

Children on the Frontline: An Analysis of Climate Change and its Disproportionate Impact on Children in Disaster-Prone Sirajganj in Bangladesh



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Acronym

BCCSAP	Bangladesh Climate Change Strategy and Action Plan
BWDB	Bangladesh Water Development Board
CHCP	Community Health Care Provider
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
FGD	Focus Group Discussion
KII	Key informant Interview
LGI	Local Government Institution
MHPSS	Mental Health and Psychosocial Support
NGO	Non-governmental organization
NPDM	National Plan for Disaster Management
PTSD	Post-Traumatic Stress Disorder
SDG	Sustainable Development Goals
UNCRC	United Nations Convention on the Rights of the Child
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities
UNICEF	United Nations Children's Fund

**Kalbaisakhi* Kalbaisakhi, also known as a Nor'wester, is a pre-monsoon thunderstorm that occurs in Bangladesh and parts of India. It is characterized by strong, gusty winds, heavy rainfall, and sometimes hail, often bringing temporary relief from the hot and dry weather.



Executive Summary

This executive summary distills the findings of the report “Children on the Frontline: An Analysis of Climate Change and Its Disproportionate Impact on Children in Disaster-Prone Sirajganj in Bangladesh.” The study, conducted by a multidisciplinary research team and supported by the Right Livelihood Foundation, investigates how climate-induced hazards—primarily monsoon flooding and riverbank erosion—are threatening children’s rights, development, and well-being in Sirajganj, one of the most climate-vulnerable districts in Bangladesh.

Background:

Bangladesh is among the most disaster-prone countries globally, with Sirajganj facing repeated monsoon floods, erosion, and displacement due to its geographical location along the Jamuna River. These environmental shocks have catastrophic impacts on children, particularly in char areas and among ethnic minorities and households experiencing poverty or disability.

Research Scope and Methodology:

The study used a mixed-methods approach combining a desk review of policy and literature with primary data collection through eight Focus Group Discussions (FGDs) and seven Key Informant Interviews (KIIs). Participants included children (aged 14–19), caregivers, teachers, local government officials, and health and NGO workers.

Key Findings:

1. **Disruption of Education:** Floods frequently damage school infrastructure, cause prolonged closures, and result in children losing access to learning materials. Many children drop out permanently due to displacement and economic pressures, with girls and children with disabilities disproportionately affected.
2. **Health and Nutrition Risks:** Children face widespread waterborne diseases, food insecurity, and inadequate access to healthcare during disasters. Health services in remote areas like char lands are insufficient and lack child-sensitive provisions.
3. **Mental Health and Psychosocial Impact:** Emotional trauma from displacement and loss is widespread. Children report anxiety, sleep disturbances, and a loss of interest in activities. There is minimal access to structured mental health and psychosocial support (MHPSS).
4. **Protection Concerns:** Disasters increase risks of child labor, early marriage, and trafficking. Emergency shelters lack child-friendly spaces, gender-sensitive facilities, and protection systems.
5. **Participation and Inclusion Gaps:** Children’s voices are largely absent in local disaster planning. There are few platforms for youth participation, and governance structures rarely include adolescents in decision-making.
6. **and Implementation Gaps:** National policies acknowledge children’s vulnerability but lack effective local implementation. Budget allocation for child-centered disaster risk reduction (DRR) is limited, and there is poor coordination between sectors.

Recommendations:

- Develop flood-resilient and inclusive school infrastructure, and support mobile classrooms during disasters.
- Scale up mobile health units and adolescent-friendly clinics, and promote nutrition-sensitive agriculture for food security.
- Institutionalize MHPSS through school-based interventions, trained teachers, and tele-counseling platforms.
- Strengthen child protection by establishing child-safe zones in shelters and integrating protection into DRM.
- Empower children through civic education, disaster preparedness training, and inclusion in Union Disaster Management Committees.
- Mainstream child-centered DRR across national planning, improve inter-agency coordination, and increase public investment with disaggregated data monitoring.

Conclusion:

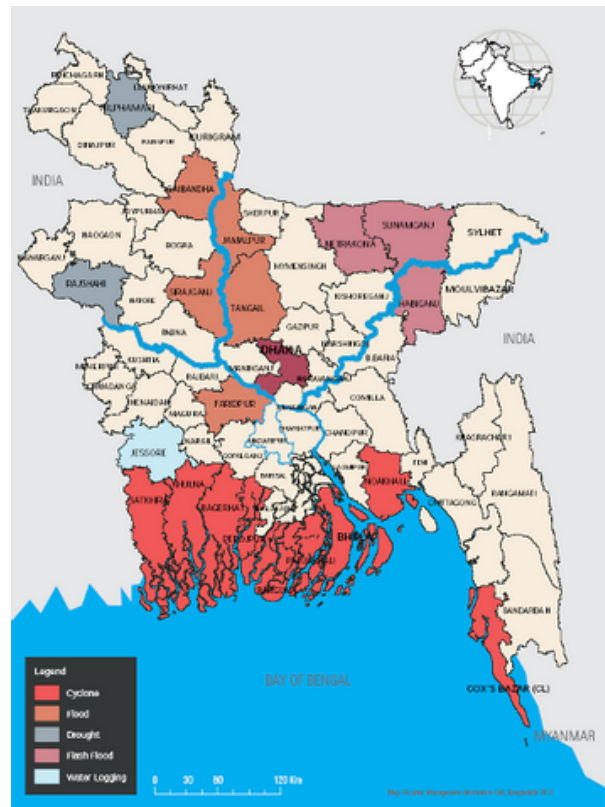
Children in Sirajganj face layered and systemic threats due to climate-induced disasters. While they are the most affected, they are the least represented in planning and response mechanisms. A child-centered approach—one that integrates their voices, ensures access to rights, and prioritizes inclusive service delivery—is essential for building long-term resilience and equity. The findings and recommendations of this study offer a roadmap for aligning Bangladesh’s climate response with child rights frameworks such as the UNCRC, CRPD, and SDGs.



1. Background and Research Rationale

1.1 The General Picture of Natural Disasters and the Impact of Climate Change in Bangladesh

Climate change is a defining global challenge with far-reaching implications for the environment, economies, and human well-being. Bangladesh ranks among the most climate-vulnerable countries globally due to its low-lying geography, high population density, and exposure to multiple climate hazards. The Global Climate Risk Index (2021) ranks Bangladesh 7th in long-term climate risk (2000–2019). The UNICEF Children’s Climate Risk Index (2021) ranks Bangladesh 15th globally in terms of children’s exposure and vulnerability to climate risks. Nearly 20 million children in Bangladesh face high exposure: 12 million in flood-prone areas, 4.5 million in cyclone-prone coastal zones, and 3 million in drought-affected inland regions.



UNICEF identified 20 of Bangladesh’s 64 districts as high-risk, hosting over 5.36 million children under five and 19.42 million under eighteen. This underscores the urgent need for child-focused climate adaptation and disaster preparedness efforts. The cumulative effects of these challenges create a harsh reality for millions of children in Bangladesh, many of whom lose their homes, face educational disruptions, and endure psychological trauma. In this context, addressing the impacts of climate change on children and youth is not just a humanitarian imperative but a critical step towards building a resilient and sustainable future for the country.

1.2 Climate Change Situation in Sirajganj

Bangladesh is globally recognized as one of the most disaster-prone countries, with flooding as a dominant and recurring hazard. Sirajganj district, located along the banks of the Jamuna River in northwestern Bangladesh, is among the most severely affected regions. Its low elevation—averaging only seven meters above sea level—and the presence of several major rivers, including the Brahmaputra (Jamuna), Baral, Ichamati, Karatoa, and Phuljuri, significantly heighten flood vulnerability.



Flooding and Riverbank Erosion

Sirajganj faces frequent and destructive monsoon floods between June and September due to heavy rainfall and upstream water inflows. These floods submerge vast portions of the district, especially low-lying upazilas like Chauhali, Kazipur, Sirajganj Sadar, Belkuchi, Ullahpara, and Shahjadpur. In some years, floods have affected over 60% of the district's land area, displacing thousands of households.

A persistent challenge closely linked to flooding is riverbank erosion. The Jamuna River's lateral shifts erode approximately 2,000 hectares of land annually, according to the Bangladesh Water Development Board (BWDB). Char-dwelling communities—home to more than 100,000 people—are particularly at risk. Major embankment breaches in flood years such as 1988, 1998, 2004, 2007, and 2024 have accelerated erosion and mass displacement. Despite local coping mechanisms, such as temporary relocation and embankment construction, current mitigation strategies remain inadequate.

Socioeconomic and Health Impacts

Flooding and erosion cause widespread damage to agriculture, the district's economic backbone. Crop losses, livestock deaths, and disrupted employment exacerbate food insecurity and poverty. A study by Md. Zakaria Ibne Baki and colleagues revealed significant losses due to flooding, including crop damage (32.7%), land loss (28.7%), destruction of domestic animals (20%), and damage to houses (18.7%). Environmental degradation was also reported, with 45% of respondents indicating high levels of degradation, 33% reporting medium, and 22% noting low degradation. Socio-economic losses were substantial as well, with 44% of households facing high losses, 33% medium, and 23% low.

Respondents identified climate change (39.7%), poor flood management (36.3%), and the impact of the Farakka Barrage (24%) as the primary causes of flooding in the region. During flood events, communities faced several critical challenges, including poor communication infrastructure (28.7%), lack of food (24.7%), shortages of drinking water (25.7%), and limited access to health services (21%). Additionally, the floods contributed to widespread outbreaks of waterborne diseases such as diarrhea (34%), cholera (25%), typhoid (22%), and dysentery (19%).



Table 1: Distribution of Respondents According to Flood-Related Losses and Problems

Characteristics		Percentage (%)
Problem face	Lack of communication	28.7
	Lack of food	24.7
	Lack of drinking water	25.7
	Lack of health services	21
Disease	Diarrhoea	34
	Cholera	25
	Typhoid	22
	Dysentery	19
Losses	Crop	32.7
	Land	28.7
	Domestic animal	20
	House	18.7
Environmental degradation	High degradation (>20)	45
	Medium degradation (13-20)	33
	Low degradation (up to 12)	22
Socio- economic losses	Low socio- economic loss (up to 12)	23
	Medium socio- economic loss (score 12)	33
	High socio- economic loss (above 20)	44

Health risks also surge during floods, with increased outbreaks of waterborne diseases and limited access to essential services.

Vulnerability of Char and Minority Communities

The char areas—riverine islands formed by sedimentation—are especially exposed to annual floods and erosion, causing repeated displacement. Displaced households in northwestern Bangladesh relocate an average of 4.46 times, primarily within nearby regions. Between 80% and 95% of households in these areas rely on seasonal or circular migration.

Ethnic minority groups such as the Santal, Sing, Orao, Mundari, Mahato, and Rajoar, mainly residing in Raiganj and Sirajganj Sadar upazilas, face disproportionate risks. Marginalized by limited access to land rights, government services, and adaptive resources, these communities suffer from disrupted livelihoods. As commercial shrimp farming expands, traditional farming jobs decline, pushing minorities into deeper poverty. Girls and young women are especially affected, with rising rates of school dropout and early marriage driven by economic stress and displacement.

Regional Risk Assessment and Adaptive Capacity

According to the Multi-Hazard Risk Analysis conducted by NIRAPAD for Start Fund Bangladesh, Sirajganj ranks 4th among the highest risk districts in northern Bangladesh.



Table 02: Climate-related Multi-Hazard Risk Index of Sirajganj

Division Name	Rajshahi
District Name	Sirajganj
Major Disaster_Primary	Flood
Major Disaster_Secondary	Riverbank Erosion
Disaster Impact Index (2014-2020)	7
Disaster Impact Risk level	Very High
Rank of Disaster Impact	4
Hazards Frequency Areas	7.5
Hazard Exposed Areas	6.6
Level of Annual Inundation Areas	9
Landslide Susceptibility	0
River Erosion Prone Areas	7.5
Char Land Areas	10
Exposed Major Crop Land	7.5
Population Exposed	8.2
Hazard Exposure Index	8
Hazard Exposure Risk level	Very High
Rank of Hazard Exposure	5
Vulnerability Living Standard	4.5
Vulnerability Coping Capacity	3.2
Vulnerability Mental and Physical Well	5.9
Vulnerability Index	4.6
Vulnerability Level	Medium
Vulnerability rank	32
Multi-Hazard Risk Index	6.5
Multi-Hazard Risk level	Very High
Rank Multi-Hazard Risk	4

A study by Azam et al. (2021), using the Livelihood Vulnerability Index (LVI) and the IPCC vulnerability framework, further identified financial capital (0.685) as the most vulnerable domain, followed by human, natural, social, and physical capitals. The IPCC Vulnerability Index (0.0163) highlights that exposure to hazards exceeds adaptive capacity, necessitating urgent development interventions.

Recent Flood Events and Inadequate Response

In 2024, heavy rainfall and upstream water inflows caused severe flooding across 34 unions in five upazilas, affecting more than 103,000 people. Erosion continued to displace residents in Kazipur, Chauhali, and Shahjadpur. While adaptive initiatives such as improved agriculture and fisheries practices have been introduced, these have not adequately mitigated long-term impacts. Without sustained investment in climate-resilient infrastructure, disaster preparedness, and inclusive social protection, the region’s vulnerabilities will intensify.

Sirajganj faces complex climate-induced challenges, including frequent flooding, river erosion, food insecurity, and social disruption. These recurring crises highlight the urgent need for inclusive and targeted climate adaptation and disaster risk reduction (DRR) interventions. To ensure resilience-building efforts are equitable and sustainable, priority must be given to the most vulnerable groups—particularly char dwellers, ethnic minorities, and impoverished households—so that no one is left behind.

1.3 Impact of climate change on Vulnerable Children in Sirajganj

Children in Sirajganj face multifaceted risks from climate change-induced hazards such as floods and erosion. Infants and young children are particularly vulnerable due to their dependence on caregivers, while older children and adolescents experience significant psychological and physical stress during disasters. Displacement, disrupted schooling, malnutrition, and exposure to unsafe environments all contribute to long-term developmental setbacks.

Disasters frequently interrupt education, increase illness, and create conditions that foster child labor, early marriage, and unsafe migration. Lori Peek’s framework classifies children’s disaster-related vulnerabilities into three key categories:

Psychological Vulnerability	Physical Vulnerability	Educational Vulnerability
PTSD, Depression, Anxiety, Emotional distress, Sleep disorders, Somatic complaints, Behavioral problems	Death, Injury, Illness, Malnutrition, Heat stress, Physical and sexual abuse	Missed school, Poor academic performance, Delayed progress, Failure to complete education

Beyond fatal events, climate change is exacerbating poverty for already struggling families. In such contexts, families may be forced to make harmful decisions that compromise children's health, education, and protection—pushing them into child labor, early marriage, or unsafe migration.

According to UNICEF, approximately 19.4 million children in Bangladesh live in areas exposed to climate hazards. Among them, Sirajganj, affected primarily by flooding, has over 1.4 million children under 18 at risk. Frequent disasters in this region damage schools, homes, and healthcare services, exacerbating poverty, food insecurity, and public health risks.

A 2024 field survey and a 2025 article by Nafia Saddaf (ICCCAD) in the Dhaka Tribune reveal specific insights into children's education in char lands, informal settlements, and planned relocation sites:

Educational Access and Barriers

- **Char Lands:** Girls' education has improved up to secondary level but remains hindered by early marriage, displacement, and financial constraints. Families often view daughters as burdens and see marriage as a form of protection and economic relief.
- **Informal Settlements:** Despite limited resources, children attend school due to community awareness. However, basic needs often take precedence over education, limiting the long-term educational prospects of youth, particularly girls.
- **Planned Relocation Sites:** While the government has provided schools and infrastructure, societal norms continue to deprioritize girls' education. Gender roles, early marriage, and household responsibilities remain significant barriers.

Shared Impacts on Children in Sirajganj

- **Educational Disruption:** In both districts, schools are often closed or repurposed as emergency shelters during disasters. This disrupts education, especially for girls, contributing to long-term learning deficits.
- **Food Insecurity and Economic Hardship:** Kabir (2023) reported that 63% of children in flood-affected areas suffer from food insecurity due to loss of household income and agricultural production.
- **Child Marriage:** Driven by poverty and insecurity, child marriage rates have surged by up to 39% in disaster-prone districts (IRC, 2023). Families may see early marriage as a coping mechanism to reduce economic burdens.
- **Mental Health Challenges:** Repeated displacement and trauma have led to increasing cases of anxiety, depression, and PTSD among children (Uddin et al., 2021). However, access to psychosocial support and mental health services remains limited.
- **Marginalization and Discrimination:** Vulnerable groups—including girls, children with disabilities, ethnic minorities, and Rohingya refugees—face compounded disadvantages. They are often excluded from disaster preparedness plans and lack targeted support.

Children in Sirajganj experience a disproportionate burden from climate change. Addressing their needs demands a child-centered adaptation approach that integrates education, health, protection, and psychosocial support into disaster risk management and climate resilience planning.

Table 03: Child Population at Risk in Climate-Vulnerable Districts of Bangladesh (2018)

Disaster-prone Districts		Projected Under-5 Population	Projected Under-18 Population 2018
DISTRICT	MAIN RISK		
Bhola	Cyclone	229,660	870,403
Barguna	Cyclone	94,938	365,730
Patuakhali	Cyclone	172,264	674,206
Pirojpur	Cyclone	111,555	452,548
Cox's Bazar	Cyclone	378,154	1,395,360
Noakhali	Cyclone	451,540	1,718,893
Tangail	Flood	386,040	1,482,420
Faridpur	Flood	219,686	862,401
Bagerhat	Cyclone	133,822	551,104
Khulna	Cyclone	200,105	831,287
Jessore	Water Logging	276,411	1,112,531
Satkhira	Cyclone	185,281	772,118
Netrokona	Flash flood	318,463	1,121,414
Jamalpur	Flood	279,345	1,025,598
Sirajganj	Flood	391,315	1,440,772
Rajshahi	Drought	246,764	1,027,032
Gaibandha	Flood	293,269	293,269
Nilphamari	Drought	239,662	888,557
Habiganj	Flash flood	326,517	1,125,993
Sunamganj	Flash flood	424,275	1,408,194
Total number of children at risk:		5,359,067	19,419,829

1.4 International Legal Framework

Bangladesh is a signatory to several international legal instruments that provide protections and rights to all children, including children with disabilities, in the context of climate change and disaster risk.

- United Nations Convention on the Rights of the Child (UNCRC): Guarantees children's rights to survival, development, protection, and participation. Article 23 specifically addresses the rights of children with disabilities, emphasizing their right to special care, education, and dignity. Other relevant articles include Article 6 (survival), Article 24 (health), Article 28 (education), and Articles 34–36 (protection from exploitation).
- Convention on the Rights of Persons with Disabilities (CRPD): Emphasizes the rights of persons with disabilities, including children, to be included in all aspects of life on an equal basis. Article 7 of the CRPD specifically affirms the rights of children with disabilities to full enjoyment of all human rights and fundamental freedoms.
- Sendai Framework for Disaster Risk Reduction (2015–2030): Calls for inclusive and accessible disaster risk reduction strategies that account for the needs and capabilities of people with disabilities, including children.
- Sustainable Development Goals (SDGs):
 - SDG 4 promotes inclusive and equitable quality education.
 - SDG 10 calls for reducing inequalities.
 - SDG 13 focuses on urgent action to combat climate change and its impacts.
 - SDG 16 aims to promote inclusive societies and ensure access to justice for all, including marginalized and vulnerable children.

1.5 Bangladesh National Framework

Bangladesh has developed multiple national policies that address the rights of children, including children with disabilities. However, integration of disability-specific provisions into climate change and disaster risk management remains insufficient.

- National Children Policy (2011): Affirms the rights of all children, including those with disabilities, to health, education, protection, and participation. It calls for inclusive education and protection measures but lacks practical implementation strategies in disaster contexts.
- Persons with Disabilities Rights and Protection Act (2013): A landmark legislation providing legal rights and protections for persons with disabilities. It mandates accessibility, inclusive education, health services, and integration of disability issues into national policies, including during emergencies and disaster responses.
- National Plan for Disaster Management (NPDM) 2021–2025: Promotes inclusive disaster risk management and community-based preparedness, but lacks clear mechanisms for involving or supporting children with disabilities in emergencies.
- Bangladesh Climate Change Strategy and Action Plan (BCCSAP) 2009: Recognizes vulnerable populations in general terms but does not address the unique needs of children with disabilities.
- National Education Policy (2010): Emphasizes universal and inclusive education, including for children with disabilities, but does not provide specific guidance for disaster-resilient or climate-adaptive educational infrastructure for children with special needs.

Despite these policies, implementation gaps persist. Children with disabilities remain underrepresented in disaster response planning, and there is an urgent need to ensure their full inclusion in climate adaptation, emergency preparedness, and recovery programs.

1.6 Why Children Must Be Considered Separately

Children—defined by the UN Convention on the Rights of the Child as individuals aged 18 and under—make up a significant portion of disaster-affected populations. In Bangladesh, where children constitute 41% of the population, they are particularly vulnerable to the impacts of climate change and natural disasters such as cyclones, floods, river erosion, and salinity intrusion. These hazards frequently lead to health complications, malnutrition, displacement, school dropout, child labor, early marriage, and psychological trauma.

Despite bearing the brunt of these challenges, children's voices remain largely absent from policy-making, disaster preparedness, and climate adaptation processes in Bangladesh. Their specific needs are often overlooked in relief and recovery efforts, which typically focus on adult populations. To reduce this neglect, it is essential to understand children's experiences directly and recognize how their vulnerability varies by age, gender, socioeconomic status, disability, and geographic location. Further research is needed to explore these dimensions, especially in high-risk areas like coastal and char regions.

Addressing children's vulnerability requires coordinated action from government agencies, NGOs, humanitarian actors, schools, and community members—including teachers, mental health professionals, emergency responders, and caregivers. Integrating children's perspectives and needs into disaster planning and response in Bangladesh is critical to safeguarding their rights and promoting long-term resilience.

1.7 What's Missing? What Will This Research Do?

Current DRM and climate policies in Bangladesh overlook critical child-centered aspects. Key gaps include:

- Lack of child participation in disaster and climate policy processes.
- Limited psychosocial support services.
- Weak integration of child protection in emergency responses.
- Absence of disaggregated, child-specific data in planning.

This research will document the lived experiences of children in Sirajganj, analyze policy gaps, and provide actionable recommendations to integrate child rights into climate resilience planning.



2. Research Problem

In Bangladesh, climate change is primarily framed within the domain of disaster risk management (DRM) due to the country's chronic exposure to natural hazards such as floods, cyclones, river erosion, and salinity intrusion. While this approach has mobilized emergency response systems, it often overlooks the specific vulnerabilities, rights, and voices of children—especially those from marginalized communities. Instead of focusing on proactive, child-centered resilience and adaptation strategies, national efforts largely emphasize reactive measures that fail to integrate children's lived experiences or developmental needs.

Children in disaster-prone districts like Sirajganj—where climate-induced hazards such as river erosion and monsoon flooding are recurrent—face compounded risks. These risks are especially acute for children from:

- Ethnic minority communities (e.g., Santal, Orao, Mundari, Mahato) who face socio-economic exclusion and lack access to land rights, services, and adaptive infrastructure;
- Households in char lands and informal settlements, who experience repeated displacement, loss of livelihoods, and food insecurity;
- Families led by women, persons with disabilities, or those living in extreme poverty.
- These children are disproportionately affected because:
 - Their environments are physically exposed to frequent and severe hazards.
 - Their families lack economic resilience to recover from disasters.
 - They encounter chronic barriers to accessing education, healthcare, and protection services.
- Emergency response systems often lack child-friendly, inclusive, and gender-sensitive provisions.
- Their perspectives are rarely included in decision-making processes related to disaster planning and climate policy.

Despite Bangladesh's commitment to several international and national legal frameworks—such as the UNCRC, CRPD, and National Children Policy—the specific needs of children remain insufficiently addressed in DRM and climate adaptation policies. Key gaps include:

- Limited psychosocial support for children before, during, and after climate disasters;
- Absence of disaggregated data by age, gender, disability, and ethnicity;
- Inadequate provisions for inclusive education in climate-affected regions;
- Weak integration of child protection in shelter management and emergency planning.

This research therefore seeks to bridge the disconnect between child rights frameworks and climate policies by documenting how climate-induced disasters impact children in Sirajganj and by offering actionable recommendations to ensure that children's needs and voices are prioritized in future climate resilience strategies.



3. Research Scope and Significance

This study focuses on the climate-vulnerable and disaster-prone district of Sirajganj in northwestern Bangladesh. It aims to investigate how recurrent climate-induced disasters such as flooding and river erosion affect children’s access to their fundamental rights—specifically in relation to health, education, protection, participation, and well-being. Through qualitative methods including desk reviews, focus group discussions (FGDs) with youth and caregivers, and key informant interviews (KIIs) with local authorities, school officials, and NGO workers, the research will capture both the structural policy gaps and the lived experiences of children.

Academic Contribution

- Enhances the academic understanding of child rights and climate justice in Global South contexts.
- Applies the UNCRC framework to real-world disaster settings in Bangladesh.
- Contributes to global discourse on the Sustainable Development Goals, particularly, SDG 3 (Good Health and Well-being), SDG 4 (Quality Education), SDG 13 (Climate Action) and SDG 16 (Peace, Justice, and Strong Institutions).
- Policy and Practice Contribution
- Identifies weaknesses in current disaster risk management related to children’s protection, educational continuity, and psychosocial support.
- Provides evidence-based recommendations for child-centered DRR planning and implementation.
- Strengthens national alignment with international obligations such as the UNCRC, CRPD, Sendai Framework, and the SDGs.
- Supports local governments, humanitarian actors, and civil society in making disaster preparedness more inclusive, participatory, and responsive to children's needs.

By elevating the voices and experiences of children, particularly from marginalized groups such as ethnic minorities and displaced households—this research will contribute to shaping more equitable and resilient climate adaptation strategies.

Research Objectives:

- To explore the impacts of climate-induced disasters on children's access to fundamental rights and overall well-being in Sirajganj.
- To identify existing policy gaps in Bangladesh’s disaster management frameworks in relation to vulnerable children.
- To investigate actionable strategies for strengthening child-centered disaster resilience and protection systems in high-risk communities.

Research Questions:

- How do climate-induced disasters disproportionately affect children from vulnerable communities in accessing their fundamental rights and well-being in Sirajganj?
- In what ways does Bangladesh’s national disaster management policy fail to address the specific needs of vulnerable children?
- What policy reforms and community-level strategies can strengthen child-centered resilience and protection systems in climate-affected areas?

Table 04: Research Matrix: Impact of Climate-Induced Disasters on Children’s Rights

Research Question	Objective	Key Focus Areas	Data Sources & Methods	Analysis
1. How do climate-induced disasters affect children’s rights and well-being?	To explore the impact of climate hazards on children’s access to rights and services.	Flooding, erosion, displacement; education, health, protection (UNCRC)	FGDs with children and caregivers, KIIs with NGOs and teachers	Thematic and rights-based analysis
2. How do existing DRM policies overlook the needs of vulnerable children?	To identify gaps in disaster management frameworks.	Policy shortcomings: MHPSS, inclusive education, child protection in emergencies	Policy review, KIIs with local authorities and policy actors	Gap and policy-practice analysis
3. What strategies can enhance child-centered disaster resilience?	To recommend inclusive and child-focused resilience strategies.	Community-based DRM, child participation, service continuity	KIIs with CSOs, local leaders; participatory workshops	Strategic synthesis aligned with UNCRC and SDGs

This study adopts a structured research matrix to align its objectives, research questions, and methods with the overall aim of understanding how climate-induced disasters affect children’s rights in Sirajganj. The matrix is built around three core research questions that explore: (1) the disproportionate impact of climate hazards on vulnerable children’s access to fundamental rights, (2) the gaps in existing disaster risk management (DRM) policies in addressing children’s specific needs, and (3) actionable strategies for strengthening child-centered resilience and protection systems.

Key focus areas include the intersection of climate hazards with structural vulnerabilities (e.g., poverty, displacement, marginalization), and the breakdown of essential services such as education, healthcare, and child protection. Data is collected through qualitative methods, including focus group discussions, key informant interviews, and participatory workshops. Analysis will draw on thematic coding and rights-based frameworks, particularly the UNCRC and relevant SDGs, to inform evidence-based recommendations for more inclusive and resilient DRM practices.

4. Research Methodology

This research adopts a mixed-methods approach to comprehensively examine the multifaceted impacts of climate change on children's learning, health, mental well-being, and safety in the disaster-prone areas of Sirajganj. The methodology integrates both primary and secondary data sources, combining desk reviews, Focus Group Discussions (FGDs), and Key Informant Interviews (KIIs). This approach enables an in-depth understanding of children's lived experiences during climate-induced disasters and helps identify both community-level responses and policy-oriented strategies for strengthening child-centered disaster resilience.

Research Approach and Data Sources

The study combines primary and secondary data sources:

- *Secondary Data:* A comprehensive desk review was conducted to examine existing literature, government and NGO reports, policy documents, and academic studies related to climate change, disaster impacts, and child rights in Bangladesh.
- *Primary Data:* Field-level data was collected in selected areas of Sirajganj District—one of the most climate-vulnerable regions in Bangladesh. The data captures the lived experiences and perceptions of children, adolescents, caregivers, and institutional stakeholders.

Research Design

The study's research design is structured around the following three components:

- *Desk Review:* An extensive desk review analyzed national and international literature on the impacts of climate change on children's rights. This included reviewing government policy documents, academic articles, and relevant reports from UN agencies, NGOs, and civil society organizations. The objective was to identify policy gaps, best practices, and key challenges to inform the qualitative tools and overall analysis.
- *Focus Group Discussions (FGDs):* A total of eight FGDs were conducted to capture community-level perspectives on climate-induced challenges affecting children. FGDs allowed for participatory and age-appropriate dialogue, ensuring a nuanced understanding of gender-specific and age-specific vulnerabilities. The FGDs were structured as follows:
 - a. Two FGDs with children aged 14–16 (mixed groups of boys and girls)
 - b. Four FGDs with adolescents aged 17–19 (two with girls and two with boys)
 - c. Two FGDs with parents and caregivers of children
- *Key Informant Interviews (KIIs):* Seven semi-structured interviews were conducted with key stakeholders to obtain expert and institutional insights. These informants represented a range of sectors directly engaged with children's health, education, and protection in the context of disaster management:
 - a. Health department officials
 - b. Local Government Institution (LGI) representatives
 - c. School teachers
 - d. NGO/CSO representatives

Table 05: Data collection breakdown by respondents and methods

Method	Respondent Category	Number of Sessions	Number of Participants
FGD	Parents/Caregivers of Children	2	21 (15 female)
	Children (14–16 years old)	2	25 (17 girls)
	Adolescents (17–19 years old; boys and girls)	4	49 (26 girls)
KII	Government Officials (Health Department)	—	1
	Local Government Institution Representatives	—	2
	School Teachers	—	2
	NGO/CSO Representatives	—	2
Total		8 FGDs, 7 KIIs	102 participants

Data Analysis

All primary data were transcribed and translated where necessary. Thematic analysis was applied to identify key patterns, categories, and insights emerging from the qualitative data. Coding was done manually and digitally, ensuring themes aligned with the research objectives and conceptual framework.

Data triangulation was employed to validate findings across sources—cross-referencing insights from the desk review, FGDs, and KIIs. This approach enhanced the reliability and depth of the analysis, helping to produce a well-rounded and context-sensitive understanding of how climate change is impacting children's lives in Sirajganj.



5. Findings from the Literature Review

5.1. Climate Change – Global Picture

Climate change is a defining crisis of our time, with wide-ranging impacts on ecosystems, health, economies, and human rights. Globally, the increasing frequency and severity of extreme weather events—such as hurricanes, droughts, floods, and wildfires—have disrupted communities, particularly in low- and middle-income countries.

Children are among the most affected groups worldwide. The Intergovernmental Panel on Climate Change (IPCC) confirms that early-life exposure to climate-related shocks can have long-term consequences on physical health, cognitive development, and social outcomes. The UNICEF report (2021) emphasizes that over 1 billion children globally are at extremely high risk due to climate and environmental hazards, a phenomenon it describes as a “climate crisis that is a child rights crisis.”

5.2. Climate Change Impact on Vulnerable Groups

The impact of climate change is uneven, disproportionately affecting marginalized communities who have the least capacity to adapt. These include:

- Ultra-poor households: Lack resources to recover from climate shocks, increasing children's risk of malnutrition, school dropout, and child labor.
- Communities in disaster-prone areas: Coastal and riverine populations face repeated displacement, loss of livelihood, and destruction of infrastructure.
- Riverbank Erosion and Displacement: Each year, riverbank erosion affects around 1 million people in Bangladesh, particularly those living near major rivers and on chars. In northwestern regions, households have been displaced an average of 4.5 times, mostly within nearby areas. Studies show 80–95% of char households are migrants, often engaged in temporary, seasonal, or circular migration. In Sirajganj, 5,500 out of 30,000 slum residents are displaced by river erosion.
- Indigenous and ethnic minorities: Often excluded from policy dialogues and public services, they face higher exposure to environmental stressors without adequate protection.
- Children with disabilities: Face greater risk during evacuations and have limited access to inclusive healthcare, education, and emergency response.

Climate change amplifies existing inequalities, leading to layered vulnerabilities that leave already-marginalized children at greater risk of exploitation, forced migration, early marriage, and violence.

5.3. Bangladesh Situation: National Context + Sirajganj + Child Rights Challenges

National Climate Picture

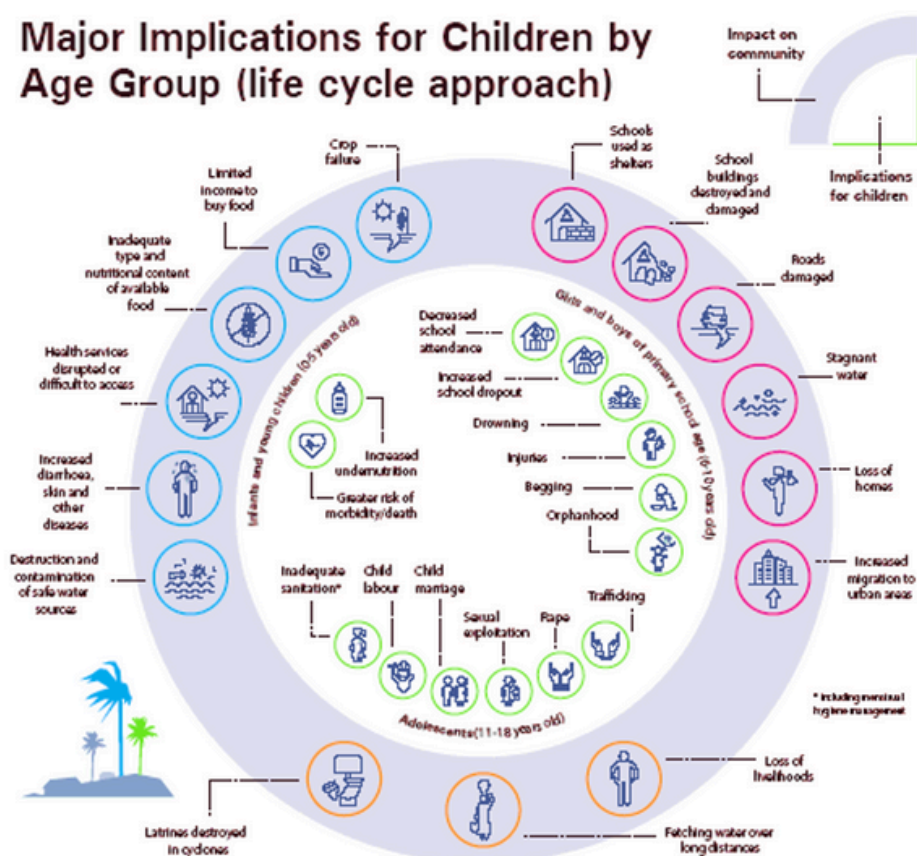
Bangladesh is one of the most climate-vulnerable countries globally due to its low elevation, high population density, and dependence on climate-sensitive sectors. It faces regular disasters—such as floods, cyclones, and droughts—that have intensified in frequency and severity over the last two decades.

The country ranks 15th in the Children’s Climate Risk Index (UNICEF, 2021).

According to UNICEF (2022), over 19 million children in Bangladesh are highly exposed to climate-related risks:

- 12 million in flood-prone riverine areas,
- 4.5 million in cyclone-vulnerable coastal regions,
- 3 million in drought-affected inland zones.

UNICEF also identified number of Impact of Climate Change on Children in Bangladesh^[1], as presented in the following:



Regional Focus: Sirajganj District

Sirajganj, located in northwestern Bangladesh along the banks of the Jamuna River, is among the most climate-affected districts in the country. It frequently experiences severe monsoon floods, riverbank erosion, and displacement. In some years, over 60% of the district has been submerged. Char areas—temporary silt islands formed in riverbeds—are particularly vulnerable, housing thousands of families in precarious conditions.

Key impacts in Sirajganj include:

- Flood and erosion-related displacement: Over 100,000 people face repeated displacement due to erosion, with around 5,500 of 30,000 urban slum dwellers having been forced from their original homes.

[1] The Impact of Climate Change on Children in Bangladesh, United Nations Children's Fund (UNICEF) November 2016

- Loss of livelihoods: Floods damage agricultural land, homes, and infrastructure, exacerbating poverty and food insecurity.
- Environmental degradation and health risks: Studies show high levels of soil and water contamination, disease outbreaks (e.g., diarrhea, cholera), and reduced access to clean water and healthcare.
- Disproportionate impact on marginalized communities: Ethnic minorities, women, children, and char dwellers including persons with disability face greater challenges due to lack of access to resources, social safety nets, and public services.
- Educational disruption: Frequent flooding leads to school closures, loss of learning materials, and increased dropout rates, especially among girls.
- Strain on local services and infrastructure: Recurrent disasters damage roads, embankments, and public facilities, impeding mobility and emergency response.
- Migration pressures: Seasonal and permanent displacement have increased rural-to-urban migration, leading to overcrowding in urban slums and pressure on city resources.

Child Rights Challenges in the Face of Climate Change

Climate change poses a growing threat to children in Bangladesh, particularly in high-risk areas like Sirajganj. With more than 19 million children living in climate-vulnerable zones (UNICEF), the impacts of floods, erosion, droughts, and cyclones are not just environmental—they are deeply tied to the erosion of children’s fundamental rights.

Multidimensional Rights Violations

In climate-affected districts, children face interconnected and compounding challenges that undermine their development, health, safety, and future prospects. These risks are especially severe among children in char lands, slums, relocation camps, and displacement-prone areas.

1. Survival and Health: Frequent flooding and displacement compromise children’s access to clean water, food, and essential health services. Outbreaks of waterborne diseases such as diarrhea, cholera, and typhoid are common. Nutritional deficiencies and child mortality rates rise in post-disaster contexts, especially among children under five.

2. Education Disruption: Climate-induced school closures and damage to infrastructure hinder children’s ability to pursue continuous education. Girls are disproportionately affected, as displacement, domestic responsibilities, and early marriage often force them out of school. In char and informal settlements, education becomes a lower priority amid survival concerns.

3. Protection from Exploitation and Abuse: Disasters increase vulnerabilities to child labor, early marriage, and trafficking, especially when families experience income loss. For instance, IRC (2023) reported a 39% rise in child marriage in disaster-affected areas. Girls and children with disabilities are at heightened risk due to limited safety nets and protection systems.

4. Participation and Mental Well-being: Children in climate-impacted regions rarely have a say in decisions affecting their lives—whether in adaptation planning or disaster preparedness. Additionally, repeated exposure to disasters can lead to psychological trauma, including anxiety, depression, and PTSD. Access to mental health and psychosocial support remains extremely limited in both rural and urban areas.

5. Inequity and Marginalization: Children from disadvantaged groups—including those living in poverty, with disabilities, or from ethnic minorities—face multiple layers of exclusion. They are often overlooked in relief efforts, excluded from education and healthcare, and forced to live in unsafe, overcrowded shelters or slums after displacement.

Climate Change and the UNCRC: Undermined Rights

The impacts of climate change directly challenge Bangladesh's commitments under the UN Convention on the Rights of the Child (UNCRC) by jeopardizing key entitlements:

- Article 6 – Right to Survival and Development: Increased exposure to malnutrition, disease, and disaster-induced fatalities threatens children's ability to survive and thrive.
- Article 24 – Right to Health: Rising salinity, poor sanitation, and disrupted services diminish physical and mental health outcomes.
- Article 28 – Right to Education: Floods and other disasters disrupt education by damaging schools, destroying learning materials, and forcing closures. For instance, in 2007, floods in nine upazilas of Sirajganj resulted in the partial or complete damage of 710 educational institutions, including colleges, high schools, madrasas, and primary schools. More recently, secondary data indicates that over 600,000 children in Sylhet were affected by the 2024 floods, further compromising their access to education (UNICEF, 2025).
- Articles 34–36 – Protection from Exploitation: Economic hardship fuels a surge in child marriage, labor, and trafficking.
- Article 12 – Right to Participation: Children's voices are absent in national climate dialogues and local disaster risk reduction planning.
- Article 27 – Adequate Standard of Living: Loss of homes, land, and livelihoods pushes families into chronic poverty and unsafe housing.
- Right to Mental Health and Emotional Well-being (cross-cutting): Children affected by recurring disasters are often traumatized, but few receive appropriate psychosocial care.

Climate change is not just an environmental issue—it is a profound child rights crisis. Its effects cut across all domains of child well-being, threatening to reverse decades of progress in health, education, protection, and equity. Addressing these challenges requires child-centered climate adaptation, inclusive planning, and investment in systems that safeguard children's rights in both emergency and long-term development contexts.

5.4 Findings from the Primary data - qualitative survey

Followings presented qualitative findings from Sirajganj District, drawing on focus group discussions (FGDs) with children, adolescents, caregivers, and key informant interviews (KIIs) with teachers and NGO representatives. The data highlights the multi-dimensional impacts of climate-induced disasters on children's rights and well-being, identifies policy and implementation gaps, and outlines strategies to strengthen child-centered disaster resilience in vulnerable communities.

5.4.1 Impact of Climate-Induced Disasters on Children's Rights and Well-being

Climate-induced disasters such as floods, cyclones, and river erosion disproportionately affect children in Sirajganj, especially those from landless, displaced, or impoverished families. These recurring shocks severely undermine their rights to education, health, protection, and participation. Climate-induced disasters in Sirajganj have a disproportionate and multi-dimensional impact on children, undermining their rights to education, health, protection, and participation.

Children from low-income, landless, and displaced households, as well as girls and children with disabilities, are particularly vulnerable. The intersection of poverty, displacement, and weak infrastructure deepens their exposure to harm.

Education is one of the most visibly disrupted sectors. Prolonged flooding and river erosion lead to the destruction of school infrastructure, prolonged closures, and unsafe transportation routes. Children often lose essential learning materials during displacement, and the lack of a conducive learning environment at shelters or temporary homes further hinders their academic continuity. Many parents and adolescents reported that these interruptions diminish children's confidence and motivation, with some ultimately dropping out or turning to work to support their families. Although the government and NGOs provide support in the form of free textbooks and stipends, these are largely insufficient and reactive, failing to address the educational needs of children in remote or marginalized communities.

“I had to stop going to school for a year after our house was washed away in the river. I couldn’t manage transportation or buy new books.”

– Boy, 17, FGD

“When the flood came, all our books were soaked. We had to move to a shelter, and I couldn’t study there.”

–Girl, 15, FGD

“My child says, ‘What is the point of going to school when I keep losing everything every year?’”

– Father, 43, FGD

In terms of health and nutrition, the effects are equally severe. Children in flood-affected areas commonly experience waterborne diseases such as diarrhea, typhoid, and skin infections due to contaminated water and unsanitary shelter conditions. Access to routine healthcare—including immunizations—is disrupted during and after disasters. Simultaneously, food insecurity is exacerbated by the loss of agricultural production and market access, leading to acute malnutrition, stunting, and vitamin deficiencies among children. The lack of adolescent-focused health services, including reproductive and menstrual health care, further restricts their well-being.

**“After the flood, my son had severe diarrhea,
and we couldn’t find clean water or medicine
for two days.”
–Mother, 38, FGD**

**“We had only rice and dry food to eat. There
were no vegetables or eggs for weeks.”
–Boy, 14, FGD**

**“Even the tube wells were underwater. We
drank from ponds and got sick.”
–Father, 40, FGD**

The psychological burden of climate shocks is another critical dimension. Disasters cause emotional distress in children through the loss of homes, schools, personal belongings, and even loved ones. Children and adolescents described feeling fear, anxiety, hopelessness, and grief—often without access to structured mental health or psychosocial support (MHPSS). Teachers and parents sometimes offer informal emotional care, but the absence of trained professionals and structured interventions means that trauma often goes unaddressed. Girls, children with disabilities, and adolescents reported heightened vulnerability to isolation and emotional instability, which in turn affects their education and physical health.



“When the floodwaters rose suddenly, I thought we would die. I still can’t sleep properly.”

–Girl, 16, FGD

“I used to love drawing. But after our house was destroyed, I stopped doing everything.”

–Boy, 15, FGD

“My son says, ‘Our life will never be normal again.’”

–Mother, 45, FGD

Stigma and cultural barriers significantly hinder children’s ability to express emotional distress, particularly among boys and adolescents. In many communities, traditional gender norms discourage boys from showing vulnerability, labeling emotional expression as a sign of weakness. As a result, emotional and psychological struggles often remain hidden, unaddressed, and untreated. This cultural silence around mental health and emotional well-being prevents children from accessing the support they need, leaving them more vulnerable to long-term psychological consequences.

Child protection concerns intensify sharply during disasters, exposing children to a range of heightened risks. Families facing sudden displacement, loss of income, or destruction of homes often resort to desperate coping mechanisms. Economic hardship compels some households to withdraw children from school and push them into hazardous forms of labor, exposing them to physical harm, exploitation, and long-term developmental setbacks. In some cases, financial and social pressures result in early or forced marriages, especially for girls, as a perceived way to reduce household burden or ensure safety.

Disasters often lead to unsafe and unregulated migration, where children become separated from their families or travel in unsafe conditions, increasing the risk of trafficking and exploitation. Alarming reports have emerged of child abuse, neglect, and trafficking in emergency shelters and among displaced populations. These incidents are exacerbated by the breakdown of traditional family and community support systems, leaving many children unsupervised and unprotected in already chaotic environments.

There is a lack of structured case management, and government and NGO child protection services are often absent in emergency shelters or post-disaster recovery phases.

Children’s capacity to participate in preparedness and resilience efforts remains underdeveloped. While some schools conduct emergency drills and a few community-level initiatives involve youth in awareness campaigns, these are sporadic and lack institutional backing. Most children—especially in char and rural areas—do not receive training or tools to prepare for or respond to disasters. Their voices are rarely included in family or community-level preparedness planning. This exclusion perpetuates a view of children as passive victims rather than active agents of resilience.

“During the floods, a girl in our neighborhood was married off because her parents feared harassment in the shelter.”

–Mother, 39, FGD

“There is no separate space or toilet for girls in the shelters. We feel unsafe.”

–Girl, 14, FGD

“I worked in a garage for six months after the floods to support my family. I couldn’t return to school.”

–Boy, 17, FGD

These quotes highlight critical gaps in child protection during disasters. Fear of gender-based violence in shelters often leads families to adopt harmful coping strategies, such as child marriage, reflecting both insecurity in public shelters and deep-rooted social norms. The quote from the boy illustrates how economic hardship following disasters forces children, especially boys, into child labor, disrupting their education and long-term development. Additionally, the lack of safe, gender-sensitive infrastructure in shelters increases the protection risks for adolescent girls, reinforcing their feelings of insecurity and exclusion. Together, these accounts point to the urgent need for child-sensitive disaster planning, including safe shelter design, psychosocial support, and family assistance to prevent negative coping mechanisms.

“Children are excluded from drills and not considered in planning.”
–Teacher, 48, KII

"Our opinions are not taken into account; adults think we don't understand."
–Girl, 15, FGD

The findings also reveal that children and adolescents have minimal opportunities to express their views or meaningfully influence decision-making processes related to disaster preparedness and response. Deeply embedded social norms, which perceive children as passive recipients rather than active stakeholders, combine with adult-centric governance structures to reinforce their exclusion. As a result, young voices are systematically sidelined, even though they are among the most affected during disasters. Many children interviewed shared that their ideas, concerns, and lived experiences were often dismissed or ignored during community planning or disaster risk reduction discussions. Even when invited to participate, their involvement was often tokenistic, lacking real influence or follow-up. This reflects a broader lack of institutional mechanisms to engage youth meaningfully in disaster governance.

“Youth involvement in planning is not prioritized by local governance.”
–LGI Official, 41, KII

“We are not asked what we think; they assume we don’t know anything.”
–Boy, 16, FGD

Youth engagement platforms, where they exist, are limited in number, poorly resourced, and disconnected from formal policymaking bodies. They rarely have formal linkages with local governance mechanisms such as Union Disaster Management Committees (UDMCs), which are responsible for key planning and response activities. As a result, adolescents’ unique insights and coping strategies remain untapped, despite their firsthand experiences navigating disaster risks in their communities. This marginalization not only undermines children’s rights to participation, as outlined in the UN Convention on the Rights of the Child, but also weakens the overall effectiveness and inclusiveness of disaster risk governance. Building systematic, age-appropriate, and institutionalized avenues for youth participation—with feedback mechanisms, capacity-building, and representation at decision-making tables—is essential to creating resilient, child-centered disaster preparedness and response systems.

5.4.2 Gaps in Policy and Governance for Child-Centered Disaster Management

Despite some progress at the national policy level, significant gaps remain in integrating children's needs into Bangladesh's disaster management frameworks. While documents such as the National Plan for Disaster Management acknowledge children's vulnerability, there is little evidence of operationalization at the subnational level. Implementation is fragmented due to poor coordination between sectors and a lack of clear mandates or budget allocations for child-specific interventions. Education and health systems are not equipped with climate-resilient infrastructure or contingency plans that ensure uninterrupted services during disasters. Schools, when used as emergency shelters, often lack child-friendly facilities such as separate toilets, sleeping spaces, or learning corners. Health services for children are limited to basic first aid or emergency treatment; long-term nutrition and mental health support are missing, especially in char areas.

Data and monitoring systems rarely disaggregate children's experiences during disasters, making it difficult to track outcomes or develop evidence-based responses. Moreover, national and local budgets allocate minimal funding for child-centered disaster risk reduction (DRR) activities. This leads to overreliance on NGOs and short-term aid, rather than sustained public investment.

“Budgets rarely allocate for child-centered DRR activities.”

–Education Official, 52, KII

“Children's needs are not integrated in local-level disaster responses.”

–NGO Personnel 40, KII

“Schools are used as shelters, but there are no safe zones for children inside.”

–Teacher, 50, KII

“Children are rarely included in disaster meetings or planning. Adults don't think their opinions matter.” – Teacher, 45, KII

“There is no separate fund or system for addressing children's needs in disasters.”–NGO Personnel, 37, KII

Community and local governance structures such as Union Disaster Management Committees often lack the training or mandates to consider children's unique risks or to meaningfully include them in planning.

Another critical policy gap lies in the lack of accountability and participatory mechanisms for children and youth. Their participation in local disaster committees or policy consultations is minimal or tokenistic. As a result, policy decisions often overlook children's perspectives, needs, and adaptive capacities. Institutional frameworks remain rigid, adult-centric, and poorly aligned with the evolving climate risks facing Bangladesh's younger generations.

Key Informant Interviews (KIIs) with Community Health Care Providers (CHCPs) reveal that the local health system in Sirajganj is only partially prepared to address children's health needs following climate-induced disasters. Community clinics offer essential primary care services, often supported by both government and non-government actors. However, several systemic challenges persist. These include inadequate infrastructure in remote char areas, limited availability of mental health support, and insufficient outreach services in hard-to-reach regions—significantly hindering children's access to timely and comprehensive healthcare during and after disasters.

5.4.3 Strategies for Strengthening Child-Centered Resilience

To address these challenges, a combination of policy reforms and community-level strategies is essential. *First*, climate-resilient infrastructure—especially schools, health centers, and shelters—must be prioritized. School buildings should be flood-proofed, equipped with separate WASH facilities, and designed to serve as safe spaces during emergencies. Mobile and temporary learning centers should be institutionalized with pre-trained educators and low/no-tech learning materials. *Second*, child-sensitive health services must be scaled up. This includes mobile health units with pediatric and nutrition specialists, pre-positioned child health kits, and adolescent-friendly services covering reproductive and mental health. Nutrition-sensitive agriculture programs can support household food security and resilience. *Third*, structured MHPSS interventions should be embedded in disaster response and education systems. Training teachers and caregivers in psychosocial first aid, establishing child-friendly spaces, and offering tele-counseling or mobile support units can help children recover emotionally and regain a sense of normalcy.

**“Train our teachers and give us someone to talk to when we are scared.”
–Boy, 12, FGD**

“If we could talk to the union council, we’d tell them what children really need in shelters.” –Girl, 15, FGD

**“We need classes in safe places like community centers during floods.”
–Boy, 13, FGD**

For protection, disaster policies must include specific provisions for preventing child labor, early marriage, and exploitation. Protection committees, safe shelter designs, and case referral systems must be activated during and after emergencies. Awareness campaigns should challenge harmful coping strategies and promote child rights in emergencies. Preparedness efforts should include children meaningfully. School-based DRR curricula, youth preparedness teams, and child-friendly early warning tools can empower children to act safely and support their communities. Similarly, participatory platforms—like school councils, youth committees, or adolescent representatives in disaster committees—should be formalized to ensure that children have a voice in shaping resilience strategies.

Finally, governance systems must integrate child-centered DRR into broader policies on climate adaptation, education, health, and social protection.

Table 06: Data collection breakdown by respondents and methods

Thematic Area	Recommended Strategies
Education	Establish flood-resilient schools, deploy mobile classrooms, promote low/no-tech learning solutions, and distribute education recovery kits with integrated Mental Health and Psychosocial Support (MHPSS).
Health & Nutrition	Operate mobile health units, pre-position child health kits, promote nutrition-sensitive agriculture, and ensure adolescent-friendly health services.
MHPSS (Mental Health and Psychosocial Support)	Train teachers in Psychological First Aid (PFA), create child-friendly spaces, offer tele-counseling services, and integrate MHPSS into school curricula.
Child Protection	Mainstream child protection (CP) into Disaster Risk Management (DRM), set up safe zones in shelters, and build capacity of local child protection actors.
Preparedness	Institutionalize child-inclusive Disaster Risk Reduction (DRR) in schools, form youth-led preparedness groups, and use visual early warning systems accessible to children.
Participation	Establish youth committees, deliver civic education, include adolescents in Union Disaster Management Committees (UDMCs), and promote public dialogues with local governments.
Governance	Mainstream child-centered DRR across all policy levels, increase financial investment in child resilience, track child-specific outcomes, and improve interagency coordination.

6. Conclusion

The findings from this study clearly demonstrate that children in climate-vulnerable areas like Sirajganj face multidimensional threats to their fundamental rights—including education, health, protection, and participation—due to increasingly frequent and severe climate-induced disasters such as floods and river erosion. These hazards disrupt regular schooling, limit access to essential health and nutrition services, contribute to psychological distress, and increase children's exposure to violence, exploitation, neglect, and unsafe living conditions. The cumulative impact of these disruptions not only undermines children's immediate well-being but also threatens their long-term development and future potential.

Despite the presence of national disaster management frameworks, there are significant gaps in policy design, institutional capacity, and implementation, particularly in addressing the specific vulnerabilities and needs of children. Critical elements—such as child-focused mental health and psychosocial support (MHPSS), inclusive protection systems, meaningful child participation, and resilient service infrastructure—remain either insufficiently addressed or completely overlooked. This results in an ongoing disconnect between national strategies and the lived realities of children on the ground, particularly in high-risk and underserved areas like the chars and urban slums of Sirajganj. However, insights from children and community members collected through FGDs and KIIs offer a clear and locally grounded roadmap for change. Participants recommended a range of practical and inclusive strategies, such as constructing flood-resilient schools, deploying mobile classrooms, and providing low-tech learning kits that incorporate MHPSS to ensure educational continuity during crises. In the health sector, mobile health units, pre-positioned child health kits, nutrition-sensitive agricultural practices, and adolescent-friendly services were highlighted as key interventions. To address rising mental health concerns, the training of teachers in Psychological First Aid, development of child-friendly spaces, integration of tele-counseling, and embedding MHPSS into school curricula were suggested. For child protection, the integration of child protection mechanisms within disaster risk management, establishment of safe zones in emergency shelters, and capacity-building for local protection actors were emphasized. In terms of preparedness, institutionalizing child-inclusive disaster risk reduction in school systems, forming youth-led preparedness groups, and using visual early warning systems accessible to children were identified as effective solutions. Equally, children and adolescents expressed the need for active participation through youth committees, civic education, inclusion in Union Disaster Management Committees, and regular dialogues with local government. At the policy and governance level, the integration of child-centered DRR across all planning frameworks, increased investment in child-focused interventions, systematic tracking of child outcomes, and stronger interagency coordination were strongly recommended.

Taken together, these strategies point to a much-needed shift toward a child-centered, inclusive, and responsive disaster governance approach. To build a resilient future, it is essential that government bodies, NGOs, and development partners prioritize children not merely as passive victims of climate crises but as central stakeholders and agents of change. Ensuring meaningful investment in child-inclusive disaster risk reduction, supported by policy reform, local ownership, and coordinated action, is not just a moral imperative—it is a strategic necessity to secure a safer, more equitable future for all children living in the face of climate change.

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