



Leveraging Education in Emergencies for Climate Action

No time to lose: Commit to resilience and learning now



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Recognising the critical nature of the climate crisis, which threatens children's and youth's right to education, particularly in crisis settings, the members of the EiE Hub chose to focus its 2023 flagship report on the interplay between climate change and education in emergencies. Dr. Fumiyo Kagawa and Dr. David Selby of Sustainability Frontiers authored the report.

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Foreword

Climate-induced disasters are increasing and frequently compound other crisis drivers, resulting in complex emergencies changing the face of humanitarian response. They come on top of conflict, violence and disasters, and exacerbate existing risks and inequalities, including gender, ethnicity, disability, age and income. They are known to disproportionately impact those already in crisis and vulnerable groups, girls and young women in particular.

Children and youth are most affected by these challenges. Local, national, and international actors must ensure continuous, safe, and quality education, especially at times when a crisis threatens to interrupt it. While education services are increasingly threatened by droughts, floods, heat waves and climate disasters, education itself has never been as crucial as an enabler for adapting to and mitigating climate change.

This report demonstrates the need for new ways of thinking and behavioural change as climate breakdown increases risks to the continuity, safety, and equity of education for children and young people. Furthermore, as extreme temperatures make existing classroom environments increasingly untenable in many regions, greater foresight will be needed when learning spaces are being re-established or rebuilt in the wake of a disaster or crisis.

This report also gives a voice to practitioners, teachers and students, and their concrete ideas for better educational responses to climate change and to climate-induced crises. They know what is needed most and where — in towns, communities, neighbourhoods, and schools impacted by the complex interplay of climate change, emergencies, and protracted crises.

If we want to see a future in which the rights and wellbeing of children and young people living in emergency contexts are protected, both education and climate change interventions must be integrated into humanitarian preparedness and throughout the response.

In this report, children and young people, along with their families, teachers, and humanitarian practitioners, are showing the way forward, and they must be supported in developing and deploying new solutions and best practices.

We ask you to bear that in mind as you read this report, and to consider the parts we all have to play in responding to climate change and education in emergencies.

On behalf of the Steering Group of the Geneva Global Hub for Education in Emergencies,

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Executive Summary

This report, which is the result of a literature review and empirical research, examines the impacts, implications, and repercussions of climate and environmental breakdown for the field of education in emergencies (EiE). It explores how climate change and environmental degradation are compounding, exacerbating, and multiplying hazards and disaster risks, and hence heightening the already significant challenges confronting EiE. The report considers how EiE has so far addressed these challenges, as they continue to manifest as rapid- and slow-onset threats. It also suggests new directions the field might take to respond more thoroughly to climate and environmental breakdown. The central research guestion is: How can EiE—along with other sectors and actors across the nexus—respond most effectively to ever more severe climate- and environment-induced crises in order to ensure the right to quality education for crisis-affected children and youth?

After brief introductory and methodological sections, the report provides an overview of the climate crisis. It states that the climate crisis is unprecedented, compounds and exacerbates other risk divers, and is poised to become the catalyst of an ever-accelerating, multi-pronged poly-crisis of which the destruction of nature and lost biodiversity will be major elements.

The key findings of this research on the impacts on EiE of climate-induced rapid- and slow-onset hazards and shocks are as follows:

 Children and youth are most affected by the climate and environmental breakdown.
 Moreover, the impacts of climate change exacerbate existing risks and inequalities, including gender, ethnicity, disability and age.
 Increasing tensions can threaten fragile peace and security and drive up the risk of insecurity, violent conflict, and displacement.

- Recurring, intensifying, and multiplying climate-induced shocks interrupt the provision of education by damaging and destroying school facilities, as well as teaching and learning resources.
- Extreme temperatures are making indoor classrooms unfit for learning and teaching. Those who attend school in the open air or in a tent are often also exposed to harsh conditions that make sustained and serious study impossible.
- The growing number of forcibly displaced and migrant children and youth that result from a climate or environmental crisis makes it harder for education authorities and providers, who are already beyond their limits, to meet students' diverse educational needs.
- Migration and displacement are driving up teacher-student ratios, creating additional learning challenges in already crowded classrooms.
- Climate change-induced hazards and shocks can severely erode teachers' ability to provide quality education to crisis-affected children.
- Recurrent and intensifying climate change-induced hazards are putting a great strain on already tight government financial resources, making it more difficult to invest in resilient education systems.
- In the face of increasing household poverty and declining livelihoods triggered by climate change, parents and caregivers are more prone to engage in risky and negative strategies to cope and survive, thereby undermining their children's and youth's right to education.
- Extreme weather events induced by climate change adversely impact student health and wellbeing, which reduces their ability to attend school and engage in learning.

Key actions taken so far in the EiE response to climate and environmental crises, the challenges faced, and the opportunities emerging are summarised as follows:

- Efforts have been made to integrate climate change, disaster, and environmental concerns into EiE-related policy and strategy at various levels. Other areas to be strengthened include ensuring the operationalisation of crisis-sensitive policy and planning that recognise the existential threat of the climate crisis, and developing cross-sectoral policy that encourages collaboration between EiE and other key sectors.
- There are well-established EiE coordination mechanisms for times of humanitarian crisis. In the context of recurring, concurrent, and prolonged emergencies that are exacerbated by the climate crisis, a stronger integrated approach is needed that goes beyond the silo mindset and is operationalised in locally appropriate ways that ensure support for crisis-affected and displaced children and youth.
- EiE has been chronically underfunded relative to the burgeoning needs of crisis-affected and displaced children and young people. The siloed humanitarian and development funding streams make it difficult for local actors to initiate EiE that is responsive to the changing climate and environment. Robust collaboration across the humanitarian-development nexus and close cross-sectoral collaboration are vital for EiE as it pursues international climate funding. Mobilising domestic financing to support resilience-building and climate action in the education sector is another area calling for greater attention from the EiE community.
- Disaster risk reduction (DRR) and emergency preparedness are well established in EiE thinking and practice. Anticipatory action—a set

- of actions taken to prevent or mitigate potential disaster impacts before a shock or before acute impacts are felt— is an emerging mechanism within the disaster response management continuum that is gaining momentum across the EiE community. However, precisely what it entails requires clarification, especially in relation to slow-onset and protracted crises. There is a question of how funding will be secured to maintain sustainable operations in local contexts, especially where a hazard is seasonally recurring.
- Many crisis-affected and displaced children and young people have already been assuming a leadership role in safeguarding a liveable planet into the future. Formal learning settings in areas affected by crisis offer only limited education about climate change. In non-formal learning settings, however, children and youth have engaged in practical and action-oriented climate change education.
- The child's right to a clean, healthy, and sustainable environment is largely overlooked or under-articulated in EiE discourse, despite the scale and seriousness of the harm done to children's rights—including the right to education—by climate change, by relentless environmental degradation, by the loss of biodiversity and habitat, and by pollution. This presents an opportunity to expand current EiE thinking and practice.

This report concludes by emphasising the growing challenges posed by the climate and environmental crisis to the EiE field. It stresses the necessity of collaboration with humanitarian, development, peace, climate, and environmental partners to ensure the provision of quality education for displaced and crisis-affected children. It recommends possible measures to take that will make that a common reality.

Based on these key findings, the authors of the study make the following recommendations:

General recommendations to all EiE partners

Overall vision

- Use existing platforms where humanitarian, development, peace, climate change, and environment actors—including those working on nature-based solutions—can interact to help ensure that each has a distinct but complementary role and responsibilities in mitigating risks to the education sector.
- Sign and commit to act in accordance with the Climate and Environmental Charter for Humanitarian Organisations.¹
- Accompany the EiE principle to 'do no harm' to the natural environment with a 'do some good' approach that aims to actively advance or restore environmental integrity.
- Give greater weight and visibility to practical, on-the-ground initiatives when implementing

- EiE programmes across the nexus and in partnership with other key sectors.
- Work together to mainstream education in climate and environmental political forums, processes, and mechanisms.
- Advocate in the EiE discourse for educational and environmental rights, including consideration of the linkages between the two.
- Address the existing gap in policy and strategy to ensure the right to education for learners displaced by climate-related events, and that lay out the needs of children and young people who were disproportionately affected by events due to their gender, age, disability, or other characteristics.

Data and research

- Improve the collection and analysis of evidence on EiE and reduce fragmented data collection on humanitarian and development programming. Use crisis-sensitive indicators to capture learning quality, climate, and environmental conditions, and establish cause-and-effect relationships among these indicators.
- Ensure that mechanisms are in place to analyse and disseminate precise data on the impacts of climate and environmental crises—both rapid and slow onset—on the education of children and youth, in particular those who are displaced, girls, and those with disabilities.
- Conduct a cost-benefit analysis of both climate action and inaction in the education sector to highlight the fact that prioritising investment in education can lead to significant savings over the long term.
- Determine the financial and other benefits of investing in preparedness and adaptation, and prioritise investments accordingly.

Disaster Risk Reduction (DRR), preparedness and anticipatory action

- Clarify any confusion about the difference between 'preparedness' and 'anticipatory action', especially in local situations, by developing clearer guidelines and tools.
- Working closely with relevant partners, clarify how the systematic cumulative data called for by anticipatory action is to be collected, stored, and made available.

- Enhance coordination with other sectors working on anticipatory action at the global, national and local levels to ensure that education is always considered in the design and implementation of anticipatory action programmes.
- Take steps to elaborate what anticipatory action looks like in terms of protracted and slow-onset crises, including how to do it effectively in conflict-affected and fragile situations.
- Consider how best to handle uncertainty about the impacts of climate change when planning for and implementing anticipatory action.

Child and youth agency, teaching and learning

- Mainstream opportunities for resilience-building, action-oriented climate change and environmental learning in EiE programs in a manner that is gender, age and disability sensitive, and contextually appropriate.
- Provide safe spaces where children and youth can play, learn, be protected and be listened to throughout an emergency, and where they can access safe, participatory, and inclusive engagement opportunities to contribute to local DRR, preparedness, anticipatory action, and climate and environmental action.
- Integrate climate change topics into both formal and non-formal curricula while providing training and support for teachers so they can deliver this content effectively.
- Provide opportunities and resources for teachers, and support their ability to maintain their wellbeing, thereby enabling them to meet professional duties and assist crisis-affected children and youth effectively.

Recommendations primarily for those working at a national or sub-national level²

Overall vision

- Develop enabling frameworks or strategies for EiE that articulate climate change and environmental imperatives and are predicated on existing key global frameworks and strategies. These may include the Comprehensive School Safety Framework of the Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector; the Inter-agency Network for Education in Emergencies' Minimum Standards; the Global Education Cluster Strategy; and the Global Partnership for Education's Climate Smart Education Framework. Also, ensure that these frameworks or strategies are informed by innovative community-level thinking and practice.
- Encourage humanitarian and development actors to embed climate change and environmental dimensions in their educational policy-making, strategising, and planning.

- Integrate building resilience to climate change into education-sector planning by involving EiE actors.
- Strengthen EiE data collection on climate-related disruption of education, risk assessment (at all levels), analysis and dissemination, in order to better support the implementation of climate-resilient solutions, including stakeholder capacity-building.
- Make contingency-informed policy that considers different projections of global surface heating and cooling, including local variations and particularities.
- Develop institutional arrangements that help to forge close collaboration among ministries that will support climate, environmental, and DRR education in formal and non-formal learning spaces.

Allocate funding to enable displaced and crisis-affected youth to participate in climate change mitigation and adaptation activities, and to gain skills and livelihoods.

School built environment and learning environment

- Allocate adequate resources to ensure that the design, building materials, construction, and maintenance of school buildings maximise safety, increase durability, and mitigate the adverse impacts that intensifying hazards have on student learning in both indoor and outdoor settings.
- Develop contextually appropriate and sustainable measures to make learning outdoors and in temporary learning spaces conducive to quality learning in various climate scenarios.

Recommendations for donors, funding bodies, and those otherwise concerned with financing EiE

Global

- Increase the proportion of predictable multiyear funding for EiE, and create stronger partnerships and synergies around humanitarian and development funding in order to support EiE efforts to combat climate change and to bring long-term general support to EiE.
- Humanitarian and development funders should incorporate climate change and environmental criteria into their funding frameworks and objectives.
- Further enhance coordination among humanitarian and development funders to ensure funding is allocated to preparedness, mitigation and adaptation components in projects in complementary ways.

- Fund examples of anticipatory action in the EiE sphere that extend over several years, with a view toward providing models of best practice.
- Advocate for EiE to receive a fair share of international climate finance, including the Loss and Damage Fund.
- Conduct a cost-effective analysis of climate action and inaction in the education sector to highlight the fact that early investments in education can bring significant savings, while non-investment can have significant human, economic, and psychosocial costs.

National

- Mobilise domestic, locally led financing to support climate-responsive EiE using measures such as tax reform and/or budgetary allocation, and create a monitoring system for such funding.
- Work in cross-sectoral teams that include ministries of education and accredited bodies outside of education to seek opportunities to open up climate financing.
- Enable children and youth to have a voice in donors' consideration of grant submissions that concern resilience-building in the education sector.

Recommendations for coordination entities overseeing the EiE response

- Ensure joined-up coordination between coordinating bodies across the nexus, which includes education clusters, local education groups, and refugee working groups, and between the nexus and bodies that represent cross-cutting elements, such as the environment, climate, and DRR.
- Promote close collaboration between country-based coordination groups and national and sub-national authorities, while recognising that governments are central in planning for and responding to climate-induced education loss and damage.
- Identify ways to contribute meaningfully to the capacity of humanitarian response partners to mitigate and adapt to climate change, DRR, preparedness, and anticipatory action, including within the Initiative for Strengthening EiE Coordination.³

- Strengthen commitments of global coordination mechanisms to help country-based coordination groups to better understand mitigation and adaptation, DRR, preparedness, and anticipatory action.
- Provide instruments and tools to facilitate both coordinated approaches to EiE preparedness, and anticipatory action to mitigate the adverse impacts of climate and environmental breakdown.
- Foster an environment that enables the effective delivery of humanitarian assistance, the sharing of synergistic outcomes, and the integration of financing streams for building climate-resilient education systems in a sustainable manner.



Abbreviations

CSSF Comprehensive School Safety Framework 2022-2030

DRR Disaster Risk Reduction

ECW Education Cannot Wait

EIE Education in Emergencies

EiE Hub Geneva Global Hub for Education in Emergencies

FGD Focus Group Discussion

GADRRRES Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector

GPE Global Partnership for Education

IDP Internally Displaced Person

INEE Inter-agency Network for Education in Emergencies

LEG Local Education Group

MoE Ministry of Education

NDCs Nationally Determined Contributions

PSS Psychosocial Support

SEL Socioemotional Learning

WASH Water, Sanitation, and Hygiene



Introduction

'Our planet has just ended a season of simmering—the hottest summer on record. Climate breakdown has begun.'

UN Secretary-General António Guterres,
 6 September 2023⁴

Human-induced climate change and environmental degradation are posing an existential threat to our planet. Recognising the critical threat the climate and environmental crises pose to children's and youth's right to quality education, in particular in crisis settings, the Geneva Global Hub for Education in Emergencies (EiE Hub) commissioned this study of the intersecting, multiplying, and mutually compounding impacts of climate change and environmental degradation on education in emergencies (EiE).5 The mandate of the EiE Hub includes supporting better data and evidence, enabling policy-making informed by that evidence, and driving political will, commitment, and agenda-setting with governments and partners. An annual Flagship Report which reflects and makes recommendations on a pivotal EiE issue of the day is one of the EiE Hub's most important contributions in this regard. This document is the EiE Hub's second such report.

Section 1 of this report outlines the research methodology employed for the study. **Section 2** provides an overview of the climate crisis, describing it as unprecedented, as compounding and exacerbating other risk drivers, and as set to become the catalyst of an ever-accelerating and multi-pronged poly-crisis of which the destruction of nature and lost biodiversity will be magnifying elements.

Section 3 explores how climate and environmental emergencies impact EiE. It considers the impact of climate-driven events on schools' physical infrastructure, facilities, and learning resources, on the teaching and learning environment, and on teachers' capacity to cope with these changes while still providing quality education. The discussion also focuses on the impacts the intensifying climate crisis is having on the financial resources available to education systems. The discussion then turns to

the impacts on the children themselves, in particular the effects on students' physical and mental health and wellbeing. It also addresses the question of how to meet the educational needs of children and youth who have migrated or been displaced as a consequence of climate-related or environmental events.

Section 4 highlights key EiE responses to the challenges posed by the intensifying climate crisis. It reviews emerging efforts to integrate climate and environmental concerns into EiE-related and cross-sectoral policy and strategy frameworks, where there is a recurring gap between the limited evidence base informing EiE deliberations and policy-making. The report then considers the EiE coordination mechanisms deployed in times of humanitarian crisis, making the point that a more integrated approach is needed when the climate-driven crisis is coming on so heavy and fast. The chronic underfunding of EiE is addressed next in a series of sub-sections—the first on humanitarian and development finance at the global level, the second on international climate finance, and the third on domestic financing, both national and sub-national.

The entire area of emergency preparedness and actions that foreshadow a disaster event is scrutinised next. This includes both the potential and the challenges presented by the notion of anticipatory action, which is examined through the lens of climate and environmental breakdown. The report moves on to consider the agency of children and youth in actions to adapt to and mitigate climate change whether arising through their formal learning via the school curriculum, or through non-formal learning rooted in community action. The report underlines the importance of interlinking formal and non-formal place-based action learning. Finally, it draws attention to the child's right to a clean, healthy and sustainable environment and all that entails, which is a precursor for making the case that nature and the environment need to become core aspects of EiE discourse, policy, and practice.

The final section offers concluding remarks and recommendations. This study is important reading for policy-makers, opinion formers, decision-makers, and implementers who are working and interfacing at the nexus, as well as donors in the areas of climate change, development, and humanitarian aid. Others who may benefit from

reading this report include those working at the coordinating and networking entities that represent related fields; representatives of national and sub-national authorities; young people working for EiE and climate action; and partners whose remits include climate change and emergencies, and environmental and disaster risk.

Box 1. Definitions

Education in Emergencies: The provision of quality education opportunities that meet the physical protection, psychosocial, developmental, and cognitive needs of children and youth affected by emergencies, which can be both life-sustaining and life-saving.⁶

The Humanitarian-Development-Peace nexus is the term used to capture the interlinkages between the humanitarian, development, and peace sectors. It specifically refers to attempts to establish new ways of thinking in those fields, to work together to more effectively meet people's needs, mitigate risks and vulnerabilities, and move towards sustainable peace.⁷



Section 1. Scope of the Study and Methodology

This study examines the impacts, implications, and repercussions of worsening climate change and mounting environmental degradation for EiE. It aims to:

- Highlight how climatic and environmental breakdown are compounding, exacerbating, and multiplying risks.
- Examine the impacts of rapid- and slow-onset climate-induced hazards and shocks on EiE.8
- Identify ways EiE is responding to climatic and environmental challenges, while flagging new directions the sector might take in the future in responding to changes to the climate and environment.
- Identify ways to build more robust and resilient education systems that are better equipped to withstand crises.

The key research question is as follows: How can EiE—along with other sectors and actors across the nexus—respond most effectively to ever more severe climate- and environment-induced crises in order to ensure the right to quality education for crisis-affected children and youth?

The scope of the study is limited to the education of children and youth at the primary and secondary education levels. It is primarily concerned with crisis settings in lower-income country contexts, where the impacts of multifaceted climate change are most prominent and severe.

The researchers employed three data-collection methods:

- Desk-based literature search and review:
 Researchers conducted a search, collection, and review of existing literature that focused mainly on the interface between climate.
- cused mainly on the interface between climate change, environmental degradation, and EiE.

 Stakeholder surveys: Three separate online
- surveys were conducted in July 2023, each of them in English, French, and Spanish. The first survey targeted experienced EiE actors and practitioners and their counterparts in non-education sectors. There were 143 responses to this survey. The second survey targeted primary and secondary teachers working in climate-induced crisis conditions. There were 80 responses. The third survey targeted child and youth leaders, including climate activists from countries affected by emergencies. There were 35 responses.
- Key informant interviews: Key informant interviews were conducted at the global, national and sub-national levels in July and August 2023. The interviews took place with EiE-affiliated personnel and with specialists from outside the EiE community. At the global level, 11 individuals (8 EiE and 3 non-EiE specialists) were interviewed. At the national and sub-national levels, 16 individuals (14 EiE and 2 non-EiE specialists) participated in the interviews. Three focus group discussion (FGD) sessions were conducted with teachers, and a youth-oriented FGD was conducted with 10 teachers and 2 youth leaders.

Data from the literature review, the stakeholder surveys, and the key informant interviews are drawn from throughout this report.

The research limitations include limited data on climate change's influence on EiE and the latter's response to climate and environmental crises. A short data-collection window during the summer holidays constrained the involvement of key informants from non-education sectors and resulted

in fewer child and youth participants than originally targeted. The findings are not necessarily representative of the vast EiE community. Rather, they illuminate unique insights and nuanced perspectives which are not necessarily captured in the literature.

For further details on the methodology employed, see Annex 1.



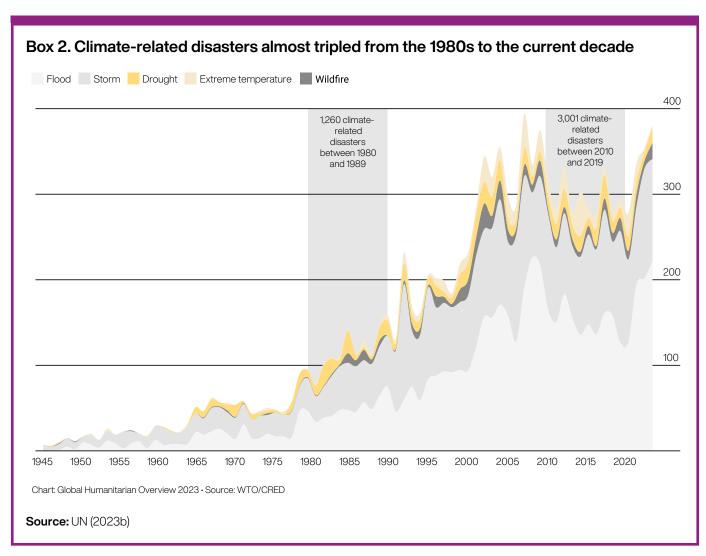


Section 2. The Climate Crisis

The current speed and scale of human-caused global heating is unprecedented.

The climate crisis is the defining existential challenge of our time. Coming on heavier and faster than anticipated, it is breaking up global and regional climate patterns and wreaking havoc on longstanding environmental norms, often in unforeseen ways. In 2022, the global mean surface temperature was 1.15°C hotter than in pre-industrial times, with a record high concentration of greenhouse gases in the atmosphere.⁹

June, July, and August 2023 were the three hottest consecutive months in recorded meteorological history. Climate breakdown has exacerbated the frequency, intensity, and duration of weather and climatic extremes, all of which increase the risk of disaster. Climate-induced, rapid-onset hazards such as flooding tripled from the 1980s to the 2010s, while the frequency of extreme temperature events multiplied sixfold in the same period (see **Box 2**). In



In recent years, lower income countries in Africa, Asia, and Latin America have been experiencing a rising incidence of severe heat waves, which are increasingly compounded by other extreme climate-driven events, such as drought, wildfires, and tropical storms.¹² In the period from 2020 to 2022, 23 countries around the world faced drought emergencies.¹³ In 2023, multiple huge wildfires have raged across many parts of the world.¹⁴ Meanwhile, the occurrence of deadly storm events, supercharged by the constant warming of the oceans, has been increasing. Thousands of small-scale events that fall below the global media threshold are nevertheless triggering multiple instances of local loss and damage.¹⁵

Hazards and disasters arising from climate breakdown combine with other risk drivers to compound and exacerbate risk while deepening inequality and heightening injustice.

Climate-induced hazards and other human-induced risks, such as the overexploitation of natural resources, unsustainable agricultural and industrial practices, pollution and waste generation, have led to a devastating loss of life and the destruction of livelihoods and ways of life.¹⁶

Added to the mix is the wholesale degradation and destruction of the natural world. The recent flagship report by the World Wide Fund for Nature (WWF) stated that, since 1970, global wildlife populations have declined on average by 69%.¹⁷ Biodiversity loss and habitat degradation are other critical drivers of disaster risk. Without healthy biodiversity, and with nature no longer able to provide a buffer against hazardous events while also providing livelihoods, communities are less able to withstand, cope with, and recover from recurring climate-induced shocks. Degraded lands, forests, and seas are less able to absorb and store carbon, which feeds into the vicious downward spiral of accelerating climate change.18 We now face an interconnected and mutually reinforcing 'triple planetary crisis' of climate disruption, loss of nature and biodiversity, and pollution and waste.19

Climate breakdown is disproportionally impacting the most vulnerable groups and populations which historically and currently bear the least responsibility for greenhouse gas emissions. The effects of climate change within countries and societies are deepening, and are compounding the risks and inequalities arising from societal factors such as gender, ethnicity, disability, and age. They are also widening regional disparities and income gaps and disproportionately impacting those who are already experiencing crises.²⁰

Moreover, the impacts of climate change are not 'gender neutral'. Girls and women are disproportionately impacted by the climate crisis due to gender-differentiated norms, roles, responsibilities, and power structures. As gender intersects with other modes of inequality, women and girls from the most marginalised groups (e.g., Indigenous girls and women, girls with disabilities, migrant women) are especially vulnerable.²¹

Girls and women have more domestic responsibilities than men and boys, such as securing food, water, and fuel. Due to declining ecosystems and an increasingly harsh environment, they have to spend more time and travel longer distances to gather necessary natural resources, which exposes them to greater risk of sexual violence and insecurity. Climate-induced hazards also are increasing women's and girls' risk of facing gender-based violence, including sexual exploitation and forced child marriage.²² There also is emerging data that, as the climate crisis remains unchecked and temperatures continue to rise, girls and women are increasingly affected by domestic violence (see Box 3). Lack of access to information and basic social services, and a lack of voice in decision-making, are other factors that increase women's and girls' vulnerability in contexts of the climate crisis.²³

Box 3. Climate change and domestic violence

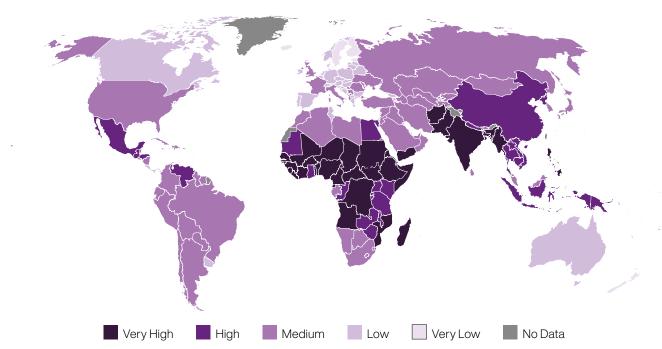
A recent study tracking incidents of physical and sexual violence among nearly 20 million girls and women ages 18 to 49 in India, Pakistan, and Nepal was able to correlate a 1°C rise in heat with an 8% rise in the former and a 7.3% rise in the latter. Extreme heat can cause crop failure and, in consequence, loss of livelihoods. It can buckle infrastructure. It can force people to be confined indoors in small spaces for long hours. The combined impact of these factors can cause extreme stress, especially in low-income and rural households, which puts children and women at increased risk of domestic violence. For children, who often bear the brunt of climate-induced stress, attending school becomes an added challenge amidst the relentless heat.²⁴

The impact of climate change on children is deep, multifaceted and severe, as described in Box 4.

Box 4. Disproportionate impacts of climate change on children

Climate breakdown is disproportionately impacting the vulnerable populations and countries that historically and currently bear the least responsibility for creating greenhouse gas emissions. Children in low-income countries are especially affected. According to the UNICEF Children's Climate Risk Index (CCRI), approximately 1 billion children globally—nearly half the world's children—live in countries considered at 'extremely high risk' from the impacts of the climate crisis. ²⁵ Children in these counties are exposed to multiple climate-related and environmental shocks. A 2023 Education Cannot Wait study reveals that, of an estimated 224 million crisis-affected school-age children worldwide, more than half (54%) live in sub-Saharan Africa, where conflict, drought, and flooding exacerbated by climate change are making things worse for children. ²⁶





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

Note: The CCRI is composed of many indicators across climate and environmental hazards, shocks and stresses, as well as child vulnerability

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

Children with disabilities are particularly affected by and vulnerable to climate-induced disasters, due to long-term physical, mental, intellectual, or sensory impairments. However, they remain largely marginalised, as various barriers may hinder their full and effective participation in the climate debate and actions.²⁷ Reliable data concerning the impacts of climate change on people with disabilities, including children, are scarce. Recent research indicates that children with disabilities and their families have low levels of disaster preparedness and below-average general recovery support because of longstanding discriminatory attitudes and practices.²⁸

In already fragile and conflict-affected contexts with poor governance, climate shocks intersecting with political and socioeconomic stresses heighten competition for shrinking natural resources. Increasing tensions can threaten fragile peace and security and drive up the risk of insecurity, violent conflict, and displacement. Insecurity and violent conflict in turn can reverse development gains and make communities poorer and less able to cope with the consequences of climate change.²⁹ More than 70% of refugees and internally displaced people fleeing conflict and violence originally came from climate 'hotspots', where people generally lacked the resources to adapt to the combined impact of an increasingly merciless climatic and natural environment along with a strife-torn society. The unfolding climate crisis also makes it ever more difficult for displaced people to return to their homelands as the natural environment becomes uninhabitable, due to drought, wildfires, floods, and rising sea levels.30

In a global context of accelerating climatic and environmental breakdown, displacement and migration are on the rise. In 2022, the number of people internally displaced as a result of disasters stood at 8.2 million, a 45% increase over 2021.³¹ Of this displacement, 98% was triggered by weather-related hazards such as floods, storms, and droughts. In countries such as the Philippines, Madagascar, and South Sudan, many people have repeatedly fled from place to place due to recurring disaster incidents.³² While the decision to migrate is complex, the loss or decline of livelihood due to slow-onset events such as sea-level rise, extreme heat, and drought and desertification increasingly play a critical role in people's decision to migrate

in search of alternative income to meet their basic needs. In Somalia in 2019, for instance, 67% of the nearly 700,000 internally displaced persons (IDPs) had moved due to drought.³³

Looking into the not-too-distant future, unless urgent steps are taken, climate breakdown is likely to lead to a world of more complex and cascading risks—a veritable poly-crisis.

The 6th Intergovernmental Panel on Climate Change assessment report makes it clear that the global surface temperature will continue to rise in the near term (2021-2040), due to the effects of climate change. It also states that, with every increment in the global temperature, weather and climate extremes will become more widespread and increasingly pronounced. This will lead to further loss and increasing damage to human and natural communities. Continued global heating is projected, amongst other things, to further intensify the strength and velocity of tropical storms; to trigger both extremely wet and exceedingly dry regional climatic events; to lead to the inexorable advance of aridification; and to compound heat waves and droughts across the temperate zones. The Intergovernmental Panel on Climate Change asserts with confidence that such events are likely to occur simultaneously, and more frequently, across multiple locations. Managing risk, in short, will become an increasingly steep uphill task.34

The existing governmental and international pledges and action plans are generally insufficient to deal with the magnitude of the task before us. Current projections put us on track for a 2.8°C increase over pre-industrial times by the end of the century, thus dangerously overshooting the 1.5°C mark set as the point beyond which we must not pass, as per the Paris Agreement. It is, in fact, more than likely that the 1.5°C mark will be reached at least once between 2023 and 2027.35 Failing to take urgent and effective action now will put the number of people likely to need international humanitarian assistance due to the ill effects of climate change and climate-related disasters at 150 million annually by 2030, and at 200 million annually by 2050. Moreover, the financial costs of providing humanitarian assistance could reach US\$20 billion per year by 2030.36

In its Global Risks Report 2023, the World Economic Forum points out that the climate and environmental risks we will face are those we are least prepared for. It states that, 'without significant policy change or investment, the interplay between climate change impacts, biodiversity loss, food security and natural resource consumption will accelerate ecosystem collapse', thereby amplifying the impacts of disasters while impeding and limiting much-needed climate mitigation and adaptation efforts.³⁷

The global community needs to anticipate a potential poly-crisis—that is, a cluster of multiple and interrelated environmental, geopolitical, and socioeconomic failures—which threatens to lead to a compounding breakdown of unpredictable consequences. Left unchecked, such a poly-crisis could spiral downward and become self-perpetuating.³⁸





Section 3. Impacts of Climate Change on Education in Emergencies

Multiple and tangled forces are affecting education during emergencies and protracted crises.³⁹ What follows is a discussion, supported where possible by recent examples, of seven key areas in which climate change is intruding on education access, equity, and quality.⁴⁰

It should be noted that rigorous and comprehensive data on the climate-driven impacts on the education sector are limited. The available data focuses predominantly on the impacts of specific large-scale, rapid-onset events. Quantitative data on the impacts of recurrent, protracted, and smaller scale climate-induced hazards are largely absent or not readily available. There is an equivalent

lack of comprehensive, longitudinal, and cumulative datasets.

The literature and data reviewed for this report tend to focus on how climate change impacts access to and the quality of education during emergencies. Data that capture learning quality—that is, facts and figures on learning outcomes and attainment—are largely absent. Where data do exist, they tend to be anecdotal or speculative. A body of research evidence indicating a strong correlation between climate-change risk and learning deprivation is now surfacing, but it is only in the early stages.⁴¹

3.1. Physical Infrastructure of Schools and Learning Spaces, Facilities, and Resources

Recurring, intensifying, and multiplying climate-induced hazards interrupt the provision of education by damaging and destroying school structures and facilities, as well as teaching and learning resources.

There are numerous examples of loss and damage to the infrastructure of schools and other learning spaces that have led to the interruption

of learning that has lasted from a few days to as much as a year or more (see Box 5). According to 76.2% of the practitioners participating in the survey conducted for this report, education in crisis settings has been disrupted by damage to school buildings and facilities due to climate change. Nearly 60% of respondents reported that climate change caused damage to textbooks and other school materials.

Box 5. Damage to school infrastructure: Some examples		
Typhoons Quinta, Goni (Rolly), and Vamco (Ulysses), the Philippines, 2020	Due to COVID-19, schools remained closed and distance education was being employed when a trio of typhoons hit the country in quick succession. More than 8,600 schools were damaged or destroyed. Damaged self-learning modules for learners required reprinting and redistribution to ensure education continuity for 2.8 million learners throughout the country. ⁴²	
Floods, Bangladesh (nine northwestern districts), 2022	In just the two districts most affected by the floods, Sylhet and Sunamganj, respectively 94% and 84% of the land area was submerged. Three thousand primary and secondary schools remained closed for about a month, depriving more than 1.5 million learners of the opportunity to learn. ⁴³	
Cyclones Batsirai and Emnati, Madagascar, 2022	Two cyclones hit the country in February 2022, completely destroying 6,954 classrooms and partially damaging a further 2,706, especially the roofs. Also destroyed were 37 administrative buildings. At the primary level, 423,866 students were deprived of lessons. ⁴⁴	
Tropical Cyclone Freddy, Malawi, 2023	Key school facilities, including 532 classrooms, 510 teachers' houses, and 1,520 toilets, were totally or partially destroyed. The Ministry of Education suspended classes for some 25 school days. ⁴⁵	

Loss of lesson time due to climate-driven events thus becomes one of the main factors causing a decline in learning quality over the short and medium term.46 A few teachers who participated in this study explained that recurring floods damaged their semi-permanent school buildings and that water remained in the buildings for as much as three months, which damaged their teaching and learning materials. One teacher explained that this destruction of instructional materials was undermining the school's ability to realise the learning outcomes promised to their students. Participants in Cameroon said that flooding occurred there every September, which in some parts of the country delayed the start of the school year until December or even January. All participants described how significantly the reduced lesson time had lowered students' learning attainment.

The precarious water, sanitation, and hygiene (WASH) facilities found in schools in many lower income countries are being impacted by increasingly extreme weather events that are exacerbated by climate change. The quality and quantity of the water available in these schools are threatened

by a range of climate-change effects, including unpredictable and declining precipitation and prolonged spells of hot, dry weather. Flood waters also damage and pollute the drinking water sources. Meanwhile, the melting glaciers and ice fields are increasing seasonal river flows but reducing water availability during some months. In coastal areas, sea-level rise and storm surges energised by warming seas are leading to increased salinisation and the intrusion of the sea water into surface water and ground-water supplies, which threatens the availability of safe water in the schools.⁴⁷

Slow-onset hazards, such as waterlogging and saltwater intrusion, gradually damage school buildings and make them more vulnerable to subsequent hazards.⁴⁸ According to the 2021 Bangladesh Education Statistics, 2,051 schools in Bangladesh are located in areas prone to waterlogging, and 266 schools are in areas affected by salinity. Without renewed and/or repeated investment in building maintenance, the recurring damage to these schools is likely, sooner or later, to interrupt the provision of quality education.⁴⁹

The lack of access to functional basic WASH facilities at school is one of the main factors negatively affecting student health and school attendance. This applies both in times of stability and during emergencies, but especially the latter. The lack of adequate WASH facilities at school is associated with absenteeism, especially among adolescent female students during their menstrual periods, which in a significant number of cases leads to permanent dropout.50 Damage to WASH infrastructure can also increase the risk of violence for learners and teachers, particularly gender-based violence, such as when girls are forced to leave safe places in search of water or sanitation facilities.⁵¹ In Somalia, which has been severely affected by drought, water scarcity is one of the main causes of school closures (see Annex 2 for further details).

The lack of clean and reliable potable water also has a bearing on student access to school. In interviews conducted with teachers from South Sudan, they shared their fears about children making the two-hour walk to school in the hot, dry season with no watering facilities along the route, and said they also were concerned about the students' commute during the rainy season. Watching their students leave the school and head for home often left these teachers feeling anxious.

The use of schools as temporary emergency shelters to accommodate disaster-affected populations damages the school properties. It also leads to lost lesson time, especially when no alternative teaching modalities and/or spaces are available. Prolonged school closures resulting from their use as shelters can also increase student

dropout rates.52 For example, the education system in Mozambique was still recovering from shocks, including the COVID-19 pandemic and two cyclones that hit the country in early 2022, just six weeks before Tropical Cyclone Gombe hit. In the aftermath of Cyclone Gombe, schools that withstood the destruction were used to shelter the displaced population. Combined with existing multiple vulnerabilities in the affected communities (e.g., high poverty, high student absenteeism, low female student retention), the prolonged school closures created a higher risk of student dropout, especially among girls. 53 Some research evidence indicates that, when schools are closed due to weather-related hazards, girls are less likely than boys to attend any temporary school facilities provided. This is often linked to family fears about girls' safety as they travel to and from the school facilities.⁵⁴

According to one global EiE actor, the response to infrastructural damage and devastation is, with some notable exceptions, still caught up in a never-ending and exasperating cycle of progress and setbacks. When schools are destroyed or seriously damaged by some disastrous event, the tendency is to knock the building down and rebuild it just as it was before—and then to wait for the next disaster to cause similar destruction. In the preoccupation to 'return to square one', insufficient attention is given to improving resilience in school design and structure, including possible relocation or simple and cost-effective methods of retrofitting. Such considerations are 'not taken into account as mass core construction continues unabated'.

3.2. Teaching and Learning Environment

Extreme temperatures are making indoor classroom environments unfit for learning and teaching. Those who attend school in the open air or in a tent are, in many instances, exposed to harsh conditions that make sustained and serious study impossible. Migration and displacement are driving up the teacher-student ratio, which creates further learning challenges in already crowded classrooms.

Extremely high ambient air temperatures and poor hydration are known to affect children's ability to concentrate, which results in lower learning achievement. Fecent research conducted in Bangladesh, India, and Pakistan confirmed this point. In crowded classrooms experiencing soaring temperatures, high humidity, and a lack of cooling and ventilation facilities, teachers struggle to deliver lessons to students whose concentration and motivation are negatively affected, and as they themselves fall victim to heat exhaustion and dehydration. These conditions

undermine their ability to deliver quality classroom teaching and learning.⁵⁶ An EiE actor interviewed for this report told of his team's action research on the impact ever-hotter classrooms are having on student learning. They found a significant correlation between the classroom temperature and the level of attainment, as reflected in learner assessments, particularly 'if the classroom had been excessively hot on the previous two days'.

Some teacher participants reported that their students find it difficult to engage with the lesson in a very hot classroom and tend to fall asleep. Children suffer badly in schools in highly populated urban areas that lack cooling and hydration facilities, in particular during heat waves.⁵⁷ A number of teachers pointed out that classrooms designed and constructed decades ago are no longer fit for learning, due to the insistently rising temperatures. They asserted that the situation calls for new school designs and cooling facilities.

One strategy schools and education authorities are using to cope with extreme temperatures is to change the school calendar or adjust the school hours. For instance, schools in South Sudan have adjusted school hours to accommodate what schedule is most suited to the dry or rainy season, both of which are experiencing more extreme weather events due to climate change. In the hot, dry season, the school day begins at 6 AM and ends at 11 AM to avoid the hottest time of day. During the rainy season, the school day begins at 8 AM and ends at 4 PM, which gives students more time to negotiate the mud and the flooded roads. In the Philippines, during the scorching heat wave of 2023, the department of education reminded school principals to call off in-person classes to avoid the summer heat, and to use alternative modes of learning and/or adjust the school term to allow for harsher weather.⁵⁸ In Bihar, India, the education department adjusted both the school day timetable and the yearly calendar to avoid the worsening effects of an ever-more

destructive monsoon season, with a consequent reduction of the summer vacation period.⁵⁹

The increasing displacement and migration caused by the worsening climate crisis mean that many classrooms with an already high student-teacher ratio are becoming unbearably overcrowded. One study participant explained the obvious: when a teacher has 200 students in a classroom during 'normal' times, they simply cannot cope with 100 more students arriving from flooded areas.

In contexts where students have to learn outdoors in the shade of trees or in flimsy tents, they are relentlessly exposed to increasingly high temperatures and other extreme weather conditions. For instance, in South Sudan, an estimated 17,030 classrooms operate in the open air due to a lack of education infrastructure. Learners are exposed to harsh weather conditions that reportedly affect girls disproportionately.⁶⁰ In Tanzania's three largest refugee camps, more than 70% of students learn outdoors, where they are exposed to the elements.⁶¹ As the global heating trend continues, outdoor learning spaces are on the brink of becoming unusable in very hot regions around the world.

A local-level key informant pointed out that there are some innovations which use solar energy to make temporary learning spaces cooler in summer and warmer in winter. However, he noted that these innovations do not work in contexts such as Syria, where temperatures rise to 48 degrees in summer and fall below zero in winter.

A number of interview participants shared the conviction that global heating will soon bring the days of schooling in tents to a close. With global temperatures likely to exceed the 1.5C increase and current projections moving toward 2.8C, it is time to ask, at what point will rising temperatures make holding classes in tents impossible?

3.3. Teachers⁶²

Hazards and shocks induced by climate change can severely erode teachers' ability to fulfil their professional responsibilities and undermine their ability to provide quality education to crisis-affected children.

The climate crisis affects the performance and influence of teachers in a variety of ways. It reduces the availability of teachers whose personal situations have been affected by their own illness, injury, or displacement related to a climate-induced emergency. Moreover, in the aftermath of such disasters, teachers often experience psychosocial stress, which clearly hinders their ability to fulfil their duties. A family member's illness or injury due to an emergency can lead to irregular teacher attendance, as a teacher may be needed to provide family care duties. This is an expectation which often falls on female teachers.⁶³

Teachers are often called on to participate in disaster response and/or recovery activities that are outside their normal teaching duties, thus diverting their time and effort from their usual duties. ⁶⁴ Furthermore, loss and damage to their own homes and livelihoods may require teachers to prioritise the recovery efforts at home, rather than their teaching. This can lead to a breakdown of teacher retention. ⁶⁵ A community-level key informant explained that, when teachers are displaced to urban areas because of recurring floods and other hazards, it creates a vicious downward spiral of teacher shortages, particularly in contexts already facing a chronic shortage of trained teachers.

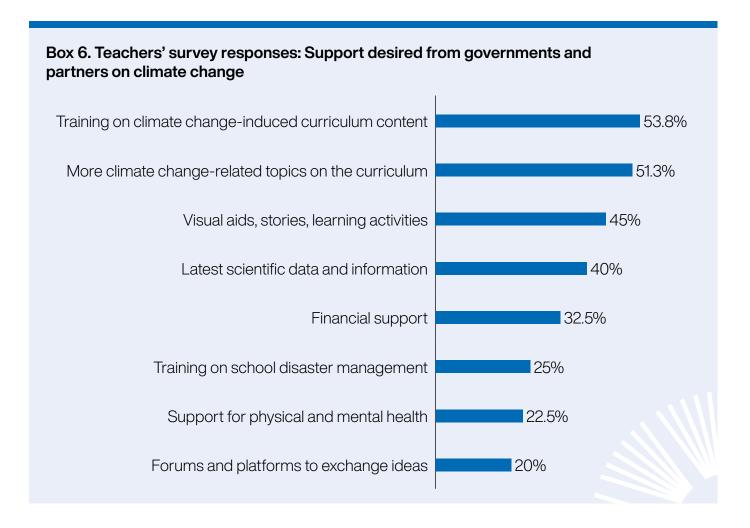
Extreme weather events, such as heavier than normal monsoon rains, can disrupt teachers' ability to travel to their school, especially if their commute is long. 66 This difficulty getting to the schools often reduces the number of trained teachers available, which may lower the quality of education in the abandoned areas. For instance, teacher FGD participants explained that muddy roads and torrential downpours during the rainy season and the very hot weather during the dry season frequently interrupt their and their colleagues' ability to get to their schools.

Another key challenge teachers commonly face in crisis situations is a lack of adequate salaries and timely payment. This contributes to teacher apathy and distrust and, consequently, high turnover.

The deepening climate crisis makes this challenge more acute and pronounced. For instance, in Somalia, as drought conditions worsen, work conditions deteriorate, and salaries are not paid regularly, a large number of teachers are dropping out of school to seek alternative income sources. Some teachers and key stakeholder participants in this study pointed out that teaching is one of the poorest-paid professions, and that voluntary teachers without salary (e.g., parent teachers) face significant difficulties, including hunger. Teachers displaced by an emergency are unlikely to secure regular employment in a new and unfamiliar context.

Teachers working in conditions caused by the worsening climate crisis are struggling to deliver the curriculum within the lesson time available, due to the frequent interruptions caused by climate-induced hazards. Teachers and other key stakeholders participating in this research frequently cited reduced lesson time as an impediment to learning, along with teaching a curriculum that seems increasingly unfit, given their daily reality. The teachers had not been trained in modes of lesson delivery that would be more workable under the altered circumstances and help them meet the hopes and quiet the fears of their students. The teachers interviewed for this research are facing increasing teaching challenges, including caring for psychosocially distressed children, unaccompanied children and those separated from their families, and children who are hungry. They said they were not adequately trained in the kinds of skills likely to be needed in a crisis, such as overseeing hygiene and sanitation, providing psychosocial support, and developing a resilient mindset.69

Teachers clearly need help, but sustained support is lacking. According to the teacher survey conducted for this study, 51.3% of the teacher respondents reported that they do not have access to capacity-building opportunities or resources that would equip them to teach their students about climate change and enable them to take positive action. Of the teacher survey respondents, 32.6% indicated that they have 'very little access' or 'no access' to such training and resources. See **Box 6** for the supports needed, as expressed by the teacher survey participants.



3.4. National Education Finance

Recurrent and intensifying climate changeinduced hazards are putting a great strain on already tight government financial resources, making it more difficult to invest in resilient education systems.

In the face of the recurring and intensifying impacts of climate change and related disasters, the thinly stretched education finances in crisis-affected countries face the further challenge of responding to the soaring needs of the education sector. This includes the costs of repairing or replacing lost or damaged school infrastructure, as well as teaching and learning resources. In Pakistan, for example, the unprecedented loss and damage to the education sector caused by the devastating 2022 floods amounted to a staggering US\$779 million, while the damage done to the education sector in Malawi by Cyclone Freddy in 2023 was estimated at about US\$42.09 million (see Annex 2).

There often is no dedicated national education budget for the reconstruction and rehabilitation of school buildings and facilities damaged by disaster events, let alone investment in climate-proof school designs, new policy and curriculum development, teacher capacity-building, and other needs.71 A number of key national and sub-national-level actors interviewed for this study highlighted the fact that the impacts of climate change are increasing the need for emergency education funding year after year. One Ministry of Education (MoE) actor from Southeast Asia pointed out that the funding available is by no means enough to repair the widespread and recurring damage done by typhoons and other disasters. His ministry, he explained, does not have sufficient funds to undertake the necessary repairs and rebuilding, despite increasing budget allocations for EiE and disaster risk reduction (DRR). An MoE actor from eastern Africa articulated the scale of the challenge his country faces. While his country recently received external funding of US\$10 million for the reconstruction

and renovation of schools damaged by floods, this sum barely covered the rebuilding of 20 of the 400 schools destroyed. The gap between need and funding is indeed wide and deep.

The costs to recover from the damage and destruction caused by disasters can drain national budgets, divert already scarce resources from the education sector, and hinder long-term investment in building a climate-resilient education system. According to 40.6% of the practitioner survey respondents, climate change impacts have led to diverted funds and shifting priorities.

Climate change is squeezing the primary sources of government revenue, such as taxes and official development assistance. Reduced livelihoods and household incomes due to climate and environmental crises lead to lower tax revenue.⁷³ Climate change also can lead donor countries to shift their funding priorities away from the education sector and toward others, such as infrastructure and energy.⁷⁴ Some key informants shared their concern that, if the donor countries themselves are affected

by the climate crisis, they could well reduce their financial assistance to the education sector in countries affected by emergency and crisis.

The education sector is largely overlooked in government investments related to disasters and climate change, despite the growing recognition of their impacts on the sector and the critical role education can play in raising awareness and taking climate-related action.75 Analysis of the climate change impacts on national education financing in crisis-affected contexts is forthcoming from GPE and Save the Children. Also needed are contextualised cost-benefit analyses of both climate action and inaction in the education sector, which will highlight the fact that prioritising investment in education can lead to significant savings over the long term. These analyses are needed to help governments fully appreciate the costs of inaction, and the possible gains to be made from specific key actions. They also will help make the case for early investment in the education sector.⁷⁶

3.5. Household Economy and Livelihoods

In the face of increasing household poverty and declining livelihoods triggered by climate change, parents and caregivers are more prone to engage in risky and negative strategies to cope and survive, thereby undermining their children's and youth's right to education.

Recurring rapid- and slow-onset climate-induced hazards can create significant shocks. Many low-income households, which often have limited resources and cope poorly in the face of such shocks, barely recover from one climate-induced event before another strikes, and thus are caught in a vicious downward spiral of poverty. This can increase the risk that the education of the family's children will be interrupted.⁷⁷ For example, in rural Zimbabwe, when farming income is lost due to drought, families are left with insufficient income to meet the education costs of their offspring, which often forces them to withdraw children from school, especially girls.⁷⁸

According to 66.4% of the practitioner survey participants, extreme climate conditions have undermined families' ability to support their children's education. A number of study participants pointed out that children from rural areas suffer from malnutrition and hunger due to crop failures and household poverty, which impacts their ability to learn effectively at school. Teachers interviewed for this research expressed concern for the students experiencing hunger, not least because of the effect on their learning. A teacher from eastern Africa asked, 'What am I supposed to do when children are coming to school without eating anything? They are resistant to long lessons. Should I reduce the number of class hours? Sometimes they will tell you, "We are hungry, let us go home!"

Families in desperate situations often resort to destructive and risky ways of coping and surviving that are not in their long-term interest. These strategies include forced child marriage, child labour, child trafficking, and association with armed or violent groups, all of which can easily lead to school

dropout.⁷⁹ When families struggle economically, children—especially girls—must take on increased household chores. Boys and young men may be pressured to join the labour market or even armed groups. These situations lead to irregular school attendance or dropout.⁸⁰

A limited but growing body of research explores the linkages between children's experience of household shocks in early life—including climate-induced disasters such as floods and droughts—and their subsequent learning achievement and overall wellbeing, especially those from the economically poorest households. According to a recent paper reporting on a sample of 713 adolescent children in Peru, household shocks caused by the climate crisis can materially affect the adolescent learner. Example of 713 adolescent learner.



3.6. Students' Physical and Mental Health and Psychosocial Wellbeing

Extreme weather events propelled by climate change adversely impact students' health and wellbeing, which reduces their ability to attend school and actively engage in learning.

Climate change-induced hazards have a detrimental effect on children's and youths' health and wellbeing, and often magnify their pre-existing health inequalities. Research evidence indicates that there are synergies between health and education: children need to be healthy in order to attend school and thrive, and attending school in turn helps students achieve a state of good health and wellbeing.⁸³

Flooding that is exacerbated by climate change elevates child mortality by creating compound risks of infectious diseases, malaria, and malnutrition, among other things. He for instance, in the aftermath of the 2022 floods in Pakistan, children had an elevated chance of morbidity and mortality due to the compound risks of acute respiratory infection (a leading cause of child death), diarrhoea, malaria, and severe malnutrition. All were primarily due to contaminated and stagnant flood waters, unhygienic conditions, and the destruction of WASH facilities. Children also are highly susceptible to climate change-related water-borne illnesses, such as diarrhoeal disease and cholera, and vector-borne diseases such as malaria and dengue fever.

According to a community-level EiE interviewee, water shortages exacerbated by climate change have led to frequent cholera outbreaks and skin

diseases in northern Syria, which has negatively impacted children's ability to access schooling. Moreover, drought, which often leads to wildfires, increases the risk of respiratory disease.

Children under five are particularly vulnerable to heat-related mortality and morbidity, as their bodies adjust more slowly to changes in ambient temperatures, and they are less able to change their own behaviours to accommodate their changing environment. Children with existing health issues are more vulnerable to infectious diseases, and those experiencing malnutrition due to household poverty and food insecurity are less able to cope with the health effects of increasing climate shocks.

Climate change impacts not only children's physical health but also their mental health and psychosocial wellbeing. Emerging research evidence indicates that many children and young people feel anxious, worried, distressed, fearful, or even anguished about the climate and environmental crises (see Box 7). The research suggests further that children's high level of concern over climate change and related disasters has detrimental consequences for their mental and emotional health. This includes post-traumatic stress disorder, depression, anxiety, and psychosocial distress symptoms, such as nightmares and sleep disorders. This makes children more susceptible to longterm negative effects on their health and wellbeing, which in turn can lead to learning difficulties and poor academic performance.89

Box 7. Children's and youth's concerns about climate change: Survey results

- Some 70% of respondents reported that they were 'very/extremely' or 'a little worried' about climate change and what it means for the future, according to a UNICEF South Asia survey involving 25,000 young people ages 15 to 24.90
- Some 86% of respondents from Eastern and Southern Africa and 93% from Southeast Asia reported that they were 'extremely worried' or 'a little worried' about climate change and disasters linked to climate change, according to International Federation of Red Cross and Red Crescent Societies surveys. These involved more than 2,100 children and youth ages 10 to 30 in the Eastern and Southern African regions, and more than 33,000 children and young people ages 10 to 25 in Southeast Asia.⁹¹
- Some 68.5% of respondents said they felt 'very' or 'extremely' worried about climate change, in a 2023 EiE Hub global survey involving 35 children and youth activists ages 15 to 23.

3.7. Displaced and Migrant Children and Youth

The growing number of children and youth displaced and migrating as a result of climate or environmental crisis makes it harder for education authorities and providers, who are already stretched beyond their limits, to meet students' diverse educational needs.

In recent years, an increasing number of children and communities have been uprooted from their homes as they fled from climate-induced events and environmental degradation. Millions of children and youth also have been displaced due to conflicts and violence that often are connected to climate change. Displacement and migration are of particular concern for education authorities and providers, as they put additional strain on already struggling education systems.

When people are defined as being in a situation of displacement or of migration, that has important legal and social implications for them and for the education of their children and youth. These children and youth are differentiated by whether they moved within their own country of origin or across country borders; whether they were forced to move; whether they moved temporarily or permanently; whether they are on their own or with their caregivers; and whether they are documented. There also are children and youth who are unable to move away from their usual place of residence, climate and environment risk notwithstanding. Those who want to move

but cannot are commonly referred to as 'trapped populations'.94

Several respondents to the practitioner survey and key informant interviewees highlighted the disproportionate impact of climate change on displaced and migrant children and youth who, in the words of one respondent, 'face multiple crises within crises'. A global EiE actor interviewee drew attention to the existence of 'transit populations', which are those moving between countries as they head for a final destination but for whom an institutional support response is largely absent. In order to bring some stability to their lives, people in such a situation usually have to stop where they are and work for some time, before continuing to their desired destination.

Children and youth face particular hurdles relating to access to quality education, which are dependent on the criteria applied to them. Those left behind by parents who have been displaced or have migrated are likely to receive inadequate learning opportunities and support. However, there is some evidence that receiving financial support from parents who migrated can increase children's chances of staying in school. Children and youth who have migrated or been displaced to an urban centre, with or without their families, often live in unsafe and precarious informal settlements that are themselves prone to disasters, and which may lack access to essential services, such as education, and social protection structures.

Some practitioner survey respondents pointed out that displaced and migrant girls and children with disabilities are at even greater risk of losing their access to education and of dropping out. In Yemen, for instance, where 1.5 million school-age children were displaced by the 2022 floods, children with disabilities are often subject to discrimination when seeking refuge in a community different from their own. Children from minority groups lack regular access to education, which further exacerbates the inequalities they face.⁹⁶

Even if learning opportunities do exist for displaced and migrant children and youth, their willingness to attend school and their readiness to learn is often impeded by overcrowded classrooms and overburdened teachers. They often encounter discrimination, xenophobia, racism, social exclusion based on sociocultural and economic origins, language barriers, and curriculum-related challenges. Children and young people who are displaced, whether internally or externally, also commonly face barriers related to administrative regulations, culture, and legal status. Additionally, displaced families' economic situations hinder children's and youth's access to quality education, and many of them are already coping with the psychosocial distress arising from their displacement. This helps to explain the high levels of school dropout amongst displaced or migrant children and youth.⁹⁷





Section 4. Education in Emergencies in a Time of Climate and Environmental Crisis: Responses, Challenges, and Opportunities

What follows in this section is an examination of key actions taken by EiE actors who are working to address the climate and environmental impacts described above. The following sections, which look at seven areas, also explore future directions the EiE sector might take that are more responsive to the impacts of the climate and environmental crises. 99

The EiE community has long worked to secure the right to quality education for all children and young people affected by emergencies and protracted crises, including situations where climate change is a key driver. This is reflected by the practitioner survey respondents, 63.6% of whom think the climate crisis is making EiE practice more challenging.

Crucial aspects of the EiE response include ensuring continuity of education for displaced and crisis-affected children and youth, reducing disaster risk in education systems at all levels, improving preparedness, and making an impactful contribution to the creation of resilient national education systems in crisis-torn countries. There is much to be done in all these areas. A resounding majority (86%) of practitioner survey respondents think the current EiE response to the scale and severity of the climate crisis is 'somewhat insufficient' or 'insufficient'.

Each of the following sub-sections touches on opportunities to strengthen the humanitarian-development-peace nexus, and to build and reinforce cross-sectorial synergies.¹⁰⁰

4.1. Policy and Planning

Efforts are being made to integrate climate change, disaster, and environmental concerns into EiE-related policy and strategy at various levels. Areas that need to be strengthened include ensuring the operationalisation of crisis-sensitive policy and planning that recognise the existential threat of the climate crisis, as well as

cross-sectoral policy development that forges synergies between EiE and other key sectors.

In recent years, crisis-sensitive education planning has become a key priority among education authorities and their humanitarian and development partners working in crisis-affected countries. A core component of crisis-sensitive planning is analysing risks to education posed by human-made and natural hazards, including climate-related hazards, to prevent, prepare for, respond to, and recover from crises and emergencies more efficiently. (For details about coordination mechanisms in place to respond to humanitarian crises, see sub-section 4.2. below)

EiE actors also have become involved in emerging efforts to integrate climate, disaster, and environmental considerations into key education strategy and framework documents. They aim to enhance resilience in the education sector.

The Inter-agency Network for Education in Emergencies (INEE) Minimum Standards, which are being updated, are recognised as the global standards for EiE actors. In 2022, INEE undertook a thematic review titled Aligning the INEE Minimum Standards to Respond to Environmental Crises and Climate Change. 102 The main findings and recommendations are included in the next edition of the Minimum Standards, which makes more than 60 references to climate change. This bodes well for the future integration of concerns about environmental and climate-change issues into EiE policy and practice. The next edition identifies climate change as a cross-cutting issue to be considered in using and implementing the Minimum Standards. It also offers specific guidance on actions to be taken to combat climate change, and the terms 'climate change' and 'climate change education' have been added to the glossary accompanying the document.¹⁰³

Building 'prepared and resilient education systems' is one of four strategic goals offered in the Global Education Cluster Strategy 2022-2025. Acknowledging the scale and complexity of climate shocks, the Global Education Cluster Strategy puts significant emphasis on anticipatory action, preparedness, rapid response, and humanitarian and nexus-focused efforts to address climate and other related shocks.¹⁰⁴

The Comprehensive School Safety Framework (CSSF) 2022-2030 developed by the Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector (GADRRRES)—which updated the previous version of the CSSF to cover conflicts, as well as lessons learnt from the

COVID-19 pandemic—supports the building of education-sector resilience by taking an all-hazard and all-risk approach to protecting children and education. Climate change-induced hazards are listed with other hazards with apparent equal weight. The CSSF has developed a cross-cutting foundation on systems and policies, as well as three intersecting pillars: safer learning facilities, school safety and continuity management, risk reduction and resilient education. To proactively address threats to education systems, the CSSF also supports risk identification, risk reduction, response preparedness, and rapid recovery. The CSSF also supports work to strengthen intersectoral collaboration and the nexus.¹⁰⁵

In Towards Climate-Smart Education Systems: A 7-dimension Framework for Action, the GPE articulates the mutually reinforcing goals of protecting and advancing equitable quality education; protecting the planet's life systems; and promoting climate justice in lower income countries. Encompassing the seven interrelated key education system dimensions—data and evidence; policy and planning; coordination; finance; infrastructure; teaching and learning; schools and communities—the 'climate smart' education systems framework highlights potential approaches for strengthening education system resilience, and for leveraging an impactful education-sector contribution to wider climate change, DRR, and environmental efforts.¹⁰⁶

In its Strategic Plan 2023-2026, Education Cannot Wait (ECW) has made a series of commitments to address the climate crisis. This includes responding to climate emergencies, ensuring that all ECW investments are climate smart, implementing the CSSF, and exploring ECW's role in anticipatory action, amongst others. ECW is currently working up its approach to climate change as a next step in implementing these commitments.

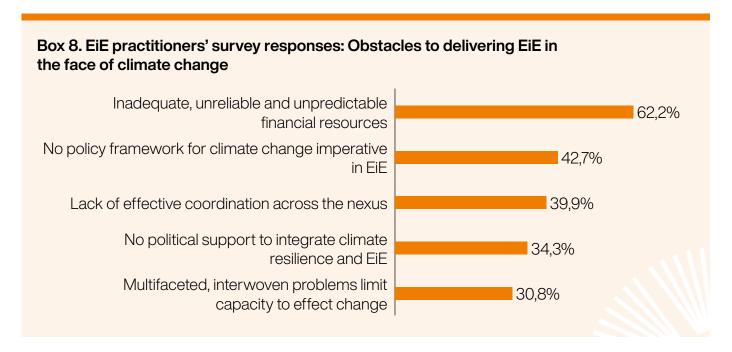
A recent development at the global level is the Greening Education Partnership, which was launched at the UN Transforming Education Summit in 2022 and is led by UNESCO. The partnership aims to catalyse action to equip every learner with the knowledge, skills, values, and attitudes needed to tackle climate change and promote sustainable development. Countries signing up for the partnership commit to reach the targets

of at least two of four action areas by 2030: greening schools, greening learning, greening capacity and readiness, and greening communities. There also are plans to establish a Greening Education Partnership Multi-Partner Trust Fund at the 2023 United Nations Climate Change Conference (COP28). Its goal is to include education as a key component of any climate-related project.

In national education planning, policy, and strategy documents, detailed references to climate change and environmental challenges and disasters, as well as comprehensive education-sector responses, are generally limited. One MoE officer who participated in this research explained that the education policy in his country is thoroughly focused on conflict, and that climate

change-induced hazards and environmental degradation have yet to be addressed. One promising example is Liberia's Education Sector Plan 2022/23-2026/27, that includes the 'development of a policy framework on disaster risk reduction and climate change adaptation and mitigation'.¹⁰⁹

Of the practitioner survey respondents, 42.7% consider the lack of a policy framework that identifies climate change imperatives for EiE to be a key obstacle to delivering EiE in the face of climate change-induced challenges (see **Box 8**). A number of global and local-level key informants participating in this study pointed out that, while more EiE actors are now talking about climate change, there is no clear shared definition or set of frameworks to guide policy-making.



There currently is a gap in education policy and strategy, in that the existing frameworks and processes fail to ensure the right to education of learners displaced by climate-related events. As discussed above (section 3.7), displaced children and young people have diverse educational needs. The available data on displaced children and youth in the context of climate change are insufficient, which impedes the development of policy measures to safeguard the rights of these children.

Extensive population displacement, whether due to conflict, disaster, environmental degradation, or socioeconomic challenges, is likely to be intertwined with climate change. The EiE response to such crises must address the educational needs of both the host and the displaced populations. A global EiE actor in Latin America and the Caribbean region noted that, in the context of protracted and multiple crises with significant population movement, it is critical to take a 'whole community approach' that involves both host and displaced communities, rather than creating parallel systems and policy initiatives. Making host communities part of the EiE response is a critical factor in achieving social cohesion.

A common gap in lower income countries is the lack of a clear education-sector contribution to policy-making that addresses the national climate, DRR, and the environment. Specific and unique education-sector contributions, including those of EiE, should be considered and integrated into key sector plans.

A well-recognised challenge facing evidence-based policy-making on EiE is the limited evidence informing how the need for EiE is understood. The available data tend to be fragmented, and data collection around humanitarian and development programming are rarely integrated or easily comparable. National Education Management Information Systems lack either

crisis-sensitive indicators or the quality data needed to inform such indicators. 114 Of the practitioners who responded to the study survey, 46.2% think that EiE should develop more sustained and thoroughgoing evidence- and data-informed policy and planning to ensure quality education for all crisis-affected children and youth.

One noteworthy example of evidence-based decision-making is from the Philippines (see **Box 9**). By continually incorporating risk-related data collected at the school level into its National Education Management Information Systems, the Philippines provides an effective demonstration of the humanitarian-development nexus in action.

Box 9. Philippines: DRR and management information systems

The Department of Education in the Philippines, in partnership with Save the Children and the Prudence Foundation, launched a set of digital tools to inform planning and decision-making at the national, sub-national, and school levels. The Rapid Assessment of Damages Report application is used to report school-level post-disaster damage and needs assessments. It enables the Department of Education to make timely interventions that help to ensure learning continuity. The School Watching Application is a student-led school hazard mapping checklist. The Comprehensive School Safety Monitoring Tool enables schools to conduct ongoing self-monitoring and receive customised guidance. ¹¹⁵

Rectifying the lack of data collection and analysis, and the dissemination of findings across the EiE sector, is a key step toward developing evidence-based policy and planning. EiE actors currently have a limited ability to demonstrate need and track results, including when donors are

requesting quantifiable proof of the effectiveness of EiE interventions. Incorporating the data collected across the nexus into overarching datasets would go a long way toward making the nexus a well-coordinated and dynamic change influencer.

4.2 Coordination

well-established coordination has mechanisms in place to respond humanitarian crises. In context of the recurring, concurrent, and prolonged emergencies that are exacerbated by the climate crisis, it is crucial to continue developing integrated approaches that are operationalised in locally appropriate ways and ensure that displaced and crisis-affected children and youth receive the support they need.

EiE coordination mechanisms that bring together national and international actors with different mandates play a pivotal role in creating an enabling environment for continued, safe, and quality education both before and during a crisis. This allows for faster, more coherent, and synergistic action to ensure the right to education for crisis-affected and displaced children and youth.

The shape of humanitarian coordination varies, in keeping with the context. The appropriate

coordination structure depends on the size and phase of the emergency; its impact on learners, education systems, and their personnel; the capacity of the government to address the needs of those affected; and any government's stance toward the affected populations.

A government that has the capacity to coordinate an emergency response will do so based on established national humanitarian coordination structures and procedures. When a government lacks the capacity to coordinate an emergency response, it usually will request support for the relief effort from the international community. To prepare for such circumstances, the Inter-Agency Standing Committee and the United Nations outlined the recommended methods of coordination across multiple sectors, including education. Based on a mandate derived from the 2005 Inter-Agency Standing Committee Cluster approach, the education clusters provide a coordinated humanitarian response aimed at fulfilling the right to quality education for crisis-affected children and youth, including IDPs. In 2023, education clusters operated in more than 30 contexts and convened more than 1,300 partner organisations.¹¹⁶ When refugee populations are involved, the UN High Commissioner for Refugees has the mandate to coordinate the response. Refugee education working groups coordinate the education of refugee children and youth in all phases of an emergency. Education clusters and refugee education working groups are part of a global framework for

cooperation, strategic planning, leadership, and accountability in emergencies, the aim of which is to ensure the timeliness and quality of an emergency response. In protracted crises and development contexts, the relevant MoE coordinates the education-sector response through the local education group (LEG).¹¹⁷ In protracted crises, a number of humanitarian partners also join the LEG mechanism to ensure meaningful implementation of the education response across the nexus.¹¹⁸

EiE coordination mechanisms at the country level are a critical element of humanitarian preparedness and response. They are designed to ensure predictability, accountability, and effective partnership. With education authorities and other education partners, these coordination mechanisms organise multiple actors around common priorities and approaches, which helps to minimise duplication and address gaps. This process enhances the timeliness and quality of the emergency response.

A number of key informant interviewees pointed out that, in contexts where climate change makes emergencies more complex and prolonged, the distinction between humanitarian assistance, development cooperation, and peacebuilding becomes blurred. Such situations clearly suggest the need for more coherent, joined-up coordination of the groups operating at the nexus in order to ensure that crisis-affected and displaced children and young people receive support that is both equitable and sustainable.

Box 10. Bangladesh

Coordinating humanitarian actors via education groups and disaster management initiatives during the monsoon season enhanced communication between refugee camp focal points, education coordinators, teachers, and parents. This made quick notification and action possible when the roofs of learning centres blew away, and enhanced education continuity in a multi-hazard context.¹¹⁹

Asked about EiE actors' current level of involvement in operationalising the humanitarian-development-peace nexus, more than half (53.8%) of practitioner survey respondents considered it 'insufficient'. Asked what more EiE should do to ensure quality education for crisis-affected children and youth, most practitioner survey participants (65.7%) replied that 'resource mobilisation and

policy development through a joined-up approach across the nexus' is essential. A few key informants said that further efforts were needed to ensure effective coordination at the national and sub-national levels in order to avoid parallel operations, duplication, and wasted time. One informant, who works in a country where the education cluster exists only at the sub-national level and the LEG

at a national level, said that linking the two was challenging. There is currently no platform where these groups can meet to discuss and operationalise how each can most effectively help to mitigate risks to the education sector, and how they could adopt distinct but complementary roles and responsibilities.

4.3. Finance

EiE has been chronically underfunded relative to the burgeoning needs of crisis-affected and displaced children and young people. The siloed humanitarian and development funding streams make it difficult for local actors to initiate EiE that is responsive to the changing climate and environment. Robust collaboration across the nexus and close cross-sectoral collaboration are particularly vital for EiE as it pursues international climate funding. Mobilising domestic financing to support resilience-building and climate action in the education sector is another area calling for greater attention from the EiE community.

Humanitarian and development finance

It is well documented that EiE is and has long been underfunded.¹²⁰ Interviewees and study survey participants share the view that funding opportunities to support the education of crisis-affected children and young people are becoming more competitive, due to the increased number of concurrent emergencies and crises, alongside shrinking funding from traditional donors due to the difficulties and emergencies they are facing closer to home. Some local-level EiE practitioners described the political nature of international funding, in that 'old' and 'protracted' crises tend to be overlooked because recent crises garner greater media attention. On the practitioner survey, the obstacle mentioned most frequently in terms of delivering EiE in the context of climate change was 'inadequate, unreliable, and unpredictable financial resources' (see Box 8).

Local-level EiE actors also share the view that the siloed mindset and operation of humanitarian and development funding streams make it difficult to access funds to support the needs of crisis-affected children and young people. Humanitarian funding is insufficient to address EiE needs, which makes enhancing coherence with development cooperation doubly important. As a senior member of an aid organisation put it, 'Funding streams are not well connected, not well coordinated. Humanitarian funding streams and development funding streams are different. They do not necessarily talk together'. One local-level EiE actor explained that, due to specific donor requirements, it is not possible for practitioners

to include requests related to climate change in an EiE funding proposal. They added that including such a request would make it likely that the application would be denied. A global player in EiE circles remarked that, 'when we talk outside of rapid-onset crises, EiE funders get uncomfortable'. This person viewed this mentality as an obstacle to obtaining funding for climate-change action out of emergency education coffers. A few local-level practitioners also noted that, given the lack of funding criteria and opportunities for EiE that are related to climate change, plus the lack of mechanisms to measure climate-change programme outcomes, there is no incentive among local-level EiE programme implementers to seek such funding.

These observations underline the need to align funding for both humanitarian and development assistance to support EiE. This is important if the sector aims to contribute significantly to building resilience against climate change, especially with the increasing frequency of disasters.

A major EiE funder who was interviewed for this study explained that their organisation makes sure that EiE funding is included in long-term development projects so that, if an emergency is likely to occur, resources are available to meet it. See **Box 11** for the noteworthy example of collaboration between ECW and GPE in South Sudan, a successful example of the humanitarian-development nexus in action.

Box 11. Responding to floods in South Sudan: ECW and GPE working together¹²¹

When one-third of South Sudan was flooded in 2022, GPE allocated US\$10 million at the country's request to mitigate the impact of the floods on education. Working with the Ministry of General Education and Instruction, the education cluster, coordinating agencies from the UK and US, and other global and local partners, GPE allocated the US\$10 million to the ECW-facilitated Multi-Year Resilience Programme 2 (MYRP-2), in addition to US\$40 million in seed funding from ECW. This meant that GPE funding was fully integrated into the MYRP-2 scope of work.

MYRP-2 has a strong focus on girls and children with disabilities, the return of refugees and IDPs to their homes, and the transition from emergency to development. The programme supports a holistic package of interventions, including school fees, radio education, re-enrolment campaigns, teacher training (female teachers in particular), child protection, and safe and protected learning. It is aligned with the country's education-sector plan, which the bulk of GPE resources is supporting in areas such as improving access, addressing quality, and system management. ECW/MYRP-2's focus on humanitarian response and early recovery provides a framework for GPE to fund and help build resilience by mitigating the impact of floods on education.

International climate finance

While the EiE sector has the potential to unlock international climate funding, such as the Green Climate Fund and the Adaptation Fund, climate finance is not reaching countries experiencing complex and long-term crises. In fact, of all the projects funded by the Green Climate Fund and the Adaptation Fund since 2011, only one had education as its principal objective and very few included an education-related segment.¹²² A 2023 Development Initiative study found that 'people in countries experiencing protracted crisis and a high level of climate vulnerability receive a lower proportion of their total official development assistance as climate finance than other climate vulnerable countries'. The study also observed that these countries receive less financial support through multilateral climate funding mechanisms—just US\$1 per capita, as compared to US\$4.88 per capita in climate-vulnerable countries not experiencing long-term crisis.¹²³

Global EiE stakeholders interviewed for this study have a mixed view on EiE tapping into international climate funding. This is mainly because climate finance is so competitive and the funding process takes such a long time. One global actor pointed out that the education sector, including EiE, has to make a convincing case using language and logic that appeal to the climate scientists likely to be involved in any review of climate finance proposals. A few global and national-level interviewees think it is more appropriate for the MoE to work with an accredited body outside the education sector when applying for climate funding. An MoE interviewee for this study pointed out that developing a climate finance funding proposal itself requires some funding, which may not be available to the education sector.

The Loss and Damage Fund, which was established at the 2022 United Nations Climate Conference (COP27) and is to be operationalised, supports the countries most impacted by climate change. The Fund's next goals, set for 2024, are to reconstruct the climate finance delivery scheme and set a new climate finance goal.¹²⁴ This opens opportunities for EiE actors to advocate that children and young people disproportionately affected by the climate crisis should receive a fair share of the funding in order to secure their right to education.

Domestic finance

Mobilising domestic finance to build education-sector resilience is also important in efforts to make the education system more climate change resilient. A global key informant remarked that 'it is not just global financing we need; it is also national financing'. The Government of Indonesia, for instance, with the support of state budget resources, international aid, and private-sector partnerships, has established a fund that includes an allocation for building resilience in the education sector, including infrastructure, teaching training, and curriculum development.¹²⁵ Moving forward, it will be critical to monitor climate change-related public financing, including for education, by setting a clear budget for climate change-related spending. For example, the Government of the Philippines developed a so-called Green Tagging function, through which spending allocations for climate change-related projects are tagged across government

ministries, including education. Green Tagging makes the climate change-related budget and spending visible, which in turn helps underpin the government commitment.¹²⁶

One global-level interviewee offered a vision of a specific slice of national climate and EiE funding being channelled to communities as 'locally led climate finance'. It would stipulate that at least 30% of the money be deployed to 'climate proof' child welfare and wellbeing.

Raising funding at the local government level is another strategy highlighted by the global actors interviewed for this research. This includes improving the tax base (e.g., levies on extractive industries) and locally led climate financing (e.g., local governments commit a small percentage of annual development funding to climate action).

4.4. Disaster Risk Reduction, Emergency Preparedness, and Anticipatory Action

DRR and emergency preparedness are well established in EiE practice. Anticipatory action—a set of actions taken to prevent or mitigate potential disaster impacts before a shock or before acute impacts are felt—is an emerging genre under the heading of preparedness. It is currently gaining momentum across the EiE community. However, precisely what it entails requires clarification, especially in relation to slow-onset and protracted crises. There is a question of how funding will be secured to maintain sustainable operations, especially where a hazard is seasonally recurring.

DRR in education is an approach that seeks to minimise underlying vulnerabilities, mitigate the impacts of disasters, and improve disaster preparedness. Many EiE actors have been engaged in risk assessments at the school, sub-national, and national levels, with a view toward systematically and continually reducing risks that could adversely affect the education sector. Emergency preparedness, which is based on risk analysis of a particular context, is concerned with putting mechanisms,

systems, and measures in place in anticipation of hazard events in order to enable an effective and timely response to a humanitarian crisis. Measures activated under this heading include early warning communication systems, standard operating procedures, contingency and preparedness planning, evacuation drills, stockpiling of education equipment and supplies, development of school disaster management/emergency response plans, coordination, and associated training. The CSSF and the INEE Minimum Standards are the key framework and standards, respectively, that enable the EiE community to support and advance risk reduction and preparedness efforts in the education sector.

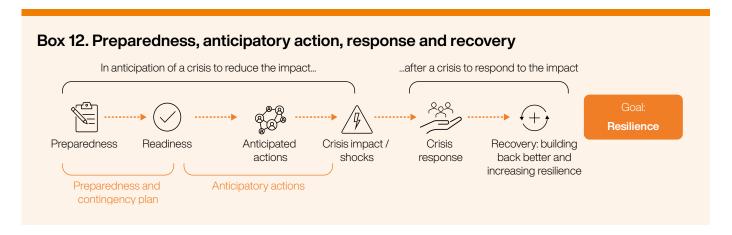
According to the practitioner survey, only 9.1% of respondents consider the current level of EiE actor involvement in risk assessment (including climate risks) in schools and temporary learning spaces to be 'very sufficient' or 'sufficient', and nearly half (49.7%) of respondents regard it as 'insufficient'. Although EiE actors have long been involved in risk assessment in the education sector, it appears that 'climate risk assessment' would be a departure from the usual. While the DRR and climate

sectors have overlapping concerns, they have different perspectives and priorities. The DRR sector tends to focus on the immediate local impacts of disasters, while the climate sector is oriented more toward mid- and long-term projections and prognoses.¹²⁹

Practitioners were asked about EiE actors' involvement in 'ensuring that schools, children, educators and communities have standard operating procedures in place in responding to climate (and other) emergencies'. Some 50.3% saw the level as 'insufficient', 33.6% as 'somewhat sufficient', and 5.6% as either 'sufficient' or 'very sufficient'. It is not easy to unpack why preparedness efforts are considered inadequate. This is possibly because they are

not effectively coordinated when there is an emergency caused by a combination of climate change and other crises, where humanitarian-development collaboration is needed.

The approach that has come to embody and energise the coming together of the development and humanitarian sectors in terms of building resilience is anticipatory action. Defined as a 'set of actions taken to prevent or mitigate potential disaster impacts before a shock or before acute impacts are felt', anticipatory action is attracting widespread adherence and commitment.¹³⁰ Box 12 below visualises how anticipatory action relates to emergency preparedness.



Anticipatory action calls for systematically collecting cumulative data to inform hazard forecasts and projections. It involves creating detailed, locally contextualised plans and mechanisms to mitigate risk. It also requires putting in place measures that, when triggered, alert communities to an imminent threat. Finally, it involves earmarking funds that are perennially available for immediate use, should a warning alert be triggered.¹³¹

One global-level interviewee felt that a financing approach based on anticipatory action would be attractive to donors: 'It is really a way to get donors to release funding. If you go to them and say El Niño is coming, they will say "so what". Whereas if you go with specific plans linked to a specific forecast, saying that a particular impact level call for X amount of funding, they will more likely sit up'.

Anticipatory actions are gaining momentum across the EiE community, and noteworthy examples are emerging (see Box 13).

Box 13. Examples of anticipatory action in practice

Cyclone Freddy, Madagascar, February-March 2023

In anticipation of the cyclone season, Save the Children helped more than 50 schools in the western regions of Madagascar to cope with natural hazards and ensure the continuity of education by reinforcing roofs, doors, and windows. Ahead of Cyclone Freddy, that hit the southeastern region of the country, Save the Children also distributed sandbags and tools to school committees to reinforce roofs, as well as waterproof bags to keep the students' learning materials protected from the rain. During the three days before Freddy made landfall, materials were also dispatched to schools and villages that recommended behaviours for children to follow. As a result of these actions, most school roofs held, thanks to the materials supplied and prevention messages circulated. Children were able to resume school quickly. Most of the materials for this advanced preparedness action approach were purchased and put in place before the beginning of the cyclone and rainy season, thanks to diverse sources of funding.¹³²

Drought, Somalia, 2019

In Somalia in 2019, the United Nations Office for the Coordination of Humanitarian Affairs headed up a group of organisations engaged in the 'first collective, multi-sectorial anticipatory action framework against out-of-ordinary drought shocks'. They provided 338,773 students with emergency food and drinking water, as well as one child protection kit per child. Emergency teacher incentives were also put in place. The aim was to mitigate the impact of drought on education and ensure the continuity of education for a six-month period. The scheme would see finance being released whenever 'severe drought is predicted with high probability', so that the anticipatory actions could be implemented.¹³³

Drought, Ethiopia, 2022

In two pastoralist communities in Ethiopia, the looming impact and shock of climate-induced drought for children and their schooling was lessened through a World Vision anticipatory action initiative. Under the scheme, the 440 vulnerable families selected received a cash disbursement for a six-month period, while the 16 schools serving their 7,726 children received child protection support and WASH facilities. The aim of the anticipatory action was to mitigate the impacts of the projected drought, and so ensure school attendance and minimise dropout rates. Training in child protection was given to teachers and supervisory staff, while the cash support enabled families to afford food, send their children to school, and to engage in the knowledge and learning events organised under the project. The project report concludes: 'Anticipatory action reduced school drop out before the eruption of the climate shock. It reduced education disruption. Prevention of risks decreased the cost of responding to exacerbated needs'.¹³⁴

Much as anticipatory action is gaining ground amongst those operating at the humanitarian-development nexus, it raises a number of significant dilemmas. Advocates need to collect and process solid data so they can make the case for government funding and donor support. Even trials of the anticipatory action approach need financial support. One global player interviewed remarked that funding for the design of anticipatory action

initiatives is not difficult to find, but funding to continue operations is harder and more expensive to obtain: 'US\$ 10 million in advance of a regular year-after-year cyclone will be a challenge'.

It is not yet fully clear what anticipatory action looks like relative to climate-related protracted crises and slow-onset hazards. Anticipatory action in protracted and slow-onset disasters needs a

long lead time.¹³⁵ On the other hand, when a rapid-onset crisis occurs, it calls for a 'different level of readiness and flexibility of funding to almost being automated once the alarm is issued'. The window of opportunity to trigger the release of funding is bound to be brief. Perversely helpful in this regard is the seasonality of a number of rapid-onset

events, such as tropical storms and flooding. The inexorable and stealthy nature of some rapid-on-set events may mean that triggering anticipatory action is a regularly recurring affair. Certain to complicate the debate is the application of the anticipatory action to conflict-affected situations.



4.5. Child and Youth Agency, and Teaching and Learning

Many crisis-affected children and young people have already taken a leadership role in safeguarding a liveable planet into the future. Formal learning settings in areas affected by crisis offer only limited education about climate change. In non-formal learning settings, however, children and youth have engaged in practical and action-oriented climate-change education.

Child and youth as agents of change

Protecting a liveable planet has been urgently advocated by an ever-increasing number of children and young people. They are deeply concerned about the state of the planet and the disproportionate impacts of climate-induced crisis on their lives and communities, now and in the future. There has been an ever-louder call in recent years for crisis-affected children and young people to be cast not as victims but to be listened to as change agents and advocates in their own right. If given a voice, the younger generations will play a prominent role in addressing climate and environmental emergencies in concrete and fresh-eyed ways. The sentiment is captured in the slogan, 'Children must be part of the solution'.¹³⁶

There has been a worldwide groundswell of child-initiated climate action through the social media, community engagement, participation in international climate gatherings, child-led school strikes, peaceful demonstrations, and nonviolent civil disobedience. The number of global activist movements has also multiplied. Examples are Fridays for the Future and Extinction Rebellion,

which are calling for immediate action to halt the climate breakdown.¹³⁷ Children and youth across various regions are increasingly instituting legal proceedings against authorities who have failed to take sufficient action to reduce greenhouse gas emissions and thus to safeguard their future. ¹³⁸

According to the practitioner survey, however, only 7.7% of respondents regard the current level of EiE involvement in 'helping climate-affected children and young people enhance their capacities as agents of change for climate change adaptation/ mitigation' to be 'very sufficient' or 'sufficient', while 58.7% consider it 'insufficient'. Although a number of factors likely contribute to this, insufficient opportunities for education on climate change for crisis-affected children and young people is likely one of the main reasons. Of the practitioner survey respondents, 55.2% think that the contribution of EiE and closely associated fields to 'mainstreaming DRR, resilience building, climate change and environmental education in school curricula' is 'insufficient'

Formal learning

Young people around the world are demanding action-oriented climate change education that helps them understand the complex issues and prepares them to contribute to a greener future. However, climate change education in the formal curricula has so far not met these demands.¹³⁹

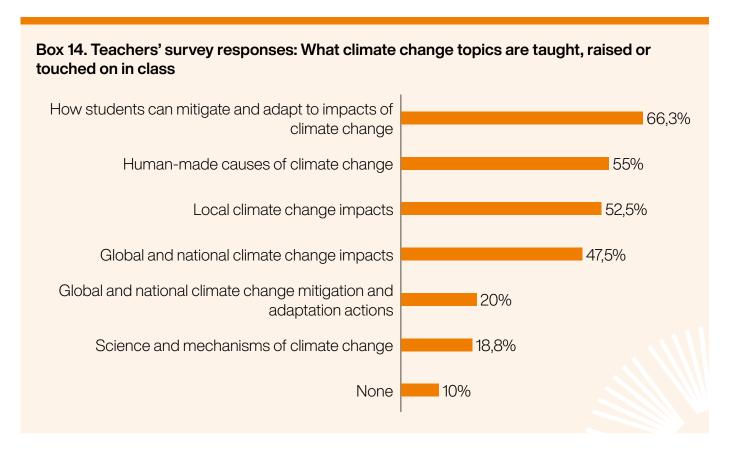
Most key informants participating in this research indicated that, in their experience, climate-change education and EiE currently exist 'in parallel'. Some have discerned clear gaps in the provision of climate change and environmental education in EiE teaching and learning. One explained that what passes for climate change and environmental

education in the EiE curriculum falls short of helping children understand the complex interrelationship between humans and the natural world.

That said, examples are emerging of the integration of climate change and environmental education into EiE curricula. For instance, schools supported by ECHO-funded EiE programmes in Somalia teach a new government curriculum that includes environment and climate education as a funding stipulation. These programmes have the incidental effect of enhancing humanitarian and development coherence. In Nigeria, the EiE Working Group is promoting knowledge and

skills related to environmentally sustainable practices (e.g., natural resource conservation, waste management, renewable energy) through teacher training and awareness campaigns directed at local stakeholders, including students, teachers, parents, and community members.

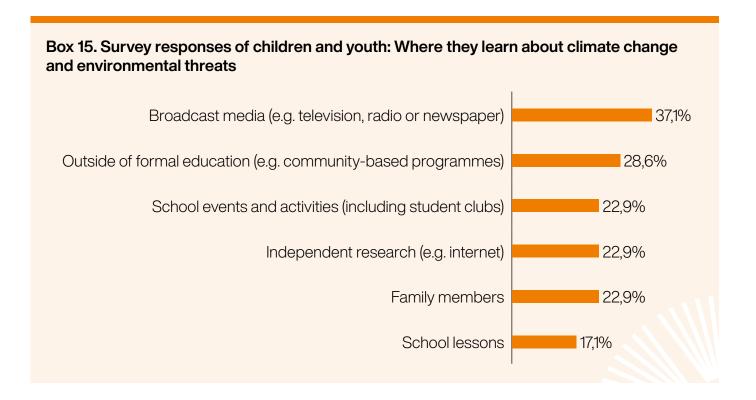
According to the teacher survey and teacher focus groups conducted for this research, some teachers are taking the initiative in raising student awareness of the climate and environment. See Box 14 for a listing of the topics most frequently taught by teacher survey respondents.



Non-formal action learning

Only 17.1% of the child and youth survey respondents reported that they have learned about climate change and environmental issues in their school lessons. Broadcast media and community-based programmes outside the classroom are the learning modalities most frequently mentioned (see **Box 15**). While the survey sample is very small, the finding points to the importance of offering multiple climate- and environment-related learning

opportunities to children and young people, of linking them, when possible, with the school curricula, and of linking classroom learning to non-formal learning opportunities. One global-level key informant pointed out that schoolwork on the environment and climate change tends to be done in extracurricular spaces.



Given dropout and non-attendance rates, it is vital to include climate and environmental action education in the formal curriculum, as well as in non-formal curricula and learning spaces. For instance, Zimbabwe's Ministry of Primary and Secondary Education and the Ministry of Environment, Climate and Tourism and Hospitality Industry have established memorandums of understanding to complement each other's efforts on environmental and climate education and action. The ministries are working together on school-level initiatives such as environmental clubs, careers days that focus on careers related to the environment and climate change, clean-up campaigns, and environmental walks and tours.

Children and young people are agents of change and they need more support. Increasing their knowledge and understanding of climate change and environmental issues is not enough. The complexity of the climate and environmental crises call for education that is interactive and action-oriented, and that encourages learners to practice their citizenship skills.¹⁴⁰

One noteworthy example of a tool to provide children with action-oriented education is the climate cards approach.¹⁴¹ Designed to be used at home, in schools, and in displacement sites and refugee camps, the tool provides a series of play-based and interactive activities that help children learn what climate change is, discover the global and local impacts, and be inspired to engage in climate action.¹⁴² It has been successfully implemented in diverse crisis-affected contexts, and has led to context-specific, child-led initiatives, such as urban and community gardens, dengue fever awareness campaigns, and flood resilience.

The local community and environment offer excellent opportunities for the exercise of child and youth agency. Teacher and youth participants in this study commonly reported planting trees, in particular fruit and nut trees, which are good for the environment and enhance food security in the school community. They are also creating and maintaining school gardens. See Box 16 for examples of place-based child and youth agency in crisis-affected contexts.

Children and young people who are given the necessary support and opportunities can contribute to policy dialogues. See **Box 17** for some examples.

Box 16. Place-based learning and action in crisis-affected contexts: Some examples

Bangladesh

The series of refugee camps for Rohingya people that were carved out of the southern Bangladesh forest in 2017 led to significant loss of natural environment, pollution, and loss of wildlife. In response, five youth groups from the camps and five groups from the surrounding host community were given training in environmental issues by UNHCR and the International Union for Conservation of Nature. Since then, the youth groups have worked on re-greening the camp and surrounding environment, developing a waste disposal system, and raising awareness to change attitudes and behaviours toward nature. A UNHCR officer attests to the benefits of these efforts going beyond environmental mindfulness, specifically mentioning the development of problem-solving and leadership skills and the restoration of a sense of purpose in a place offering few opportunities to youth.¹⁴³

Viet Nam

The Ministry of Education and Technology is developing a National Climate-Smart Education Strategic Framework at all school levels. The framework is currently being piloted in the schools of selected provinces, with the goal of scaling it up nationwide. UNICEF Viet Nam is also investing in climate-smart innovations by building a climate-smart school model with solar power and energy efficiency measures. The Regional Plan for Inclusive Green Economy through the Empowerment and Participation of Young People in Greater Mekong was launched by UNICEF and UNESCO. The findings, together with a youth-led consultation focusing on climate change and the environment, raised the voices of youth and informed the next phase of UNICEF's climate change programming.¹⁴⁴

Box 17. Youth engagement in policy dialogue: Some examples

Fiji

Supported by UNICEF Fiji, the first National Youth Climate Action Summit provided the opportunity for 200 youth to be consulted and to give their feedback on the Climate Change Act 2021, which was enacted by the parliament.

Zimbabwe

The policy dialogue on the Nationally Determined Contributions (NDCs) enhancement included youth. A group of young people were given the opportunity to develop a policy paper that was considered in the NDCs updating process, and which informed various actions and commitments they were ready to support at the NDCs implementation phase.¹⁴⁵

Psychosocial support and socio-emotional learning

Psychosocial support (PSS) and socio-emotional learning (SEL) are areas where the EiE field has longstanding experience and expertise, and where many practical tools have been developed. PSS-SEL seek to help crisis-affected children and young people recover from adverse experiences, deal with difficult emotions, and maintain their emotional well-being. PSS-SEL enable these children and young people to engage with learning more constructively and to develop healthy relationships with others in their communities and beyond. PSS-SEL enable these of wellbeing and self-confidence, PSS-SEL

are likely to play critical roles in the ability of crisis-affected children to exercise agency.

It is important to note that children's and young people's distress and anxiety arising from the climate crisis are deepened when their sense of injustice is heightened. Thus it is important that children and young people be supported as they develop the capacity to demand accountability from those in power and participate in collective action to facilitate systemic change. 148

4.6. The Child's Right to a Clean, Healthy, and Sustainable Environment

The child's right to a clean, healthy, and sustainable environment is largely overlooked or under-articulated in EiE discourse, despite the scale and seriousness of the harm done to children's rights—including the right to education—by climate change, by relentless environmental degradation, by the loss of biodiversity and habitat, and by pollution. This presents an opportunity to expand current EiE thinking and practice.

EiE policy and practice are rightfully rooted in children's rights, including the right to education. But EiE discourse inadequately reflects the growing international recognition over the last five decades of the right to a clean, healthy, and sustainable environment. In 2022, the UN General Assembly affirmed that a clean, healthy, and sustainable environment is a human right and recognised that negative impacts on the environment undermine all human rights.¹⁴⁹ The 2023 'General Comment No. 26 on children's rights and the environment with a special focus on climate change' addresses the climate emergency, the collapse of biodiversity, and pervasive pollution, and highlights measures to protect the lives and life perspectives of children. This is progress in the recognition that every child has the right to live in a clean, healthy, and sustainable environment. 150

There is emerging recognition of the importance of integrating environmental considerations into programmes and operations in the humanitarian sector. More than 200 humanitarian organisations have

committed to act in accordance with the Climate and Environmental Charter for Humanitarian Organisations. While the immediate priority for the humanitarian sphere is saving lives and reducing human suffering, the changing nature of emergencies makes it ever more vital for humanitarian action to help develop long-term resilience among crisis-affected populations.¹⁵¹

Two important factors, often overlooked in discussions involving EiE and the nexus, have profound repercussions for the severity and frequency of crises and emergencies: climate change and the environment. Nearly half the respondents to the EiE practitioner survey (48.3%) answered that EIE responses currently do not consider the triple global crisis of climate biodiversity, habitat loss, and pollution. Nearly 90% of respondents reported that EiE policy and practice should address these issues.

Recognising this, but also mindful that addressing climate change and environmental emergencies is a long-term matter, several interviewees reluctantly accepted that climate and the environment have a role in EiE action that currently is guided by the principle to 'do no harm'—in other words, ensuring that EiE efforts do no harm to the environment. Some voices, however, are calling for a more proactive approach to 'do some good'. For instance, a senior MoE participant from southern Africa pointed out that EiE operations currently fail to consider the increasing threat of environmental destruction and loss of biodiversity.

She said, 'Without addressing the fundamental environmental emergencies, more emergencies, including climate crisis, are inevitable. We have to be

accountable to the environment'. See **Box 18** for teacher and youth voices on the importance of addressing the environment in EiE.

Box 18: Critical importance of the environment: Teacher and youth voices

'When teaching in emergency contexts, environmental issues cannot be left out while discussing climate change. The major cause of mortality are environmental issues. Understanding and mitigating their impact is crucial for humanity's survival and a flourishing plant life, and this is the aspect we harness in considering African scientific and native solutions to combatting ecological and environmental problems'. –Teacher

'I simply ask that politicians to be aware that young people [need] be listened to when they are alarmed on the subject. Our future depends on how we treat our environment'. -Youth

Looking at EiE discourse and practice through the lens of GPE's three goals for climate-smart education systems—Goal 1: to protect and advance quality, relevant, and equitable education; Goal 2: to achieve climate justice; Goal 3: to protect the planet's life systems—EiE per its humanitarian mandate is focused on Goal 1. A dialogue is already happening on the development side about how to build climate-smart education systems. While acknowledging that GPE has a wider development

mandate, what is needed is a complementary dialogue about the extent to which some of those same goals can be taken on board in humanitarian programming. Dialogue is needed around climate justice and the protection of the environment, in particular on what reasonable expectations there should be for the EiE community around these two burning issues.

Box 19. Nature-based solutions: Examples

Cameroon (1)

At the Minawao refugee camp in northern Cameroon, which is hosting 70,000 refugees who fled from Boko Haram violence in Nigeria, refugees and members of the host communities joined together to restore the environment by planting 360,000 seedlings. Refugee children were engaged in the planting. The aim was to restore surrounding bush, already thinly forested, that had become threadbare in consequence of refugee firewood collection. The damage done to the environment had brought the refugees and host community into conflict. The planting project became part of the Great Green Wall initiative aimed at putting a corridor of green coast-to-coast across the Sahel Desert. The reforesting programme was launched by UNHCR and the Lutheran World Federation in 2018. 152

Cameroon (2)

To support internally displaced people in Ardjaniré, Cameroon, the Jesuit Refugee Service, in partnership with UNHCR, opened a communal garden to enhance food and livelihood resilience. A vegetable garden was started and 1,800 trees were planted. Training in new and transferable agricultural techniques was also given. The initiative allows IDPs to meet their daily food needs and meet the costs of sending their children to school.¹⁵³

World Vision's Regreening Communities Project Model

A thriving environment is key to addressing food insecurity, climate-related disasters, and natural resource-related conflict in rural, farming, coastal, and pastoral areas. World Vision's Regreening Communities Project Model offers a participatory and integrated approach to restoring and protecting the natural environment and enhancing social cohesion as a way to build community resilience to multiple shocks. This model offers an omnibus of tools, procedures, and instruments to help communities develop and implement a tailored set of solutions, that include scaling-up Indigenous restoration practices. As part of the program, schools are involved in nature protection and restoration, waste management, and water conservation efforts.¹⁵⁴

Nature-based solutions for DRR have attracted increased attention in recent years. The interest arises from a recognition that the natural world is critical to the safety and protection of human communities. Human wellbeing depends on healthy ecosystems that enable people to withstand, cope with, and recover from disasters; that provide

natural buffers against hazard events; and that increase environmental and social resilience. Urgent dialogue is needed between proponents of nature-based solutions and the EiE community, with a view toward building synergies between the fields. See **Box 19** for examples of nature-based solutions.



Concluding Remarks and Recommendations

Concluding Remarks

This report has described the extent to which the climate crisis is bringing new layers of complexity and ever-increasing challenges to the EiE sector. Past and present achievements notwithstanding, it is ever more apparent that EiE can only ensure the right to quality education for all crisis-affected children and youths by working with the nexus of humanitarian, development, and peace partners, which must include climate change and environment actors.

This report demonstrates the importance of strengthening connections between global, national, sub-national, and local actors and partners. The challenges identified in section 3 are set to benefit from the further development of the many activities presented in section 4. The surveys and interviews conducted for this report have revealed

a number of instances where, despite shared awareness of the factors linking climate change to EiE, local actors have been unable to access resources or feedback information and assessments from across the nexus.

If displaced children and youth and those living in emergency situations are to have their right to quality education fulfilled, climate and environmental actions must involve all key stakeholders across the nexus: the EiE community, those working at the national and sub-national level, donors and funding bodies, and the coordination entities overseeing the EiE response.

There is also a need for further research into some of the questions which could not be adequately address in this report, due to the lack of data.

Recommendations

The authors of this study make the following key recommendations for consideration by members of the Geneva Global Hub for Educations in

Emergencies, and by other actors and organisations working in the field of EiE.

General recommendations to all EiE partners

Overall vision

- Use existing platforms where humanitarian, development, peace, climate change, and environment actors—including those working on nature-based solutions—can interact to help ensure that each has a distinct but complementary role and responsibilities in mitigating risks to the education sector.
- Sign and commit to act in accordance with the Climate and Environmental Charter for Humanitarian Organisations.¹⁵⁶
- Accompany the EiE principle to 'do no harm' to the natural environment with a 'do some good' approach that aims to actively advance or restore environmental integrity.

- Give greater weight and visibility to practical, on-the-ground initiatives when implementing EiE programmes across the nexus and in partnership with other key sectors.
- Work together to mainstream education in climate and environmental political forums, processes, and mechanisms.
- Advocate in the EiE discourse for educational and environmental rights, including consideration of the linkages between the two.
- Address the existing gap in policy and strategy to ensure the right to education for learners displaced by climate-related events, and that lay out the needs of children and young people who were disproportionately affected by events due to their gender, age, disability, or other characteristics.

Data and research

- Improve the collection and analysis of evidence on EiE and reduce fragmented data collection on humanitarian and development programming. Use crisis-sensitive indicators to capture learning quality, climate, and environmental conditions, and establish cause-and-effect relationships among these indicators.
- Ensure that mechanisms are in place to analyse and disseminate precise data on the impacts of climate and environmental crises—both rapid and slow onset—on the education

- of children and youth, in particular those who are displaced, girls, and those with disabilities.
- Conduct a cost-benefit analysis of both climate action and inaction in the education sector to highlight the fact that prioritising investment in education can lead to significant savings over the long term.
- Determine the financial and other benefits of investing in preparedness and adaptation, and prioritise investments accordingly.

Disaster Risk Reduction (DRR), preparedness and anticipatory action

- Clarify any confusion about the difference between 'preparedness' and 'anticipatory action', especially in local situations, by developing clearer guidelines and tools.
- Working closely with relevant partners, clarify how the systematic cumulative data called for by anticipatory action is to be collected, stored, and made available.
- Enhance coordination with other sectors working on anticipatory action at the global, national and local levels to ensure that

- education is always considered in the design and implementation of anticipatory action programmes.
- Take steps to elaborate what anticipatory action looks like in terms of protracted and slow-onset crises, including how to do it effectively in conflict-affected and fragile situations.
- Consider how best to handle uncertainty about the impacts of climate change when planning for and implementing anticipatory action.

Child and youth agency, teaching and learning

- Mainstream opportunities for resilience-building, action-oriented climate change and environmental learning in EiE programs in a manner that is gender, age and disability sensitive, and contextually appropriate.
- Provide safe spaces where children and youth can play, learn, be protected and be listened to throughout an emergency, and where they can access safe, participatory, and inclusive engagement opportunities to contribute to

- local DRR, preparedness, anticipatory action, and climate and environmental action.
- Integrate climate change topics into both formal and non-formal curricula while providing training and support for teachers so they can deliver this content effectively.
- Provide opportunities and resources for teachers, and support their ability to maintain their wellbeing, thereby enabling them to meet professional duties and assist crisis-affected children and youth effectively.

Recommendations primarily for those working at a national or sub-national level¹⁵⁷

Overall vision

- Develop enabling frameworks or strategies for EiE that articulate climate change and environmental imperatives and are predicated on existing key global frameworks and strategies. These may include the Comprehensive School Safety Framework of the Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector; the Interagency Network for Education in Emergencies' Minimum Standards; the Global Education Cluster Strategy; and the Global Partnership for Education's Climate Smart Education Framework. Also, ensure that these frameworks or strategies are informed by innovative community-level thinking and practice.
- Encourage humanitarian and development actors to embed climate change and environmental dimensions in their educational policy-making, strategizing, and planning.
- Integrate building resilience to climate change into education-sector planning by involving EiE actors.

- Strengthen EiE data collection on climate-related disruption of education, risk assessment (at all levels), analysis and dissemination, in order to better support the implementation of climate-resilient solutions, including stakeholder capacity-building.
- Make contingency-informed policy that considers different projections of global surface heating and cooling, including local variations and particularities.
- Develop institutional arrangements that help to forge close collaboration among ministries that will support climate, environmental, and DRR education in formal and non-formal learning spaces.
- Allocate funding to enable displaced and crisis-affected youth to participate in climate change mitigation and adaptation activities, and to gain skills and livelihoods.

School built environment and learning environment

- Allocate adequate resources to ensure that the design, building materials, construction, and maintenance of school buildings maximise safety, increase durability, and mitigate the adverse impacts that intensifying hazards have on student learning in both indoor and outdoor settings.
- Develop contextually appropriate and sustainable measures to make learning outdoors and in temporary learning spaces conducive to quality learning in various climate scenarios.

Recommendations for donors, funding bodies, and those otherwise concerned with financing EiE

Global

- Increase the proportion of predictable multiyear funding for EiE, and create stronger partnerships and synergies around humanitarian and development funding in order to support EiE efforts to combat climate change and to bring long-term general support to EiE.
- Humanitarian and development funders should incorporate climate change and environmental criteria into their funding frameworks and objectives.
- Further enhance coordination among humanitarian and development funders to ensure funding is allocated to preparedness, mitigation and adaptation components in projects in complementary ways.

- Fund examples of anticipatory action in the EiE sphere that extend over several years, with a view toward providing models of best practice.
- Advocate for EiE to receive a fair share of international climate finance, including the Loss and Damage Fund.
- Conduct a cost-effective analysis of climate action and inaction in the education sector to highlight the fact that early investments in education can bring significant savings, while non-investment can have significant human, economic, and psychosocial costs.

National

- Mobilise domestic, locally led financing to support climate-responsive EiE using measures such as tax reform and/or budgetary allocation, and create a monitoring system for such funding.
- Work in cross-sectoral teams that include ministries of education and accredited bodies
- outside of education to seek opportunities to open up climate financing.
- Enable children and youth to have a voice in donors' consideration of grant submissions that concern resilience-building in the education sector.

Recommendations for coordination entities overseeing the EiE response

- Ensure joined-up coordination between coordinating bodies across the nexus, which includes education clusters, local education groups, and refugee working groups, and between the nexus and bodies that represent cross-cutting elements, such as the environment, climate, and DRR.
- Promote close collaboration between country-based coordination groups and national and sub-national authorities, while recognising that governments are central in planning for

- and responding to climate-induced education loss and damage.
- Identify ways to contribute meaningfully to the capacity of humanitarian response partners to mitigate and adapt to climate change, DRR, preparedness, and anticipatory action, including within the Initiative for Strengthening EiE Coordination.¹⁵⁸

- Strengthen commitments of global coordination mechanisms to help country-based coordination groups to better understand mitigation and adaptation, DRR, preparedness, and anticipatory action.
- Provide instruments and tools to facilitate both coordinated approaches to EiE preparedness, and anticipatory action to mitigate
- the adverse impacts of climate and environmental breakdown.
- Foster an environment that enables the effective delivery of humanitarian assistance, the sharing of synergistic outcomes, and the integration of financing streams for building climate-resilient education systems in a sustainable manner.



Annex 1. Research Methodology

Desk-based meta-research on the documentation available was conducted using publicly available databases and Google Scholar. The literature search focused primarily on manifestations of education in emergency and crisis-affected situations in lower-income country contexts. The consultants drew mainly from documentation dated 2018 and thereafter.

Three online surveys were conducted, each targeting one of the following groups:

- Experienced EiE actors and practitioners, as well as their counterparts in non-education sectors, such as those with remits in environment, climate change, and disaster risk reduction
- Primary and secondary teachers working under climate-induced crisis conditions
- Child and youth leaders and climate activists from emergency-affected countries who are between ages 15 and 23

The online surveys were made available in English, French, and Spanish for a three-week period in July 2023. There were a total of 143 responses to the actor and practitioner survey; 80 teacher survey respondents, including 62 female teachers (77.5%) and 18 male teachers (22.5%); and 35 child and youth survey respondents, consisting of 16 female (45.7%) and 19 male (54.3%) respondents.

Quantitative survey data were analysed in terms of frequencies and percentages. Qualitative survey data were thematically categorised and analysed. Due to the limitations of time, the survey data analysis did not include data disaggregation.

In July and August 2023, key informant interviews were conducted with a diverse range of stakeholders who are active at the global, national and sub-national levels; the interview timetable covered

a four-week period. The process of selecting interviewees began by applying a snowball sample method in which, over a limited number of rounds. those approached were asked to identify individuals who they felt were best placed to respond to the research questions attached to the letter of invitation. Once names and contact details were returned, those identified were in turn approached; the process was ended as identifications became repetitive. After gathering 111 names using the snowball sampling method, we invited potential participants, taking into consideration the names most frequently referenced in the sampling process, as well as geographic and organisational diversity. Given that the snowball sampling process failed to accumulate enough non-EiE specialists, the EiE Hub Secretariat and the consultants identified additional participants to ensure the involvement of people from various non-education sectors.

At the global level, 13 EiE specialists were invited and eight participated in the key informant interviews. Eleven non-EiE specialists were invited and three participated. At the national and sub-national levels, 17 EiE specialists were invited and 14 participated, including four via email. Eight non-EiE specialists were invited and two participated.

In addition, three FGD discussions were conducted involving ten teachers from a range of countries, including Cameroon, Malawi, Nigeria, and South Sudan. In response to an INEE call for participation, a couple of organisations volunteered to help recruit and organise teacher FGDs. One youth FGD was also organised. Five youth leaders who were active in EiE or in combatting climate change were invited, and two participated.

All interviewees received a copy of the semi-structured schedule ahead of the interview, each comprising key trigger questions. The consultants selectively transcribed each interview. The consultants read, marked up, and colour-coded each transcript

as a preliminary step to analysis. Also comprising part of the analytical process was the triangulation of survey, literature review, and interview outcomes. From this emerged the structure and components making up the whole report, as well as the tenor and substance of observations made, insights offered, and recommendations put forward.

The main research limitations are as follows. First, the research data on the impacts of climate-change on EiE and on the EiE response to climate and environmental emergencies are emerging but still limited. Second, the data collection took place over a short period during the summer holidays, which limited the number of key informants from

non-education fields available to explore various cross-sectoral perspectives. The number of child and youth participants for the online survey and focus group interview also did not reach the target number. Third, although 258 individuals responded to the three online surveys and 39 participated in the key stakeholder interviews, the findings are not necessarily representative of the vast EiE community. Rather, the findings illuminate unique insights and nuanced perspectives which are not necessarily captured in the literature. Fourth, the survey data analysis did not include data disaggregation, due to the limited time available.



Annex 2. Examples of Climate Change Impacts on Education in Emergencies

Somalia: Ongoing drought

Somalia is experiencing one of the most extreme and persistent droughts in the last 40 years. As of July 2022, an estimated 2.4 million school-age children were impacted. At least 250 schools were closed due to drought-related challenges, such as lack of water at the schools. More than 70,000 children have dropped out due to drought-induced school closures. Many students do not come back to school once they leave. The conflict-related safety risks awaiting children on the way to and from school have been exacerbated by the drought conditions, thus hindering their access to education. Access to education is especially at risk

for girls and children with disabilities.¹⁵⁹ Child labour, child marriage, family inability to cover school fees, safety concerns, and drought-induced population displacement as people search for food and safe water are all key factors driving up school dropout. Available data indicate that teachers are abandoning their duties to search for alternative livelihoods, and some schools have been forced to close because of a teacher shortage. As the influx of IDPs increases, children's access to education in settlements has deteriorated due to a lack of learning spaces. The available learning spaces are already overcrowded.¹⁶⁰

Pakistan: 2022 Floods

From June to August 2022, Pakistan experienced unprecedented rainfall and a combination of riverine, urban, and flash flooding. This affected approximately 33 million people, with nearly 8 million people displaced. One-third of the country was under water, with the hardest hit districts already figuring amongst the most vulnerable in Pakistan. One-third of the children in the affected areas were already out of school, and 50% of children were suffering from stunted growth. The floods caused exceptional damage and loss to the education sector. As of September 2022, at least 25,993 education institutions were reported as fully or partially damaged. More than 7,000 undamaged schools were used as temporary shelters for the affected population, interrupting learning continuity. The education of

more than 3.5 million school-age children was affected; 672,000 required urgent EiE support to ensure learning continuity, protection, and prevention of school dropout. Teaching and learning materials (books, school furniture, etc.) worth millions of rupees were destroyed. Damage to electricity and internet connectivity made remote learning largely inaccessible. Pakistan had already experienced one of the world's longest school closures during the COVID-19 pandemic. And less than six months on, students once again lost their learning opportunities. The unprecedented loss and damage caused by the floods amounted to an estimated US\$779 million. Primary schools were the most severely impacted of all education institutions.

Malawi: 2023 Tropical Cyclone Freddy

In March 2023, Malawi was severely affected by record-breaking Tropical Cyclone Freddy, which brought extreme rains and devastating flooding, debris flows, and landslides. At least 633 education institutions were affected, including 550 primary and 74 secondary schools. In all, 532 classrooms, 510 teachers' houses, and 1,520 toilets were totally or partially destroyed, along with other key school facilities. Most classrooms were inundated and filled with debris, and school boreholes were submerged, which adversely affected WASH conditions in most schools. Weak education infrastructure that was non-compliant with safe construction standards and inadequate construction practices exacerbated the impact of the disaster.

The Ministry of Education suspended classes for some 25 school days. Approximately 1,481 classrooms at 408 schools were used as camps to accommodate internally displaced people. The use of schools by internally displaced people forced some students to attend classes outdoors, while also putting pressure on school WASH facilities that, pre-disaster, were already inadequate. This sparked the spread of communicable diseases, such as cholera. In the aftermath of the disaster, 724,790 learners stopped attending classes; 978 teachers were having difficulty continuing their duties. The total damage to the education system was estimated at about US\$42.09 million.¹⁶⁴



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Endnotes

- 1 www.climate-charter.org
- 2 This includes local authorities, civil society organisations and others.
- 3 Since 2019, the Initiative for Strengthening Education in Emergencies Coordination (ISEEC), which includes GEC, UNHCR, INEE, and UNESCO, has been working to improve education for children and youth in crisis situations by enhancing global inter-agency coordination in the education sector. ISEEC marks a significant milestone in providing unified technical assistance to country coordinators and teams across various contexts.
- 4 UN (2023a)
- The provision of quality education opportunities that meet the physical protection, psychosocial, developmental, and cognitive needs of children and youth affected by emergencies, which can be both life-sustaining and life-saving.
- 6 Geneva Global Hub for Education in Emergencies (2022).
- 7 www.un.org/internal-displacement-panel/sites/www.un.org.internal-displacement-panel/files/idrp_hlp_submission_ws3_triple_nexus.pdf
- 8 A 'hazard' represents a potential source of harm, while a 'shock' is the sudden and severe disruption resulting from the actual occurrence of that hazard. 'Rapid-onset' disasters, like floods and tropical storms, strike suddenly, causing immediate and severe damage, whereas 'slow-onset' disasters, such as droughts, heat waves, and sea-level rise, develop gradually, resulting in prolonged and often less visible effects.
- 9 WMO (2023a).
- 10 WMO (2023b).
- 11 UN (2023b).
- 12 IFRC & OCHA (2022)
- 13 They include: Afghanistan, Kazakhstan, Niger, Angola, Kenya, Somalia, Brazil, Lesotho, South Sudan, Burkina Faso, Mali, Syria, Chile, Mauritania, Pakistan, Ethiopia, Madagascar, United States, Iraq, Malawi, Zambia, Iran, Mozambique (UNCDD 2022).
- 14 This includes: Algeria, Greece, Spain and Italy in the Mediterranean region; much of western Canada and many parts of the USA in North America; Kazakhstan and Turkey in Asia; Chile in South America.
- 15 UNDRR (2022a).
- 16 IPCC (2022, 2023); UNEP (2021).
- 17 WWF (2022)
- 18 UNEP (2021); UNDRR (2020).
- 19 OHCHR et al (2023).
- 20 IPCC (2022); UN (2023b).
- 21 UN Women (2022); UN Women et al (2022); UNEP et al (2020).
- 22 UN Women (2022); UN Women et al (2022); UNEP et al (2020).
- 23 UN Women (2022).
- 24 McClure, T & Dhillon, A. (2023).
- 25 UNICEF (2021).
- 26 ECW (2023).
- 27 https://data.unicef.org/topic/child-disability/overview/
- 28 CBM Global Disability Inclusion (2022); Mann et al (2021).
- 29 UNEP et al. (2020); Slim (2023).
- 30 UNHCR (2021, 2023).
- 31 IDMC (2023)
- 32 IDMC (2023)
- 33 IOM (2022).
- 34 IPCC (2022)
- 35 WMO (2023c).
- 36 IFRC (2019a); IFRC & WWF (2022).
- 37 World Economic Forum (2023)
- 38 World Economic Forum (2023).
- 39 Protracted crises are prolonged situations characterised by ongoing conflict, instability, and humanitarian challenges.

- 40 The seven areas often discussed in the literature as the key realms emerging out of empirical research are: 1) physical infrastructure of schools and learning spaces, facilities and resources; 2) teaching and learning environment; 3) teachers; 4) national education finance; 5) household economy and livelihoods; 6) student physical and mental health and psychosocial wellbeing; 7) displaced and migrant children and youth.
- 41 For instance, see ECW (2023).
- 42 OCHA (2020a, 2020b).
- 43 Government of the People's Republic of Bangladesh (2023).
- 44 ILO (2022).
- 45 Government of Malawi (2023).
- 46 Kagawa (2022a); UNICEF EAPRO (2019).
- 47 Godfery & Tunhuma (2020).
- 48 Water logging takes place as a result of heavy accumulation of waters that have not been drained. This is a chronic form of flooding.
- 49 Kagawa (2022b).
- 50 Sharma & Adhikari (2022), UNICEF (2020a); UNICEF (2021).
- 51 Sommer et al. (2014).
- 52 Asia Pacific Coalition for School Safety (2017); Tsioulou et al. (2020).
- 53 OCHA (2022a).
- 54 Malala Fund (2021).
- 55 UNICEF (2021, 2022a); Helldén et al. (2021).
- 56 Kagawa (2022b, 2022c, 2022d).
- 57 UNICEF (2021).
- 58 Dancel (2023).
- 59 Kagawa (2022 c)
- 60 OCHA (2022b).
- 61 UNHCR (2018).
- 62 Here teachers include both qualified teachers and non-qualified teaching staff (e.g., parent teachers, community volunteers).
- 63 Febrianto et al. (2022); Kagawa (2022b).
- 64 UNESCO IIEP (2022).
- 65 Kagawa (2022a); UNESCO (2023a).
- 66 Kagawa (2022a); UNESCO et al. (2023).
- 67 Somalia Education Cluster (2022).
- 68 Henderson (2023); UNESCO IIEP (2022).
- 69 UNESCO IIEP (2022); UNESCO (2023a).
- 70 UNICEF EAPRO (2019).
- 71 Information offered by UNESCO in personal communication.
- 72 Godfery & Tunhuma (2020).
- 73 Bachner & Bendnar-Friedly (2019); Giovanis (2022)
- 74 ODI (2023); OECD (2022).
- 75 Tammy & Munnelly (2023).
- 76 Kagawa & Selby (2022).
- 77 OSRSG/VAC (2022); Reyes & Randell (2023).
- 78 Chigwanda (2016).
- 79 IFRC (2021a, 2022a); OSRSG/VAC (2022); Malala Fund (2021).
- 80 OSRSG/VAC (2022).
- 81 Department of International Development, Oxford University (2022).
- 82 Reyers & Randell (2023).
- 83 Clark et al. (2020).
- 84 Helldén, et al. (2021).
- 85 Government of Pakistan et al. (2023).
- 86 Helldén, et al (2021).

- 87 Helldén, et al (2021); IFRC & OCHA (2022)
- 88 UNICEF (2021).
- 89 Burke et al (2018); IFRC (2021a); Ramadan et al. (2023)
- 90 Lopez Rello & Ackers (2020).
- 91 IFRC (2022a, 2022b).
- 92 Pye et al (2021); Save the Children (2021).
- 93 Pye et al. (2021).
- 94 UNICEF Office of Global Insight and Policy (2022).
- 95 UNICEF (undated).
- 96 OCHA (2022).
- 97 UNESCO (2023a); UNESCO et al. (2023).
- 98 Although Section 4 is not organised according to the headings used in Section 3, this section touches upon all the key impact areas considered in Section 3
- 99 There areas are often discussed in the literature as the key realms emerging out of empirical research.
- 100 The use of the nexus in EiE related literature is not consistent. It is often the humanitarian-development nexus, rather than the humanitarian-development-peace nexus.
- 101 Geneva Global Hub for Education in Emergencies (2023); Pye et al (2021).
- 102 INEE (2023).
- 103 Personal communication with INEE.
- 104 GEC (2022).
- 105 GADRRRES. (2022).
- 106 GPE (2023).
- 107 ECW (2022).
- 108 GPE (2023); Paci-Green at al. (2020).
- 109 Ministry of Education, Liberia (2022).
- 110 Pye (2021); UNESCO (2023); UNESCO et al (2023).
- 111 UNESCO (2021).
- 112 GPE (2023).
- 113 See for instance, INEE (2021).
- 114 UNESCO (2021).
- 115 Department of Education, Philippines (2022).
- 116 At the global level, the Global Education Cluster has a role to play in climate related challenges, given its current strategic priority (2022-2025) on "Prepared and Resilient Education Systems", a task team supporting preparedness and anticipatory action across the nexus and developing a toolkit on preparedness and guide on the nexus. These, and other existing normative instruments and frameworks such as CSSF, could be built upon in response to climate change challenges.
- 117 Alternative names are also used, for instance, Education Sector Development Committee, Joint Education Sector Working Group, Education Technical Working Group, Education Sector Plan Consortium.
- 118 In operational contexts where the government does not have the capacity, UNESCO co-leads the LEG together with the Government and in some situations together with a donor entity. For a complete description of coordination mechanisms, please consult the 2020 Global Partners Project report "Education in Emergencies coordination Harnessing humanitarian and development architecture for Education 2030" at https://inee.org/sites/default/files/resources/GPP%20report%20FINAL_EN.pdf.
- 119 Nicolai et al (2020).
- 120 See the Geneva Global Hub for EiE (2022), INEE (2021).
- 121 Plan International Australia & Save the Children Australia (2023); Mawhinney et al. (2023).
- 122 Children's Environmental Rights Initiative (2023).
- 123 Development Initiative (2023).
- 124 UN (2023c).
- 125 Key informants.
- 126 Key informant.
- 127 Global Education Cluster (2012); UNICEF (2019).
- 128 Global Education Cluster (2023); INEE (2010).
- 129 IFRC (2019b).

- 130 IFRC (2021b).
- 131 IFRC (2021b).
- 132 Save the Children Madagascar.
- 133 OCHA (2020c).
- 134 UN Transforming Education Summit (2022).
- 135 Davila et al (2022).
- 136 OSRSG/VAC (2022); UNDRR (2022b).
- 137 Selby (2023)
- 138 UNEP (2023).
- 139 UN (2023c).
- 140 Kagawa & Selby (2022).
- 141 Developed by the Children in a Changing Climate Coalition (Plan international, ChildFund Alliance, Save the Children, UNICEF and World Vision) in partnership with Red Cross Red Crescent Climate Centre, Global Disaster Preparedness Centre, IFRC, British Red Cross and the UK Met Office.
- 142 The Children in a Changing Climate Coalition (2021).
- 143 Siegfried (2022)
- 144 www.unicef.org/vietnam/media/10011/file/Rooftop%20solar%20power:%20A%20potential%20solution%20in%20clean%20energy%20for%20 climate-smart%20schools%20in%20Viet%20Nam.pdf
- 145 UNDP (2022).
- 146 INEE (2022).
- 147 Hickman et al. (2021).
- 148 Kagawa & Selby (2022)
- 149 UN General Assembly (2022).
- 150 www.ohchr.org/en/press-releases/2023/08/urgent-action-states-needed-tackle-climate-change-says-un-committee-guidance
- 151 They include: addressing root environmental causes that have contributed to the crisis; improving affected communities' health and safety through reducing pollution (e.g. waste management); protecting the essential natural resources which support community's food security; taking preventative steps to protect community and environment from future risk; acting to slow or put into reverse nature degradation trends, such as deforestation, biodiversity loss and soil erosion that, if not checked, will pile up further crises. ReliefWeb (2023).
- 152 Australia for UNHCR (undated).
- 153 Jesuit Refugee Service (2022).
- 154 Key informant.
- 155 UNDRR (2020)
- 156 www.climate-charter.org
- 157 This includes local authorities, civil society organisations and others.
- 158 Since 2019, the Initiative for Strengthening Education in Emergencies Coordination (ISEEC), which includes GEC, UNHCR, INEE, and UNESCO, has been working to improve education for children and youth in crisis situations by enhancing global inter-agency coordination in the education sector. ISEEC marks a significant milestone in providing unified technical assistance to country coordinators and teams across various contexts.
- 159 Somalia Education Cluster (2022).
- 160 OCHA (2022c).
- 161 UNICEF (2022b).
- 162 Government of Pakistan et al. (2022).
- 163 Government of Malawi (2023).

Photo Credits

Cover Image: © UNICEF/UN0608495/Franco. Mozambique, 15 March 2022. Mariano Abdala, 13 years old, a victim of Cyclone Gombe, is attending grade 7 at lacaca Primary School. Tropical Cyclone Gombe entered Mozambique on March 11 2022 with winds of 165 and 230 km/h. 113 schools, 346 classrooms and 14,775 students were affected.

Page 3: © UNICEF/UN0278469/Herwig. Jordan, 29 November 2018. Besan and her brother Yaseen belong to the Dom minority group in Jordan. She attends the UNICEF-supported Makani centre with her brother Yaseen, 7 years. "I don't like the cold. We don't leave home much during the winter."

Page 4: © UNICEF/UN0642145. Bangladesh, 23 May 2022. Boys wade through floodwaters on the way to school in Sunamganj on 23 May 2022. DHAKA, 23 May 2022 – Over 1.5 million children are at increased risk of waterborne diseases, drowning and malnutrition due to extensive flooding in north-eastern Bangladesh. UNICEF is on the ground with Government and non-government partners to respond to the urgent safety, health, nutrition and clean water needs of children and their families.

Page 12: © UNICEF/UN0804600/Shing. Vanuatu, 10 March 2023. Class 4 buildings at St. Sean-duc primary school had their roof completely blown off by TC Kevin.

Page 14: © UNICEF/UN0405690/Akacha. Syrian Arab Republic, 19 January 2021. On 19 January 2021, a child looks out over a flooded area of Kafr Losin Camp in northwest Syrian Arab Republic. Over the past few days, western Aleppo and Idlib governorates in the northwest of the country have been experiencing some of the heaviest winter storms so far this season.

Page 17: © UNICEF/UN0782222/Sewunet. Somalia, 8 February 2023. Joyful children return from school as the sun sets in Ladan IDP camp, their laughter echoing through the makeshift homes. Despite facing numerous challenges, these children remain committed to their education, pursuing their dreams for a brighter future. ©UNICEF Somalia/2023/Zerihun Sewunet.

Page 19: © UNICEF/UNI401440/Viet Hung. Vietnam, 18 May 2023. Lam Anh Nguyet, 15 years old, a Khmer student from Long Phu Secondary School, Long Phu district, Soc Trang, shares her thoughts on how climate change affects her family and study at school.

Page 20: © ICRC/V-P-ML-E-00649/Seck. Mali, 01 June 2021. Bintagoungou's mayor is deeply concerned about the situation, as he explained it to an ICRC team: "A force stronger than us came and changed everything: climate change. This school was abandoned because of violent winds and soil erosion. It's a catastrophe for the 400 children who used to go to this school and who are now left behind. Without an education, they are particularly vulnerable to bandits and armed groups".

Page 25: © UNICEF/UNI420014/Andriantsoarana. Madagascar, 10 July 2023. 10th July 2023, Mananjary, Vatovavy - Antsenavolo, what remains of a classroom after Hurricane Freddy, which did not prevent classes from continuing, but the sky was the roof.

Page 26: © UNICEF/UN0403886/Billy. Guatemala, 17 January 2021. Damage to a school, after the flooding and the overflow of the Motagua River due to storms Eta and lota, the school of the Community of El Tenedor, in Guatemala, suffered damage to its perimeter wall and mud is still visible inside the classrooms.

Page 34: © UNICEF/UN0775850/Karimi. Afghanistan, 28 November 2022. On 28 November 2022, three girls in grade 6 read their textbook inside a UNICEF-supported community-based education class in Azhdahar Valley, Bamyan Province, central Afghanistan.

Page 37: © UNICEF/UN0269866/Knowles-Coursin. Nigeria, 8th November 2018. 6th grader Saidu Sule, 12 sits with his brothers outside Kafin Liman Primary School.

Page 38: © UNICEF Thailand/UNI419964/ Preechapanich. Thailand, 23 June 2023. Karaked Ked Glinhom, a 10-year-old 4th-grade student; and Pattawee Kaooat Kamhang from Baan Haad Suan Ya school are walking back to the classroom after an afternoon break. Regular activities and play are limited due to the extremely hot temperatures, which significantly impact their child development and overall well-being. The Impact Assessment of Climate Change and Environmental Degradation on Children in Thailand, authored by the Thailand Development Research Institute (TDRI) with the support of UNICEF Thailand found that children in Thailand are at high risk from climate change, especially those living in the northeastern and southern provinces of Ubon Ratchathani, Nakhon Rachasima, Sri Saket, Nakhon Srithammarat and Narathiwat. The primary climate hazards affecting children in Thailand are floods, droughts and high temperatures, which can cause water contamination, spread of diseases and food insecurity. These threaten the health, development and well-being of children, who are more vulnerable to climate disasters than adults due to their less developed immune and nervous systems as well as their dependency on adults for their safety and well-being. Moreover, children from low-income families, children living in rural areas, children with disabilities, and migrant children are more likely to suffer the worst and compounding consequences.

Page 49: © UNICEF/UN0747336/Karimi. Afghanistan, 18 October 2022. On 18 October 2022, boys sit outside on the grass and study their lesson books outside their school in Nangarhar Province, Afghanistan.

Page 57: © UNICEF/UN0669669/Nelson Owoicho. Nigeria, 21 June 2022. On 21 June 2022, a child crosses a wooden bridge spanning a canal as she returns from school, in Makoko, a riverine community in Lagos, Nigeria.

Page 62: © UNICEF/UN0699389/Mussapp. Guatemala, 13 June 2022. On June 13th, 2022 in Alta Verapaz, Guatemala Sarahi Yat (12), a 6th grade student at the Sacanilla School. Her school was one of the 432 schools affected in the country by hurricanes Eta and lota, that hit the country on November 2020.20.

Page 64: © UNICEF/UNI396316/Prieto. Venezuela, 17 October 2022. A girl shows her notebook outside the comprehensive care program for academic leveling in Bolívar, Venezuela, on October 17, 2022.

Page 66: © ICRC/V-P-ML-E-00242/NXEDLANA. Mozambique, 24 April 2019. Cabo Delgado, Quirimbas Islands. The ICRC, the Mozambique Red Cross Society and the IFRC conduct an assessment in the aftermath of Cyclone Kenneth.

Page 84: © Save the Children/CH1656574/
Daphnee Cook. Zambia, 15 March 2022. Sitali is a 12-year-old girl who lives with her parents and four siblings in a tiny village near the town of Mongu, in Western Province, Zambia. Her village is situated on the floodplains of the Zambezi River, and every year as the rainy season draws to a close, the Zambezi River pushes over its banks and onto the plains and grasslands of the floodplain.

Geneva Global Hub for Education in Emergencies Members

































Danish Alliance for Education in Crisis



































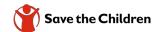






















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About the EiE Hub

Faced with the under-prioritisation and underfunding of EiE, and given the magnitude of the challenge, the members of the EiE Hub come together to form a strong alliance of like-minded states and organisations to step up visibility, political and operational commitment, and funding for EiE.



