one that is infamous for harsh conditions and relying almost exclusively on natural resources – 82% of the population lives below the poverty line (Vilhelmsen Haug 2014). While some families are displaced temporarily, often residing with friends and families nearby, others facing chronic disasters and poverty feel they have no choice but to migrate to urban hubs. Yet despite their hopes of finding a more stable, safe physical environment and better economic opportunities, the majority of such migrants find themselves in deplorable situations (IDMC 2014). This is due in part to the fact that, apart from these climate-induced migrations towards urban areas, Uganda already has one of the highest rates of urbanization in the world, and competition to find work in the city is therefore tenfold (UNFCCC 2022b).

Perhaps the most stark example of this rural-urban migration and urbanization trend can be seen among the Karamojong due to the extremely high level of poverty in the district. Minors from Karamoja have been observed migrating to urban areas in order to earn income and then bring it back to their families, yet contrary to their aspirations, in reality they find themselves at high risk of labour exploitation, often finish begging on the streets, and live in slums with unsafe sanitation and infrastructure. Many Karamojong migrants also report experiencing harassment and both verbal and physical abuse (Vilhelmsen Haug 2014).

While three quarters of the Somali population are currently employed in agriculture, Somalia is nevertheless one of the fastest urbanizing countries in the world, with the urban population expected to overtake the rural population by 2026 (Aubrey & Cardoso 2019). Given the decade-long lack of rain, and the nearly complete inability to continue living off crops and livestock in rural areas, many Somalis are finding themselves with no choice but to move to urban hubs, notably Mogadishu, in search of some source of income. Yet, as is the case with the majority of urbanization in Kenya and Uganda, rural-urban movements often result in the IDPs squatting in make-shift settlements on the outskirts of major cities; in infrastructure that is highly unstable, unsanitary, and crumbles under inundation; and without sufficient access to basic social services.

Such is the case with the IDP settlements in Mogadishu. As opposed to finding security and income, IDPs already finding themselves in an insecure environment are instead greeted with bulldozers destroying their shelters and schools, such as the case in December 2017 when more than 5,000 IDP families were once again forcibly displaced and obliged to flee to settlements further from the city. According to the Norwegian Refugee Council, approximately 11,000 IDPs were evicted every month from Mogadishu, with a total of 153,682 people rendered homeless in 2017 alone (Goldbaum 2018). This phenomenon is not only a recent occurrence, but rather a pattern of migration that begun as early as 2011, when drought led to the widespread famine. As of July 2011, the UNHCR had already recorded 40,000 Somalis headed towards Mogadishu, with a further 30,000 in informal settlements 50 km outside of the capital (UNHCR 2011).

Migration to refugee camps

Others – who might not have the resources to migrate to urban hubs, or who did migrate but were then forcibly displaced once again by local authorities – choose a different route: declaring themselves refugees with the hope of obtaining basic life necessities in the refugee camps, such as shelter, food, water, sanitation, education and security. According to an interview undertaken by the ICRC, one herder in Somalia confirmed: '"If you lose your animals, you sign up as a refugee, that's what we say,' he said. 'There are many people who lost their animals and signed up as refugees'" (ICRC 2021).

Despite the fact that persons displaced internally or internationally as a result of the effects of climate change are not legally qualified as "refugees," according to the definition in the 1951 Convention Relating to the Status of Refugees, tens of thousands of Somalis fleeing drought are nevertheless self-declaring "refugees" and swarming to refugee camps in neighbouring countries- notably the Dadaab refugee camp in northern Kenya, 80 kilometres from the Somali-Kenyan border (Almendral 2020). While refugee camps are, in theory, supposed to serve as a temporary solution to displacement, Somalis fleeing drought have nothing left; with all their animals having died, and drought persisting, they have little incentive to leave the security of the Dadaab camps (Onyiego 2011) – now with a population of approximately 220,000 persons (Almendral 2020).

Similarly, in Kenya, many of its own citizens are also resorting to refugee camps despite the fact that their movement is internal, not international. Many Kenyan pastoralists finding themselves without any crop yields or successful livestock production due to accentuated drought, and subsequently no livelihood or economic activity, flee to the refugee camps of Dadaab, claiming to be Somalian refugees so as to simply access basic services such as food, water, health care, shelter, and education. Yet this poses major problems for these pastoralists' human rights, as in claiming that they are Somalian refugees, they forcibly lose their Kenyan citizenship (Bonneau 2013).

However, this would be more difficult in countries such as Uganda, Africa's largest refugee-hosting country (1.5 million refugees in early 2022, notably from South Sudan and the DRC - UNHCR 2022a), which generally offers limited or non-existent access to basic sanitation services (UNFCCC 2022b) and specifically struggles to meet the basic needs of refugees (UNHCR 2022a).

Trapped populations and the last resort

For those who are unable to migrate or find safe passage to a refugee camp in neighbouring countries, and therefore remained trapped and facing death by starvation, one perilous option remains: joining the armed jihadist group Al-Shabaab- not out of desire, but out of either necessity, manipulation, coercion, or extortion. As one Somali taking refuge in the Dadaab camps explained, "The reason [al-Shabab] banned all the aid agencies that would have helped the people is to attract the hungry people, knowing too well that people facing starvation will fall for anything" (Heaton 2017). Al-Shabaab - taking advantage of the dire conditions caused by climate change- uses drought and food insecurity as a way to lure in new recruits, promising them food, income, and security in exchange for their membership.

In an interview conducted by Laura Heaton[13] in 2017 as part of her article for the Groundtruth Project, a former Al-Shabaab fighter, who refused to give his real name, explained that Al-Shabaab used to demand one-third of his harvest as a tax, leaving his family in a situation of severe food insecurity and poverty. Ultimately giving into the extorsion, in 2008 he "joined al-Shabab to keep that portion of his harvest – choosing extremism for himself over starvation for his family." For those former fighters who later chose to abandon Al-Shabaab and flee to Kenyan refugee camps, security is still perilous: should Al-Shabaab find a former fighter, a likely violent end awaits. Yet one's fate might be similarly treacherous should Kenyan authorities be made aware that a refugee in their camps used to belong to Al-Shabaab. While the situation is extremely complex and multi-faceted, in patterns like that described above, climate change is ultimately at the root of why many Somalis still remain trapped (Heaton 2017).

Nomadic pastoralism, internal migration, and conflict

While Somalia's overall dependence on agriculture for its GDP at the state level, and for regular household income on the individual level, render the nation particularly vulnerable to climate change, there is one group that faces even greater threats: the nomadic pastoralists. The vast majority of Somalis are indeed employed in agriculture, but only a small portion are traditional, stationary farmers. Rather, 60% of the Somali population are nomadic or semi-nomadic pastoralists- herding cattle, sheep, goats, and camels and traveling with their herds seasonally in search of water and viable pasture (UNDP 2021).

Yet, even though the mobility known for centuries to the nomadic pastoralists might appear to be an advantage in terms of flexibility in searching for resources, nomadic pastoralists are now facing the same challenges as traditional farmers: there are so few natural resources left – in large part as a result of climate change – that no matter the distance travelled, there is no more water; there is no more pasture; floods have become so severe that they are wiping out a large majority of livestock herds remaining; and the source of nomadic pastoralist's livelihood, food security and income is dying.

13 Laura Heaton is a writer and journalist. Over the past decade, her writing on East and Central Africa has focused mainly on conflict, human rights and women's experiences of war. https://www.laura-heaton.com/about

In an article published by the ICRC in September 2021, a nomadic pastoralist interviewed recounts how he once had 70 camels. Due to drought and dry ground in every direction, 50 of them have now died. His words reflect the direness of climate change's reality for the majority of Somalis: "If your animals die, you die with them." Desperate to keep their animals, and their families, alive and away from starvation, nomadic pastoralists are migrating further than ever – and, more and more frequently, finding themselves facing violent conflict as a result (ICRC 2021). With the competition fierce over the remaining natural resources, nomadic pastoralists are now facing inter-communal conflict; inter-clan conflict; conflict with traditional farmers, as now both farmers and pastoralists are competing over the same resources; and are now arming themselves with guns and small arms to ward off looters attempting to steal their food and livestock – a concept known as "rustling", which is becoming more and more common and, subsequently, leading to more and more violence. Yet due to a lack of government presence in many parts of Somalia and political strife, leading to poor governance, there is no one body effective at preventing the outbreaks of violence between clans and pastoralists – adding a further complexity to the already fragile situation, and demonstrating how climate change itself can be an indirect cause of conflict (Yaw Tchie 2021).

Uganda, due to its geographical position and surrounded by countries experiencing both civil unrest, violent conflict, as well as climate change, is a major receiving country for refugees- with a total refugee population of 1.5million and is the largest host of refugees in all of Africa (UNHCR, 2023b). While many of the refugees might be fleeing conflict, as opposed to climate change, the large population of Sudanese refugees living in northern Uganda will also have to face the challenges post by deteriorating climatic conditions. Northern Uganda, lying outside of the tropical belt and already receiving less rainfall than the rest of the country, is resource-scarce and dealing with water shortages. This could possibly lead to conflict between refugee populations and host communities as climate change continues to worsen.

Refugees are not the only migrants that are both putting pressure on scarce resources and also dealing with the effects of climate change upon arrival; internal migration is being seen among the nomadic pastoralist communities in north-eastern Uganda, as well. As climate change is leading to shifts in herd's grazing patterns, pastoralists in across the Horn of Africa are following their livestock as they search for viable pastures- leading some Ugandans into Kenya, and some Kenyans into Ugandan pastoral lands (Whiting 2016). Because livestock is the sole means of income for such pastoralists, the increasing encroachment into other pastoralists' lands is leading to violent, armed conflict throughout the horn of Africa- including in Uganda (Mkutu).

Similarly, while many Kenyans plagued by the effects of climate change are migrating to urban areas internally, foreign factors cannot be ignored: as both environmental conditions and conflict have been severe in Somalia for well over a decade, Kenya is a main receiving country for Somali migrants and refugees fleeing climate change, conflict, or both (Achour & Lacan 2012). Whether these refugees arrive in the pastoral lands of north-eastern Kenya or the refugee camps of Dadaab, the influx of migrants paves the way for conflict over housing, land, food, water, and resources. Whether the competition be between rural-urban Kenyan migrants or between Kenyan pastoralists and Somali migrants, it is clear that both internal and international displacement as a result of climate change is intricately intertwined with growing conflict over the scarce resources remaining in Kenya.

## A note on gender

Be it internal displacement following sudden-onset events, urban migration, nomadic pastoralism, or cross-border displacement, not all populations are affected by climate change equally. On the contrary, the East African region most clearly shows the disproportionate impact of climate change on girls and women. While men in rural, Sub-Saharan Africa are often charged with raising livestock and herding, women are charged with household chores such as scouring for firewood and water. Yet as climate change is severely diminishing the amount of surface water available, women are forced to travel further away from their homes to find such basic resources on a daily basis – putting them at risk of physical and sexual abuse and violence (Mourdoukoutas 2016). In Somalia, for example, as the main gatherers of water and firewood, the severe and worsening drought is forcing women and girls to travel up to three kilometers by foot – sometimes further- to search for provisions, returning often with heavy loads of 10-litre buckets of water (UNFPA, 2021). Not only does this require large amounts of time daily- potentially interrupting other activities such as education- but it also poses a security risk to girls and women travelling alone.

Outside of the extra vulnerabilities rural East African women face in their usual place of residence, climate change is leading more and more women to migrate to urban areas in search for basic income following climate-driven losses of livelihood. Traditionally, for example, Ugandan women are more likely to migrate than Ugandan men. This remains the case with rural-urban migration, as women in Uganda are more likely to find economic opportunities in cities- such as childcare, housekeeping, and cooking (Vilhelmsen Haug 2014). Yet should these women arrive in major cities and slums without family, friends, support, and safe housing, they also could find themselves at risk for exploitation and sexual abuse.

Adding yet another layer of complexity is internal displacement and taking residence in refugee camps or IDP settlements, as girls and women remain disenfranchised, lack access to essential services such as health care and hygiene, and face an extremely heightened risk of gender-based violence (UNFPA 2021). As reported by National Geographic, gatekeepers for informal IDP camps in Puntland frequently extort women by demanding sexual favours in exchange for access to shelter and food. Similarly to Al-Shabaab's explicit targeting of vulnerable populations, such informal IDP camps are targets for human traffickers, playing on families' desperation and persuading boys and girls alike to leave with them for a "better life" in Europe, though many die in transit. With the male parent typically staying with their herds, women and girls are left in the camps with weak societal ties and physical security, and very often fall prey to gender-based violence with no other place to turn (Almendral 2020).

Even before women and girls find themselves in IDP settlements and refugee camps, the process of displacement and transit itself poses just as great a threat. One woman, who fled southern Somalia by foot to reach the Dadaab refugee camp in Kenya, was raped by eight men during her trek while her toddler-aged son screamed as he watched by her side. Years later, three men dragged the same woman's daughter from her school in the camp and sexually assaulted her. Yet another young woman, who was 12 at the time, was sold into marriage by her own grandmother following the drought in 2016 and the subsequent death of their livestock (Almendral 2020). Between the daily search for water and wood, the dangerous route between home and the destination location, and the violent conditions within formal and informal camps, girls and women face a very real and present danger as a direct result of climate displacement. As the effects of climate change continue to intensify, so will the number of girls and women at risk.

# Climate displacement patterns and associated barriers to education

## Floods, infrastructural damage and transport

As is the case in all countries experiencing increased flooding and erratic rainfall due to the effects of climate change, some of the most significant and direct barriers to education are school closures, damage or decimation of schooling infrastructure and materials, impassable trajectories to and from school due to flooding and blocked roads, and schools being used as emergency shelters as opposed to continuous educational facilities.

Uganda is no exception. In 2007, for example, as the extent of climate change's effects in Uganda became more apparent, severe flooding in the eastern part of the country which left over 300,000 people in dire need of aid also rendered 150 schools unable to open at the start of the school term (Reliefweb 2007). This trend, as predicted, only continued and worsened throughout the twenty-first century. For example, in 2020, severe floods in western Uganda completely washed away five primary schools, left another 24 inaccessible and destroyed six bridges that were used to travel to and from these regional schools (Ntabadde 2020).

In Kenya, as floods have become more severe, the barriers to education have moved from schools closed due to water damage to being completely demolished and even claiming human lives, as was the case in May 2020 when flooding washed away a girls' high school and killed 18 people (Chiseremi & Owiti 2020). Outside of damage to schooling infrastructure itself, floods also present barriers to education by affecting transportation infrastructure. Due to the overflowing Lake Victoria, for example, students were forced to take boats to school as water flooded the usual ground transportation routes, putting the children's physical safety at risk, and also limiting access to only the families with financial resources to pay for the boat fares (AfricaNews 2020).

Similarly in Somalia, following the catastrophic floods of 2019 which displaced 370,000 Somalis, 86 schools were affected by flooding with over 700 teachers unable to work after fleeing to higher ground. This all comes after the Ministry of Education was forced to postpone national examinations in 2018 due to severe flooding in Somalia. While the barriers to education posed by flooding were acknowledged, the response efforts notably lack a prioritization of educational continuation. Following the flooding, UNICEF stated that thousands of families were in "dire need of clean water, sanitation, safe shelter, health and food supplies" – yet access to schools and education was a need not included in the list of priorities (Al Jazeera 2019).

Lastly, and as is the case in most other flood-prone regions around the world, schools are one of the first public institutions to be used as emergency shelters following sudden-onset, forced displacement. In 2020, following the continued rising water levels of Lake Kwania in Uganda which affected over 5,000 households, the poorest families and those without relatives nearby had no other choice but to take refuge in surrounding schools. Not only does this pose an immediate interruption to schooling taking place, but the Head Teacher at Kachung Junior – a primary school – highlighted the fact that the large number of displaced persons living in the school building leads to the destruction of the schools facilities, such as dormitories and classrooms, and that overall the educational institutions are left in an unfit state to receive students (Immaculate 2020).

## Lack of education on climate change and related displacement

Climate displacement can appear as an abstract concept, especially for communities experimenting severe drought and economic vulnerability. Thus, it becomes imperative to integrate education on climate change and related displacement not only into schools' curricula but also lifelong learning initiatives, to raise awareness and make this issue more visible among populations. Furthermore, the prevalent lack of comprehensive understanding regarding disaster risk reduction among both students and teachers underscores the urgent need to incorporate climate education into school curricula. Indeed, education plays a crucial role in strengthening people's ability to adapt to the adverse effects of climate change by equipping them with vital knowledge and skills. Consequently, it is essential to design programmes that relate to locally relevant issues and address the diverse learning needs of climate-displaced people, such as language diversity. Through the integration of climate change education within both formal and lifelong learning processes, societies can not only enhance their resilience but also better meet the necessities of climate-displaced populations, ultimately nurturing a more sustainable and robust future (UNESCO 2023b).

In the recent years, Kenya and Uganda have taken significant steps towards addressing the vital role of climate change education in their respective countries, although their programmes have different approaches. On one hand, the unveiling of the ten-year Kenya Climate Change Learning Strategy of 2021 places a strong emphasis on developing knowledge and capacity across society, with a particular focus on educational institutions. It recognizes the education sector as a pivotal driver for achieving these goals and addressing Kenya's environmental and social challenges. The primary objective for the education sector is to bolster climate change understanding, interpretation, and practical application among learners, teachers, trainers, and facilitators by the year 2030. Key actions include integrating climate change into all levels of education, improving teacher capacity, creating relevant teaching materials, using non-formal education, and promoting research-industry collaboration for climate knowledge (OHCHR, 2021). On the other hand, the National Climate Change Act of Uganda, adopted in 2021, recognizes the importance of educating both government agencies and the general public about climate change issues. Key provisions in the law mandate the integration of climate change education and research into the national curriculum, ensuring that young people are equipped to understand and address climate challenges. Additionally, the Act promotes collaborative efforts between government departments, lead agencies, individuals, and private entities to enhance educational and outreach programmes on climate change, fostering a more informed and engaged society. Local government committees are entrusted with conducting education and awareness campaigns within their jurisdictions, spreading climate knowledge and mitigation strategies to even the most remote areas (The Republic of Uganda, 2021). This multifaceted strategy can serve as a model for other nations seeking to address the educational aspects of the climate crisis.

## Urban slums

As is the case almost anywhere in the world, children living in slums almost always face barriers to accessing education in comparison to their urban counterparts. Kenya is no exception, and the prevalent rural-urban migration pattern as a result of climate-driven livelihood loss is resulting in a growing slum population. In 2006, a study was published in the International Journal of Educational Development that showed, as a result of various factors, that children living in slums do not benefit from the "urban advantage" of having increased access to facilities such as schools (Mugisha 2006).

Even outside of factors such as poverty and physical proximity, children in slums were more likely to suffer from diarrhea than their urban counterparts, and also more likely than children in rural households- resulting in more days of school missed. Certainly, increased illness due to poorer sanitary conditions is one barrier to education for the slum populations, but other factors are also present that prevent full educational attainment, such as: poor quality of primary schools in slums, limited access to secondary school for slum children, increased vulnerability to coercion into sexual activity and other ills that hinder school participation, disabling environment at home and increased child labour (Mugisha 2006). While these barriers to education do not exclusively affect climate-displaced persons, the fact that climate change is creating a rural-urban/slum migration corridor inevitably results in a higher number of students facing such challenges.

One study examines how, while the Ugandan government has made significant strides in ensuring education in the north, where many refugees remain in camps, similar efforts have not been undertaken in Uganda's urban slums. In Namuwongo - an urban slum of Kampala, a study was undertaken in which interview with children reveals a grim outlook for educational pursuits. Despite the fact that public education is free in Uganda, other fees- such as for uniforms, books, etc. – are still too onerous for some families to furnish (Sims et al. 2011).

For the children who are able to attend school, depictions of their educational experiences have very little to do with education itself, but rather with the pleasure of being able to use sanitary facilities and having a safe place to play outside- a luxury quite rare in Ugandan slums, as most children have no, or very unsanitary, facilities at home nor any place to play outside that is not riddled with garbage and human waste. When asks to sketch their experiences at school, not one child in the study included a drawing of a teacher (Sims et al. 2011).

As is the case in Kenya and Uganda, the standards of living in urban slums and access to essential services remains precarious in Somalia. According to a 2015 study, 85% of the population living in the settlements surrounding Mogadishu are IDPs – approximately 400,000 people. While the study does not differentiate conflict-displaced persons from climate-displaced persons, all data on internal displacement globally suggests a growing number of these IDPs are climate induced displacement.

According to the population surveyed, only 33% of IDPs residing in the Mogadishu settlements between the ages of 5 and 18 were attending school. Of those who were attending school, the majority were attending Madras[14]. While the study does not establish a causal relationship between residence in the settlements and low school attendance, one could imagine the low access to education is due to a mixture of poverty, child labour, and/or lack of documentation following displacement, given that only 1% of the population sampled had a Somali identification document, and only 1% had a birth certificate.

It should also be noted that climate-displaced persons residing in the informal Mogadishu settlements face compounded barriers to education: despite already being internally displaced, the governments continued evictions surrounding Mogadishu put already-displaced persons at risk of being displaced and homeless yet again. According to the same study, 37% of the IDP population expected an eviction from their current place of residence within the upcoming six months at

14 Madras are muslim theological schools (see https://fr.wikipedia.org/wiki/M%C3%A9dersa **and** https://www.britannica.com/topic/madrasah)

the time of being surveyed. Perhaps the mere expectation of being evicted could render parents hesitant to enroll their children in schooling, giving the uncertainty of their housing situation. But more evidently, the eviction itself and subsequent homelessness or new displacement poses a major interruption to education for families already the most vulnerable (Internal Displacement Profiling in Mogadishu 2016).

## Rural and nomadic populations and poverty

Among groups traditionally disadvantaged with regard to access to education are children residing in rural areas as well as children of nomadic families. In rural agricultural areas, schools are often situated at a further distance from certain households- resulting in long commute times for children. While already rendering physical access to school more difficult, climate change which brings increasingly severe rainfall and flooding could cause this distance to be untraversable.

Another feature of rural populations is a high rate of poverty. Although basic education in Kenya is free and compulsory for all children, and a right guaranteed by the Constitution and national legislation, other fees- such as transportation costs, uniforms, textbooks, and school supplies- still accumulate to an amount than many rural families cannot provide. While poverty is a universal barrier to education in any country, the Kenyan rural population is at a much greater risk of falling deeper into poverty due to climate-driven loss of livelihoods, and subsequently less able to afford education due to climate change.

While climate change might forcibly result in new populations on the move in Kenya, some families have been on the move for decades: the nomadic pastoralists, who seasonally migrate along set routes to heard livestock. Kenya is traditionally home to many pastoralist tribes, including the Masaai, Turkana, Pokots, Samburu, and more, hosting overall between seven to eight million people (CDC 2012). As with children having a fixed home in rural areas, children of nomadic families already face barriers to education- notably, that they are mobile, often change location and therefore schools, and might find that their migratory pattern is too far away from a local school to have consistent access.

In Uganda, outside of logistical barriers- notably, the nomadic lifestyle constantly on the move, and poverty-related barriers, rural and nomadic populations have a considerably negative attitude towards education. According to Brown et. al, "Cattle rearing, early marriage for girls (including dowries), and growing business opportunities due to rapid urbanisation and development were identified as opportunities yielding better, quicker and more tangible economic returns than investments in education." Furthermore, as the men of nomadic families move to herd their roaming cattle, often times children are forced to do domestic work and chores, such as searching for firewood, water, taking care of their subsistence gardens, etc.- rendering them unable to attend school (Brown et al. 2017). Because of this unique but unfortunate combination of factors in rural and nomadic families, only 25% of children aged six to nine were attending school in Karamoja (Eninu 2018).

While urban slums and informal settlements are often associated with poverty- which is one of the predominant barriers to education in general – poverty is also rampant amongst the rural and nomadic populations in Somalia, presenting a major barrier to education for this population, as

well. As of 2012, over 50% of rural households were already living in extreme poverty. Despite public primary school being free, costs associated with transportation to school, school supplies, textbooks, and uniforms are still too onerous for many rural families, and as a result, children drop out of school to either pursue economic activity or help run the households. This is illustrated by the fact that only 17% of children in rural Somalia are enrolled in school (READO 2020).

These patterns are particularly prevalent among nomadic pastoralists on the move. As pasture for livestock becomes more and more rare due to climate change exacerbating extreme drought, often times the male head of the household migrates with the herds in search of water and pasture – leaving the daily household responsibilities to the remaining family members. With children having to walk 3 kilometers or more to search for water and firewood, simply obtaining basic necessities- which are becoming increasingly sparse due to climate change – forces many children to drop out of school as climate change simultaneously forces heads of nomadic households to migrate further away from their families (UNFPA 2021). As these unprecedented droughts continue, some sources predict that one-third of all Somali children could drop out of school – plagued by poverty and famine (Al Jazeera 2017).

## Internal migration and refugees

When analyzing the barriers to education in Kenya, one must go beyond the right to education solely for Kenyan nationals. As Kenya has become a popular country of refuge for voluntary migrants and refugees from surrounding countries- notably, Somalia and South Sudan, one of the most critical issues on which to focus in pursuing the right to education for all in Kenya will be eliminating the barrier to education for foreign migrants and refugees.

International refugees- whether displaced by climate change or migrating for other reasons- face significant barriers to education in the destination location: sometimes explicit exclusion from national education systems; being placed in parallel, informal education systems; language barriers; lack of documentation proving qualifications; discrimination; trauma and more (UNESCO 2020).

For example, following an influx of Sudanese refugees in the late 1990s to early 2000s, the overflowing refugee camps were not able to provide sufficient educational institutions or resources, thus many families decided to move to Nairobi with hopes of better access to education and livelihoods. Yet even outside of the refugee camps, barriers to education were starkly present: in order to access primary schools in Nairobi, families had to present certain registration documents such as a UNHCR mandate certificate as well as a birth certificate- documentation many refugees do not unfortunately have. Even with such documentation, some refugees were denied enrolment into public primary school due to discrimination and extortion (Karanja 2010).

Whether climate change leads families to rural-urban migratory patterns, keeps nomadic pastoralists trapped in drought and famine, or leads them to flee to refugee camps either in Somalia or across borders, climate-driven livelihood losses and poverty are still the most major barrier to education for climate-displaced Somalis. The UNHCR highlights the prevalence of this barrier in their interview

with a Somali family who fled to a refugee camp in Ethiopia. Only following the UNHCR's installation of an irrigation system- transforming previously barren land into fertile farms and providing work opportunities for the refugees – was one mother able to finally raise enough funds to send her children to the local school. Previously, and without any form of income-generating activity, the vast majority of refugees were unable to afford necessities such as uniforms, books, and supplies to send their children to school despite being able to find shelter in refugee camps (UNHCR 2022a).

As refugees' incomes increased, so did school enrolment overall for refugee children – which over doubled between 2012 and 2017 in the Dollo Ado region of Ethiopia. Yet as enrolment grows exponentially, further barriers to education for all refugees – including climate-displaced refugees – becomes evident: a lack of physical capacity and space for the refugees, as well as a lack of qualified teachers to accommodate the new students. Even for those students who do find space, have access to qualified teachers, and have household heads who generate income, reductions in food assistance still have a significant impact on enrolment- leading to high rates of absenteeism and dropout as refugee children must go back to work to assist their families (UNHCR 2022a).

The aforementioned barriers to education for refugees are not exclusive to climate-displaced persons, but as the number of climate-driven displacements and subsequent enrolment in refugee camps continues to grow substantially, so will the number of children facing such barriers to their right to education.

## Policy guidance for the East African region

The East African region is extremely vulnerable to the effects of climate change – due to both its geographical location, its pre-existing history with drought and the newly developing phenomenon of increased flash-flooding, and even cyclones – as well as due to its socio-economic characteristics, with many East African nations already plagued with poverty, conflict, urban slums, and a high presence of refugees.

Taking these barriers to education into account, below are policy guidance for consideration which could guide Member States and policy-makers on how to ensure the right to education for all, including climate-displaced people, in the face of climate change and climate displacement – both current and future.

### Law and policy guidance

- Amend the relevant national laws to ensure the right to education for all persons, not just citizens of the given country.
- Ensure all East African countries have ratified the Kampala Convention, which guarantees the protection and fulfillment of human rights for IDPs in the signatory countries.

- Create a clear, legal definition of IDP in the national framework in the case that there is an absence of one; if it does define an IDP, expand the definition to include persons displaced, both temporarily and permanently, by the effects of climate change. A model for such definition could be inspired by the one adopted in Kenya's "Prevention, protection and assistance to internally displaced persons and affected communities Act[15] , under which persons displaced by natural or human-made disasters are considered an IDP.

- Create a policy initiative, along with the necessary government personnel support, that is dedicated specifically to ensuring the rights of IDPs—a policy separate from initiatives to aid refugees—to give IDPs a clear voice and priority. Such policy should expressly protect the right to education for IDPs. An example of such is Principle 23 in the aforementioned Kenyan law.

## School-level guidance

- Use funding from international organizations and partners to increase the resilience of physical infrastructure of schools, through retrofitting, ensuring new schools are built to withstand climate threats and develop zoning policies for school construction.

- Identify other public buildings, as opposed to schools, to be used as dedicated emergency shelters following flooding and disasters.

- Build upon distance learning technology developed globally in response to the COVID-19 pandemic to ensure learning continuity when schools are inaccessible following disasters, notably radio and TV education for populations without internet access while ensuring that in-person education is reinstated as soon as possible.

- Simplify administrative procedures for school enrolment, notably through eliminating documentation requirements for education for persons arriving without identification or passports.

- Develop state-funded, safe transportation to and from schools in light of flooding risks – such as making boats available in high-flood risk areas which are navigated by licensed and trained adults.

- Develop a registry of mobile teaching professionals who are able to move along with nomadic pastoralists with school-aged children.

- Ensure part of funding for refugees is dedicated to increasing school capacity and teacher availability in the most dense and high-receiving refugee camps.

15 Under this Act, an «internally displaced person» means "a person or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, large scale development projects, situations of generalized violence, violations of human rights or natural or human—made disasters, and who have not crossed an internationally recognized State border".

- Integrate comprehensive Education for Sustainable Development into curriculum, pedagogy and teachers training, adapted to each country's specific situation and socio-economic characteristics and elaborated with the participation of youth, so that students can become an active part of the solution in mitigating and fighting the effects of climate change.

## Intersectoral cooperation guidance

- In upcoming educational policy reforms, include a section on education in emergencies, explicitly laying out a plan for alternative education continuity post-disaster.

- In upcoming DRR and DRM reforms, as well as interventions by international organizations, explicitly include ensuring access to education in the systematic response plans with the same urgency as providing food, shelter and health.

- In the case that a centralized DRM/DRR/climate change coordination platform, committee or governmental body exists, add a member of the Ministry of Education as a permanent seat.

## Resilience guidance

- Increase funding for TVET programmes to upskill and reskill agricultural workers and nomadic pastoralists, ultimately creating resilience in the face of climate change, fewer climate-driven livelihood losses and less poverty.

- Work with international organizations such as the FAO and the WFP to implement the utilization of flood-resistant and drought-resistant crop varieties, ultimately diminishing the risk of climate-driven livelihood losses and slow-onset displacement thereafter.

- Ensure the availability of livelihood opportunities in and around refugee camps to permit refugee parents to pay affiliated school fees for their children.

- Consider setting up a conditional cash transfer programme for families displaced following disasters to ensure their ability to afford transport to school and book, supply and uniform replacement.

- Develop a comprehensive, joint financing strategy to create a fund for climate-displaced persons and their right to education – financed by both the Ministry of Education and the departments concerning disaster risk reduction and management while also leveraging private partnerships.

# Annex D

## Findings from the South-Eastern European region[16]

16 This annex is a summary of the South-eastern Europe regional synthesis (UNESCO 2023c) and contains excerpts from the publication.

While Asia-Pacific, Central America and the Caribbean, and East Africa are all well-known climate change "hot spots," one other region is experiencing the increasingly severe effects of climate change combined with a high level of vulnerability: South-Eastern Europe. Over recent decades, rain has become more erratic – with an overall annual decrease in rainfall but an increase in severe rainfall events and subsequent flooding. At the same time, periods of drought are becoming prolonged and water shortages becoming more severe (UNESCO 2023c).

Furthermore, shifts in atmospheric patterns are resulting in extreme weather events rarely witnessed, such as the cyclone that remained stationary over the Balkan states in 2014, leading to rain for up to 21 consecutive days in some places, and resulting in infamous flooding that displaced 90,000 people in Bosnia and Herzegovina, 32,000 in Serbia, and 15,000 in Croatia (Montalto Monello & Carlone 2020). Certainly, other countries in Europe are experiencing increased catastrophic flooding, rain, and drought – such as in France, Germany, Spain, and Portugal. However, what sets the South-Eastern European region apart is their heightened vulnerability – defined as "the propensity or predisposition to be adversely affected by climate hazards and encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of ability to cope and adapt" (UNESCO 2020). According to the INFORM Global Risk Index 2022, for their exposure to natural hazards all the South-Eastern European countries studied as part of this initiative score in the range of 4.0-4.4 (on the scale of 0-10) (Mkrtchyan 2021).[17]

In the case of South-Eastern Europe, it is the heightened propensity to be adversely affected by climate hazards that other European states might not possess that render the region particularly at risk in the face of climate change, notably due to relatively high poverty rates – limiting families' financial capacity to adapt to climate-driven losses and damage, a history of war-torn infrastructure, decentralized governance structures[18], and high levels of already or previously-displaced persons living in fragile housing situations (UNESCO 2023c).

As a result of these vulnerabilities, South-Eastern Europe is already experiencing climate displacement in multiple forms – from temporary displacement following sudden-onset events, to permanent displacement both internally and internationally as a result of climate-driven livelihood losses, to the likely risk of future displacement for those populations who have been previously or are currently displaced – notably the significant number of migrants, asylum-seekers, refugees, and conflict-driven IDPs. In all of these patterns, persons displaced by climate change in South-Eastern Europe face multiple barriers to education, be it directly or indirectly, that threaten the fulfillment of SDG4 in the region.

Below are a few key takeaways with regard to barriers to education in South-Eastern Europe as a result of climate change and/or climate displacement following a comparative analysis of the situation in Bosnia and Herzegovina, the Republic of Moldova, and Serbia:

17 To put the numbers into perspective, it may suffice to say that, in averaged, this is almost 4 and more than 5 times higher than the respective scores for Sweden and Luxembourg. Serbia's score of 4.4 exceeds what Ireland (or Iceland) has earned on this continuum by twofold, while coming on par with the scoring that has been recorded for countries like Namibia or Senegal (Mkrtchyan 2021)

18 It should be noted that there are gaps in decentralized governance structures in Southeast Europe. Even when DRR policies are in place, it is difficult for countries with weak, fractured and decentralized governance structures to have a uniform and effective response to ensure continuity of education in times of crisis and/or disaster (UNESCO 2023c).

**Table 7: Key takeaways of the South-Eastern Europe regional synthesis report**

**Key takeaways**

- Infrastructural damage to schools and school closures following extreme flooding, linked to climate change, poses the most direct barrier to education, and occurs in each country studied.
- The Republic of Moldova is experiencing displacement among its agricultural and rural populations due to climate-related livelihood losses.
- In Bosnia and Herzegovina and Serbia, the high numbers of IDPs, refugees, asylum seekers and migrants in unstable housing are at high risk of future displacement as floods continue to worsen.
- DRR and DRM plans focus on the impact that education can have on climate resilience. They should also consider education continuity in post-disaster response.
- While there are comprehensive policies addressing refugees and their needs, there are few policies dedicated solely to IDPs, and those displaced by climate change are not considered IDPs according to the national legislation of any of the countries studied.
- Climate-displaced persons remain politically invisible in national frameworks and therefore strategies to ensure the right to education of these groups are non-existent, despite the very real barriers.

*Source:* UNESCO 2023c.

## How climate change is driving displacement in South-Eastern Europe

### Direct displacement following sudden-onset events

As with all other regions studied, South-Eastern Europe also experiences direct displacement following sudden-onset events, notably extreme rainfall, flooding, and riverbank overflow. Such was the case in the Republic of Moldova following severe flooding in 2010 and the overflow of the Prut River- affecting over 33,000 hectares of agricultural land and leading to the evacuation of 3,000 people (Swiss Cooperation, 2010).

Even outside of evacuations, climate change – worsening the frequency and severity of floods – is driving permanent displacement through relocation. For example, following the severe damage to the village of Cotul Morii in the Republic of Moldova after the 2010 flooding, the government rebuilt a new Cotul Morii 15 kilometres away out of the high flood-risk zone (Esanu 2020). Nevertheless, certain families decided to stay behind in the old Cotul Morii, continuing life without access to basic services such as drinking water, schools, and medical services. Given that 42% of settlements in the Republic of Moldova are at risk of flooding, it is highly likely that the Republic of Moldova and other countries in South-Eastern Europe will continue to see permanent relocation of settlements as a result of the impacts of climate change (Mkrtchyan, 2021).

While the relocation of an entire village is one example of how the impacts of climate change can cause direct displacement, South-Eastern Europe saw perhaps the most dramatic example of climate displacement following the infamous floods of 2014, in which a cyclone remained stationary of the Balkan States with consecutive rain in some parts for up to 21 days. Many major rivers in Bosnia and

Herzegovina and Serbia broke their levees, resulting in an outpour of storm water that remained for three days, decimating infrastructure and causing almost USD $4 billion worth of damage and losses. The 2014 floods provoked the most severe level of climate displacement, both internal and international, in South-Eastern Europe to date. In Bosnia and Herzegovina, 90,000 people were evacuated, with an additional 32,000 evacuated in Serbia, causing many to claim that climate change had caused the "worst exodus [in the region] since the [Bosnian] war" (Montalto Monello & Carlone, 2020). While some emigrated internationally, others remained trapped populations or IDPs.

## Indirect displacement following climate-driven livelihood losses

Certainly, climate change is directly displacing populations in South-Eastern Europe. However, it is also indirectly displacing populations, notably through climate-driven loss of livelihoods- and particularly in the agricultural sector. A significant proportion of the population in the three study countries are employed in the agricultural sector: 20% in Bosnia and Herzegovina, 15% in Serbia (a drastic reduction from 25% in 2010, indicating the reducing sustainability of the livelihood) and 30% in the Republic of Moldova (Trading Economics, 2022). While agriculture is an important part of the economy and workforce, it is also one of the most susceptible to the effects of climate change – notably higher surface temperatures, water stress, severe drought, and flooding.

In Serbia, for example, a heatwave in 2012 with 50 consecutive days at 35 degrees Celsius or higher, resulted in the loss of over one million hectares of agricultural production and more than USD $141 million in damages. Just two years later, the infamous floods of 2014 resulted in USD $2 billion in damages, not only affecting food security for the nation and the region, but also the income of agricultural workers and their livelihood security (USAID, 2017). Similarly in the Republic of Moldova, the 2007 drought caused maize production to fall by 73% and resulted in a loss of USD $305 million for livestock producers (USAID, 2017).

At a certain point, and as climate change continues to worsen the economic prospects of those working in the agricultural sector, populations might be forced to migrate – though for the purposes of this report, such forced migration is considered displacement – following climate-driven loss of livelihoods. This type of indirect displacement and movement is already becoming quite evident, particularly in the case of the Republic of Moldova, where half of the population lives in rural areas and one-third of the population owns agricultural lands. Particularly in the south of the country, rising temperatures and a lack of water is decreasing agricultural productivity, leading to economic decline and a clear pattern of rural-urban migration in the country. Not only is climate change leading to internal displacement in the Republic of Moldova, but climate-driven livelihood losses are contributing to the approximately 100 Moldovans that leave the country every day in search of better-paying jobs abroad (Mkrtchyan 2021).

## Secondary displacement of current IDPs, asylum seekers, and the Roma population

Secondary displacement is a phenomenon in which persons who are already displaced are forcibly displaced a second time and, for the purposes of this report, the second displacement is a direct result of climate change. Secondary displacement is a major concern for the large numbers of currently displaced persons in South-Eastern Europe, the high levels of asylum seekers and refugees, and the Roma – notably because such populations are already living in weak, unstable housing structures that are particularly vulnerable to destruction by the flooding that is only becoming more frequent and severe in the region.

To begin, one demographic particularity of South-Eastern Europe is the high number of previous and current IDPs. Due to the Balkan wars, as well as the separatist movement in the Republic of Moldova, previous conflict resulted in millions of people displaced internally and internationally in the region. While efforts have been made to return conflict-displaced persons to their place of origin, there are still a significant number of persons who remain internally displaced as of 2020 – with over 200,000 IDPs in Serbia and nearly 100,000 in Bosnia and Herzegovina (Mkrtchyan 2021). Added to this number were an additional 90,000 IDPs as a result of the 2014 flooding. According to Mkrtchyan, "all types of migrants (and especially sub-groups like Roma IDPs) can be particularly susceptible to the negative impacts of natural hazards. Among factors facilitating their heightened vulnerability are the erratic nature of movements, higher likelihood for settling in unsafe areas, as well as restricted access to general information or specially issued warnings on potential risks" (ibid).

Outside of the high number of IDPs, another particularity of the South-Eastern European region is the high number of migrants, refugees, and asylum seekers, notably due to the position of certain states along the West Balkan Route- one of the main migratory routes to Europe. Asylum seekers often originate in countries such as Syrian Arab Republic, Iran (Islamic Republic of), Afghanistan and Pakistan arriving in Türkiye or Greece, then attempt to make their way into the European Union by moving north through the Western Balkan States (Refugees in Towns). As with IDPs, asylum seekers often reside in precarious housing situations prone to extreme flooding, and the lack of capacity in certain receiving states is putting even more asylum seekers at risk. For example, in 2018 alone, more than 21,000 asylum seekers crossed the Bosnia and Herzegovina border, yet the state only had two centers for migrants in place with a total capacity of 500.

With 21,000 registered asylum seekers in Bosnia and Herzegovina in 2018, yet a cumulative capacity of less than 500 persons in the official state-run centres for migrants, thousands were left on the street or in deplorable emergency camps without stable shelter able to withstand the growing risks of flooding and landslides. Thus, as with IDPs, the growing attractiveness of the Western Balkan Route and the subsequent growing number of vulnerable asylum-seekers is increasing the number of people likely to undergo secondary displacement by climate change in the future.

Lastly, the large and present Roma population, predominantly residing in Serbia and Bosnia and Herzegovina, are experiencing many of the same vulnerabilities to climate disasters due to their marginalized and poor status. Roma only have limited access to education, economic opportunities, health care, housing and essential services, and documentation, even relative to their non-Roma

neighbors who live in close physical proximity (The World Bank, 2019). In Bosnia and Herzegovina, where the Roma population makes up an estimated 60,000–100,000 of the 3.81 million residents, informal settlements are most often the homes of the Roma (Yee, 2017). As in Serbia, between the lack of financial assets and human capital, and the prevalence of poor housing in the Roma population, they are extremely vulnerable to the threats of climate change and, in addition, have almost no capacity to adapt thereto. Thus, the Roma population accounts for 15%, i.e. 10,000 people, of all displaced people in urgent need in Serbia. In the same way, following the flooding of 2014, 6,000 of the 32,000 displaced were of the Roma community, many of whom were experiencing secondary displacement (Mkrtchyan 2021). The situation of this population, the largest ethnic minority in Europe but also one of the most deprived and socially excluded groups, is particularly alarming and need more attention from policy-makers.

To summarize, while IDPs, asylum seekers, and the Roma population might not be currently displaced because of climate change, they are at extremely high risk of future, secondary displacement due to the effects of climate change, notably flooding, as a result of their poor housing situations, general state of poverty, and lack of assets.

## Climate displacement patterns and associated barriers to education

### Barriers to education following sudden-onset events

As has been found in all regions across the globe facing the effects of climate change, the most direct barrier to education related to climate is the destruction of school facilities by extreme flooding and rainfall events; the impairment of infrastructure such as roads and transport; insufficient capacity of schools to accept large amounts of displaced persons; and the use of schools as emergency shelters, thus preventing their use as purely educational facilities.

For example, one report highlighted the direct impact on physical infrastructure and assets in Serbia following the 2014 floods, finding the following:

> In the period from 18 to 21 June 2014, the Recovery Needs Assessment (RNA) team (formed under the leadership of the Serbian Government and with the support of the UN, the EU and the World Bank) carried out an analysis of the situation in 24 municipalities and performed a needs analysis on 35 identified facilities. It was found that the floods water in buildings was between 50 cm and 2.5 m high and that it remained in facilities for between 3-30 days.
>
> The floods wave severely damaged the 35 educational institution buildings examined which were distributed as follows: 12 preschool institutions; 13 elementary schools and 10 secondary schools located in seven municipalities (…). In those buildings the educational activities realized with 45,329 children/students - of which 14% are preschool children, 62% are elementary school students and 25% are secondary school students (The Government of the Republic of Serbia, 2014, page 59).

It is important to keep in mind that the needs analysis was performed on 35 facilities; this does not indicate that only 35 facilities were affected and, in reality, it is likely that many more across Serbia, Bosnia and Herzegovina, and Croatia were severely damaged as well. Addressing this barrier to education begins by shifting the focus away from disaster risk management and towards disaster risk reduction or, in other words, from reaction to prevention. When it comes to preventing damage to schooling infrastructure, this may entail clarification of zoning laws to prevent building schools in flood-risk areas, addressing building codes for the construction of future schools and implementing retrofitting (modification of the structure of buildings after their initial construction). While Serbia has made some policy efforts to build infrastructure resilient to climate disasters, schools seem to be completely absent from the picture—as it is also the case in Bosnia and Herzegovina and the Republic of Moldova (UNESCO 2023c).

It is also important to note that even when school structures remain standing and functional, they do not automatically resume their function as educational facilities immediately; often, and as has been seen in South-Eastern Europe, schools serve as emergency shelters – further disrupting educational continuity and, sometimes, leading to further damage of schooling structures.

## Indirect barriers to education

A. Poverty and housing instability exacerbated by climate change

Poverty and unstable housing are some of the most major barriers to accessing education worldwide and exist outside of climate change and climate displacement. Nevertheless, climate change is exacerbating these barriers to education for a larger portion of the population already at risk. As already aforementioned, many IDPs, asylum seekers, and the Roma population live in current poverty and unstable housing infrastructure – putting them more at risk of future displacement in the case of increased flooding. Secondary displacement caused by climate change would destroy these population's very few remaining assets, thrusting them further into poverty and housing insecurity and leaving them with very little resources to devote towards continued education.

B. Discriminatory practices and realities adversely affecting displaced Roma and vulnerable groups

Another barrier to education that exists outside of climate change are discriminatory practices, particularly those that inadvertently exclude minority populations such as the Roma from fully enjoying their right to education, including language barriers. This challenge to accessing inclusive education already exists in South-Eastern Europe, but could be further exacerbated by future climate-driven displacement. For example, and according to Mkrtchyan, "Almost half of the domicile Roma in Serbia have not completed (or attended at all) a primary school. This is by itself a stunning indicator; however, even worse has been the same statistic for the Roma IDPs (65%), compared to only 8% for the general population in the country (Mkrtchyan, 2021)."

One reason for such low educational attainment of the Roma population could be poor command of language when attending schools primarily functioning in Serbian (for the Roma IDPs in Serbia) – given that only 7% of displaced Roma speak Serbian at home. The situation is similar in Bosnia and Herzegovina, with 86% of the Roma population identifying Romani as their first language (ibid). While this barrier is not exclusive to climate-displaced persons, Roma families in Bosnia and Herzegovina and Serbia who might have found an educational institution permitting their children to study in Romani could lose such a constitutional right should they be displaced by flooding and landslides, and ending up in a location which only teaches in one of the official languages—a practice which can be considered discriminatory and contrary to the right to education, according to the Special Rapporteur on minority rights (UN News, 2020). Therefore, climate change and climate displacement yet again exacerbate an existing educational barrier.

The long-standing issue of discriminatory education practices in Bosnia and Herzegovina, affecting both the Roma population but also beyond, becomes particularly concerning in the context of climate displacement. The "two schools under one roof" practice[19], initially introduced as a temporary solution in the late 1990s, perpetuates ethnic segregation in schools, hindering integration and fostering a culture of segregation in compulsory education. Progress in ending this segregation has been slow, with the UN reporting its persistence in at least 56 schools as of 2019. Climate-driven displacement can worsen this situation, jeopardizing climate displaced students' right to inclusive education, including Roma children (UNESCO 2023c).

C. Agriculture, "economic" migration, and dropout

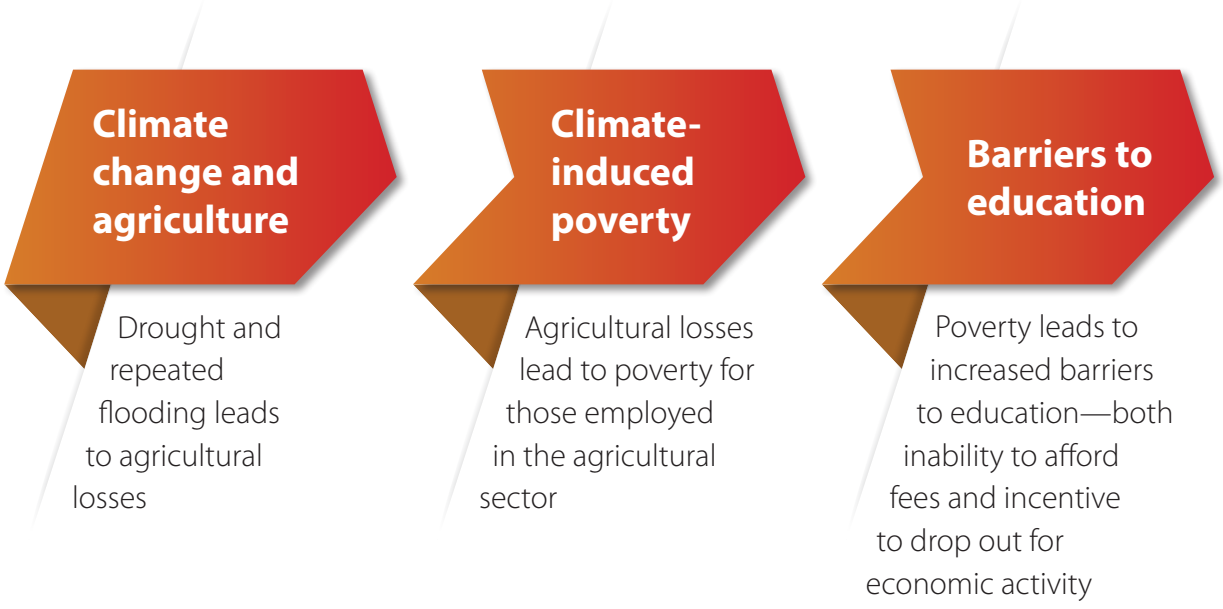
While barriers to education in Bosnia and Herzegovina and Serbia are more strongly tied to systemic poverty stemming from the wartime period and previous displacement (which nevertheless will be worsened by climate change), the Republic of Moldova is seeing very direct barriers to education posed by climate change, notably due to the country's large agricultural/rural population with the 40.7% employed in agriculture (Climate Change Post, 2022) at risk of poverty and displacement following loss of livelihoods.

As families can no longer cope with climate-related agricultural losses, many are displaced to urban hubs internally, and others internationally, in search of income. These displacement patterns—be it trapped, internal or international—lead to several scenarios which all impact the right to education:

- An agricultural family remains trapped: climate effects decrease their income; the child may drop out of school to help the family economically;
- One member of the family migrates internally to an urban setting or internationally in search of economic activity, leaving the child vulnerable without support for their developmental needs;
- Children move with their families but cannot access education in their destination due to either legal, financial or other barriers.

19 The model of school organization known as "two schools under one roof" is an approach which assumes hosting two distinct ethnic and linguistic bodies of students within the same premises and yet in two parallel streams, with each of the two running a unique curriculum, hiring its own teaching staff and employing an isolated set of administrative procedures. Please refer to UNESCO 2023 publication: "South-eastern Europe Regional Synthesis: Climate Change, Displacement and the Right to Education" for more information.

**Figure 1: Impact of climate change on the right to education of agricultural populations in the Republic of Moldova**




*Source:* This figure was produced internally for the South-Eastern European regional synthesis report

D. Policy barriers

As with the majority of regions studied within this global project, south-eastern Europe presents no direct, de jure barriers to education for persons displaced by climate change; each of the three states guarantees the right to education for all and without discrimination in the legislation. Yet it is the absence of certain policies and legal definitions that creates an indirect barrier to education for climate-displaced persons: notably, the omission of climate-displaced persons within the legal definition of an IDP (as is the case in Bosnia and Herzegovina) or the lack of legal definition for an IDP (as is the case in the Republic of Moldova) (UNESCO 2023c)

The incompleteness or in some cases complete absence of a definition of an IDP inevitably results in climate-displaced persons remaining politically invisible. This is not only the case at the national level, but the international level as well, given that international law has no single, comprehensive definition of a climate-displaced person. Nevertheless, while not violating any international human rights law, the absence of a legal definition at the national level still presents one of the most major barriers to developing strategies to help ensure all human rights for those displaced by climate change, including the right to education.

## Policy guidance for the South-Eastern European region

Climate change threatens—directly and indirectly—the right to education, and some of these risks are already occurring. Floods have destroyed schools; seen schools transformed into shelters, interrupting learning; forced school closures for safety reasons; displaced people to temporary camps without schools in proximity; and thrust vulnerable populations deeper into poverty and housing insecurity, affecting families' abilities to afford auxiliary education costs. As climate change destroys livelihoods, children are forced to drop out of school to help their family economically or pushed to move internally or internationally to find stable income in a destination where their right to education is not necessarily ensured.

Taking these barriers to education into account, below are policy guidance for consideration which could provide guidance to Member States and policy-makers on how to ensure the right to education in the face of climate change and climate displacement – both current and future:

### Law and policy guidance

- Create a clear legal definition of "internally displaced person" in the case that there is an absence of one (as in the Republic of Moldova); if policy does define "internally displaced person", expand the legal definition to include persons displaced, both temporarily and permanently, by climate change.
- Create a policy initiative, along with the necessary government personnel support, that is dedicated specifically to ensuring the rights of IDPs—a policy separate from initiatives to aid refugees—to give IDPs a clear voice and priority. Such policy should expressly protect the right to education for IDPs.

### Data and monitoring guidance

- Create a registry and database of IDPs in the country following the Serbian model to identify, track and evaluate the needs of all IDPs as their situation evolves.
- Use such a database to map and forecast which populations are at the highest risk of primary or secondary displacement to inform and develop targeted, preventative policies.

### School-level guidance

- Use funding from international organizations and partners to increase the resilience and safety of physical infrastructure such as schools, through retrofitting, ensuring new schools are built according to relevant building codes to withstand climate threats and develop zoning policies for school construction.
- Identify other public buildings, as opposed to schools, to be used as dedicated emergency shelters following flooding and disasters.
- Use the Bosnia and Herzegovina post-war displacement initiatives to ensure minorities can access a safe school of their choice without discrimination, for example through setting up special bus lines between displacement camps and former schools.

- Prepare schools in host areas to receive the influx of displaced persons after a disaster and offer the same quality of education to all without discrimination, including members of minorities (notably the Roma population) (by revising school curricula, retaining minority teachers...).
- Build upon distance learning technology developed globally in response to the COVID-19 pandemic to ensure learning continuity when schools are inaccessible following disasters.
- Increase funding for TVET programmes to upskill and reskill agricultural workers, ultimately creating resilience in the face of climate change, fewer climate-driven livelihood losses and less poverty.
- Enhance measures to prevent school dropout among secondary school children and provide school guidance counselling.
- Integrate comprehensive Education for Sustainable Development into curriculum, pedagogy and teachers training, adapted to each country's specific situation and socio-economic characteristics and elaborated with the participation of youth, so that students can become an active part of the solution in mitigating and fighting the effects of climate change.
- In order to ensure access to quality education, provide targeted teacher training on hybrid learning pedagogies, teaching at the right levels, assessment of learning losses, and more.

## Intersectoral cooperation guidance

- In upcoming educational policy reforms, include a section on education in emergencies, explicitly laying out a plan for alternative education continuity post-disaster.
- In upcoming DRR and DRM reforms, explicitly include ensured access to education in the systematic response plans with the same urgency as providing food, shelter and health.
- In the case that a centralized DRM/DRR/climate change coordination platform, committee or governmental body exists, add a member of the Ministry of Education as a permanent seat.

## Resilience guidance

- Work with international organizations such as the FAO and the WFP to implement the utilization of flood-resistant and drought-resistance crop varieties, ultimately diminishing the risk of climate-driven livelihood losses and slow-onset displacement thereafter.
- Consider setting up a conditional cash transfer programme for families displaced following disasters—who can be identified should an IDP registry be created— to ensure financial ability to afford transport to school, book and supply replacement and uniform replacement.
- Develop a comprehensive, joint financing strategy to create a fund for climate-displaced persons and their right to education- financed by both the Ministry of Education and the departments concerning disaster risk reduction and management while also leveraging private partnerships.

# References


ACAPS. *Kenya: Refugee Situation*. 2020. https://www.acaps.org/country/kenya/crisis/refugee-situation

AfricaNews. *Taking the boat to school in flooded western Kenya*. 2020. https://www.africanews.com/2021/01/04/taking-the-boat-to-school-in-flooded-western-kenya/ .

Ahmed, I. *Factors in building resilience in urban slums of Dhaka, Bangladesh*. Procedia Economics and Finance, 2014. 18, pp.745-753.

Al Jazeera. *Somalia drought forces children out of school.* 2017. https://www.aljazeera.com/news/2017/3/4/somalia-drought-forces-children-out-of-school .

Al Jazeera. *UN calls for action as Somalia floods affect 200,000 children*. 2019. https://www.aljazeera.com/news/2019/11/6/un-calls-for-action-as-somalia-floods-affect-2000000-children .

Almendral, Aurora. *For these women, an age-old way of life is ending in the Horn of Africa*. National Geographic. 2020. https://www.nationalgeographic.com/history/article/extreme-drought-somali-women-face-new-dangerous-world .

Achour, Mehdi & Lacan, Nina. *Drought in Somalia: a Migration Crisis*. IDDRI. 2012. http://labos.ulg.ac.be/hugo/wp-content/uploads/sites/38/2017/11/The-State-of-Environmental-Migration-2011-75-90.pdf .

AP Noticias *Guatemala: emigrar o morir, el dilema tras un deslave fatal*. Independient en Español. 2021. https://www.independentespanol.com/ap/guatemala-emigrar-o-morir-el-dilema-tras-un-deslave-fatal-guatemala-emigrar-o-morir-el-dilema-tras-un-deslave-fatal-b1899837.html

Apolat Legal. *New points of the residence law 2020*. Lexology. 2020. www.lexology.com/library/detail. aspx?g=f61dd604-18d6-4a64-98fa-c742592427fa

Aubrey, Dyfed & Cardoso, Luciana. *Towards Sustainable Urban Development in Somalia and IDP Durable Solutions at Scale*. United Nations Somalia. 2019. https://www.globalprotectioncluster.org/wp-content/uploads/UN-Somali-DSI-Towards-Sustainable.pdf .

Baker, Aryn. *Environmental Crises are Forcing Millions into Cities. Can Countries Turn Climate Migrants into an Asset?* Time. 2021. https://time.com/5953402/climate-migrants-kenya-floods/ .

BANBEIS. *Traditional and cultural barrier of female education in secondary schools. Ministry of Education, Government of the People's Republic of Bangladesh*. 2015. Dhaka

Berardelli, Jeff. *How Climate Change is making Hurricanes more Dangerous*. Yale Climate Connections. 2019. https://yaleclimateconnections.org/2019/07/how-climate-change-is-making-hurricanes-more-dangerous/?gclid=CjwKCAiA2fmdBhBpEiwA4CcHzWjYwmnmj-vyh0i5ht85uqBobnMppbzKA4O4KySU2_Ga2GMiWaVW0hoCa0sQAvD_BwE .

Bonneau, Pierre. *Drought and internal displacements of pastoralists in northern Kenya in 2012: an assessment.* IDDRI. 2013. http://labos.ulg.ac.be/hugo/wp-content/uploads/sites/38/2017/11/The-State-of-Environmental-Migration-2013-101-116.pdf .

Brown, Victoria et. al. *The Education System in Karamoja.* 2017. https://karamojaresilience.org/wp-content/uploads/2021/05/the_education_system_in_karamoja_revised_july_17_dfid.pdf .

CDC. *Putting Nomadic Pastoralists on the Map.* 2012. https://www.cdc.gov/globalhealth/countries/kenya/blog/nomadic_pastoralists.htm .

Chandrashekhar, Vaishnavi. *As the Monsoon and Climate Shift, India Experiences Worsening Floods.* Yale School of the Environment. 2019. https://e360.yale.edu/features/as-the-monsoon-and-climate-shift-india-faces-worsening-floods .

Chiseremi, Winston & Owiti, Noven. *Floods wreak havoc on school's infrastructure as rains continue.* PD Online. 2020. https://www.pd.co.ke/news/education/floods-wreak-havoc-on-schools-infrastructure-as-rains-continue-35263/

Chun. *Livelihoods under stress: critical assets and mobility outcomes in the Mekong Delta, Viet Nam*. The Migration, Environment and Climate Change: Policy Brief Series. 2014.

Chun. *Planned relocations in the Mekong Delta: a successful model for climate change adaptation, a cautionary tale, or both?* Brookings-LSE, Project for Internal Displacement. 2015.

Climate Change Knowledge Portal. *Country: Somalia.* The World Bank. 2021. https://climateknowledgeportal.worldbank.org/country/somalia .

Climate Change Post. *Moldova: Agriculture and Horticulture Moldova*. Centre for Climate Adaptation. 2022. https://www.climatechangepost.com/moldova/agriculture-and-horticulture/#:~:text=The%20agricultural%20sector%20plays%20a,employed%20in%20agriculture%20(1).

Climate Guide. *Indian villages lie empty as drought forces thousands to flee*. 2019. https://www.theguardian.com/world/2019/jun/12/indian-villages-lie-empty-as-drought-forces-thousands-to-flee

Duong, L. B., Linh, T. G. and Thao, N. T. P. *Social protection for rural and urban migrants in Vietnam: Current situation, challenges and opportunities.* 2011.

Eninu, Edward. *75 percent of School-Going Age Children in Karamoja at Home- Report."* Uganda Radio Network. 2018. https://ugandaradionetwork.net/story/75-percent-of-school-going-age-children-in-karamoja-at-home-report .

Entzinger and Scholten. *Relocation as an adaptation strategy to environmental stress: Lessons from the Mekong River Delta in Viet Nam*. The Migration, Environment and Climate Change: Policy Brief Series. 2015.

Esanu, Anatolie. *The Mayor who Bought a Village*. ZDG. 2020. The Mayor Who Bought a Village – Ziarul de Gardă (zdg.md) .

Floodlist. *Kenya- Lake Floods Displace Thousands, Damage Livelihoods.* 2020. https://floodlist.com/africa/kenya-lake-turkana-floods-october-2020 .

Floodlist. *Kenya - Floods Displace Thousands of Households in Mandera and Kisumu*. 2023. Kenya – Floods Displace Thousands of Households in Mandera and Kisumu – FloodList

Giovetti, Olivia. *Breaking Down the Decade of Drought in Somalia*. Concern Worldwide US. 2020. https://www.concernusa.org/story/decade-drought-in-somalia/ .

Goldbaum, Christina. *Somalia's Climate Change Refugees*. The New Humanitarian. 2018. https://www.thenewhumanitarian.org/feature/2018/02/21/somalia-s-climate-change-refugees .

Heaton, Laura. *Somalia's Climate for Conflict: How Drought brings War to Somalia*. The GroundTruth Project. 2017. https://thegroundtruthproject.org/somalia-conflict-climate-change/ .

Helps, Horace. *Jamaica cleans up after Hurricane Dean.* Reuters. 2007. https://www.reuters.com/article/uk-storm-dean-jamaica-idUKN2030076020070820 .

Holliday, D. *Pacific Small Island Developing States and Climate Change Migration*. 2020.

Hujale, Moulid. *Displaced Somalis and refugees struggle to recover as climate change brings new threats.* UNHCR. 2021. https://www.unhcr.org/news/stories/2021/8/611a2bca4/displaced-somalis-refugees-struggle-recover-climate-change-brings-new-threats.html .

Huy, H. T. and Khoi, L. N. D. *Analysis of labour migration flows in the Mekong Delta of Vietnam*. M. A. Stewart and P. A. Coclanis (eds), Environmental Change and Agricultural Sustainability in the Mekong Delta, pp. 115–140. Springer Netherlands. 2011. https://doi.org/10.1007/978-94-007-0934-8_8

ICRC. *Climate Change and Conflict: Somali Herders.* 2021. https://www.icrc.org/en/document/somalia-herders-climate-change-conflict-crisis .

IDGT. *Entre sobre vivir y perderlo todo: Un aporte al conocimiento y a la relación entre pandemia y desplazamiento forzado interno*. Instituto de Investigación y Proyección sobre Dinámicas Globales y Territoriales. Universidad Rafael Landívar. 2021.

IDMC. *Disaster Displacement in Asia and the Pacific*. 2022. https://www.internal-displacement.org/disaster-displacement-in-asia-and-the-pacific-2022

IDMC. *Global Report on Internal Displacement 2019.* 2019. https://www.internal-displacement.org/global-report/grid2019/ .

IDMC. *Global Report on Internal Displacement 2021*. 2021. https://www.internal-displacement.org/global-report/grid2021/ .

Immaculate, Amony. *Flood Displaced Families in Dokolo Take Shelter at School.* Uganda Radio Network. 2020. https://ugandaradionetwork.net/story/flood-displaced-families-in-dokolo-take-shelter-at-school- .

*Internal Displacement Profiling in Mogadishu*. Report. 2016. https://www.jips.org/uploads/2018/10/Somalia-Mogadishu-profiling-report-2016.pdf .

IOM. *Migración y desplazamiento en la región del SICA*. Informe regional. 2019.

IOM. *Participatory Mapping of Population Mobility for Environment and Climate Change in Uganda*. 2021.

IOM. *Uganda floods impact: displacement tracking matrix (DTM) baseline mobility assessment.* UN CERF. 2020. https://displacement.iom.int/system/tdf/reports/DTM_UGA_Baseline_Mobility_Assessment%20May%202020_Floods%20%281%29.pdf?file=1&type=node&id=9407 .

IPCC. *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA https://report.ipcc.ch/ar6/wg2/IPCC_AR6_WGII_FullReport.pdf

Karanja, Lucy. *The educational pursuits and obstacles for urban refugee students in Kenya.* IJCDSE. 2010. https://inee.org/system/files/resources/The%20Educational%20Pursuits%20and%20Obstacles%20for%20Urban%20Refugee%20Students%20in%20Kenya.pdf .

Kataoka, S. Vinh, L. A., Kitchlu, S. and Inoue, K. *Vietnam's human capital: Education success and future challenges*. 2020. http://hdl.handle.net/10986/34316

Koswaraputra, D. *Borneo bound: inside Indonesia's big plan to move its capital.* 2021. https://www.benarnews.org/english/news/in-focus/indonesia-new-capital/

Kushner, Jacob. *The Relentless Rise of Two Caribbean Lakes Baffles Scientists.* National Geographic. 2016. https://www.nationalgeographic.com/science/article/160303-haiti-dominican-republic-lakes .

Lakhani, Nina. *People are dying: how the climate crisis sparked an exodus to the US.* The Guardian. 2019. https://www.theguardian.com/global-development/2019/jul/29/guatemala-climate-crisis-migration-drought-famine .

Menon, S. Education in India needs an overhaul. *Ashoka University's Centre for Social Impact and Philanthropy*. 2020. https://idronline.org/state-of-school-education-india-pre-covid/?gclid=Cj0KCQjw5PGFBhC2ARIsAIFIMNfT7HjOWNIry7wu4h3pVy36_v4sqYKAMkwe5ZV2-mLyMH5_Y3PXnjQaAuzxEALw_wcB

Mkrtchyan, Arsen. *Climate Change, Natural Hazards, Migration, and the Right to Education in Southeast Europe*. Study commissioned by UNESCO. 2021.

Mkutu, Kennedy. *Pastoralism and conflict in the Horn of Africa*. University of Bradford

Montalto Monello, Lillo & Carlone, Marco. *How climate change triggered a second exodus in Bosnia & Herzegovina*. EuroNews. 2020. https://www.euronews.com/2020/03/05/how-climate-change-triggered-a-second-exodus-in-bosnia-and-herzegovina .

Mourdoukoutas, Eleni. *Women grapple with harsh weather*. Africa Renewal. 2016. https://www.un.org/africarenewal/magazine/august-2016/women-grapple-harsh-weather .

Mugisha, Frederick. *School enrollment among urban non-slum, slum and rural children in Kenya: is the urban advantage eroding?*. International Journal of Educational Development. 2006. https://www.researchgate.net/publication/44838435_School_enrollment_among_urban_non-slum_slum_and_rural_children_in_Kenya_Is_the_urban_advantage_eroding .

Nansen Initiative. *Agenda for the protection of cross-border displaced persons in the context of disasters and climate change (Vol 1)*. 2015.

Nath, S. R. *Private supplementary tutoring among primary students in Bangladesh*. Educational Studies, *34*(1), pp. 55-72. 2008.

National Geographic. *Encyclopedic entry: 'Monsoon.'* Resource Library. 2021. https://www.nationalgeographic.org/encyclopedia/monsoon/print/ .

Ntabadde, Catherine. *Floods wash away five schools, cut off 24 in western Uganda*. UNICEF. 2020. https://www.unicef.org/uganda/stories/floods-wash-away-five-schools-cut-24-western-uganda .

OHCHR. *Climate change exacerbates violence against women and girls*. 2022. https://www.ohchr.org/en/stories/2022/07/climate-change-exacerbates-violence-against-women-and-girls

OHCHR. *Republic of Kenya – Submissions on the general comment on children's rights and the environment with a special focus on climate change*. 2021. https://www.ohchr.org/sites/default/files/2021-12/kenya-2021-12-14.docx

OHCHR. *The Economic, Social, and Cultural Rights of Migrants in an Irregular Situation*. Geneva, Swizterland and New York, NY, USA: s.n. 2014.

Onyiego, Michael. *Aiding Somali Herders a Factor in Fighting Famine*. Voa News. 2011. https://www.voanews.com/a/aiding-somali-herders-a-factor-in-fighting-famine-127602263/158651.html

Panda, Architesh. *Climate Change, Displacement, and Managed Retreat in Coastal India*. Migration Policy Institute. 2020. https://www.migrationpolicy.org/article/climate-change-displacement-managed-retreat-india .

Patel, Kasha. *Gati Makes Historic Landfall in Somalia*. NASA Earth Observatory. 2020. https://earthobservatory.nasa.gov/images/147576/gati-makes-historic-landfall-in-somalia .

Pickett, M. *El mar se comió todo: on the shrinking of Cuba. Visiting climate refugees in a disappearing Cuba. Pacific Standard*. 2017. https://psmag.com/environment/climate-change-refugees-cuba-is-shrinking

Probst, P., Annunziato, A., Proietti, C. and Paris, S. *2020 - Atlantic Hurricane Season: A record-breaking season*, EUR 30635 EN, Publications Office of the European Union, Luxembourg, 2021, ISBN 978-92-76-32177-4, doi:10.2760/00114, JRC123923.

READO. *Somalia: Education in the Southwest State, December 2020*. ReliefWeb. 2020. https://reliefweb.int/report/somalia/somalia-education-southwest-state-december-2020 .

Refugees in Towns. *The Balkan Route*. N.d. https://www.refugeesintowns.org/balkans-route.

ReliefWeb. *DSWD DROMIC Report #22 on the effects of southwest monsoon enhanced by super typhoon "Goring", typhoon "Hanna", and tropical depression "Ineng" as of 27 September 2023*. 2023a. https://reliefweb.int/report/philippines/dswd-dromic-report-22-effects-southwest-monsoon-enhanced-super-typhoon-goring-typhoon-hanna-and-tropical-depression-ineng-27-september-2023-6pm

ReliefWeb. *DSWD DROMIC Report #48 on the effects of southwest monsoon and super typhoon "Egay" as of 30 September 2023*. 2023b. https://reliefweb.int/report/philippines/dswd-dromic-report-48-effects-southwest-monsoon-and-super-typhoon-egay-30-september-2023-6pm

ReliefWeb. *India – Monsoon rains, update (Reliefweb, NDMI, IMD) (ECHO Daily Flash of 29 September 2023).* 2023c. https://reliefweb.int/report/india/india-monsoon-rains-update-reliefweb-ndmi-imd-echo-daily-flash-29-september-2023

ReliefWeb. *Somalia: Floods- May 2021*. 2021a. https://reliefweb.int/disaster/fl-2021-000051-som

ReliefWeb. *Somalia: Floods- Mar 2023.* 2023d. Somalia: Floods - Mar 2023 | ReliefWeb

ReliefWeb. *Somalia: Impact of Gu Floods (as of 3 June 2021).* 2021b. https://reliefweb.int/report/somalia/somalia-impact-gu-floods-3-june-2021 .

ReliefWeb. *Three hundred five schools face closure as hurricane-hit Puerto Rico tackles budget crisis. ReliefWeb.* 2018. https://reliefweb.int/report/puerto-rico-united-states-america/305-schools-face-closure-hurricane-hit-puerto-rico-tackles

Reliefweb. *Uganda: Schools stay closed as floods hit eastern districts.* 2007. https://reliefweb.int/report/uganda/uganda-schools-stay-closed-floods-hit-eastern-districts

ReliefWeb. *Update on the 2011 East Africa drought and famine*. Podcast. 2012. https://reliefweb.int/report/somalia/update-2011-east-africa-drought-and-famine-podcastqa .

Saar, Larissa. *Climate Change Related Displacement : Tuvalu*. 2019. https://stand.ie/climate-related-displacement-in-tuvalu/#:~:text=It%20is%20considered%20to%20be,above%20sea%20level%20on%20average.

Seal, Andrew & Bailey, Rob. *The 2011 Famine in Somalia: lessons learnt from a failed response?*. Conflict & Health 7, 22. 2013. https://conflictandhealth.biomedcentral.com/articles/10.1186/1752-1505-7-22#citeas .

SIINSAN. *Crónica de un desastre: tormenta tropical Stan en Guatemala.* SIINSAN. 2018. http://www.siinsan.gob.gt/siinsan/wp-content/uploads/2018/12/Tormenta-Tropical-Stan.pdf

Sims, Margaret et. al. *Children's experiences of Social Exclusion- what is it like living in a slum in Kampala?* International Research in Early Childhood Education. 2011. https://files.eric.ed.gov/fulltext/EJ1151221.pdf .

Swiss Cooperation. *Floods in Moldova Summer 2010*. 2010. https://www.eda.admin.ch/dam/deza/en/documents/laender/resource-194468_EN.pdf .

Sun, et al. Impact of Ocean Warming on Tropical Cyclone Size and Its Destructiveness. *Sci Rep 7*, 8154. 2017. https://doi.org/10.1038/s41598-017-08533-6.

Tamarkin, *M. The Roots of Political Stability in Kenya.* African Affairs. Oxford University Press. 1978. https://www.jstor.org/stable/721836 .

The Government of the Republic of Serbia. *Serbia Floods 2014.* 2014. https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_397685.pdf

The Indian Express. *Here is what happened in Kedarnath, and the rest of Uttarakhand, in 2013*. 2018. https://indianexpress.com/article/research/here-is-what-happened-in-kedarnath-and-rest-of-uttarakhand-in-2013-5482050/

The Republic of Uganda. *The National Climate Change Act*. 2021. uga208305.pdf (fao.org)

The World Bank Group. *Climate Risk Profile: Uganda (2020)*. 2020. https://climateknowledgeportal.worldbank.org/sites/default/files/2020-06/15464-WB_Uganda%20Country%20Profile-WEB_v1.pdf .

Thorsen, D. *Children Working in Mines and Quarries, Evidence from West and Central Africa*. UNICEF, Briefing Paper No. 4, p. 4. 2012.

Tower, A. *Climate Change Would Cause 14 Cuban Settlements to Disappear By 2050*. Climate Refugees. 2020. https://www.climate-refugees.org/spotlight/2020/7/16-cuba

Trading Economics. *Serbia - Employment in Agriculture (% of Total Employment*). 2022. https://tradingeconomics.com/serbia/employment-in-agriculture-percent-of-total-employment-wb-data.html .

Translators without Borders. *Language Data for Indonesia.* 2021. https://translatorswithoutborders.org/language-data-for-indonesia/

UNDP. *Human Development Report 2021/2022 – Uncertain Times, Unsettled lives: Shaping our Future in a Transforming World*. 2022. hdr2021-22pdf_1.pdf (undp.org)

UNDP. *Kenya*. Climate Change Adaptation. 2021. https://www.adaptation-undp.org/explore/eastern-africa/kenya .

UNDP. *Latest Human Development Index Rankings*. Human Development Reports. 2020. http://hdr.undp.org/en/content/latest-human-development-index-ranking .

UNDP. Pacific Office. *Tuvalu wields new data in the fight against climate change*. 2020.https://www.pacific.undp.org/content/pacific/en/home/presscenter/articles/2020/tuvalu-wields-new-data-in-the-fight-against-climate-change.html.

UNDP. *Somalia*. Climate Change Adaptation. 2021. https://www.adaptation-undp.org/explore/eastern-africa/somalia .

UNESCO. *Asia-Pacific regional synthesis: climate change, displacement and the right to education*. 2023a. https://unesdoc.unesco.org/ark:/48223/pf0000385187/PDF/385187eng.pdf.multi

UNESCO. *Central America and the Caribbean regional synthesis: climate change, displacement and the right to Education*. 2023b. https://unesdoc.unesco.org/ark:/48223/pf0000385183/PDF/385183eng.pdf.multi

UNESCO. South-Eastern Europe regional synthesis: climate change, displacement and the right to education. 2023c. https://unesdoc.unesco.org/ark:/48223/pf0000385287

UNESCO. *The Impact of Climate Displacement on the Right to Education (*No. 12; Working Papers on Education Policy). 2020. https://unesdoc.unesco.org/ark:/48223/pf0000374966

UNFCCC. *Somalia's First Adaptation Communication to the United Nations Framework Convention on Climate Change*. 2022a. Somalia Adaptation Communication.pdf (unfccc.int)

UNFCC. *Updated Nationally Determined Contribution – The Federal Republic of Somalia*. 2021. Microsoft Word - Final Updated NDC for Somalia 2021.docx (unfccc.int)

UNFCC. *Updated Nationally Determined Contribution – Uganda*. 2022b. Updated NDC _Uganda_2022 Final.pdf (unfccc.int)

UNFPA. *Drought in Somalia forces displacement, posing particular challenges for women and girls.* 2021. https://www.unfpa.org/news/drought-somalia-forces-displacement-posing-particular-challenges-women-and-girls .

UNHCR. *It's everyone's business to educate refugees. Turn the Tide*. 2022a. https://www.unhcr.org/turnthetide/3-its-everyones-business-to-educate-refugees/ .

UNHCR. *Global trends*. 2023a. https://www.unhcr.org/global-trends

UNHCR. *Tens of thousands of drought-displaced Somalis head to Mogadishu*. Refworld. 2011. https://www.refworld.org/docid/4e2fb41b2.html .

UNHCR. *Uganda Comprehensive Refugee Response Portal*. 2023b. https://data2.unhcr.org/en/country/uga

UN Human Rights Council. *The slow onset effects of climate change and human rights protection for cross-border migrants* (Doc. A/HRC/37/CRP .4). Geneva, Switzerland. 2018

UNICEF. *Climate Uprooted in a changing climate*. 2020. https://www.unicef.org/environment-and-climate-change/migration#:~:text=In%202020%20alone%2C%20there%20were,strategy%2C%20particularly%20for%20young%20people.

UNICEF. *Children Uprooted in the Caribbean: how stronger hurricanes linked to a changing climate are driving child displacement*. 2019.

UNICEF. *Schools for more than 2 million children in Pakistan remain inaccessible due to devasting floods*. 2022. https://www.unicef.org/press-releases/schools-more-2-million-children-pakistan-remain-inaccessible-due-devastating-floods

UN News. *Educate children in their mother tongue, urges UN rights expert.* 2020. https://news.un.org/en/story/2020/03/1059241 .

UNODC. *Global Report on Trafficking in Persons 2020*. 2021. https://www.unodc.org/documents/data-and-analysis/tip/2021/GLOTiP_2020_15jan_web.pdf

USAID. *Climate change risk profile: Guatemala.* Fact sheet. 2017. https://www.climatelinks.org/sites/default/files/asset/document/2017_USAID%20ATLAS_Climate%20Change%20Risk%20Profile_Guatemala.pdf .

USAID. *Climate Change Risk Profile: Moldova.* Fact Sheet. 2017. https://www.climatelinks.org/sites/default/files/asset/document/2017_USAID%20ATLAS_Climate%20Change%20Risk%20Profile%20-%20Moldova.pdf .

USAID. *Climate Risk Profile: Serbia.* Fact Sheet. 2017. https://www.climatelinks.org/sites/default/files/asset/document/2017_USAID_Climate%20Change%20Risk%20Profile_Serbia.pdf .

UN. *World Urbanization Prospects – Country Profiles*. 2018. https://population.un.org/wup/country-profiles/

Valladares Cerezo, Carlos Enrique. *The Case of Guatemala City, Guatemala*. 2003. https://www.ucl.ac.uk/dpu-projects/Global_Report/pdfs/Guatemala.pdf .

Van de Vuurst, Pagie & Escobar, Luis E. *Perspective: Climate Change and the Relocation of Indonesia's Capital to Borneo.* Frontiers in Earth Science. 2020. https://www.frontiersin.org/articles/10.3389/feart.2020.00005/full .

Vilhelmsen Haug, Irunn. *Leaving drought and hunger behind: out-migration from Karamoja, Uganda.* 2014. http://labos.ulg.ac.be/hugo/wp-content/uploads/sites/38/2017/11/The-State-of-Environmental-Migration-2014-101-116.pdf .

Walthouse, Emily. *Effects of Hunger on Education*. The Borgen Project. 2014. https://borgenproject.org/effects-of-hunger-on-education/ .

Watt, E. *Thousands of schools destroyed, damaged, or disrupted by South Asia's deadly floods.* Theirworld. *2017.* https://theirworld.org/news/south-asia-floods-destroy-damage-thousands-schools-india-bangladesh-nepal

Wells, Sarah. *When is the monsoon season in India?* Experience Travel Group. 2020. https://www.experiencetravelgroup.com/blog/2020/08/monsoon-season-india/#:~:text=There%20are%20two%20monsoons%20 .

Whiting, Alex. *Uganda's nomadic herders feed the country, but under pressure to settle down: activist.* Reuters. 2016. https://www.reuters.com/article/us-uganda-nomads-idUSKCN12L24V .

Worldometer. *Kenya Population (live*). 2021. https://www.worldometers.info/world-population/kenya-population/ .

World Bank. *Tuvalu Tropical Cyclone Pam Recovery and Vulnerability Reduction Plan*. 2015. https://documents1.worldbank.org/curated/en/997661468190187675/pdf/98793-PGD-P156169-Box393188B-OUO-9-IDA-R2015-0230-1.pdf

World Bank. *Reforming Vietnam's Household Registration System*. 2016. http://pubdocs.worldbank.org/en/597131465814757714/Vietnam-Household-Policy-note-EN-20160610.pdf.World Bank Databank. *Population, total – Kenya*. 2022. Population, total - Kenya | Data (worldbank.org)

World Bank Databank. *Population, total – Somalia.* 2022. Population, total - Somalia | Data (banquemondiale.org)

World Bank. *Vietnam: Reforms Needed to Close the Gap in Social Service Access for Migrants.* Press Release. 2016. https://www.worldbank.org/en/news/press-release/2016/06/16/vietnam-reforms-needed-to-close-the-gap-in-social-service-access-for-migrants.

Yasir, Samir. *Monsoon Rains Pummel South Asia, Displacing Millions.* The New York Times. 2020. https://www.nytimes.com/2020/07/15/world/asia/monsoon-asia-bangladesh-india.html .

Yaw Tchie, Andrew E. *How climate insecurity could trigger more conflict in Somalia*. The Conversation. 2021. https://theconversation.com/how-climate-insecurity-could-trigger-more-conflict-in-somalia-157696 .

Yee, Hoi Mun. *Bosnia's Roma Try to Break Out of Isolation.* BalkanInsight. 2017. https://balkaninsight.com/2017/06/14/bosnia-s-roma-try-to-break-out-of-isolation-06-13-2017-2/

## Stay in touch

**UNESCO**
7, place de Fontenoy - 75352 Paris 07 SP France
righttoeducation@unesco.org

https://www.unesco.org/en/right-education

Follow **@UNESCO** on social media

unesco
United Nations
Educational, Scientific
and Cultural Organization

# Learning at risk

## The impact of climate displacement on the right to education

### Global report

This global report on climate change, displacement and the right to education provides concrete policy guidance at both national, regional, and global levels for all Member States to ensure climate-displaced persons around the globe have their right to education protected and fulfilled.

Notable is the fact that this global report presents for the first time, and compare, the results of empirical data collection undertaken in several regions – rendering the policy guidance included not only normative, theoretical aspirations, but data-driven, operational, informed, and tailored so as to achieve real impact in realizing the right to education for all.

9 789231 006425

4 QUALITY EDUCATION

Sustainable Development Goals