



## **COPING WITH CRISIS: ADAPTIVE STRATEGIES OF PRIMARY SCHOOLS AFTER THE 2024 LAKSHMIPUR SADAR FLASH FLOOD**

KHONDOKAR SABERA HAMID<sup>1</sup>   
Khan Md. Hasanuzzaman<sup>2</sup> 

### **ABSTRACT**

This report examines the responses of primary schools in Lakshmipur Sadar to the 2024 flash flooding event and its implications on educational access to hundreds of children. In this research paper based on qualitative evidence obtained through semi-structured interviews with teachers, Focus Group Discussions with parents, Key Informant Interviews with health and education sectors including health facility staff and education administrators, the focus was on the health and education sectors' response. The results pinpoint health-related problems experienced after the flood, many international and national actors working together, schools acting as a dual-purpose facility and the issue of restoring education. It emphasizes the need for effective interventions focused on children's health care and disaster management plans to prevent disruption of educational activities and health risks.

### **KEYWORDS**

Flash flood, primary education, disaster resilience, health interventions, post-flood recovery, collaborative response, child-specific health programs, community support, teacher adaptability, disaster preparedness

### **INTRODUCTION**

In the year 2024, as has been reported by various media houses, flash floods in Lakshmipur Sadar, an area that does not face severe floods on a regular basis, resulted in excessive damages moving thousands of families and also paralyzing the education sector significantly. A lot of schools thought it wise to turn themselves into relief camps, which in turn stalled the education calendar and further damaged the already dilapidated facilities. In addition, during the flooding, the public health responses to

---

<sup>1</sup> Assistant Teacher, South Point School and College, Dhaka, Email: [emakhshamid@gmail.com](mailto:emakhshamid@gmail.com), ORCID: [0000-0003-2029-8492](https://orcid.org/0000-0003-2029-8492)

<sup>2</sup> Senior Assistant Secretary, Ministry of Water Resource, Govt. of Bangladesh, ORCID: [0009-0007-1546-2645](https://orcid.org/0009-0007-1546-2645)

flooded populations, especially that for school going children, was found wanting. The focus of the present research is to look into the common adaptive strategies of schools and health authorities, the importance of lessons learnt and possibilities of strengthening resistance towards disasters in countryside education systems. Also the challenges posed to children's health, school attendance and general wellbeing in post disaster situations are discussed along with the suggestions on how to incorporate these challenges in rehabilitation planning of future emergencies. Besides, she advocates for developing community-based support systems and inter-sectorial networks between the education and health sectors as a way of enhancing their resilience towards such risks in the future.

### **LITERATURE REVIEW**

Natural disasters like displacing flash floods in Lakshmipur Sadar in 2024 posed numerous operational hurdles on primary schools in the area and therefore there was need for changes in their modes of operation. This theoretical background discusses some literature that has studied adaptive coping practices among primary school systems in cases of emergency, that is, with respect to 2024 Lakshmipur Sadar flash floods. The review text has shown the significance of community participation, resources allocation, and teachers' resistance to distraction as vital components in the delivery of education under such conditions. In addition to that, it stresses the need for relevant rehabilitative policy and physical changes to assist in the success of the learning process. Schools in areas prone to flooding are more equipped to address the needs of both pupils and teachers following natural calamities thanks to these policies.

### **Crisis Management and School Leadership**

Crisis management strategies in educational institutions include, among others, the practice of sense-making, which enables school principals to adopt flexible decision making when the crisis is detected (Chatzipanagiotou & Katsarou, 2023). The significance of effective strategies for crisis management cannot be overstated in their enforcement of educational continuity and in ensuring the well-being of students and personnel members. Such strategies necessitate effective and timely internal communication, outreach to and coordination with the external agencies in the area, and rapid situational evaluation. In addition, the concept of leadership in crisis means cultivating the capacity of the educational community to cope with changes in the environment, thereby addressing both short-term and long-term goals in the community.

### **Resilience and Coping Skills**

Coping mechanisms have significantly powerful psychological effects on children and adolescents making their importance in the development of resilience evident (Ronen, 2021). The orientation of all interventions known as resilience-enhancing

interventions is towards helping the adolescents cope with any changes and turmoil that face them by attempting to teach them skills that will empower them to deal with adverse environmental changes and traumatizing events (Ronen, 2021). These strategies most often include the provision of some or all of the following: training in emotional control, training in problem solving, and enhancing the network of social support available to the individual. Advanced coping strategies have been shown to not only promote resiliency but also reduce the aftereffect impacts of stress and other adversities in the long run. It is interesting to note that while the development of hope and a sense of agency in children is imperative, it has been found to contribute to their resilience even further. Hence, there is an emphasis on the need to build such skills within the children and the adolescents which prepare them in a better way to face the challenges in an assertive and flexible manner in the coming times.

### **Teacher Stress and Coping during Crises**

In order to ensure the smooth functioning of the entire school system, teacher stress and coping with crises of whatever magnitude is of paramount importance (Herman, Sebastian, Reinke, & Huang, 2021). Teachers' likelihood of positive adaptation during crisis situations is influenced by their confidence in managing student behaviors and their sense of competence in getting students to learn (Herman et al., 2021). In addition, social networks and opportunities for training and development have been found to be important resources for the teachers' adaptation (Beltman, Mansfield, & Price, 2011). Additionally, certain aids, including, but not limited to, mental health resources, and teaching materials, can help ease the stress and perform the teaching work effectively (Skaalvik & Skaalvik, 2015). It is noted that in high stress situations teachers who undertake self-care and mindfulness have better emotional control, thereby enabling them to manage classrooms with ease (Roeser et al., 2013). This means that it is equally essential to foster an environment for support and growth in professionalism that allows teachers to prosper even in adverse conditions.

### **Organizational Health and Climate**

Within the education system, some factors such as, for instance, supportive leadership and fair discipline in schools, are critical to help teachers cope during such crises (Herman et al., 2021). Whereas an organizational atmosphere and health may advance the adaptation process, those factors may also restrict or hinder the effectiveness of the crisis management strategies (Herman et al., 2021). Involving leadership encourages healthy interaction, trust, and participation in decision-making processes and this enhances resilience in teachers. Well delineated and reliable policies make the teachers know that they are backed during tough times and that they have realistic targets. Furthermore, a healthy school environment helps to minimize stress and exhaustion among teachers so that they can concentrate on improving and educating

their students. When those elements are given priority by school managers, these elements also enhance the overall crisis management response, allowing for a higher comfort level for teachers during the process.

### **Impact of Floods on Educational Attainment**

In the Nyando Basin in Kisumu County, Masese, Opiyo, and Okayo (2012) investigate how flooding affects educational outcomes. Their study shows that there are considerable effects of floods on school attendance and the quality of education as well, hence the need to find specific helping measures to enhance the educational systems in flooding regions. The research further reveals the loss of valuable teaching and learning time, the high rates of dropouts, and the trauma levels of students and teachers. The study proposes that schools located in areas with a high risk of flooding should have disaster preparedness plans and measures built to mitigate the impact of such flooding. Moreover, the findings propose that a local disaster response and recovery plan focusing on education should be mobilized to allow for effective learning. In order to address the negative long wait foreseeable consequences of floods on education, initiating effective warning systems and employing advanced learning methods are of the utmost need.

### **Geo-Climatic Vulnerability and Settlement Patterns**

In terms of geo-climatic vulnerabilities in Bangladesh, Kabir (2012) focused on coastal regions. His work explains how these dimensions affect the emergence of specific settlements and the residents living therein, emphasizing the occurrence of floods and the crippling effect they have, not only on structures but even on people's health and education. It was noted in the research that due to the nature of the floods in the area, daily life cannot be carried out easily as households get displaced and considerable damage is incurred on both buildings and educational facilities. The research calls for rehabilitation measures including the introduction of better systems geared towards disaster management, disaster resilient structures and community awareness programs. It also proposes decentralization of climate change response strategies and mechanisms for better operational management of future adverse climatic conditions.

### **Disaster and Education in Bangladesh**

A research article appearing in the Journal of Disaster and Emergency Research in the year 2021 investigates the effects of flooding on school-age children in Keshabpur Upazilla, Bangladesh. It clearly demonstrates the extent of interruptions the floods because which leads to loss of learning hours and quality deterioration of education, which further calls for a better prepared plan of mitigation and response to disasters (Habiba, Jui & Meem, 2021). The study found that the floods aggravated pre-existing disparities in school education, especially among disadvantaged students who were more prone to absenteeism in schools and further had a higher rate of cessation in

their educational pursuance. Besides, it also pointed out that schools did not have proper structures that could resist flood waters thus leading to temporary shut-downs and late opening of classes. Their recommendations include mainstreaming climate change adaptation in the school system in particular to the educational sector, and construction of more robust educational infrastructures to provide learning facilities during crisis situations.

### **Floods and Education Outcomes in Bangladesh**

Hoque, Iqbal, and Roy (2021) examine the effects of floods on education outcomes in Bangladesh, incorporating satellite data as well as school census data. The most interesting result was that floods do not impair students' sittings for the school-based examinations but depending on sex with female students and higher grade level students affected more. This study highlights the need for measures aimed at affected populations in order to maintain the education of students. The authors claim floods affect both learning and evaluation processes creating a backlog in studies. As such it is suggested by these authors that policy-makers consider looking into the housing structures improvements, provided that there is hidden populations, academic support and changing exam timetables to vulnerable groups. The authors also recommend that schools include disaster preparedness measures in the syllabus to help both catch up students and teachers in the journey.

### **Flood Situation in Lakshmipur, 2024**

Starting from August 22, 2024, heavy showers and accumulations of water from upstream sources, have led to extreme instances of flooding in a number of places across Bangladesh, including Lakshmipur. Development of a low-pressure area over the Bay of Bengal has made these rains worse, not only in Bangladesh but also in adverse Indian states such as Meghalaya and Tripura. Cumulatively, reports from the Bangladesh Meteorological Department (BMD) and the Flood Forecasting and Warning Centre (FFWC) confirm that in some places, rainfall exceeded 180 mm within three days. Such incessant rainfall coupled with water release from upstream basins made the Surma-Kushiara, Manu, Khowai, and Feni rivers spill over resulting in flooding of most of the riverine and low-lying districts (Department of Disaster Management, 2024).

In northern and southern Lakshmipur upazila, five unions were heavily inundated, affecting nearly 723,000 people, out of which 73,040 were reported to be displaced. As stated in November 2022, such estimates were gathered by the Department of Disaster Management (DDM), Ministry of Disaster Management and Relief, Mongolia. Out of 732 assessed government primary schools, the survey posited that 579 schools were waterlogged, 261 served as accommodation centers (Department of Disaster Management, 2024; District Primary Education Office, 2024). The education sector suffered particularly, because most of the classes were

either submerged in water or converted in cubicles for families seeking refuge from the floods. Consequently, schools in the affected regions were closed, which intensified existing problems for the students and their teachers. Educational inputs were limited so that the students could not carry on with their studies during the crisis. Consequently, local level administrations and non-governmental organizations started making emergency interventions such as provision of learning materials, while government bureaucrats pronounced that post flood rehabilitation efforts were paramount.

### **OBJECTIVE OF THE STUDY**

The objective of this study is to examine the adaptive strategies employed by primary schools in Lakshmipur Sadar in response to the 2024 flash flood, which significantly disrupted education. Specifically, the study aims to:

- Examine the post-flood health challenges faced by schoolchildren and the responses from health and education sectors.
- Assess the impact of schools being used as shelters on educational infrastructure and the resumption of classes.
- Investigate the adaptive strategies employed by teachers and identify challenges in disaster preparedness and response for future resilience.
- Provide recommendations for improving disaster resilience in rural education systems, with a focus on enhancing school infrastructure, health services, and teacher preparedness for future crises.

### **METHODOLOGY**

For data collection from relevant and affected institutions in Lakshmipur Sadar, Bangladesh, both convenience and purposive sampling methods were employed. This methodological approach was designed to examine the health and educational consequences of the anticipated 2024 flood among school-aged children, based on personal observations and institutional evidence.

#### **Sampling Method**

##### ***Convenience Sampling***

The sampling units for schools, health facilities, and participants were selected because they were easily available and pertinent to the study. This approach allowed for practical ease of accessibility to important sources of information without incurring great logistical burden.

##### ***Purposive Sampling***

Participants of the study included stakeholders engaged directly in the activities of flood relief and whose insight was valuable about the crisis.

## Participants

The advantages of qualitative inquiry are sufficient that for this particular study, three basic data sources were used in order to capture the views of different people of the effects of the flood on education and health in Lakshmipur Sadar, hence in Bangladesh. These included, key informant interviews (KIIs) with health and education representatives, focus group discussions of parents and semi-structured interviews with the teachers. This multi-dimensional perspective augmented the data and made it possible to have a holistic view on the topic under focus.

Table 1: structure and roles of the participants in the study

<b>Participant Type</b>	<b>Number of Participants</b>	<b>Role and Contribution</b>
<b>Teachers</b>	<b>15</b>	Engaged in semi-structured interviews regarding the experiences of taking on the post floods challenges, education being continuous, and looking into the needs of the students.
<b>Parents</b>	<b>15</b>	Participated in Focus Group Discussions (FGDs) to offer their views on how to help educate and rehabilitate their children during as well as out of the flooding activities.
<b>Head Teachers</b>	<b>3</b>	Provided perspectives through Key Informant Interviews (KII) mainly on how schools serve as both temporary shelters and educational establishments in times of floods.
<b>Civil Surgeon</b>	<b>1</b>	The strategies for health response at the district level have been provided and the difficulties that were encountered in relation to health concerns after the flooding have been discussed.
<b>UHFPO</b>	<b>1</b>	Contributed in articulating their roles in the coordination of health interventions and the management of community health responses in the affected regions.
<b>Medical Officers</b>	<b>2</b>	Pored over particular health concerns after flooding, especially those among children within schooling ages and the efforts to

<b>Participant Type</b>	<b>Number of Participants</b>	<b>Role and Contribution</b>
		provide medical care in both educational and refuge centers.
<b>Total</b>	<b>37</b>	

### **Data Collection Methods**

The study employed the following qualitative data collection methods:

#### ***Semi-Structured Interviews***

Fifteen teachers were interviewed in a semi-structured format in order to obtain in-depth information regarding the post flood health concerns of children in schools, the interruptions in schooling activities, including measures taken to encourage the recovery process.

#### ***Focus Group Discussions (FGDs)***

Essential Focus Group Discussions (FGDs) were organized with a total of 15 parents to investigate the experiences these parents went through before, during, and after the floods. These discussions examined the extent to which parents were able to maintain their children’s education and health and how they received treatment and assistance from schools and within the community. The FGDs provided a wider context on how families cope and how education is sustained.

#### ***Key Informant Interviews (KIIs)***

Seven Key Informant Interviews were carried out among three head teachers, the Upazila Health and Family Planning Officer, the Civil Surgeon, and two medical officers. These interviews offered useful perspectives on the integration of health and education services, focusing on the issues of children’s health especially in the contexts of emergencies. The primary school heads recounted dealing with schools that had been used as relief shelters, while health officials spoke about the different types of medical responses and cooperation of the government and NGOs.

#### ***Observational Data***

Furthermore, some observational data was acquired by conducting site visits to schools and health facilities within the afflicted area. These observations recorded the level of structural damage, sanitation issues and the state of recovery. Thank you for your observations which also helped put in perspective the functions of schools as both educative and temporary shelters during the flooding and the pressure it put on the schools’ resources and facilities.



The use of interviews, Focus Group Discussions (FGDs) and observational data availed a detailed picture of the several effects the flood had on children's education and health.

### **Data Analysis**

The data processing and analysis were carried out by employing thematic analysis.

- **Initial Coding:** under which various themes like health problems (diarrhea, skin infections), infrastructural attachment, and joint interventions were coded.
- **Categorization:** Collected data was categorized into wider categories such as health challenges, disruption of education, and ways the community copes.
- **Integration:** All stories of participant were interwoven with the observational data thinking about the impact of the flood as a whole.

This exhaustive approach made it possible to address the various issues that this study sought to investigate, especially the challenges that school-going children in the community encountered after the flood.

### **FINDINGS**

There were various challenges and responses in the education and health sectors in the aftermath of floods. Further, interviews with teachers, parents, and the health officials gave an elaborate account of how the nation's education and health sectors were disrupted by the flood and the measures put in place to restore normalcy. Diseases such as diarrhea, skin disease and respiratory illnesses were rampant, with a bigger percentage of children being the victims. Classrooms were turned into refugee camps resulting to over stress in the facilities with classrooms and toilets being destroyed in the process. Under such conditions, however, never the less, the teachers devoted their effort to the re-opening of the classes and restoring the lost wheel of learning. In turn, parents helped in engaging the children on education focused activities, even in the absence of any materials. Complementary to the general recovery endeavors was the partnership between government institutions and welfare organizations, although there were still some gaps related to the needs of the school-age children.

### **Post-Flood Health Issues**

The inundation was a severe public health emergency, especially for the younger generation. The most reported cases were Diarrhea, skin diseases and respiratory complications. As per Civil Surgeon, the flood warning caused a spike in the number of cases of diarrhea due to the consumption of dirty water. The medical officers also reported an increase in cases of respiratory problems as a result of the wet environment. They also cited high rates of absenteeism among students as they were still unwell and unable to come back to class. One teacher said, "A lot of our kids could not go back to school right after the flood because of sicknesses like diarrhea

and flu.” Another teacher remembered, “The health issues were recurrent. A couple of weeks later, students were still having coughs and skin rashes.”

### **Schools as Shelters and the Strain on Infrastructure**

The transformation of schools into shelter center for the displaced population affected the commencement of education. Teachers and head teachers complained of extensive damage to structures, including classrooms and washrooms, among others. In the words of one head teacher, “There were a lot of damages done to the school infrastructure by the flood water. After they used the school as relief center, the classrooms were not ready for teaching; there was need to repair and clean up before schools were reopened.”

A teacher also stated, “It was so challenging to go back to class because aside from the children coming back, the school needs to be clean and safe for those children.”

### **Addressing Safety Concerns through Swimming Lessons**

Following the unfortunate drowning case during the flood, one of the head teachers began introducing swimming lessons as one way of averting similar situations in the future. This move was welcomed by the parents and the surrounding society. The head teacher explained, “After losing a child in the floodwaters, we couldn’t afford to take the issue lying down. Let alone, this is something very little, but it can save lives.” “This was welcomed by the community, and it also ensured that the students were comfortable learning how to swim in the event of any emergencies,” one of head mistresses reiterated. Apart from giving the students swimming lessons as a way of equipping them with life proof skills, the students also developed a coping mechanism and confidence in themselves. Parents were thankful to the head teacher for her vision as they understood that such measures could help protect their children in the event of another flooding occurrence. This proactive plan of action also led to proposals to include such issues as water safety education in school curricula as part of the measures to prepare people for disasters in society.

### **Collaborative Health Response by Government and NGOs**

The health response to the aftermath of the flood saw certain government ministries and agencies working together with non-government organizations. Medical personnel were sent in to offer primary health care services especially on water-related diseases and dehydration and respiratory diseases. Nevertheless, the approach was not geared towards school-age children, which the stakeholders pointed out as a shortcoming. The UHFPO opined, “While we tried to provide care for all, we didn’t have targeted programs for children. This is something that should be prioritized in future responses.”

In turn, the Civil Surgeon stated, “With the help of NGOs, we were able to supply some medicines and water purification tablets, but when it came to children’s needs, we could not concentrate. Our intervention was not focused on children appropriately.”

### ***Teachers' Efforts to Resume Normal Learning***

Notwithstanding the obstacles that arose owing to the flood, the educators put in great strides to ensure that learning returned to normalcy in the shortest time possible. Even in the instances where the aviaries were destroyed or turned into storage shelters, the aviary works focused on constructing academic momentum instead of dwelling in those adverse conditions. One of the teachers said, “We didn’t use our classrooms straight away because there were damages but once we were able to, we took the students back into the classrooms. It wasn’t perfect, but we made it a point to ensure they didn’t fall behind.” The tenacity and steely resolve of the teachers was instrumental in making sure that the learners’ learning habits reverted back in a very short period even with the floods paralyzing operations. Upon their return to the institution, the pupils were overjoyed about being back in the school where they were accustomed, to the point where their happiness could be felt. Numerous pupils shared their feelings of longing for their peers, instructors, and the organization that schooling entailed. Even though the destruction was still present, the classroom turned into a sign of hope and security allowing the kids to feel somewhat normal. The children’s exuberance and zeal inspired parents, and teachers alike, to not only restore the physical structure, but also the learning environment that had been provided to the children.

### ***Parental Role in Education and Recovery***

In the prolonged absences of schools, many parents acted as a counterbalance to boredom among children. Most parents resorted to unorthodox techniques like: storytelling, chanting prayers and doing some simple sums. One parent narrated during an FGD, “We didn’t possess textbooks, but we worked hard and narrated stories to the children as well did some arithmetic. It wasn’t a lot, but it was helpful.” Another mother said, “I taught some things to my toddlers, but my older children were a challenge. It was easy to teach the little ones, but I lacked the ability to help him with his studies, and it was worse without any resources.

### ***Trauma and Emotional Support for Students***

There were also psychological consequences of the flood and many teachers said that they had to help the students in coping with their fears and emotional distress. One principal admitted that, “We could not go back to the real teaching until we gave our students time to express themselves about their experiences. Only then were we able to think about the lessons.” A teacher recalled, “Some students were very apprehensive of coming back to school. They had seen so much destruction.

Therefore, we tried to help them cope emotionally before we began laying out the academic work.”

Upon resuming classes, teachers could gradually tell that students were becoming mentally restored. One of the teachers explained, “It wasn’t easy to begin with, but the moment we saw the students all bright and back into their usual activities, we knew it was worth it. Everyone seemed so enthusiastic to learn again, and that gave us a glimpse of hope for what is in store ahead.” Another teacher said, “At first the students seemed shy, however, after a while when we listened to their worries, they appeared to have warmed up and were ready to join their lessons. It was nice to see them looking forward to coming back to class regardless of all they had endured.” The teachers’ emotional support and the students’ resilience worked to instill normalcy and interest in learning.

## **DISCUSSION**

The flash flood that occurred in Lakshmipur Sadar of Bangladesh in 2024 has raised several important issues and calls for better disaster response mechanisms especially within the context of rural regions. The flood had adverse effects on public health, education, and the social fabric of the community but the major problem was the lack of adequate preparation, response to and recovery from the situation. Hereafter the main issues and lessons defined by this disaster are presented with guidelines for improving resilience in the education and health sectors of the future. Further these challenges underline positive play, teamwork and active participation of every member including the community in management of disasters. The emotional context along with the structural level is also equally important in order for the society to restore back to its normal functioning within a short span of time. The lessons learned in Lakshmipur Sadar should inform ways in which our disaster management education can be improved focusing on vulnerable populations within an intercultural context, especially the young children during disasters such as floods. Filling those voids will make future disaster response efforts more gender responsive and effective to the needs of the at-risk populations.

### **Health Challenges Post-Flood**

The deluge worsened the already existing health and introduced new ones, particularly those related to water. The burden of diseases such as diarrhea, chest infections, and skin diseases was exceptionally high, more so for the at-risk group of school-going children. This calls for disaster management plans that consider sanitation and availability of clean water in an age-appropriate manner focused towards children. The absence of any child focused health programs, as indicated by the UHFPO, represents an important shortcoming in the health sector response that should be included in future disaster management strategies.

### **Impact of Schools as Temporary Shelters**

The temporary use of schools as shelters for the displaced people after the flood was necessary but prevented the resumption of normal school days and led to destruction of structures. The pressure placed on the school facilities indicates that there is need for disaster management contingency plans which ensure the provision of alternative shelter sites and that the education infrastructural facilities are protected. In future, schools should be incorporated in the overall disaster response planning and funds assigned for the restoration and rehabilitation purposes.

### **Safety Measures and the Need for Preventive Education**

The introduction of swimming lessons as a countermeasure to the drowning incidence reflects awareness and active tackling of safety issues. This intervention is a necessary measure in preventing the loss of lives during floods in the future and needs to be included in the schools located in flood-risk zones. The teaching of other safety measures such as emergency preparedness and first aid should also be included in the school curriculum. Further, schools offered such education will be expected to carry out safety drills for the children so that they learn the safety measures in case of a natural disaster. However, training teachers and other school personnel on disaster management and first aid will help bolster the safety of the student populace even more. Attending to these interventions will enable the students learn necessary skills and defensive mechanisms that will come in handy when situations that require such arise.

### **Collaborative Health Response**

The partnership of the various government institutions and NGOs was crucial in facilitating immediate response activities. However, the major flaw that needs redressing is the health care system, which is not child centered. Actions in response to future catastrophes must also have focused interventions for children to cater for their health needs during emergencies. Attention must be given to the provision of healthcare not only in terms of physical medicine but also in terms of psychological services which are often neglected in disaster response mechanisms.

### **Role of Parents in Education during Disruptions**

The importance of parents was largely witnessed in the engagement of children in learning activities during the closure of schools. However, parent's limitations mainly in aiding the older children indicate the importance of providing educational support to families in creditable circumstances. It is recommended that all schools and local authorities make available some learning materials or parental support in an attempt to fill the educational void that might arise during emergencies. Schools could also look into ways of working together with the families of students and existing resources to provide assistance to families in need of it, particularly those that are

further away. This preventive approach could help to limit the effect of learning interruptions in the event of future emergencies.

### **Adaptability of Teachers in Crisis Situations**

After the flooding, teachers encountered many problems as schools were destroyed, and even the classrooms were rendered unusable for some time. Notwithstanding, the teachers exhibited impressive fortitude and zeal and worked hard toward returning to normal schooling. They were quick to adjust to the new situations and made use of the resources at hand to put up temporary learning environments and ensure that the education of their students continued. Some teachers could even carry out lessons in the open, in a bid to ensure that learning for the students went on despite the infrastructural failures. This endeavor in the face of all challenges pointed to the strong sense of responsibility in the teachers and their desire to stand by their students in any way possible. It is also thanks to these teachers that not only physical but also educational reconstruction of the local community was possible during the post-disaster period.

### **Emotional Support for Students**

The flood has a psychological impact on children which should be taken very seriously. The resumption of academic activities after emotional support was given to students by teachers played a significant role in assisting the students back in the learning process. Educational institutions should consider these factors and include mental health care in their response plans of such disasters, and provide counseling services among others, to enable children cope with trauma.

## **RECOMMENDATIONS**

Given the results and discussions, it can be inferred several measures need to be taken to enhance disaster response mechanisms especially in education and health sectors and also to ensure proper conduct before such occurrences as floods in the future. These recommendations address the need to protect children in every way possible as well as build the entire response and recovery system.

### **Child-Centered Disasters Response Plans Must Be Developed**

There is needs to develop disaster management plans responsive to the needs of children. For example, during the flood, there was a health response gap among the school-age children population. Future training and preparedness plans should address children's health issues in disaster management and response by deploying school-age targeted interventions like, vaccination, provision of safe water and health education addressing the psychosocial and physical needs of children. During and after the emergencies, schools may serve as vital centers for promoting health information tailored to children and offering psychosocial support services.

### **Improving Educational Facilities and Back up Strategies**

The floods showed the weaknesses of the school structure when used as a shelter. Schools should be integrated not only in the response plans but also in the preparedness plans that address and explain how educational facilities will be temporally closed and how fast they will be reopened; if schools are used as shelters this must also be about them. Resources should also be provided for the rehabilitation and reconstruction of the affected school structures. Moreover, schools should be provided with some disaster recovery kits that include but not limited to portable classrooms, learning materials and latrines among others to aid in quick resumption to normalcy.

### **Integrating Safety Education into the Education System**

Stemming from the unfortunate occurrence that involved some people drowning, swimming lessons were scheduled as a curative measure. This particular recommendation however should be elaborated on and included in all Elementary school Curriculum focused on Embankment zones. Other Disaster management training or education such as first aid provision, emergency evacuating, and safety education should also be included in the curriculum in order to arm the students with the necessary skills and knowledge on dealing with catastrophes. Teachers and the school staff also need to be continually trained on how to respond to disasters and given first aid so that they can adequately be able to protect the students during emergencies.

### **Increasing Parental and Community Participation in the Teaching Process**

Parents were a great help in their children's education during the crises, especially younger children. However, most of the parents faced problems in dealing with their older children. Teachers and schools should partner with local governments and social services to make sure there are educational materials like workbooks, e-learning systems, parent's manuals and others even in the times of crises. Most of the interventions, such as parent and teacher associations, and community engagement programs, were largely focused on contributions from families during the periods of educational services and geographical transitions. Moreover, if basic educational tools and some online materials are offered to the families, learning of the children who are at home because schools are closed will not be interrupted.

### **Incorporating Psychological Support into the Rehabilitation of Disaster Prone Areas**

Flooding had a significant psychological effect on the children, but it was apparent that some emotional support had been useful in helping them come back to normal learning. Schools should therefore incorporate mental health support in their disaster recovery plans by ensuring the presence of counselors or trained mental health professionals who can assist the students in coping in such situations. Apart from

individual therapy, trauma-focused interventions such as group therapy and peer support programs can also be introduced to give the children further support. And training future teachers should also include how to recognize emotional distress in a child and how to help the child.

Safety and well-being of children as well as their education will be given foremost importance even during the disasters and will be included in recovery plans. This will help develop an effective and capable community that will effectively counter the threats posed by natural calamities in the future.

## **CONCLUSION**

Natural calamities such as the torrential rain and the flash floods, which struck Lakshmipur Sadar in the year 2024 further reiterated that the education systems are prone to disruptions of some sort, due to natural catastrophes. Regardless of this, the response to the crisis from schools, teachers, parents and the local administration was quite impressive and adaptive. The community's undertakings reinstated the status quo of education, even after the repair of infrastructure, interruptions of learning and inhibitions of public health. The teachers made their best to rehabilitate not only the physical infrastructure of the classrooms but also the learning activities, different ways how parents helped their children were evident. It was then also apparent that the emotional and psychological care of the students who had been in the disaster was also important.

This study points to the glaring need for disaster preparedness plans to be put in place where recovery strategies go beyond physical rehabilitation to emotional, psychological and educational support of the children. The measures to mitigate the effects of disasters should be community oriented, with schools being the focal point of education, safety and refuge. The contribution of local governing bodies, NGOs and society in general is crucial in recovery and ensuring that interruptions are kept at a bare minimum.

Thereafter, in the direction of development of disaster management strategies, it is high time that emphasis as well be put on schools and their ability to be resilient, safe and provide continuity of education. The experience from Lakshmipur Sadar can be replicated in other regions with similar circumstances by enabling their concerns to be addressed by these systems in order that their right to education is guaranteed despite the obstacles in place.

## **REFERENCES**

Chatzipanagiotou, P., & Katsarou, E. (2023). Crisis management, school leadership in disruptive times and the recovery of schools in the post COVID-19 era: A systematic literature review. *Education Sciences*, 13(2), 118. <https://doi.org/10.3390/educsci13020118>



Department of Disaster Management (DDM), & Ministry of Disaster Management and Relief (MoDMR). (2024). Flood situation report: Lakshmipur.

District Primary Education Office. (2024). Flood impact on primary schools in Lakshmipur.

Habiba, U., Jui, F. T. Z., & Meem, T. M. (2021). Disaster and education: Impact of flood on school-going children at Keshabpur Upazilla in Bangladesh. *Journal of Disaster and Emergency Research*.

Beltman, S., Mansfield, C., & Price, A. (2011). Teacher resilience: A framework for supporting and developing teachers in challenging times. *Teaching and Teacher Education*, 27(3), 621-629. <https://doi.org/10.1016/j.tate.2010.09.001>

Herman, K. C., Sebastian, J., Reinke, W. M., & Huang, F. L. (2021). Individual and school predictors of teacher stress, coping, and wellness during the COVID-19 pandemic. *School Psychology*, 36(6), 483-493. <https://doi.org/10.1037/spq0000456>

Roeser, R. W., Schonert-Reichl, K. A., & Jha, A. (2013). Mindfulness training and teachers' social and emotional competence: Effects of the CARE for Teachers Program. *Journal of Educational Psychology*, 105(3), 1010-1025. <https://doi.org/10.1037/a0032093>

Skaalvik, E. M., & Skaalvik, S. (2015). Teacher self-efficacy and teacher burnout: A study of relations. *Teaching and Teacher Education*, 44, 258-266. <https://doi.org/10.1016/j.tate.2014.08.004>

Hoque, M., Iqbal, K., & Roy, P. K. (2021). Impact of floods on education outcomes: Evidence from Bangladesh using satellite and school census data. *Annual BIDS Conference on Development*.

Kabir, S. (2012). Study of geo-climatic vulnerability and its response in the settlement pattern in coastal areas of Bangladesh.

Masese, A., Opiyo, R., Okayo, J., et al. (2012). Impact of floods on attainment of education for all (EFA) and vision 2030 in Nyando Basin, Kisumu County. *International Journal of Disaster Management and Risk Reduction*, 4(2), 19-31.

Ministry of Women and Children Affairs (MoWCA). (2010). Children and disaster risk reduction in the Asia Pacific: Background paper by Bangladesh. High-Level Meeting on International Cooperation for Child Rights (ICCR) in the Asia Pacific Region, Beijing.

Ronen, T. (2021). The role of coping skills for developing resilience among children and adolescents. In *The Palgrave Handbook of Positive Education* (pp. 345-368). Springer. [https://doi.org/10.1007/978-3-030-64537-3\\_14](https://doi.org/10.1007/978-3-030-64537-3_14)

The Daily Star. (2024). Floods, education, and uncertainty: The impact of climate change on students in Bangladesh.

UNICEF. (2022). Millions of children in flood-affected Bangladesh in need of food, clean water, and protection.

World Bank. (2005). *Natural disaster hotspots: A global risk analysis*. Disaster Risk Management Series No. 5. Washington, DC: World Bank.