



THE CLIMATE CHANGE AND ECD NEXUS IN BANGLADESH: IMPACTS, RISKS, AND ACTIONABLE SOLUTIONS

A POLICY NOTE

**Bangladesh ECD Network (BEN) and Asia Pacific Regional
Network for Early Childhood Development (ARNEC)**

September 2025

TABLE OF CONTENTS

Why a Policy Note?	3
1. Introduction	3
2. ECD at Risk: Climate Pressures Today and Tomorrow	3
Health and Nutrition	3
Psychosocial Well-being	4
Learning and Cognitive Development.....	4
Safety and Protection.....	5
Higher ECD risks from CC impact.....	5
3. Systemic Gaps Aggravating Adverse Climate Change Impact on ECD.....	5
Lack of Integrated Policies	5
Lack of Effective Coordination	6
Political Commitment and Stability.....	6
Leadership and Management	6
Limited Application of Evidence.....	6
Insufficient Funding	6
Infrastructure Vulnerability	6
Social Inequities	6
Cultural and Behavioral Barriers	7
Limited Awareness and Capacity	7
4. LOOKING AHEAD: Integrating Climate Resilience into Early Childhood	7
Mobilizing Government Funding	7
Leveraging Green Economy and Climate Finance	7
Leveraging NGO Expertise	7
Engaging Research Institutions	7
Building Community Networks.....	8
Fostering Collaboration Across Sectors	8
5. WAY FORWARD: ACTIONS FOR THE FUTURE.....	8
Integrated Policy Frameworks.....	8
Policy Advocacy and Awareness Raising.....	8
Multi-sectoral Collaboration.....	8
Investment in Climate-Resilient Infrastructure.....	8
Human Resource Development	8
Community Engagement and Empowerment	8
Emergency Preparedness Programs.....	8
Research and Data Collection.....	9
Health and Nutrition Interventions	9
Innovative and Child-Friendly Interventions.....	9
Digital Tools and Technology	9
Social Protection and Safety Nets.....	9
Monitoring, Evaluation, and Learning.....	9
References	9



Why a Policy Note?

[The Bangladesh ECD Network (BEN) and Asia Pacific Regional Network for Early Childhood (ARNEC) jointly conducted a Climate 101 Workshop and Consultation on Climate Change and Early Childhood Development (ECD) from 19 to 20 February 2025 in Dhaka, Bangladesh. The two-day workshop delved into the ECD-CC nexus – the mutual connections, interactions, and impacts between climate change and early childhood development - with a diverse stakeholder participation. About 30 people from key government ministries and agencies, NGOs, CSOs, academia, bilateral donors, and UNICEF participated. The workshop identified the main climate change challenges and risks impacting ECD in Bangladesh through discussions and working sessions. It also considered actionable solutions.]

As a follow-up to the workshop and to advance the agenda of fostering better understanding of climate change and ECD interaction, this Policy Note titled “The ECD–Climate Change Nexus in Bangladesh: Impacts, Risks, and Actionable Solutions” has been prepared with expert input. A Multi-Sectoral Working Group on Climate Change and ECD has also been formed to create a platform for coordinated action and advocacy on climate change and early childhood development in Bangladesh. ARNEC has also identified four strategic pillars to guide its regional work on Climate Change and Early Childhood Development (ECD): Awareness and Advocacy, Research and Evidence, Capacity Building, Fundraising and Partnership. Ongoing and future initiatives need to be aligned with these pillars to ensure coherence and strategic focus. This basic message is conveyed in this policy note.]

ⁱ Huq, S., Khan, M., Islam, A. S., & Mirza, A. B. (2024). CLIMATE CHANGE IMPACTS IN BANGLADESH: WHAT CLIMATE CHANGE MEANS FOR A COUNTRY AND ITS PEOPLE. International Centre for Climate Change and Development (ICCCAD). https://www.icccad.net/wp-content/uploads/2024/02/Bangladesh_Final_Covers_26-Jan-2024_ONLINE_compressed.pdf

1. INTRODUCTION

Bangladesh is the 8th most populous country in the world and one of the most climate-vulnerable countries. It faces escalating disasters and economic losses,ⁱ impacting the development of its youngest citizens, namely, children in their early development years. Early Childhood Development (ECD), crucial for building the nation’s future human capital, is increasingly jeopardized by climate-induced shocks such as extreme weather events, food insecurity, displacement, and health crises. These impacts threaten millions of children’s physical, cognitive, and emotional growth and impair their adult potential.

Safeguarding early childhood development in the face of climate change is a moral obligation of society and a strategic priority for Bangladesh’s development. Urgent and coordinated action is essential to ensure that all children across Bangladesh can survive, thrive, and contribute to a resilient future for themselves and the country.

2. ECD AT RISK: CLIMATE PRESSURES TODAY AND TOMORROW

With its extensive coastline and low-lying geography, Bangladesh faces severe climate change and environmental challenges affecting its youngest citizens. The World Bank (2021)ⁱⁱ Estimates that by 2030, millions of households will be significantly impacted by climate-induced disasters, raising the urgency for adaptive strategies tailored to local contexts.

HEALTH AND NUTRITION

With the increase in the frequency and severity of floods, droughts, and salinity intrusion in Bangladesh, there is a reduction in agricultural production and less access to safe drinking water, especially in rural and coastal areasⁱⁱⁱ. As a result,

ⁱⁱ Clement, Viviane, Kanta Kumari Rigaud, Alex de Sherbinin, Bryan Jones, Susana Adamo, Jacob Schewe, Nian Sadiq, and Elham Shabahat. 2021. Groundswell Part 2: Acting on Internal Climate Migration. Washington, DC: The World Bank. <https://documents1.worldbank.org/curated/en/837771631204427139/pdf/Groundswell-Part-II-Acting-on-Internal-Climate-Migration.pdf>

ⁱⁱⁱ Clement, Viviane, Kanta Kumari Rigaud, Alex de Sherbinin, Bryan Jones, Susana Adamo, Jacob Schewe, Nian Sadiq, and

families face greater food insecurity, and young children become more vulnerable to malnutrition. Inadequate nutrition during critical growth periods leads to higher rates of stunting, underweight, and other long-term developmental issues^{iv}. According to the Global Nutrition Report (2021)^v, Bangladesh already faces high rates of stunting (28%) and wasting (9.8%) among children under five.

Climate-induced crop failures and water salinity are expected to exacerbate these trends, particularly in coastal and disaster-prone areas. The IPCC Sixth Assessment Report (2022)^{vi} also, climate change will worsen undernutrition and mortality in low-income settings unless urgent adaptive actions are taken.

Poor sanitation and drainage systems allow waterborne diseases like diarrhoea, cholera, and dysentery to spread rapidly during floods and storms. Hotter temperatures and worsening air pollution increase respiratory illnesses among children. Young children with developing immune systems suffer more from these health challenges, which increases their risk of disease and death and undermines their physical and cognitive development.^{vii}

Elham Shabahat. 2021. Groundswell Part 2: Acting on Internal Climate Migration. Washington, DC: The World Bank. <https://documents1.worldbank.org/curated/en/837771631204427139/pdf/Groundswell-Part-II-Acting-on-Internal-Climate-Migration.pdf>

^{iv} UNICEF Bangladesh. (2023). <https://www.unicef.org/media/152681/file/Bangladesh-2023-COAR.pdf>

^v Global Nutrition Report. (2021). [Country Nutrition Profiles: Bangladesh](https://www.gnrreport.org/country-profiles/bangladesh)

^{vi} Intergovernmental Panel on Climate Change. (2022). CLIMATE CHANGE 2022: IMPACTS, ADAPTATION AND VULNERABILITY. CONTRIBUTION OF WORKING GROUP II TO THE SIXTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, & B. Rama, Eds.). Cambridge University Press. <https://doi.org/10.1017/9781009325844>.

^{vii} UNICEF(2022). Early Childhood Development and Climate Change: Advocacy Brief. UNICEF East Asia and Pacific Regional Office. <https://www.unicef.org/eap/documents/early-childhood-development-and-climate-change>

^{viii} UNICEF(2022). The Heat is On! Towards a Climate Resilient School System in Bangladesh. UNICEF Bangladesh Office.

PSYCHOSOCIAL WELL-BEING

When disasters destroy homes and separate children from loved ones, children lose their sense of security. Early-life trauma disrupts emotional regulation and can lead to anxiety, aggression, and attachment issues that persist into adulthood if left unaddressed.^{viii,ix}

Economic strain and uncertainty from climate impacts push caregivers into survival mode. Stressed caregivers may use harsh discipline, neglect their children, or become emotionally unavailable, which undermines children's social-emotional growth and self-esteem.^x

LEARNING AND COGNITIVE DEVELOPMENT

Frequent climate-related disasters force families to migrate and disrupt children's education. When disasters close schools, parents often deprioritize learning, and children miss out on early education. Without access to early learning, children struggle to develop foundational skills, and many never return to school, which widens educational inequities^{xi,xii}.

<https://knowledge.unicef.org/resource/heat-towards-climate-resilient-education-system-bangladesh>

^{ix} Masten, A.S., & Narayan, A.J. (2012). Child development in the context of disaster, war, and terrorism: Pathways of risk and resilience. *ANNUAL REVIEW OF PSYCHOLOGY*. Masten, A. S., & Narayan, A. J. (2012). Child development in the context of disaster, war, and terrorism: Pathways of risk and resilience. *ANNUAL REVIEW OF PSYCHOLOGY*, 63, 227–257. <https://doi.org/10.1146/annurev-psych-120710-100356>

^x Britto, P. R., Lye, S. J., Proulx, K., Yousafzai, A. K., Matthews, S. G., Vaivada, T., Perez-Escamilla, R., Rao, N., Ip, P., Fernald, L. C. H., MacMillan, H., Hanson, M., Wachs, T. D., Yao, H., Yoshikawa, H., Cerezo, A., Leckman, J. F., & Bhutta, Z. A. (2017). Nurturing care: Promoting early childhood development. *THE LANCET*, 389(10064), 91–102. [https://doi.org/10.1016/S0140-6736\(16\)31390-3](https://doi.org/10.1016/S0140-6736(16)31390-3). Britto, P.R., et al. (2017). Nurturing care: promoting early childhood development. *THE LANCET*.

^{xi} UNICEF (2022). Early Childhood Development and Climate Change: Advocacy Brief. UNICEF East Asia and Pacific Regional Office. <https://www.unicef.org/eap/documents/early-childhood-development-and-climate-change>

^{xii} Save the Children. (2021). BORN INTO THE CLIMATE CRISIS: WHY WE MUST ACT NOW TO SECURE CHILDREN'S RIGHTS. Save the Children International. <https://resourcecentre.savethechildren.net/pdf/born-into-the-climate-crisis.pdf>

Climate-induced poverty and displacement also affect parents' mental health. Stressed caregivers spend less time interacting with their children, which reduces the cognitive stimulation young children need for brain development. Many families cannot provide educational toys, books, or safe play spaces, so children lose opportunities to explore and learn through experience.^{xiii, xiv}

Stunting and cognitive delays in early years reduce future workforce productivity and national economic growth^{xv}. In Bangladesh, over 30% of children experience multidimensional poverty^{xvi}. Climate-related disruptions for these children can result in generational impacts on learning outcomes and skill development, weakening human capital and slowing progress toward SDG targets.

SAFETY AND PROTECTION

Children in climate-vulnerable areas face greater risks of injury and death during extreme weather events. Poorly built shelters, unsafe water bodies, and hazardous matter expose young children to physical threats. Many families cannot access emergency care or child-friendly infrastructure in these environments.^{xvii}

Displacement often forces children into temporary shelters, where they may experience neglect, separation from caregivers, and exposure to abuse and exploitation, including child labour. Weak child protection systems in disaster-affected areas increase these risks.^{xviii}

^{xiii} Britto, P. R., Lye, S. J., Proulx, K., Yousafzai, A. K., Matthews, S. G., Vaivada, T., Perez-Escamilla, R., Rao, N., Ip, P., Fernald, L. C. H., MacMillan, H., Hanson, M., Wachs, T. D., Yao, H., Yoshikawa, H., Cerezo, A., Leckman, J. F., & Bhutta, Z. A. (2017). Nurturing care: Promoting early childhood development. *THE LANCET*, 389(10064), 91–102. [https://doi.org/10.1016/S0140-6736\(16\)31390-3](https://doi.org/10.1016/S0140-6736(16)31390-3). Britto, P.R., et al. (2017). *Nurturing care: promoting early childhood development. The Lancet.*

^{xiv} UNICEF (2022). *The Heat is On! Towards a Climate Resilient School System in Bangladesh*. UNICEF Bangladesh Office. <https://knowledge.unicef.org/resource/heat-towards-climate-resilient-education-system-bangladesh>

^{xv} Black, M. M., Walker, S. P., Fernald, L. C. H., Andersen, C. T., DiGirolamo, A. M., Lu, C., McCoy, D. C., Fink, G., Shawar, Y. R., Shiffman, J., Deverecci, A. E., Wodon, Q. T., Vargas-Barón, E., & Grantham-McGregor, S. (2017). Early childhood development coming of age: Science through the life course. *THE LANCET*, 389(10064), 77–90. [https://doi.org/10.1016/S0140-6736\(16\)31389-7](https://doi.org/10.1016/S0140-6736(16)31389-7).

HIGHER ECD RISKS FROM CC IMPACT

It is evident that the risks ECD will face at many levels due to climate change can be catastrophic for the country's children and youth, if not addressed effectively. The UNICEF 2021 report^{xix} on climate and child rights highlights the heightened vulnerability of Bangladeshi children to rising inequalities without child policies that take into account both adaptation and mitigation strategies to cope with climate change.

Without investment in climate-resilient social protection and inclusive ECD systems, the multiple disadvantages of displacement, lack of access to early learning, food insecurity, stress, and trauma will be passed from one generation to the next. According to the World Bank^{xx}, climate change could push over 13 million people in South Asia into poverty by 2050, with children bearing the brunt of this crisis.

3. SYSTEMIC GAPS AGGRAVATING ADVERSE CLIMATE CHANGE IMPACT ON ECD

LACK OF INTEGRATED POLICIES

Climate change adaptation and ECD policies remain disconnected mainly in Bangladesh. Government and development partners often address climate resilience and ECD separately, missing opportunities for holistic interventions that

^{xvi} UNICEF Bangladesh. (2023). *Child Multidimensional Poverty in Bangladesh*

^{xvii} UNICEF (2022). *Early Childhood Development and Climate Change: Advocacy Brief*. UNICEF East Asia and Pacific Regional Office. <https://www.unicef.org/eap/documents/early-childhood-development-and-climate-change>.

^{xviii} Save the Children. (2021). *BORN INTO THE CLIMATE CRISIS: WHY WE MUST ACT NOW TO SECURE CHILDREN'S RIGHTS*. Save the Children International. <https://resourcecentre.savethechildren.net/pdf/born-into-the-climate-crisis.pdf>

^{xix} UNICEF. (2021). *The Climate Crisis is a Child Rights Crisis – The Children's Climate Risk Index*

^{xx} Clement, Viviane Wei Chen; Rigaud, Kanta K.; de Sherbinin, Alex; Jones, Bryan R; Adamo, Susana; Schewe, Jacob; Sadiq, Nian; Shabahat, Elham Shirin. *Groundswell Part II : Acting on Internal Climate Migration (Vol. 1 of 2) (English)*. Washington, D.C. : World Bank Group. <http://documents.worldbank.org/curated/en/837771631204427139>

could better protect young children from climate-induced risks. Disaster-prone conditions are still treated as exceptions in programming, rather than integrated into regular planning for ECD and related sectors^{xxi,xxii}.

LACK OF EFFECTIVE COORDINATION

In Bangladesh, the various ministries and agencies operate primarily in silos, resulting in insufficient inter-ministerial collaboration, duplicated efforts, misaligned priorities, and thus gaps in addressing climate and ECD integration. For example, education and health interventions for young children may not align with local climate resilience programs, missing opportunities for integrated community support.

POLITICAL COMMITMENT AND STABILITY

Unrest and fluctuating political commitment hinder long-term strategic planning for ECD and climate actions. Political leaders' limited understanding of the ECD-CC link can lead to underinvestment in these areas. The lack of high-level political champions for integrated climate and child development constrains national and local progress.

LEADERSHIP AND MANAGEMENT

Leadership gaps manifest in unclear roles and responsibilities, poor accountability structures, and insufficient capacity to manage multi-stakeholder processes. Weak management practices also hinder the implementation of complex, multi-sector programs that require sustained coordination, adaptive planning, and responsiveness to community needs.

LIMITED APPLICATION OF EVIDENCE

While research evidence exists, there is often inadequate application or dissemination of this knowledge to inform policy and practice. Barriers include a lack of access to research findings,

^{xxi} Pettengell, C. (2016). LEARNING TO LIVE IN A CHANGING CLIMATE: THE IMPACT OF CLIMATE CHANGE ON CHILDREN IN BANGLADESH. United Nations Children's Fund (UNICEF). [UNICEF Bangladesh Climate Change.pdf](#)

insufficient dissemination mechanisms, and a disconnect between researchers and policymakers. Usually, available evidence is not always translated into actionable recommendations that are simple, understandable, and usable by frontline implementers or local authorities. This knowledge gap hampers the design and implementation of context-specific interventions.

INSUFFICIENT FUNDING

Although Bangladesh has invested over US\$10 billion in climate change actions, funding for climate-resilient ECD programs remains limited. Most resources target infrastructure, emergency response, and agriculture, with minimal allocation for child-focused adaptation, early learning, or health services in climate-vulnerable areas.

INFRASTRUCTURE VULNERABILITY

Floods, cyclones, and salinity intrusion frequently damage or destroy educational and health facilities, disrupting children's learning and access to essential services. Many schools double as cyclone shelters, but repeated disasters degrade their condition, leading to long-term closures and reduced educational quality^{xxiii}.

SOCIAL INEQUITIES

Climate change disproportionately impacts marginalized and rural communities, especially in climatic hotspots like the coastal belt, river basins, and the Barind tract. Low-income families, women, and those dependent on natural resources face greater risks, with children in these groups experiencing higher rates of malnutrition, disrupted education, and health challenges. Social structures and gender norms further exacerbate these

^{xxii} UNICEF - eBook - [The impact of Climate Change on Children in Bangladesh](#)

^{xxiii} The Daily Star (Sep 19, 2023) <https://www.thedailystar.net/opinion/views/news/rising-tides-sinking-chalkboards-how-climate-change-threatens-bangladeshs-primary-education-3422456>



vulnerabilities, with women and girls bearing a heavier burden^{xxiv, xxv}.

CULTURAL AND BEHAVIORAL BARRIERS

Traditional beliefs and practices often impede effective responses to ECD and climate change. In many communities, immediate survival overshadows essential long-term investments in children's education and well-being. A lack of engagement in climate planning leads to misunderstandings about ECD initiatives, fostering resistance to progress. By addressing these cultural dynamics and actively promoting community involvement, we can establish robust and effective climate-adapted ECD programs that genuinely meet the needs of vulnerable populations.

LIMITED AWARENESS AND CAPACITY

Limited awareness and technical capacity prevail among policymakers and practitioners regarding the intersection of climate change and ECD, which impedes ECD's mainstreaming into adaptation planning and vice versa. Bangladesh is internationally recognized for its climate adaptation achievements; however, more is required in research and capacity to scale up and localize the CC adaptation with a focus on young children-at, at both national and local levels^{xxvi, xxvii}.

Bangladesh's progress in climate adaptation is notable, but bridging these policy, funding, infrastructure, equity, and capacity gaps is critical to safeguard the country's youngest citizens against the escalating impacts of climate change.

4. LOOKING AHEAD: INTEGRATING CLIMATE RESILIENCE INTO EARLY CHILDHOOD

Looking ahead to integrating climate resilience into the ECD agenda, Bangladesh can leverage the

^{xxiv} The Daily Star (Jan 8, 2025)
<https://www.thedailystar.net/roundtables/news/include-marginalised-women-climate-action-plans-and-adaptation-3795096>

^{xxv} UNICEF - eBook - [The impact of Climate Change on Children in Bangladesh](#)

^{xxvi} UNICEF - eBook - [The impact of Climate Change on Children in Bangladesh](#)

following resources and capacities that are already in place:

MOBILIZING GOVERNMENT FUNDING

Existing budget allocations across relevant ministries, such as health, education, disaster management, and social welfare, offer immediate avenues to support integrated ECD programs with a climate resilience lens. The existing financial resources can be strategically realigned to include climate-adaptive infrastructure in preschools, early warning awareness, and ensure health services that factor in climate change impact and environmental vulnerabilities.

LEVERAGING GREEN ECONOMY AND CLIMATE FINANCE

Bangladesh should actively tap into global climate finance mechanisms, such as the Green Climate Fund, to fund the development of climate-smart ECD infrastructure and programs. Promoting climate-resilient ECD services can generate employment and contribute to a broader green economy transition.

LEVERAGING NGO EXPERTISE

Bangladeshi NGOs have considerable experience in capacity building, advocacy, and the delivery of ECD services. These NGOs are ideally positioned at the grassroots to implement localized, climate-sensitive interventions. Therefore, collaborations with these agencies can expedite the integration of climate resilience components into ECD curricula, caregiver training programs, and community awareness initiatives.

ENGAGING RESEARCH INSTITUTIONS

Bangladesh's academic and research community holds critical insights into the intersection of child development and climate science. These

^{xxvii} Pettengell, C. (2016). LEARNING TO LIVE IN A CHANGING CLIMATE: THE IMPACT OF CLIMATE CHANGE ON CHILDREN IN BANGLADESH. United Nations Children's Fund (UNICEF)
<https://www.preventionweb.net/publication/learning-live-changing-climate-impact-climate-change-children-bangladesh>



institutions can guide evidence-based programming by developing context-specific frameworks and monitoring tools that ensure interventions are both practical and scalable. Research can also help identify location-specific climate vulnerabilities and recommend tailored strategies for building resilience in early childhood populations.

BUILDING COMMUNITY NETWORKS

Strengthening community networks is essential for building resilience. Local groups can be pivotal in disseminating information, sharing resources, and supporting families in climate-impacted areas. Fostering a sense of community solidarity can enhance social capital and improve collective responses to climate-related challenges faced by children.

FOSTERING COLLABORATION ACROSS SECTORS

Encouraging collaboration between education, health, agriculture, and environmental sectors can enhance the synergy of efforts toward climate resilience in early childhood. A multi-sectoral approach can lead to more cohesive strategies that address the diverse needs of children and communities facing climate-related challenges.

5. WAY FORWARD: ACTIONS FOR THE FUTURE

INTEGRATED POLICY FRAMEWORKS

Bangladesh needs to align its ECCD policies with the national climate change adaptation and disaster risk reduction strategies. Bangladesh can develop an integrated framework that recognizes the vulnerability of young children and ensures their needs are addressed in climate-related planning, such as in the National Adaptation Plan (NAP).

POLICY ADVOCACY AND AWARENESS RAISING

A concerted effort should be made to advocate for ECCD needs within the broader climate agenda. Raising awareness among policymakers, community leaders, and the public about the unique vulnerabilities of young children to climate change

can lead to greater support and prioritization of ECCD in national and local climate action plans.

MULTI-SECTORAL COLLABORATION

Climate-resilient ECD cannot be achieved in isolation. Strong coordination across education, health, environment, disaster management, and social development ministries is essential. Collaboration with NGOs, development partners, and private sector stakeholders is crucial to scale and sustain efforts.

INVESTMENT IN CLIMATE-RESILIENT INFRASTRUCTURE

Schools, clinics, cyclone/flood shelters, and ECD centers must be designed to endure extreme weather. This would include structural reinforcement against flooding, improved ventilation to mitigate heat stress, and child-safe sanitation systems. Climate-resilient infrastructure protects children and ensures continuity of services in disaster-prone regions.

HUMAN RESOURCE DEVELOPMENT

ECD professionals (caregivers, teachers, local administration, etc.) need targeted training on climate change adaptation and its relevance to early learning environments. Developing culturally relevant materials and tools will enable practitioners to integrate climate education into daily activities, disaster risk reduction, and emergency response, which is critical to support young children.

COMMUNITY ENGAGEMENT AND EMPOWERMENT

Families and communities are frontline responders to climate events, and they should be engaged in local adaptation planning to strengthen the social support for children. Harnessing indigenous knowledge and community networks can lead to more sustainable and accepted resilience strategies.

EMERGENCY PREPAREDNESS PROGRAMS

Developing specific programs that prepare ECD services and communities for extreme weather



events is vital. These could include drills, training materials for families, and resource packets that guide them in protecting young children during disasters.

RESEARCH AND DATA COLLECTION

Conducting research focused on the intersection of climate change and early childhood development is crucial. This includes gathering data on how climate impacts affect children in various communities, which can inform tailored interventions. Creating a database of best practices and case studies can aid in developing effective responses.

HEALTH AND NUTRITION INTERVENTIONS

Under the umbrella of enhancing child nutrition, food security initiatives should critically bolster agricultural production, community and household-based gardening of climate-resilient crops, and scaling nutrition education to counteract climate-related food insecurity. Improving water and sanitation infrastructure and hygiene practice in ECD-centered service areas, the community, and households is imperative.

INNOVATIVE AND CHILD-FRIENDLY INTERVENTIONS

Children will develop resilience at the earliest life stages by designing playful, age-appropriate educational materials and incorporating child-focused indicators in climate planning.

DIGITAL TOOLS AND TECHNOLOGY

Utilizing technology such as mobile apps, online training platforms, or digital communication tools can enhance the delivery of climate education and support to ECD practitioners, families, and children, especially in remote areas.

SOCIAL PROTECTION AND SAFETY NETS

Enhance child-sensitive social protection by expanding cash transfers and linking them with health and education services to support families with young children affected by climate shocks. Integrate ECD into emergency planning through

ECD kits, training for responders, safe shelter spaces, and psychosocial support so that young children can be accorded better and targeted support during disasters.

MONITORING, EVALUATION, AND LEARNING

For effective monitoring and evidence-based decision-making, indicators for climate resilience in ECCD should be developed to track program impact and guide adaptive strategies. Learning process must be continuously institutionalized through feedback loops, joint program reviews, and regional knowledge exchange.

REFERENCES

1. Lu, C., McCoy, D. C., Fink, G., Shawar, Y. R., Shiffman, J., Devercelli, A. E., Wodon, Q. T., Vargas-Barón, E., & Grantham-McGregor, S. (2017). Early childhood development coming of age: Science through the life course. *THE LANCET*, 389(10064), 77–90. [https://doi.org/10.1016/S0140-6736\(16\)31389-7](https://doi.org/10.1016/S0140-6736(16)31389-7)
2. Britto, P. R., Lye, S. J., Proulx, K., Yousafzai, A. K., Matthews, S. G., Vaivada, T., Perez-Escamilla, R., Rao, N., Ip, P., Fernald, L. C. H., MacMillan, H., Hanson, M., Wachs, T. D., Yao, H., Yoshikawa, H., Cerezo, A., Leckman, J. F., & Bhutta, Z. A. (2017). Nurturing care: Promoting early childhood development. *THE LANCET*, 389(10064), 91–102. [https://doi.org/10.1016/S0140-6736\(16\)31390-3](https://doi.org/10.1016/S0140-6736(16)31390-3). Britto, P.R., et al. (2017). Nurturing care: promoting early childhood development. *THE LANCET*.
3. Clement, Viviane, Kanta Kumari Rigaud, Alex de Sherbinin, Bryan Jones, Susana Adamo, Jacob Schewe, Nian Sadiq, and Elham Shabahat. 2021. *Groundswell Part 2: Acting on Internal Climate Migration*. Washington, DC: The World Bank
4. <https://documents1.worldbank.org/curated/en/837771631204427139/pdf/Groundswell-Part-II-Acting-on-Internal-Climate-Migration.pdf>
5. Global Nutrition Report. (2021). [Country Nutrition Profiles: Bangladesh](#)
6. Huq, S., Khan, M., Islam, A. S., & Mirza, A. B. (2024). *CLIMATE CHANGE IMPACTS IN BANGLADESH: WHAT CLIMATE CHANGE MEANS FOR A COUNTRY AND ITS PEOPLE*. International Centre for Climate Change and Development (ICCCAD). <https://www.icccad.net/wp->

[content/uploads/2024/02/Bangladesh_Final_Covers_26-Jan-2024_ONLINE_compressed.pdf](#)

Bangladesh Office.

<https://knowledge.unicef.org/resource/heat-towards-climate-resilient-education-system-bangladesh>

7. Intergovernmental Panel on Climate Change. (2022). CLIMATE CHANGE 2022: IMPACTS, ADAPTATION AND VULNERABILITY. CONTRIBUTION OF WORKING GROUP II TO THE SIXTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegria, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, & B. Rama, Eds.). Cambridge University Press. <https://doi.org/10.1017/9781009325844>.
8. Masten, A.S., & Narayan, A.J. (2012). Child development in disaster, war, and terrorism: Pathways of risk and resilience. *ANNUAL REVIEW OF PSYCHOLOGY*. Masten, A. S., & Narayan, A. J. (2012). Child development in disaster, war, and terrorism: Pathways of risk and resilience. *ANNUAL REVIEW OF PSYCHOLOGY*, 63, 227–257. <https://doi.org/10.1146/annurev-psych-120710-100356>
9. Pettengell, C. (2016). LEARNING TO LIVE IN A CHANGING CLIMATE: THE IMPACT OF CLIMATE CHANGE ON CHILDREN IN BANGLADESH. United Nations Children’s Fund (UNICEF). [UNICEF_Bangladesh_Climate_Change.pdf](#)
10. Save the Children. (2021). BORN INTO THE CLIMATE CRISIS: WHY WE MUST ACT NOW TO SECURE CHILDREN’S RIGHTS. Save the Children International. <https://resourcecentre.savethechildren.net/pdf/born-into-the-climate-crisis.pdf>
11. The Daily Star (Sep 19, 2023) <https://www.thedailystar.net/opinion/views/news/rising-tides-sinking-chalkboards-how-climate-change-threatens-bangladeshs-primary-education-3422456>
12. The Daily Star (Jan 8, 2025) <https://www.thedailystar.net/roundtables/news/include-marginalised-women-climate-action-plans-and-adaptation-3795096>
13. [UNICEF - eBook - The impact of Climate Change on Children in Bangladesh](#)
14. UNICEF Bangladesh. (2023). [Child Multidimensional Poverty in Bangladesh](#)
15. UNICEF Bangladesh. (2023). <https://www.unicef.org/media/152681/file/Bangladesh-2023-COAR.pdf>
16. UNICEF(2022). The Heat is On! Towards a Climate Resilient School System in Bangladesh. UNICEF
17. UNICEF (2021). [The Climate Crisis is a Child Rights Crisis: Introducing the Children’s Climate Risk Index. New York: United Nations Children’s Fund \(UNICEF\), 2021. ISBN: 978-92-806-5276-5](#)