Journalism for Preparedness to Face Floods Risk in North-Eastern Part of Bangladesh









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Journalism for Preparedness to Face Floods Risk in North-Eastern Part of Bangladesh

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Declaration

I, the undersigned, declare that this is an original report of our research, and it has been written by us and has not been submitted for any previous degree or project. Due references have been provided on all supporting literature and resources.

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Preface

Three floods hit North-eastern Bangladesh in three consecutive months in 2022. The latest flood was the worst in history which inundated 80% area of Sylhet and 90% area of Sunamganj. The flood also hit other districts of the region. Millions of people faced untold suffering. Sylhet city and Sunamganj district town were also under waist-deep water.

Any natural disaster, including flood, can be dealt with, or mitigated if the media plays a vital role. In this case, the role of trained and skilled journalists in disaster journalism is crucial. What was the role of journalism in 2022 and what should have been, and how disaster journalism can play a vital role in reducing damage such floods should be discussed and research should be done for way-out. Media also needs to build a strong foundation for preparedness in line with disaster journalism responsibilities.

The media can help to reduce damage, provide quick response, and make the people aware through providing forecasts, report on what is happening and man-made causes or lack of proper steps that can be the reasons behind the occurrence of severe natural disasters including floods.

In such a situation, the National Institute of Mass Communication (NIMC) selected the topic 'journalism for preparedness to face flood risk in north-eastern part of Bangladesh' for research.

I believe that this research will contribute to the development of disaster journalism which will ultimately play a vital role to reducing damage in frequent flood. This will make the research a success.

I sincerely appreciate researcher Ehsanul Haque Jasim and his team for carrying out the nice research. My sincere thanks to all of the NIMC officers involved in the undertaking and implementation of this research work.

Faizul Haque

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Any inadvertent errors observed in this report are my responsibility as the principal researcher.

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Acronym

BTV	: Bangladesh Television		
DG	: Director General		
DC	: Deputy Commissioner		
DDM	: Department of Disaster Management		
FB	: Facebook		
FGD	: Focus Group Discussion		
JRC	: Joint Rivers Commission		
КІІ	: Key Informant Interview		
NGOs	: Non-government organizations		
NIMC	: National Institute of Mass Communication		
NRCC	: National River Conservation Commission		
SOD	: Standing Orders on Disasters		
PID	: Press Information Department		
QS	: Questionnaire survey		
BUET	: Bangladesh University of Engineering and Technology		
BWDB	: Bangladesh Water Development Board		
BHWDB	: Bangladesh Haor and Wetland Development Board		
FFWC	: Flood Forecasting and Warning Centre		
SM	: Social Media		
TV	: Television		
MoDMR	Ministry of Disaster Management and Relief		

Executive Summary

Flash flooding is a specific type of flooding that occurs shortly after a precipitation event generally less than six hours. Due to geological formation, the north-eastern region of Bangladesh faces frequent floods, and the global unstable climate change situation is also a reason for floods in this region. Severe floods hit the north-eastern region several times such as in 1988, 1991, 1998, and, 2004. In recent years like 2017, 2018, 2019, and, 2022 also this region faced severe floods. One flood was more intense than the other. The north-eastern region, particularly Sylhet and Sunamganj districts, faced three severe floods in three consecutive months such as early April, mid-May, and mid-June in 2022. However, heavy rainfall and some man made causes are responsible for the flood.

Many works have been done on the causes and impacts of disasters and also the role of different actions of government and non-government sectors. But it is evident that little work has been done focusing on the role of journalism during disaster periods and preparedness. The role of mass media is crucial to understand to face floods in the country. So, it encourages the researcher to conduct research on the role of journalism in preparedness to face flood risk in the northeastern region of Bangladesh. The main objectives of the study is to explore the role of journalism for preparedness to face flood risk in the north-eastern region of the country. The research investigates the role of media for preparedness mechanisms to face floods risk; explore forecasting, news timing and news item on flood in media effectively.

The study was carried out for nine months from October 2022 to June 2023. Both qualitative and quantitative data were collected through questionnaire survey, FGD and KII are used to gather primary data from respondents of Sylhet and Sunamganj districts. Primary data were collected through personal interviews and surveys. Two separate focus group discussions (FGD) were conducted with locals in Sylhet and Sunamganj. Besides, secondary were collected various book, articles, government and non-government reports etc. All the collected data (qualitative and quantitative) were scrutinized carefully, and recorded, and Microsft Word, Microsoft Excel, and SPSS were used for data analysis and representation.

The major findings of this study shows that Investigative news on forecasting, expert views, awareness and institutional preparation will play important role to reduce frequent flood damage; Mainstream news should have a separate bit on disaster journalism; Arrange on separate training on disaster journalism; Lack of skills and experience of local journalist is the reason for the failure to play the professional role of journalism during disaster;

Based on findings, a few recommendations are need to be highlight. Training and facilities is essential for local journalist to reporting flood related issues. Separate bit should be created in every media house; Special shelter centres should be established in every upazila in Sylhet and Sunamganj. Better coordination should have among FFWC, the Meteorology Department of both India and Bangladesh, other internal departments as well as media for pre flood forecasting, preparedness & planning.

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Chapter One Introduction

1.1 Background of the Study

Bangladesh is familiar with natural disasters. Flood is the most common single hazard and phenomenon in Bangladesh. Every year, nearly 18% of the country gets flooded on average. The worst of Bangladesh's history is the 1998 flood when nearly 65% of the country was affected by flood severely (DDM, 2014).

The northeastern region of Bangladesh is particularly vulnerable to flash floods, which often occur during the monsoon season (Brammer, 1990). Flash floods caused by overflowing of hilly rivers in eastern and northern Bangladesh (in April-May and September-November). Flash flood-prone areas of Bangladesh are at the foothills and Haor basin. Flash flood can occur within a few hours. In the year 2002, 2004, 2007, 2009 and 2010, a number of devastating floods northeastern part, causing loss of lives, damaging to infrastructures and many people have become homeless for the floods Haor region severely particularly Sylhet and Sunamganj districts (DDM, 2014).

There is plethora of grounds behind the frequency and severity of floods in Sylhet region. These include changes in the climate, the construction of dams in the upstream, and the deforestation of the hillsides in the region. The impacts of floods in Sylhet region have been severe. The floods have caused also damage to crops. In addition, the floods have caused a number of deaths and displaced thousands of people. The floods have also had a negative impact on the economy of the region, as they have disrupted trade and transportation.

The increased frequency and severity of floods in Sylhet has led to a need for better disaster preparedness and response. The government of Bangladesh has taken a number of steps to improve disaster preparedness in the region. These steps include the construction of flood shelters, the development of early warning systems, and the training of first responders. In addition, the government has also launched a number of awareness campaigns to educate people about the risks of floods and how to prepare for them.

Despite the government's efforts, the frequency of floods in Sylhet has continued to increase. This has led to a need for further research into the causes of floods in the region and the best ways to prepare for and respond to them. Disaster journalism can also help people to understand the science behind floods, and how to interpret flood

warnings. Reporting on disasters in media is mainly disaster journalism. The process of collecting and presenting news and information about events that have occurred, are occurring or may occur in the future, is defined as disaster journalism (Houston et al. 2019). It can also help to build community resilience by promoting informal networks of support and information sharing as disaster journalism refers to the professional duties of the journalists who disseminate news on disasters that have occurred, are occurring, or may occur. The United Nations International Strategy for Disaster Reduction (UNISDR) guides journalists to report the causes of disasters, and not just describe the facts and the impacts suffered. There are two main phases to disaster reporting – the initial breaking news period, and the longer-term aftermath (UNISDR, 2018). Therefore, this research proposal seeks to address this need by conducting a comprehensive study with regard to the role of disaster journalism in preparedness to face flood risk.

1.2 Statement of Problem

Flash flood is a major disaster in the Bangladesh perspective. Media coverage of past events can be one of the keys to understanding risks and disaster communication nowadays. Disaster communication guidelines emphasize that journalists should be aware of past major disasters and identify lessons to be learned from the coverage of those events (UNISDR, 2015). In this context, the press is an important source for the evolution of historical disaster and risk research paradigms over time. In this way, press and journalism work as a memory space for disasters. Thus, risk and disaster communication are a mediated communication, where the media play a central role (Murdock et al. 2003).

The lack of flood preparedness has been proved in the latest flooding in the northeastern of the country. However, the flood control measures are limited, while the Bangladesh Water Development Board (BWDB) and other authorities concerned did not give flood forecasts. The Joint Rivers Commission (JRC) also can't avert responsibility. The media, research organizations and the civil society also did not have any preconceived notions, nor did they say anything about the preparedness.

The government and the non-government organizations, media and civil society have become active after the occurrence of floods. If news items were published about the preparedness and there were forecasts and suggestions by experts and civil society members through the media, the government and also the people of flood-hit area could have prepared well to deal with the floods. Before all the recent floods, the disaster journalism role was not as expected. However, the disaster journalism in Bangladesh is yet to stand on a strong ground and is yet to be institutionalized in the media properly.

The northeastern region, particularly Sylhet and Sunamganj districts, faced three severe floods in three consecutive months in 2022. The region also faced severe floods in 2019, 2018 and 2017. Severe floods also hit the region and other regions of the country in 2004, 1998, 1991 and 1988. The floods of 2022 hit the two districts in early April, mid-May and mid-June. One is more intense than the other.

The third spell of flooding exceeded all records, inundating 80% area in Sylhet district and 90% area in Sunamganj district. About 40 lakh people were marooned in the two districts. Many people died, while thousands of people have become homeless. Other damages, including damage to roads and culverts and dying of cattle, also took place extensively during the flood. The severe flooding also hit Habiganj, Moulovibazar, Kishoreganj, Netrakona and some other districts. The record-breaking flood that lasted over 15 days hit the region severely.

Heavy rainfall is not only responsible for the flood; man-made causes are mainly responsible. The preparedness as well as pre-flood issues were not well covered by disaster journalism. As a result, it is too late to take steps even after the occurrence of flood. Thus, knowledge of the present study is designed to journalism for preparedness to face floods risk in designated areas.

1.3 Rationale of the Study

The latest flood was the worst in northeastern part of Bangladesh. If proper preparations are not adopted; more such floods are apprehended in the northeastern region in future. However, the conventional methods will no longer work. Separate study is a must for preparedness. Disaster journalism also needs to build a strong foundation for preparedness. Research on the issue is therefore important.

The carrying capacity of rivers and haors of Sylhet region need to be adjusted to facilitate unimpeded flow of floodwater to the Bay. The flood forecasting systems must be improved by considering hydrologic data from upper riparian countries. The role of disaster journalism is essential in finding out solution through investigative reporting and bringing out the statements, recommendations and suggestions of experts and civil society in the media. Research on the issue will further clarify the responsibility of disaster journalism on flood preparedness. Along with disaster journalism, if the areas of failures of the related institutions, experts and civil society can be identified, the failures can be reduced in the future which will contribute to dealing with floods. However, against the backdrop of the apprehension of more severe floods in the northeastern region, research on disaster journalism is essential for the sake of preparedness. Because through the media, the necessary message can be easily reached to the people and the institutions concerned.

Since man has not yet acquired the ability to control nature, disaster cannot be prevented completely. However, it is possible to reduce the risk by using humanacquired knowledge. For example, if it is possible to reach people two weeks before with information, awareness, and accurate forecast of a natural disaster, the loss of life and property can be greatly reduced. It is now being done worldwide. Disaster journalism can play a vital role in creating people's awareness and informing them before the disaster occur. In such a context, research on the role of disaster journalism in flood preparedness has rationale and relevance.

It is true that many researchers have made some commendable work on disaster and disaster management. Brammer (1990) conducted a study on Floods in Bangladesh: geographical background to the 1987 and 1988 floods. Nizamuddin (2001) observed the topography of floods in the country. Anik Pal et al. (2018) and M. A. Samad (2019) studied on Improve the Flash Flood Early Warning System in the North-Eastern Parts of Bangladesh. Gender in Humanitarian Action Working Group Bangladesh (2022) studied on Rapid Gender Analysis of Flood Situation in North and North-eastern Bangladesh. But there is hardly found any study highlighting the role of journalism to face floods and other disasters risk in the country. So, participation of mass media in disaster management process is very important especially in terms disaster preparedness in the country. Therefore, considering the country's geographical location, natural settings, and environmental phenomenon, it is very important to conduct research work focusing the disaster journalism to face floods in the country.

1.4 Literature Review

There were not enough books about floods in Bangladesh, flood forecasts, flood preparedness, and awareness during floods. A few books have been written on floods in Bangladesh and also contain accounts of floods after their occurrence. Among them, 'Flood in Bangladesh' written by Professor Dr. Maniruzzaman Miah was published in

1988, is notable. The book was written around the terrible floods of 1987. Another book 'Floods in Bangladesh: History, Dynamics and Rethinking the Role of the Himalayas', written by Thomas Hofer and Bruno Messerli was published in 2007. Although the book does not describe the latest floods, it demonstrates that the hydro-meteorological processes in the Himalayas are not the main cause of floods in Bangladesh. However, there was no book has been written about the role of journalism during disaster periods and preparedness.

The number of research on floods in Bangladesh is rare. But there was no research on the role of journalism during disaster periods and preparedness. No research on the topic of frequent floods, especially in the northeastern part, and journalism for preparedness to face flood risk in this regard. Some columns and articles were published in newspapers after the severe floods of 2022. That is not enough till now about the latest flood that occurred in northeastern Bangladesh the flood which had no preparedness and which came as the worst flood in the country.

Bangladesh is considered as one of the most disaster-prone countries in the world (DDM, 2014). Consequently, the people of this country face several types of disasters every year. From historical time, Bangladesh has been subjected to different types of natural disasters such as floods, cyclones, and tidal surges, tornados, earthquakes, drought and so on. These sorts of disasters have brought devastating sufferings and losses of lives and properties in the country. These have also brought adverse impacts on economy, appearing as obstacles to its development pace. The floods of 1987, 1988, 2004, 2007, 2009, and 2022; and the cyclone of 1970, 1991, and 2007 had brought immense destruction in the country. In recent years, the impacts of climate change have intensified diverse calamities on the people of Bangladesh. As a result, a number of works have been done on environmental management in various forms such as writing books, conducting research, thesis and reports, and so on. Among of them, there are many works on the issues of environmental degradation, causes of natural and man-made disasters, etc. But there are few works on focusing the role of journalism during disaster periods and preparedness in the country.

Some related works of literature are reviewed here:

Nizamuddin (2001) observed the topography of floods in the country. He observed that the floodplain of rivers and their numerous tributaries and distributaries cover about 80 percent of the country. Consequently, the flat topography of the floodplain,

one-fifth to one-third of the county is annually flooded by overflowing rivers during monsoon, he further observed. It is predicted that a rise in the global temperature will change the climate of Bangladesh and as a result, this country will receive 10-15 percent more rainfall. In the probable future, the country is likely to be affected by the biggest ever, long-lasting and global scale human induced disaster-the climate change and sea level rise (CCSLR). Bangladesh is thought to be one of the most vulnerable countries of the world to CCSLR.

IPCC estimates predict that due to the impact of climate change, sea level in Bangladesh may rise by 14cm by 2025, 32cm by 2050, and 88cm by 2100 (Uddin et al., 2011). Gain (1998) in his written book 'Bangladesh Environment: Facing the 21st Century' focused on different issues of environment faced by the country. Among these, two articles-- Disasters: Issues and Responses and Citizens Responses to Environmental Issues- are also included in the book. In the first, different types of environmental issues like causes and impact of disasters are discussed covering various aspects of life. The article has concluded that there is no national policy on disaster, and no consensus on the definition, parameter, and level of events qualifying as disaster, this has led to scattered activities among many agencies and sectors without any coordination, and there is no development policy that focuses on the process to assess the environmental impact of development actions, disaster vulnerabilities and their link to poverty is not spell out, non-participatory approach to development means people are not consulted when programs are undertaken and the driving forces are to satisfy third party needs and not that of the disaster victims, etc. The later article discussed how people are involved in environmental issues at different times. But there is no discussion about disaster management involving people, local government institutions, and other actors such as mass media.

However, in terms of management, Nizamuddin (2001) observed that disaster management is extremely important in all three stages of disaster- pre-disaster, during disaster, and post-disaster. Disaster management is also considered as a special type of emergency management during disaster. It is a systematic observation and analysis of disasters. It is done to improve measures relating to prevention, mitigation, preparedness, emergency response, and recovery.

Keeping in mind the climatic vulnerabilities, the government of Bangladesh has adopted Bangladesh Climate Change Strategy and Action Plan 2008 (BCCSAP). It was revised in 2009. In 2005, the government of Bangladesh also developed the National Adaption Programme of Action (NAPA).

In 2012, the Government of Bangladesh adopted the Disaster Management Act 2012 to ensure the availability of the stock of assets under government and nongovernment custody in the disaster-affected area, to ensure the availability of additional assets if needed, to ensure the safety and security of common people and rule of laws, to undertake effort in reducing damage of properties and lives, and to undertake every effort needed as per the local disaster management planning (Disaster Management Act 2012). Sylhet and Sunamganj districts were not declared as 'disaster-affected areas' officially even after the two districts experienced the worst flood in the country's history. An amendment should bring to the Disaster Management Act 2012 to shun some loopholes in the law so that disaster-affected area can be declared without any legal complexities, while preparedness issue gets important.

In 2014, the government of Bangladesh revised the Flood Response Preparedness Plan of 2013. Department of Disaster Management (DDM) under the Ministry of Disaster Management and Relief (MDMR) revised the plan to strengthen the existing capacity of the government agencies and to lead and ensure an effective, timely and coordinated response that will mitigate the risks and reduce the impact of disaster on the community (DDM, 2014). It is considered that using the Plan, in advance of Flood emergency, stakeholders will be able to (i) consider the likely consequences of a flood emergency before it occurs; (ii) consider different risk scenarios to identify spatial response needs to suit prepositioning; (iii) conduct capacity assessment to identify the key resources, both human and physical, needed for any flood emergency response; and (iv) identify the critical areas for immediate action. However, the Plan also emphasized on early warning dissemination through different media, including internet, telephone, mobile phone and community radio in the country.

In 2019, the Government updated the Standing Orders on Disasters (SOD). In disaster risk management, the government emphasizes effective participation of all stakeholders. Considering the importance of participation of all stakeholders, the SOD has been developed accordingly. The objective of the formulation of the SOD is to inform all

concerned about their roles and responsibilities at every stage of disaster risk management. According to the SOD, every ministry, division, department, and agency will take some specific preparation as per its own nature of responsibilities and also take a work plan to implement it (MDMR, 2019).

Anik Pal et al., (2018) conducted a study to investigates on improve the flash flood early warning system in the north-eastern parts of Bangladesh. Flash Flood is a major problem and is increasing day-by-day in the north-eastern parts of Bangladesh. The huge amount of economic and life losses every year due to these floods demands for an up-to-date warning system which will able to notify general peoples of the affected areas. North-eastern parts are mostly vulnerable during the flash flood season. People claimed that there has no any warning system in this region as well as some of respondents said about negative to awareness program and most of respondents demanded about the warning system technology development. Although it is discussed the role of different way for forecasting early warnings, it has not mentioned the role of mass media in this regard.

M. A. Samad (2019) conducted a study on Improving Flash Flood Early Warning Systems in North-Eastern Part of Bangladesh. The northeastern part of Bangladesh is highly vulnerable for pre-monsoon flash floods which appear almost every year. Such floods result massive damage of crops and livelihood. Flash flood forecasting and effective dissemination of early warnings can be a vital tool to reduce flash flood vulnerabilities in the affected areas. Although it is discussed the role of different way for forecasting early warnings, it has not mentioned the role of mass media in this regard.

After reviewing of the abovementioned literature, it is revealed that there have been many works done on the causes and impacts of disasters and also role of different actions of government and non-government sectors. But it is evident that few work has been done focusing on the role journalism and mass media to face floods risk in the country. So, it motivates the researcher to conduct research on the role of journalism for preparedness to face floods risk in the northeastern region in Bangladesh.

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1.5 Research questions

The study puts some research questions to understand the role of journalism for preparedness to face floods risk in the northeastern parts of Bangladesh. These questions are as follow:

- Is the mass media of Bangladesh playing its role in preparedness to face floods risk in the northeastern part of the country?
- Was media effectively broadcast of forecasting, news timing and news item on flood?
- What role can journalists play for preparedness to face floods risk in the north eastern part of the country?
- What was the role of journalism before and after the floods as well as media coverage?

1.6 Research objectives

This study aims to explore the role of journalism for preparedness to face flood risk in the northeastern part of Bangladesh. Objectives are below:

- To investigate the role of media for preparedness mechanisms to face floods risk in the northeastern region of Bangladesh;
- To assess effectiveness of broadcasting on forecasting, news timing and news item on flood in media;
- To aware media professionals to develop media content for reducing flood risk pre, during and post flood situation.

1.7 Expected Outcome

The northeastern region of Bangladesh is a flood-prone zone due to its geographical location. More floods may happen future. Against this backdrop, there is no option to take preparedness. As conventional approaches may not be effective in dealing with future floods, such research will play an important role in early preparedness by governments, media, and local stakeholders. The research can play a vital role in finding a solution to reduce flood risk in the region.

Along with the preparedness, a master plan is needed to deal with floods in the northeastern region of Bangladesh. Such thinking has also started in the policy making forum of the government. This research will play an important role in flood preparedness and master planning in flood policy formulation in this region of the country.

The media outlets and the journalists involved in disaster journalism can play multiple roles to address disasters. This includes providing warning and forecasting, assessing disaster mitigation and preparedness, and reporting on what will happen, supporting long-term recovery, and building disaster resilience. This research will be useful in this regard. As disaster journalism is still not in a strong position in mainstream media in Bangladesh, this research will contribute to understanding the importance of disaster journalism and establish it as a separate category in mainstream media.

1.8 Ethical issues

Social researchers believe that ethical issues are important for conducting any research project. Care must be taken to ensure that no person or institution is disturbed or hurt by the researchers during the research process. It ensured that participants consent was obtained for data collection. Confidentiality of information was also properly and strictly maintained.

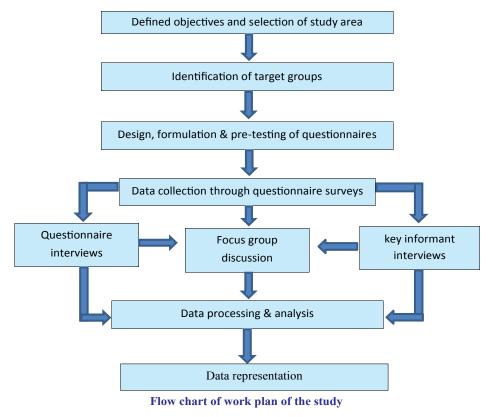
1.9 Limitations of the study

Every research has some limitations. There were some limitations to conducting this research. These limitations include- ground data is not available and there is no comprehensive work in this regard from the government and the non-government sectors.

Chapter Two Materials and Methods

Both qualitative and quantitative data were collected through questionnaire survey, FGD and KII are used to gather primary data from respondents of Sylhet and Sunamganj districts. The study was carried out for 8 months from April 2022 to june 2023. Historical data, literature review, print, and electronic media reports, government, and non-government reports have been used as secondary data sources for media monitoring and advocacy. Primary data were collected through personal interviews and surveys by structural questionnaires with 100 respondents (50 were media professional and 50 were general people). Six senior journalists, two university professors, and a water and flood management expert were interviewed as the key informant interviewees (KII) selected purposively. Two separate focus group discussions (FGD) were conducted with locals in Sylhet and Sunamganj. All the collected data (qualitative and quantitative) were scrutinized carefully, and recorded, and Micros Word, Microsoft Excel, and SPSS were used for data analysis and representation.

The design of the study for the present study involved the following steps:



2.1 Study area

The northeastern part of the Bangladesh includes Sylhet, Sunamganj, Moulvibazar, Habiganj, Kishoreganj and Netrakona districts. While all districts of northeastern part of country were affected by the flash floods of 2022, Sylhet and Sunamganj were hit hard by record devastating floods. Keeping the objectives of the study in mind, the study was conducted in these two districts of Northeastern Bangladesh. However, the people of the flooded districts have faced untold suffering, which is still ongoing and will not be easily overcome in the next few years.

2.2 Study period

The study was carried out for 9 months from October 2022 to June 2023.

2.3 Target groups

The people of Sylhet and Sunamganj districts were selected as target groups. One upazila was selected from each district, and some flood-prone villages were selected through simple random sampling from each upazila. Flood-hit people of Sunamganj Sadar under Sunamganj district, and Jaintiapur upazila under Sylhet district were selected through simple random sampling. Along with Sunamganj Sadar and Jaintiapur upazila, samples were also collected from people of Sylhet city.

2.4 Sample size and sampling

Selection of sample and sampling method are important for research. As this study is going to explore the role of journalism in terms of preparedness to face floods risk, a simple random sampling technique was followed and the respondents were randomly selected to meet the requirements of the study. For this study, the primary data were collected from randomly selected 100 flood-hit people of study area through questionnaire interviews. Among them 50 respondents were media professionals and 50 respondents were general people of Sylhet and Sunamganj districts.

Journalists working in two districts, where flood hit severely, were subjected to a questionnaire survey for this study. A few journalists working in media outlets in Dhaka were also brought under the survey. Six senior journalists, two university professors, and a water and flood management expert were interviewed as the key informant interviewees (KII) to know the preparedness mechanisms to face floods risk in the study area. Moreover, four focus group discussions (FGD) were conducted for this study. Five to seven persons were included in each FGD.

2.5 Data Collection Through Questionnaires

The data were collected from randomly selected 100 flood-hit people through questionnaires. The questionnaire was designed with both closed and open form of questions. The draft questionnaire was tested in the study area. In the test investigation, much outlook was given to any new information which was not planned to be asked, but was significant and useful towards the objectives. The questionnaire was reformed, modified and relocated according to the experience. Thus, final survey questionnaire was developed in consistent order so that people could answer thoroughly and self-confidently without hesitation. Though the questionnaire was organized in English but the people were asked the questions through Bengali language. The data were collected through questionnaire interview and crosscheck interview by asking some questions that were prepared through test investigation.

2.6 Key Informant Interview (KII)

Nine KIIs were carried out for the study. KIIs were conducted with Six senior journalists, two university professors, and a water and flood management expert selected purposively. Each interview was conducted for 60 to 90 minutes.

2.7 Focus group discussion (FGD)

For the present study, participatory rural appraisal (PRA) tool such as, focus group discussion (FGD) was conducted with villagers. Two separate focus group discussions (FGD) were conducted with locals in Sylhet and Sunamganj. Moreover, four focus group discussions (FGD) were conducted for this study. Five to seven persons were included in each FGD. In one FGD session the female vice-chairman of Jaintiapur Upazila Parishad was attended.

2.8 Data processing and analysis

All the collected data were summarized and scrutinized carefully and recorded. Lastly appropriate tables were equipped in accordance with the objectives of the study. Then these data were edited scored. Finally, relevant tables were prepared in accordance with the objectives in the study. Data presented mostly in the tabular from because it is simple in calculation, widely used and easy to understand. Microsoft word, Microsoft excel and SPSS were used for data process, analysis and representation as chart, graph and diagram.

Chapter Three Results and Discussion

3.1 Demographic Information

A total of 100 respondents were participated in the study. Among them, 50 respondents were media professionals, and 50 respondents were mass people of Sylhet and Sunamganj districts. It has shown in Table-1, the overall scenario of the respondents. 88% were male & 12% were female in media professionals and 68% were male and & 32% were female in general people. Maximum participants from media professionals as well as 40% were local journalists, 12% were work in newspapers. From the study it was revealed that, male media professionals are more advanced than females in Sylhet region.

Item of Description	Category	Frequency of	% Of Total
		Respondents	Respondents
Media Professionals	Male	44	88.0 %
	Female	6	12.0 %
Mass Deerle	Male	34	68.0 %
Mass People	Female	16	32.0 %
District of Media	Sylhet	25	50.0 %
Professionals	Sunamganj	25	50.0 %
District of Mass	Sylhet	28	56.0 %
people	Sunamganj	22	44.0 %
	Local	20	40.0 %
	National	11	22.0 %
Media Professionals	Newspaper	6	12.0 %
	Television	9	18.0
	News portal	4	8.0

Table-1: Socio and Demographic Information of Respondents

3.2 Media Professionals Perception

3.2.1 Forecasting, preparedness, and awareness news through the media

Bangladesh has achieved remarkable success in disaster management, especially for cyclones. The country has become a role model in the field of disaster management. We refer to the 1970s cyclones and death toll, which has dropped from seven-digit numbers to single-digit numbers in the last 50 years. Along with the success, the mass media has also played an important role in all the cyclones, severe cyclones and super cyclones that have hit different parts of the country in the past. During the devastating cyclones of 1991, 2007, 2009, 2017 and 2020, all electronic and print media including Bangladesh Radio and Community Radio Stations helped the coastal communities to evacuate themselves and take shelter in the nearest and suitable shelter houses along with their livestock and valuables for their safe shelter. The mass media also played proactive role before and during the last powerful cyclonic storm 'Mocha' that hit coast of Bangladesh and Myanmar on 14 May 2023.





The two pictures mentioned above are from the print edition of the 13th May 2023 issue of Dainik Samakal and Dainik Jugantar. Like the two leading Bengali dailies, all the Bengali and English dailies and other kinds of media published news over cyclone 'Mocha' that hit Saint Martin in Cox's Bazar. Saint Martin was affected by the cyclone, but it did not claim lives due to media coverage and preparation of the local people following forecast. If there was no prior forecasting and media coverage of 'Mocha', it could have claimed so many lives and the damage was so great.



Daily Samakal's 10 June and 11 June issues show that there is no news of floods. But at that time the floods were affecting. We have observed such situations even after the floods have become severe. This can be seen in the following pictures from the June 13 and June 15, 2023 issues of Dainik Kal Kantha. The same was in English dailies.



By the time the news media published the news, the flood had become severe and was about to end as well as end. The pictures of Kaler Kantha, Jugantor, and Bangladesh Post on June 19 and 20 in 2023 reflect the matter.



Behind Sylhet region's devastating floods

Ehsanul Haque Jasim

The frequency and intensity of flooding are on the rise in Sylbet region, the northeastern part of Bangladesh, with apprebensions that more terrible floods will hit the region and its adjacent regions in the coming days.

The flood waters cannot flow to the Bay easily like in the past. Some rivers in Sylhet region have lost navigability and water-carrying capacity in their certain segments following construction of major bridges, such as the Bhairab Bridge built over the Meghna River, where the Surma and Kushiyara rivers merge, thus posing one of the major reasons for the terrible floods in Sylhet region.

Construction of roads and dams in haors is another major reason for the frequent flooding in Sylhet and Mymensingh regions, while destruction of natural forests in India's Meghalaya for commercial and agricultural purposes, hill-cutting in Bangladesh and unplanned urbanization and development projects are also responsible for floods.

Sylhet and Sunamganj, two districts in the northeastern part of



the country, are now experiencing the worst flooding in recorded history of 122 years, according to the Ministry of Disaster Management of Relief.

There have been three floods, including the current severe flooding, in three months this year in the two districts. The first flash flood hit the districts in early April, while the second flood hit in mid-May and the current flood began in mid-June which inundated 80 percent area of Sylhet district and 90 percent area of Sunamganj district.

Millions of people are facing untold suffering from the severe floods this year. The three devastating floods hit Sylhet and Sunamganj districts after highest rainfall in Cherrapunji in Meghalaya, adjacent to the two districts.

SEE PAGE 11 COL 1

সিলেট সুনামগঞ্জে মানবিক বিপৰ্যয়



म्पावर त्याच

কৰ মুঠ নাজৰ কথা কৰাসমূহত মহত হয়। মহেতে। প্ৰথমটো মন্ত্ৰে কোনিয়েকে, মাত্ৰা কেৰেল মাত্ৰ সুনোৰাৰ কোনাই কোনাই কোনাই প্ৰথমটো মন্ত্ৰিটো মন্ত্ৰকাৰ মন্ত্ৰক মন্ত্ৰিয় মাত্ৰ মন্ত্ৰকাৰে মন্ত্ৰকাৰে মন্ত্ৰকাৰে কোনাইটোৰ মন্ত্ৰিটো মন্ত্ৰকাৰ মন্ত্ৰকাৰ মন্ত্ৰকাৰ মন্ত্ৰকাৰ মন্ত্ৰকাৰে মন্ত্ৰকাৰ মন্ত্ৰকাৰ

िक रिकाम करत किंदा प्राणक प्रदेश गरीक प्रान्तकर - क मुझे 20 ; कमार क • सामक भारत क स्थित क स्थित ; मुझे 6 क 26

Forecasting, preparedness and awareness are important to reduce the risk of disaster calamity. The study has revealed that a few people as well as 9% of the respondents received forecast, preparedness, and awareness news through the media before the three severe floods in 2022, while 81% of the respondents did not and the rest of the 10% have no opinion on this issue in the study area.

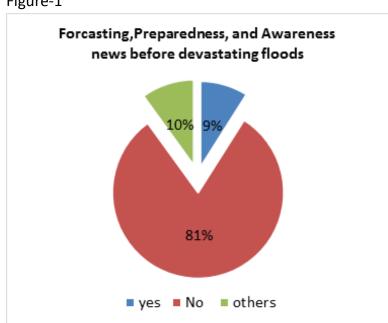


Figure-1

If media professionals get any forecast about disaster like flash flood, then they can provide message to residents of relevant areas so that they can take preparedness and conscious. As a result, it will be possible to mitigate serious damage. Journalist wants to get prompt reliable warning from (a) Flood Forecasting and Warning Centre of BWDB (b) Bangladesh Meteorological Department (c) Department of Disaster Management (d) Water Development Board (e) Institute of Water and Flood Management (IWFM) of BUET (f) Department of Agricultural Extension (DAE).

3.2.2 Media covers the worst flooding news

Flash flood is a significant hazard in Bangladesh, particularly in the northeastern region of the country. Flash flood can occur within minutes or a few hours of excessive rainfall. This can happen even when it's not raining, for example after a levee or dam fails, or after a sudden release of water by debris or ice jams. The devastating flash floods struck the northeastern districts of Sylhet and Sunamganj in 2022. The northeastern region of the country has not yet overcome the effects of the record-breaking devastating floods.

We witnessed the active role of the mainstream media after the floods became catastrophic and broke all previous records and went out of control. All local and national media outlets helped disaster victims through effective media coverage and dissemination of emergency information to relief agencies, local disaster volunteers, local government officials and various affected communities. The media played a silent role before the floods occur and primary stage of the floods. During the study, we wanted to know the flooding news coverage by media in Sylhet region during the flood and post-flood. Table-2 showed the response of Media professionals when media cover the worst flooding news. Most of the respondents as well as 80% of study area answered that media covered the worst flooding news after floods occurred, while 20% of respondents answered that media did not cover the worst flooding news. Another question was placed to media professionals to know when media cover the worst flooding news of 2022. About 90% said that media coverage the news during flood, 88% said after taking a terrible shape, 76% answered that media coverage after the floods, and only 22% said that media cover before floods/Forecasting. Media also plays an important role for preparedness during disaster periods to face disaster risk, through creating awareness that helps different community people and social groups in emergency disaster response

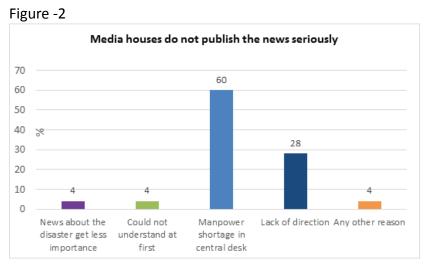
	Responses			
Media cover the worst floods of 2022	No. of	% Of	% Of Cases	
	Response	Response		
	Times	Times		
Before floods/Forecasting	11	7.6%	22.0%	
During floods	45	31.2%	90.0%	
After the floods	38	26.4%	76.0%	
After taking a terrible shape	44	30.6%	88.0%	
Others	6	4.2%	12.0%	
Total	144	100.0%	288.0%	
a. Dichotomy group tabulated at value 1.				

Table-2. Media	professionals when	media cover the	worst flooding news
	professionals when		worst noounig news

(Note: Here total percentage is more than 100%, since multiple response was acceptable)

3.2.3 Media houses do not publish news seriously

Media are the communication outlets or tools used to store and deliver information as well as disseminate news, promotional messages, and other data. Newspapers, online news portals, magazines, television, radio, internet, and social networking sites are the parts of media. Mass media term is used when talking about reaching a large number of people. The media, particularly mass media, play a vital role to mitigate any disaster calamities. The contribution of journalists in disaster management is indisputable. Because of, the journalists involved in mass media forge a direct link between the public and the organizations concerned and play an important role in disseminating vital information to the public before, during and after disasters.

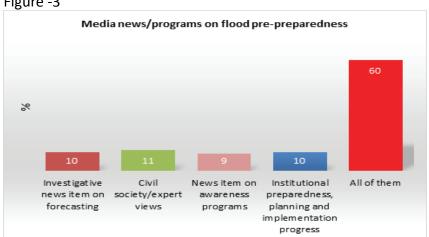


During the study we investigated that why media houses do not publish the news seriously. From the study we get to know that 60% of media professionals think the shortage of manpower in central desk is the leading cause behind media houses do not publish the news on disaster issues seriously. But 28% of the respondents consider lack of direction is as second cause. Also, a total of 12% respondents claimed other reasons like news about the disaster get less importance, could not understand at first, and any other reason. Based on the finding, it can be said that as manpower shortage in central desk is the leading cause behind media houses do not publish the news. So, the manpower capacity should be increased in the outlets of mainstream media.

3.2.4 Media news/programs on flood pre-preparedness

Reducing damages due to natural disasters is a compelling objective that is now attracting global attention. Media coverage is important in this regard. Mainly news items in the media play a vital role in modern society because the media creates interactions between new media and other social systems. According to social learning theory, the media has the greatest impact on awareness in any disaster. Various media provide the most authentic and urgent information such as time and location to arrange emergency water and food supplies or distribute relief goods immediately after a devastating disaster, and then gradually shift to providing various information for daily living or to help lift people's spirits to avoid catastrophic situations.

About 10% of respondents think the media should carry investigative news before flood pre-preparedness, 11% think of civil society/expert views, 9% think of awareness programs, 10% think of institutional pre-preparedness, planning, and implementation programs. But the majority percentage around 60% respondents think all kinds of news/programs will play an important role in flood preparedness.





Those who participated in the FGD session including the female vice-chairman of Jaintiapur Upazila Parishad said that due to the failure of the concerned institutions, they did not get any kind of forecast and awareness news about the 2022 floods in the media and felt that flood preparedness will reduce frequent floods damages.

3.2.5 Media responsibility in future

During the disasters, all media houses make special efforts by deploying their special correspondents and reporters to the affected areas. Particularly television channels of the state go for special presentations with customized graphics, and data. They make all efforts to attract the attention of the viewers. Teams of journalists work on a war-footing during disasters. During the study we explore how media (electronics, print and social media) should do in near future. It has shown in Table-3 the response of the respondents on how media should do in future.

	Responses		% Of
Media responsibility in future	No. of	% Of	Cases
	Response	Response	
	Times	Times	
Introduction of bit on disaster journalism	26	27.4%	53.1%
Publication of reports/articles on disaster forecasting	10	10.5%	20.4%
Arrangement of separate training on disaster journalism	35	36.8%	71.4%
Collection and publication of disaster forecast information using modern technology	24	25.3%	49.0%
	95	100%	129.0%

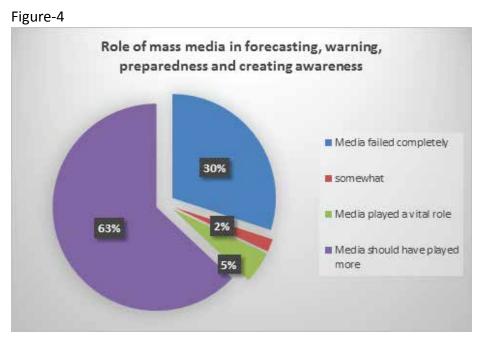
Table-3: Media responsibility in future

(Note: Here total percentage is more than 100%, since multiple response was acceptable)

3.2.6 Role of mass media in forecasting, warning, preparedness, and creating awareness

Broadcast media, especially radio, television, and daily newspapers provide valuable information such as public service announcements, updating weather forecasts, sharing extremely hazardous events, conducting interviews, and sharing documentaries.

From the study, we revealed that 5% of the respondents felt that the media played a vital role in forecasting, warning, pre-preparedness, and creating awareness during floods, 2% felt that the media contributed little, 30% felt that the media failed completely in this regard and 63% felt that the media should have played more activity as media can communicate easily.



Media is also the reflection of disseminating the ground reality when a certain disaster strike on a locality and the situations are highlighted through the local correspondence. Both state-owned and privately owned media services and community radio stations have proven to be very effective tools for disaster management in Bangladesh, as it readily delivers information during any disaster emergency suited to the community's needs.

FGD-2 discussed about establishment an emergency monitoring cell, providing training to journalists, offering financial support to media activists, familiarizing the administration and journalists with briefings, increasing India-Bangladesh cooperation, and boosting cooperation between public representatives and journalists.

3.2.7 Failure to play the role of journalism during disaster

Bangladesh is a flood-prone country, the role of media in flood management and preparedness is important to prevent flood risk and create awareness. Bangladeshi media can play a vital role before of occurrence of flood and other disasters. What was

of role of disaster journalism during the floods in Sylhet region in 2022. Researcher asked multiple response question to the media professionals if the media and disaster journalism fail to play a role, then you think what is the reasons.

Many as well as 76% consider the lack of skills and experience as the reason for the failure to play the role of journalism during disasters, while some feel that the media in Bangladesh does not give importance to disasters. 65% and 69% think other reasons like no separate bit on disaster journalism and Lack of skills, experience, orientation (Table-4).

	Responses		% Of Cases
Disaster journalism fail to play a role	No of Response	% Of	
	Times	Response Times	
Bangladesh media does not give appropriate importance to disaster journalism	5	4.3%	10.2%
No separate bit on disaster journalism	32	27.8%	65.3%
Local journalists do not get appropriate information	7	6.1%	14.3%
Lack of skill of local journalists	37	32.2%	75.5%
Lack of skill, experience, orientation	34	29.6%	69.4%
Total	115	100.0%	234.7%
a. Dichotomy group tabulated at value	e 1.		

Table-4: Failure to play the role of journalism during disaster

(Note: Here total percentage is more than 100%, since multiple response was acceptable)

On February 1, 2022, the headmaster of Khazarmukham High School in Jaintapur, Sylhet revealed the need for a flood centre, the difficulty in accessing national news related to flood forecasts and the thefts that occurred during the floods. The respondent also suggested ways to effectively combat the flood, such as the use of social media and the hiring of qualified journalists to produce good reports for news. (KII-1)

3.2.8 Separate bit on disaster journalism

Every media house needs a bit on journalism during the disaster. But most of the as well as 70% respondents informed that there was no separate bit on disaster in their respective media outlets. Some as well as 16% respondent replied that there is no separate bit on disaster journalism, and the rest as well as 14% did not give any opinion on this matter.

Figure-5

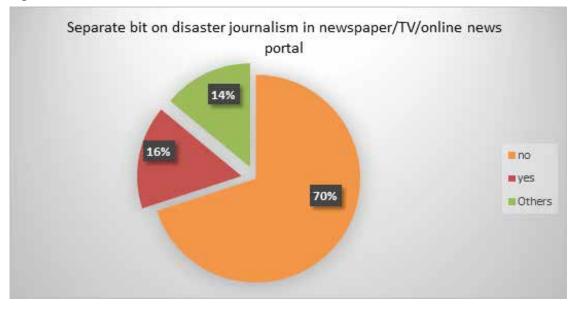


Table-5: Response of media activist on mainstream news media have separate bit on disaster journalism

		Frequency	Percent	Valid Percent	Cumulative Percent
	no	2	4.0	4.0	4.0
Valid	yes	43	86.0	86.0	90.0
vallu	Another	5	10.0	10.0	100.0
	Total	50	100.0	100.0	

From Table-5, it is clear that three quarter of media professional (86%) feel that every mainstream news media in the country should have a separate bit on disaster journalism while only 4% respondent did not give proper opinion. Based on these figure-5 and table-5 it can be concluded that mainstream news media should have a separate bit on disaster journalism such that journalist can emphasis on disaster activities.

It can be said that there is no separate bit of segment for disaster journalism in the mainstream media of the country. We collected a list of journalists from the public relations office of the Ministry of Disaster Management and Relief. The ministry or the official concern of the ministry main contact with the journalists for news purpose as well as for covering programmes of the ministry and the departments under the ministry.

No one of the journalists whose names are seen in the list is directly involved in the disaster journalism. We are mentioning the list bellow and then will discuss about the names of the list.

SL	Name	Media Outlet	Phone Number
1.	তপন বিশ্বাস	জনকণ্ঠ	০১৭১২-৮৮৬৮৮১
2.	আনিসুর রহমান খান	দ্য ইন্ডিপেনডেন্ট	০১৭৩০-০৯৭৬৮৭
3.	মহসীনুল করিম লেবু	ডেইলি অবজারভার	০১৭৭৯-২২৮৮৮৮
4.	উবায়দুল্লাহ বাদল	বাংলাদেশ প্রতিদিন	০১৬১৫-০৬১৫২৬
5.	আমিরুল ইসলাম	যুগান্তর	০১৭১২-৬০৭৫৬২
6.	আশরাফুল হক রাজীব	দেশ রুপান্তর	০১৮১৯-২০৩০০৩
7.	মুস্তাফিজুর রহমান	নিউ এইজ	০১৫৫২-৪৫৭১৩৭
8.	মাসউদুল হক	ইউএনবি	০১৭১১-১৮৬২০৩
9.	মোঃ আশরাফ আলী	নয়া দিগন্ত	০১৫৫২-৩২৪৩৪৫
10.	ইফতেখার মাহমুদ	প্রথম আলো	০১৭১৬-৪৩২৮৪৫
11.	পরিমল পালমা	ডেইলি স্টার	০১৯১২-৮১৬৪৮৫
12.	আলতাব হোসেন	যায়যায়দিন	০১৭১১০৪৫৪২১
13.	নিজামুল হক বিপুল	ঢাকা প্রকাশ	০১৫৫২-৪২০০৭৩
14.	মুন্না রায়হান	ইত্তেফাক	০১৭১২-৮০১৮৬৬
15.	ইসমাইল হোসেন	বাংলানিউজ ২৪.কম	০১৭১২-৪৯৫০২৫
16.	শহীদুল ইসলাম খান	বিডিনিউজ ২৪.কম	০১৭১৬-৮৫১৮১৮
17.	রানা মুহাম্মদ মাসুদ	জাগোনিউজ ২৪.কম	০১৭১২-৩৮৮৫৯০
18.	রাকিব উদ্দিন	দৈনিক সংবাদ	০১৭১৫-৮৮৪৯৬৩

Table-6: List of disaster journalist

The names of 18 journalists were mentioned in the list as the disaster journalists. However, no media outlets from where the journalists are working have separate bit for disaster journalism. Alongside their main bit, the journalists cover the disaster issues on behalf of the media outlets. As example, the name of Ubaidullah Badal was mentioned as disaster journalist, but he mainly covers religious bit. He was the president of Religious Reporters' Forum. Ubaidullah Badal, however, covers the disaster issue sometimes for his media house as there is not separate bit the disaster journalism in the house.

Anisur Rahman Khan of Daily Independent had been involved with reporting for the arena of Environment bit. He had covered the disaster issue, considering the disaster issue as small section of environment bit. He, however, mainly covered other issues of environment. It can be mentioned that The Daily Independent is not in operation. Mohsinul Karim Lebu of Daily Observer is mentioned as disaster journalist, but he mainly covers environment and agriculture. He also covers Secretariate bit. For this reason, he sometimes visits the Ministry of Disaster Management and Relief for news purpose.

Ashraf Ali of Naya Diganta, Iftekhar Mahmud of Prothom Alo and Parimal Palma of Daily Star are involved in journalism with Environment bit in their media houses concerned. However, they cover disaster issues occasionally when it needs as there is no separate bit for disaster journalism in their media outlets. Such statement is applicable for other names of the list. Nizamul Haque Bipul of Dhaka Prokash is mentioned as a disaster journalist. He, however, covered Secretariat bit for his media house. As he visits Secretariat regularly, he visits the Ministry of Disaster Management and Relief sometimes. He, however, currently don't go to the Secretariat regularly as he is now chief reporter of Dhaka Prokash.

3.2.9 Flood forecasting, pre-preparedness and Institutional precautionary measures

Bangladesh Meteorological Department (BMD) is the national meteorological organization of the country. BMD representative S.M. Quamrul Hassan said BMD is responsible for maintaining the network of surface and upper air observatories, radar and satellite stations, agrometeorological observatories, geomagnetic and seismological observatories and meteorological telecommunication system of Bangladesh. The BMD can provide rainfall and water level tables but cannot provide information about flood

forecasting. However, the Flood Forecasting & Warning Centre (FFWC) under Bangladesh Water Development Board (BWDB) mainly provides rainfall and water level tables, forecasting and warnings through structure-based forecasting. It provides a real time water level map of Bangladesh showing normal, warning, flooding, and severe flooding (danger level). Physical water level readings are obtained through water level monitoring stations.

Representative of Department of Disaster Management (DDM) said objectives of Disaster Management Act, 2012 by reducing the overall vulnerability from different impacts of disaster by undertaking risk reduction activities; conducting humanitarian assistance programs efficiently to enhance the capacity of poor and disadvantaged as well as strengthening and coordinating programmes undertaken by various government and non-government organizations related to disaster risk reduction and emergency response. This department conduct their activities on the basis of getting disaster related information. The information is collected from Bangladesh Meteorological Department (BMD), Flood Forecasting & Warning Centre (FFWC) under Bangladesh Water Development Board (BWDB), Forecasting and Warning Services (FFWS), Bangladesh Space Research and Remote Sensing Organization (SPARRSO), Bangladesh Betar, Television and other media houses.

An exclusive interview broadcast in BBC, 19 june 2022 where Mohammad Arifuzzaman Bhuiyan, executive engineer of the Flood Forecasting and Warning Center, told BBC Bangla, "We could definitely have predicted that there would be a flood." However, it was not our idea that the amount of rainfall would be so high. I got the indication that there will be heavy rain. The warning reports (flood forecast) that we had since the beginning of June, we had such indications every day. Our main responsibility is to give a warning message about this at the national level. Despite the ability to provide advance warning of floods, the flood forecasting and warning center cannot tell how big or intense the flood will be. We just say, there will be a lot of rain and it is our job to say what will be the response of any river to that rain. It's not always right, it can be more or less also added.

Another exclusive interview broadcast in BBC, 19 june 2022 where AKM Saiful Islam, Director of the Water and Flood Management Institute of Bangladesh University of Engineering and Technology, told BBC Bangla, "There was a forecast that there would be a flood, but I have never seen such a forecast that there would be such a record flood. It was said that there will be rain, the water level will rise and the danger level will cross. But this time it rained within a day and the water came down. He says that in most cases such flash floods cannot be accurately predicted. Because the water comes so fast that the level of damage is very high. Developed countries do not have the technology to predict such sudden floods are examples of damage or casualties in such sudden floods in Australia, Japan and China. Using more technology, it will be possible to predict flash floods earlier by sharing information with India he said.

The FFWC through its Forecasting and Warning Services (FFWS) generates and provides flood forecasts and warning information to enhance the disaster management capacity of national agencies and communities. The aim is to act as a center of emergency response through FFWS to minimize or mitigate loss of life and property damage by enhancing capacity of agencies and communities. The representative of Flood Forecasting Warning Centre (FFWC) said that FFWC forecasted about the flood on 2022 but they recognized that they were unable to determine the severity of the flood due to their weak forecasting system. Current forecasting system of FFWC is not up to date to fix the effect of flood derived by the climate change.

Gawher Nayeem Wahra, founding convenor and member secretary of Bangladesh Disaster Preparedness Forum; in a write-up published in Daily Star on July 4 in 2022 writes that Bangladesh boasts having a modern weather monitoring system and robust geostationary satellites under SPARRSO. But does it hold up during our time of need? We have the technology, understanding, and capacity to calculate the travel time of rainwater from the upstream Cherrapunji to Sylhet. If this information had been made available to the general public with a bit of specific analysis, it would be easier for the citizens to take action.

What is the benefit of maintaining the organizations and their human resources if they cannot understand the danger of 22,000mm of rainfall upstream in only three days' time? Or if they can't predict the consequences of 24 hours of continuous rain in Sunamganj? Or predict which area will be submerged if the Surma River overflows in the absence of a town protection embankment? All these should be part of the forecast and warning system.

Figure-6 shows finding regarding the flood forecasting, pre-preparedness and precautionary measures of the concerned institutions that more than half of respondent (62%) in the sample feel that media activities not as expected. 16% respondent think as expected and wrong steps, through near about one quarter of the respondent state that not at all.

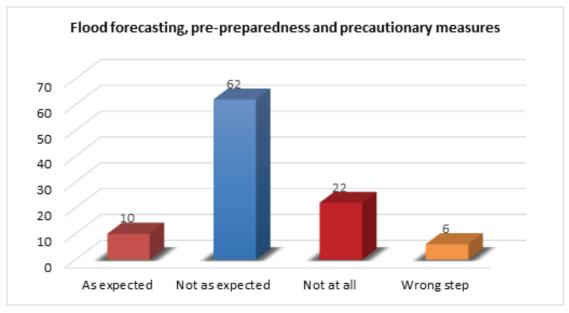


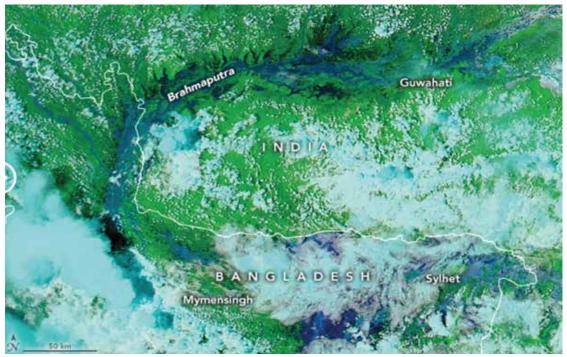
Figure-6

The participants highlighted the lack of preparedness, management and resources during the crisis, as well as the lack of support from the government and various departments. The participants suggested various measures to improve the preparedness of journalists in similar situations, such as the arrangement of boats and the storage of relief materials.

Although media's role was not expected before the flood happening in 2022 in Sylhet region, the authorities concerned could take preparations after analyzing the information from other sources, including NASA. However, The Daily Star published two photos of NASA where it was seen that the flood water came from Indian side some days after heavy rainfall. The following two picture proved that failure of the authorities concerned over flood just before it was happening.



This is the picture of May 8 in 2022 where it is seen that the flood water was coming.



The picture of June 22 in 2022 where it is seen that the flood affected the Sylhet region adversely.

Media Professionals Perception

	Resp	onses	% Of
Media Professionals Perception	No of	% Of	Cases
	Response	Response	
	Times	Times	
A separate bit on 'Disaster Journalism' needs to be developed in each media outlet so that	15	9.0%	20.6%
natural disaster is properly covered.	15	8.0%	30.6%
Arrangement of special training by NIMC and other relevant institutions needs to produce	24	12.8%	49.0%
skill human resource on disaster journalism.	24	12.076	49.078
Sylhet and Sunamganj are often affected by flash flood. So, it is necessary to arrange training	13	6.9%	26.5%
for local journalists.	15	0.570	20.370
Many flood-hit people of Sylhet and Sunamganj are still homeless. A project can be taken for	9	4 90/	10 /0/
their flood tolerant house before next flood.	9	4.8%	18.4%
Use of social media and mobile journalism to reduce or avoid damage from natural disaster,			
including flood. For this reason, local journalists in Sylhet and Sunamganj should be developed	6	3.2%	12.2%
with mobile journalism skill as well as multimedia journalism,			
Many reasons were identified behind the devastating floods of 2022 in northeastern region.	11	F 00/	22.4%
An integrated effort is needed to resolve the problems permanently.	11	5.9%	22.4%
Disaster journalism can play a positive role to identify the reasons behind flood and details			
about the reasons, including lack of river dredging and other problems which are responsible	21	11.2%	42.9%
for obstructing water flow.			
The northeastern region is particularly vulnerable to flash floods, which often occur during			
the monsoon season. Local stakeholders and relevant experts of the country should be	7	3.7%	14.3%
involved on permanent solutions.			
Environmental protection should be given utmost importance in development work. It is now			
important to change the development philosophy and stop unplanned development.	6	3.2%	12.2%
Development will be; but not by destroying the environment.			
Flood water in the northeastern part of Bangladesh generally comes from Meghalaya and			
Assam. On the other hand, similar flood occurs there. So, India-Bangladesh cooperation and	22	11.7%	44.9%
public-journalist collaboration should be developed.			
Local administration must inform journalists with briefings, and boosting cooperation	16	8.5%	32.7%
between public representatives and journalists must be increased.	10	0.3%	52.7%
Establishing an emergency monitoring cell in northeastern region is needed. Special shelter			
centres should be established in every upazila in Sylhet and Sunamganj which will also be	23	12.2%	46.9%
used as SSC and HSC exam centers.			
Offering financial support to media activists from the respective media outlets and			
government bodies concerned and other supports are needed during flood and other natural	6	3.2%	12.2%
disaster.			
It is necessary to ensure that journalists have access to the resources that they need to do		4.00/	10.40/
their job effectively.	9	4.8%	18.4%
	188	100.0%	383.7%
	1	1	

(Note: Here total percentage is more than 100%, since multiple response was acceptable, Total respondent N=49)

we found that total respondent is 49. All respondents response 188 times answered against this question; and those 49 people ticked a total of 188 boxes. 49% of the respondent opined that arrangement of special training by NIMC and other relevant institutions needs to produce some dedicated people on disaster journalism; 45% emphasis on India-Bangladesh cooperation and citizen-journalist collaboration should be developed; 47% thinks that Establishing an emergency monitoring cell in northeastern region is needed. Special shelter centres should be established in every upazila in Sylhet and Sunamganj which will also be used as SSC and HSC exam centers. As no separate bit has been developed in media for natural disaster coverage, including flood. 30.6% respondent emphasis on separate bit on 'Disaster Journalism' needs to be developed in each media outlet so that natural disaster is properly covered. And 32.7% opined that local administration must inform journalists with briefings, and boosting cooperation between public representatives and journalists must be increased.

3.3 Mass People Perception

During the study a random sample of 50 from disaster-affected (Flash flood hit) Sylhet and Sunamganj districts

3.3.1 Family/people get affected by the devastating floods

From the study we revealed that maximum number of respondents (80%) had to leave home instantly because during flood situation was not favorable, 15% respondents stayed in roof/loft while minimal respondents (5%) stayed in waterlogged home during devastating floods.

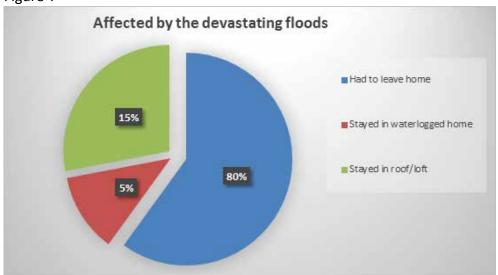


Figure-7

3.3.2 Stay homeless in the terrible flood

It has shown in Table-5 where the homeless stayed in terrible flood. From the study we found that 53.2% of respondents people stayed nearest shelter center, 46% respondents people stayed neighbor's house, while only 10% of people went to urban area.

Responses		% Of Cases	
Stay Homeless in the terrible flood	No of Response	% Of	No of
	Times	Response Times	
Shelter Center	25	26.3%	53.2%
Relative's house	17	17.9%	36.2%
neighbor's house	22	23.2%	46.8%
Urban	5	5.3%	10.6%
Any high place	21	22.1%	44.7%
Others	5	5.3%	10.6%
Total	95	100.0%	202.1%
a. Dichotomy group tabulated at value 1.			

Table-5: Stay Homeless in the terrible flood

(Note: Here total percentage is more than 100%, since multiple response was acceptable)

According to FGD-3 explanation we found that relief materials should be stored in abundance, as Sunamganj floods has occurred every year, and that multi-storied buildings should be built in the village to keep the water from turning into mud. Government should arrange enough boats so many homeless people can stay outside for several days during floods.

(A number of senior local journalists from Sunamganj District participated in the FGD-3)

3.3.3 Involvement in rescue and relief efforts

18% people think Government bodies are liabilities to involve in rescue and relief efforts than another organization, 20% people think local social organizations can contribution during disaster because local organization can easily identify where problem occurred, 12% people think non-government bodies can come to help and 40% people think in any disaster situation it is not duty for only single bodies but all type of bodies should be involved.

Involvement in rescue and		Frequency	Percent	Valid Percent	Cumulative
	relief efforts				Percent
	Government bodies	9	18.0	18.0	18.0
	Non-government bodies	6	12.0	12.0	30.0
Valid	Local social organizations	10	20.0	20.0	50.0
	Local rich people	1	2.0	2.0	52.0
	Expatriate	4	8.0	8.0	60.0
	All of them	20	40.0	40.0	100.0
	Total	50	100.0	100.0	

Table-6: Involvement in rescue and relief efforts

Aminul Haque of Doinik AjKal remarked that when all villages and towns were affected by the flood, neither the government nor the representatives nor the administration helping or playing expected role. He also mentioned that many people had taken shelter in village trees due to the sudden flooding (KII-2).

3.3.4 Damages during the unprecedented floods

Different types of damages occur due to any type of disaster calamities. From the study revealed that 32% of people's houses were damaged, 18% of people were suffering with livestock/cattle damaged, total 20% combinedly lost furniture and crops, and 30% of people lost all.

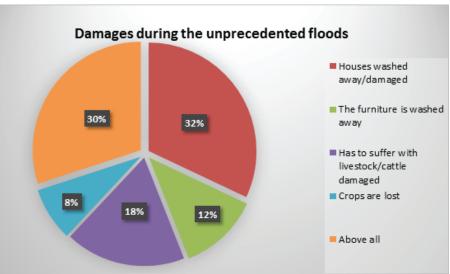


Figure-8

Dilara Begum, Social Science Teacher at Khajar Mukam High School, participeted in FGD-1 on Thursday 17th, May 2022. She could not go to school due to the flood. She also mentioned that her house sank under flood water and the school's important documents swept away with water. She noted that communication had broken down during the incident and mobile networks also went down. After 4 days, she could contact with people and got all the dry food to eat. She also mentioned the hilly areas of Sylhet were more flooded and Lalakhal and Cherrapunji were also affected by the flood. She stated that most of the houses in the village sinked under flood and cows, goats and all other domestic animals were washed away. She also mentioned that shelters were urgently needed at Gowainghat but there was no TV or radio. She also noted that school institutions that were used for shelter destroyed the school environment.

About 82 families were homeless and people and domestic animals were rescued with the help of the local people (KII-2)

During the study we found that rural people were the worst victims of frequent devastating floods of 2022 in the northeastern region.

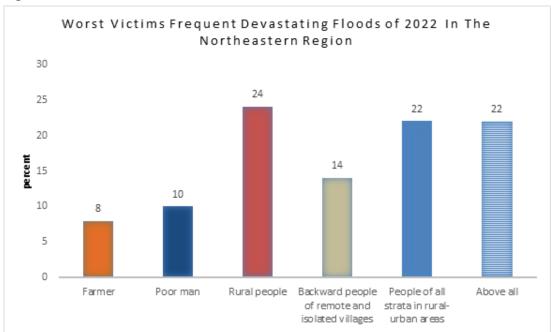


Figure-9

3.3.5 Forecasting and news items on preparedness and awareness in media before the floods

Disaster preparedness plays a vital role in mitigating the adverse impacts of natural disaster. Forecasting and early preventive measures are the part of preparedness for flood. From the study revealed that there was less information provided before flood or disaster, only 16% people get forecasting and news item on preparedness and awareness in media before the flood, while more than third quartile (84%) people did not get any forecasting and news in media before the flood.

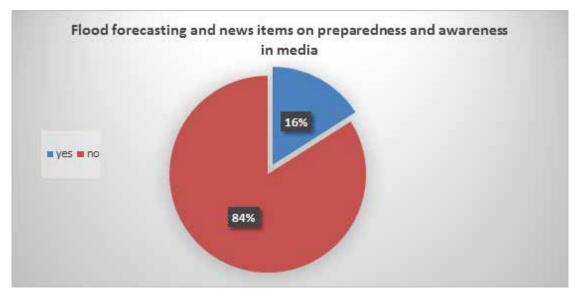


Figure-10

There are continuous awareness programs, trainings and drills going on which are produced and telecast by the media throughout the country in western and other developing countries but this is impracticable in Bangladesh. Combinedly electronic and print media can establish early warning systems in far-flung and disaster-prone areas.

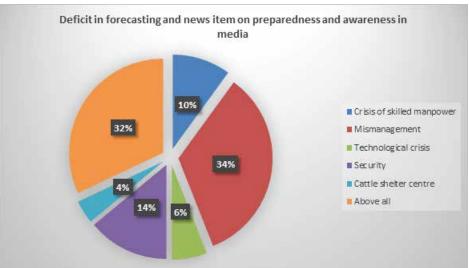
From the study revealed that about half of respondents (53%) think forecasted and warned on behalf of government and 62% respondents think mass media can play a vital role in forecast and warned while 46% respondents think local public representatives can aware.

Table-7: Should have forecasted and warned

	Responses		% Of Cases
Should have forecasted and warned	No. of	% Of	
	Response	Response Times	
	Times		
Miking on behalf of government	14	27.5%	53.8%
Local public representatives	12	23.5%	46.2%
Mass media	16	31.4%	61.5%
Others	9	17.6%	34.6%
Total	51	100.0%	196.2%
a. Dichotomy group tabulated at value 1.			

(Note: Here total percentage is more than 100%, since multiple response was acceptable)

3.3.6 Deficit in forecasting and news item on preparedness and awareness in media In certain circumstances, both electronics and print media provide important disaster management public services, especially in broadcasting alerts, early warnings, and advisories. Figure-11 shows that major respondent (34%) respondent think mismanagement was the main cause for not forecasting and news item on preparedness and awareness in media before the flood, 32% respondents think crisis of skilled manpower, mismanagement, technological crisis, resource shortage are another cause for not broadcasting news in media before flood.





3.3.7 Damage of education and Sylhet Education Board's SSC results being relatively bad

There was more impact on education and Sylhet Education Board's SSC results was relatively bad due to devastating Floods in 2022 in the North-Eastern part in Bangladesh. As a result, severe damage occurred in this terrible food.

	Frequency	Percent	Valid Percent
Sylhet Education Board's SSC results			
Damage to the education			
Yes	50	100.0	100.0
Severe damage	50	100.0	100.0

Table-8: Damage to the education and Sylhet Education Board's SSC results

During the three consecutive floods, particularly latest flood happened in June 2022, student's books and notes were washed away. Although books were provided to the students later, but the gap could not be closed. According to the government, authorities suspended classes in more than 5,000 educational institutions across 18 districts due to the inundation, and also, schools and colleges were used as shelter for flood-hit people. Most of the educational institutions of Sylhet and Sunamganj were closed. This has disrupted the education of thousands of secondary level students. This has caused a huge loss to the students.

3.3.8 Role of Haor Development Board and NRCC over floods

The north-eastern region of the country is unique from geographical aspect as the area has many haors. Not only heavy rainfall, the mismanagement of haor is also responsible for the flood. Gawher Nayeem Wahra, Member Secretary of the Foundation for Disaster Forum; during an exclusive interview published in English Daily Business Standard on June 19 in 2022 mentioned some reasons behind such a disaster as well

as the devastating flood in northeastern region of the country. He said that the flood situation across the haor region is not a result of just the volume of rainfall, which many are saying is the highest in history. Actually, the flood situation has turned worse because this high volume of rainfall has gotten stuck in low-lying land. The actual reason is that human intervention has destroyed the 124km passage for discharging stormwater from Cherrapunji (Meghalaya, India) to Bhairab (Bangladesh).

He said that the huge amount of silt coming with the downpours flows down not only the tributaries and distributaries, but also the flood plains. But we have developed a road network blocking the drainage passage. The all-weather road connecting the three haor upazilas: Itna, Mithamoin and Ashtagram, was constructed in October 2020. The road blocks flood water discharge through the western [of the road] localities, including Nikli, Bajitpur and Kuliarchar, when Sylhet and Sunamganj get submerged. This has never happened before. It is now evident how an anthropogenic cause has destroyed a natural water flow system. This road is responsible for the flash flood around the north-east region.

The tributaries and distributaries of the Sylhet region have not been dredged for many years. But a raised riverbed alone would not have caused inundation of Sylhet habitats, with 7-8 feet-high water levels. The 29km Road caused huge sedimentation over hundreds of acres of land on its north-east side. When the north-east land overflows, the Road has now limited water discharge only through an 800-meter space [culvert]. Moreover, the Surma-Khushiara_Kalni river flow fails to drain down the stranded water because of river encroachment downstream. Hence, the present floods across the north-east haor region are mostly triggered by human causes. The planning minister has announced that the government will not construct new roads in the haor belt.

Mass people Perception

	Responses		% Of
Mass People Perception	No of Response Times	% Of Response Times	Cases
The mainstream media was not able to place the real scenario of flooding or to	Times	Times	
cover the floods in some days as Sylhet and Sunamganj had been disconnected for some days.	13	12.9%	28.3%
Media's role requires to find out the people those who are still homeless.	3	3.0%	6.5%
Flood forecasting systems need to be improved by considering hydrologic data from upper riparian countries.	7	6.9%	15.2%
An integrated effort as well as a mega project involving various ministries and departments is necessary for permanent solution regarding floods.	4	4.0%	8.7%
Roads in Haor and other roads responsible for flooding should be demolished.	9	8.9%	19.6%
In many areas, the flow of water is obstructed due to road or bridge in the Haor or river. Initiative should be taken to divert the upstream water.	3	3.0%	6.5%
Trainings should be arranged to prepare skilled journalists of disaster journalism, while awareness campaign for media in this regard is also needed.	16	15.8%	34.8%
River dredging, particularly Surma, is a must to prevent flood in Sylhet region.	5	5.0%	10.9%
The northeastern region is particularly vulnerable to flash flood. Local stakeholders and relevant experts should be involved for permanent solutions.	6	5.9%	13.0%
Environmental protection should be given utmost importance in any development work. It is now important to change the development philosophy and stop unplanned development.	5	5.0%	10.9%
Destruction of the natural forest on the hills of Meghalaya for commercial forestry or agriculture purposes should be stopped through diplomatic talks.	5	5.0%	10.9%
Sand mining from rivers, hill-cutting and unplanned urbanization which contribute to siltation problem and reduction of navigability must be stopped.	7	6.9%	15.2%
Taking more effective initiative with neighboring countries in water management is a must.	4	4.0%	8.7%
Media should provide timely forecasting and creating more awareness about weather and natural disasters among people.	6	5.9%	13.0%
Special shelter centres should be established in every upazila in Sylhet and Sunamganj which will also be used as SSC and HSC centre.	4	4.0%	8.7%
Flood control measures must be increased and authorities concerned must increase manpower in office concerned.	4	4.0%	8.7%
	101	100.0%	219.6 %

(Note: Here total percentage is more than 100%, since multiple response was acceptable, Total respondent N=46)

we found that total respondent is 46. All respondents response 101 times answered against this question; and those 49 people ticked a total of 101 boxes. 34.8% respondent emphasis Trainings should be arranged to prepare skilled journalists of disaster journalism, while awareness campaign for media in this regard is also needed; 28.3% opined that social media played a vital role during floods in 2022. The mainstream media was not able to place the real scenario of flooding or to cover the floods in some days as Sylhet and Sunamganj had been disconnected for some days. 19.6% think that roads in haor and other roads responsible for flooding must be demolished; 13% respondent observed that north-eastern region is particularly vulnerable to flash flood. Local stakeholders and relevant experts should be involved for permanent solutions.

3.4 Qualitative Data: Focus Group Discussions (FGDs) and Key Informant Interviews (KII)

During the study conducted four focus group discussions (FGDs) and six Key Informant Interviews (KII). FGD-1 was conducted at Khajar Mukam High School, Jainthapur, Sylhet on 31 January 2023. The FGD was predominantly conducted to assess the experiences of the participants in the event of a flood in 2022. FGD-2 was conducted with journalists from Jainthapur Press Club, Sylhet region, on the 31 January 2023. FGD-3 was conducted with a number of senior local journalists from Sunamganj District on 01 February 2023. FGD-4 was conducted at Bangladesh Sangbad Sangstha (BSS), Zinda Bazar, Sylhet on the Role of Journalism for Preparedness to Face Floods risk in the northeastern part of Bangladesh on 1 February 2023. The participants were typically Journalists, civil society, senior journalists, political representatives, university professors, and environmental activists.

3.4.1 Focus Group Discussions (FGDs) Analysis

One of the participants (a Mathematics Teacher at Khajar Mukam High School) observed that

Media plays a very important role in flood day and during floods, thieves steal all the goods and important things. He also suggested that journalists should be training to deal with the floods and a lot of boats need to be arranged. (FGD-1)

Another participant (Social Science Teacher at Khajar Mukam High School) mentioned that

She could not go to school due to the flood. She also mentioned that her house sank under flood water and the school's important documents swept away with water. she noted that communication had broken down during the incident and mobile networks also went down. After 4 days, she could contact with people and got all the dry food to eat. She also mentioned the hilly areas of Sylhet were more flooded and Lalakhal and Cherrapunji were also affected by the flood. She stated that most of the houses in the village sank under flood and cows, goats and all other domestic animals were washed away. She also mentioned that shelters were urgently needed at Gowainghat but there was no TV or radio. She also noted that school institutions that were used for shelter destroyed the school environment. (FGD-1)

Another participant (a journalist from Jainthapur Press Club) suggested that

Establishing an emergency monitoring cell, providing training to journalists, offering financial support to media activists, familiarizing the administration and journalists with briefings, increasing India-Bangladesh cooperation, and boosting cooperation between public representatives and journalists. (FGD-2)

Another participant (a journalist from Jaintiapur Press Club) also observes that

The media plays a critical role in informing the public about natural disasters and their aftermath. It is thus necessary to ensure that journalists have access to the resources that they need to do their job effectively. Furthermore, India-Bangladesh cooperation and public-journalist collaborations should be encouraged to ensure that the people of Sylhet region can be better prepared for future floods. (FGD-2)

Another participant (a journalist from Sunamganj Press Club) also observed that There was no pre-preparedness during the flood period. He also pointed out that there was a lack of management from the administration and the Sunamganj record room was submerged in water, necessitating to build of new buildings. (FGD-3)

Aminul Haque of Doinik AjKal remarked that all villages and towns were affected by the flood, with neither the government nor the representatives nor the administration helping or playing any role. He also mentioned that many people had taken shelter in village trees due to the sudden flooding. (FGD-3)

- Another participant (journalist from Sunamganj Press Club) also observed that There should be a better coordination between the meteorology department of both India and Bangladesh for pre flood forecasting. Different departments of the Bangladesh government, such as the electricity department, water development board, Fire service and meteorological department should should meaningful, output and outcome based coordination. (FGD-4)
- Dr. Md. Jahir Bin Alam, Professor of Civil and Environmental Engineering at SUST, reacted to the discussion by pointing out that the 2022 floods were not just due to excessive rainfall, but also due to other factors such as decrease in navigability of the river, construction of bridges at several places over Surma river, construction of road at Kishoreganj haor and other haor areas. He then asserted that the media can play a vital role so that such floods don't happen again, and that disaster journalism should be given serious consideration in the media as the media can influence the policy-makers by producing investigative reports, while it can also play a unique role in making people aware. To mitigate the effects of floods in the future, he recommended protecting the drains and waterbodies of Sylhet city to avoid waterlogging and floods. (FGD-4)

From Focus Group Discussions (FGDs) it is seen that the causes of floods were not just due to excessive rainfall in study areas, but also due to other factors such as decrease in navigability of the river, construction of bridges at several places over Surma river, construction of road at Kishoreganj haor and other haor areas. A large number of villages and towns were affected by the flash flood. Many people had taken shelter in village trees due to the sudden flooding. The hilly areas of Sylhet were more flooded and Lalakhal and Cherrapunji were also affected by the flood. Most of the houses in the village sank under flood and cows, goats and all other domestic animals were washed away. Shelters were urgently needed at Gowainghat but there was no TV or radio. There was no pre-preparedness during the flood period due to lack of management from the administration.

3.4.2 Key Informant Interviews (KII) Analysis

The study conducted six Key Informant Interviews (KII). A range of categories were interviewed as the KII to understand the role of Journalism for Preparedness to face floods risk in the north-eastern part of Bangladesh. Journalists, civil society senior journalists, political representatives, university professors, and environmental activists were taking part in the interviews spontaneously and shared their experiences, and opinions freely. Expert opinions (KII-1): Teacher, Khazarmukham High School in Jaintiapur, Sylhet on 1 February 2023.

The respondent noted that during the flood, people in the village were troubled by the sudden arrival of water and had no accommodation for their animals and felt the necessity for a shelter Centre in the village where people in need of food and other assistance could be reached easily.

The respondent also highlighted the difficulty of accessing national news regarding flood forecasts due to the limited availability of television in the village and the lack of electricity, which caused the mobile phones to switch off.

Expert opinions (KII-2): Shorif Uddin, a resident of Radhanagor, Jaintiaapur, Sylhet on 1 February 2023.

Schools, and colleges are used as shelters for various families affected by the floods, but more shelters need to be built to accommodate the increasing number of people who are lived in below poverty line and are in need of assistance. Journalists need to be training to deal with the floods and pointed out more boats need to be arranged in order to transport goods from one area to another.

Expert opinions (KII-3): Bahar Uddin, chairman of 4 No. Dorbosth Union Parishad, Jaintiapur, Sylhet

People from all districts had sent goods and money to help the needy people of Sunamganj, and people from his area had also come forward to help. 90% of the people in the area were poor and the remaining 10% of people had helped by giving goods and money. 1.5 lakh taka had been received from the government and distributed 60 packets of rice among the people, but all were limited.

Lack of shelter centers and the bad condition of roads, did not allow people to take their cows and buffaloes. The government should build a high road, create a flat center and make speedboat arrangements.

Senior Journalist opinions (KII-4): Correspondent, Somoy TV.

Relief materials from all over Bangladesh had arrived, but were not reaching the most affected areas due to the flooding. Many people could not afford the high prices of boat rentals, and there was no electricity, which meant that people had to drink water from the river. Goala Bazar Tahirpur had become inaccessible due to the flooding, and those women and children were particularly affected.

280 schools should be re-established, shelters should be built, media should be informed and assistance should be sought from them. Government buildings should be built at a height of over five feet and that 17 fire services should be deployed in each upazila.

Senior Journalist opinions (KII-5): Correspondent, Daily Mirror, Sylhet

Due to the lack of infrastructure and proper management, the situation was much worse than expected. Affected people were not provided with any support or relief and they were left to survive on their own. Journalists faced a lot of difficulties while reporting from the field due to the lack of access and safety.

Senior Journalist opinions (KII-6): President, Sunamganj Reporters Unity

City protection embankment and river excavation is highly essential for the removal of all the related problems. It was also revealed that a large amount of soil is being lifted in Tangua Haor to protect the wave, which is causing crop damage. Additionally, Sunamganj Journalists have to report everything in these situations, but due to lack of training they have to face many problems. Journalists had to cover a lot from the disaster, and as they lived in Haor they should be well trained. He further added that, as a result of good training, they will get help from people from home and abroad through media.

From Key Informant Interviews (KII) it was revealed that during the flood, people in the village were troubled by the sudden arrival of water and had no accommodation for their animals and felt the necessity for a shelter Centre in the village where people in need of food and other assistance could be reached easily. Relief materials from all over Bangladesh had arrived, but were not reaching the most affected areas due to the flooding. Many people could not afford the high prices of boat rentals, and there was no electricity, which meant that people had to drink water from the river. Goala Bazar Tahirpur had become inaccessible due to the flooding, and those women and children were particularly affected.

Due to the lack of infrastructure and proper management, the situation was much worse than expected. Affected people were not provided with any support or relief and they were left to survive on their own. Journalists faced a lot of difficulties while reporting from the field due to the lack of access and safety. The difficulty of accessing national news regarding flood forecasts due to the limited availability of television in the village and the lack of electricity, which caused the mobile phones to switch off.

Chapter Four Major Findings and Recommendations

Any event, typically occurring suddenly, that causes damage, ecological disruption, loss of human life, deterioration of health and health services and which exceeds the capacity of the affected community on a scale sufficient to require outside assistance (Landesman,2001). Bangladesh is considered as one of the most disaster-prone countries in the world (DDM, 2014). Consequently, people of this country face several types of disasters every year. From historical time, Bangladesh has been subjected to different types of natural disasters such as flood, cyclone and tidal surges, tornado, earthquake, drought and so on.

During the devastating Cyclones of 1991, 2007, 2009, 2017 and 2020, all electronics and print medias including Bangladesh Betar and Community radio stations helped to make alert of coastal communities to evacuate themselves and take shelter to the nearest and suitable shelter homes along with their livestock and valuables.

On the basis of quantitative, qualitative data and field survey some findings and recommendations are presented accordingly.

Major Findings:

- 1. Most of the respondents (81%) observe that forecast, preparedness, and awareness news did not receive through the media before the three severe floods in 2022 (Fig-1)
- 2. About 90% respondent think that media coverage the news during flood, after taking a terrible shape (88%), after the floods (76%) and only 22% observe that media cover before floods/forecasting. (Tab-2)
- 3. More than half (60%) media professionals perceive that investigative news on forecasting, expert views, awareness and institutional preparation will play important rule to reduce frequent flood damage. (Fig-3)
- 4. About 71.4% respondents fell to arrange on separate training on disaster journalism (Tab-3)
- 5. About 82% media professionals expect mainstream news should have a separate bit on disaster journalism. (Tab-5)

- 6. More than half (62%) local journalist opined that institutional precautionary measures was not as expected. (Fig-6)
- 7. About 63% felt that the media should have played more activity as media can communicate easily (Fig-4).
- 8. Establishment an emergency monitoring cell, providing training to journalists, offering financial support to media activists, familiarizing the administration and journalists with briefings, increasing India-Bangladesh cooperation, and boosting cooperation between public representatives and journalists. (FGD-2)
- 9. Many as well as 76% media journalist consider the lack of skills and experience of local journalist is the reason for the failure to play the role of journalism during disasters. (Tab-4)
- 10. Almost 80% of total respondents of study area opined that flood affected people had to leave home instantly and took shelter in relative house shelter center and other places. (Tab-5 & Fig-7)
- 11. Again 32% of respondents observe that people's houses were damage deadly and suffering with livestock/cattle damage. (Fig-8)
- 12. On the other hand, 24% rural people fall in worst victims frequent devastating floods of 2022 in the north eastern region. (Fig-9)
- 13. Almost 53% of respondents think that forecasted and warned on behalf of government and 62% respondents think mass media can play a vital role in forecast and warned while 46% respondents think local public representatives can aware.
- 14. Due to the lack of infrastructure and proper management, the situation was much worse than expected. Journalists faced a lot of difficulties while reporting from the field due to the lack of access and safety. (KII-5)
- 15. Major respondents (34%) think that different media house fail to forecast, preparedness and awareness in media before the flood due to their mismanagement. (Fig-11)
- 16. Again 32% respondents think lack of skilled manpower, technological crisis, resource shortage are another cause for not broadcasting news in media before flood (Fig-11)
- 17. Scientific data and forecasting information to journalist and public representative can help to reduce flood risk. (FGD)
- Different departments of the Bangladesh government, such as the electricity department, water development board, fire service and meteorological department should have output and outcome-based meaningful coordination. (FGD-4)

Recommendations

Based on finding, the study puts some recommendations. The major recommendations are presented below:

- 1. Media should forecast with appropriate scientific data before flood.
- 2. News importance should be given on preparedness rather than flood event broadcasting.
- 3. Media should accommodate investigative news on forecasting, expert views, awareness and institutional preparation.
- 4. Training and facilities is essential for local journalist to reporting before and during flood.
- 5. Separate bit should be created in every media house.
- 6. Institutional precautionary measure should be taken properly.
- 7. Special shelter centres should be established in every upazila in Sylhet and Sunamganj which will also be used as SSC and HSC centre.
- 8. Need to establish an emergency monitoring cell, providing training to journalists, offering financial support to media activists, familiarizing the administration, flood forecasting centre and department of disaster management.
- 9. Media should focus on increasing shelter center, facilities and accessibility.
- 10. Media should focus on rescue planning, preparation, motivation, practice, infrastructure facilities and awareness from all stakeholder. Specially for the rural marginal people.
- 11. Media should focus on planning issue for post flood rehabilitation process and mechanism.
- 12. Technological development effective communication, skilled media worker and sufficient resources should be increase to overcome mismanagement.
- 13. Better coordination should have among FFWC, the Meteorology Department of both India and Bangladesh, other internal departments as well as media for pre flood forecasting, preparedness & planning.
- 14. Current forecasting system of FFWC should be modernize with advanced technology.
- 15. As National Institute of Mass Communication (NIMC) is an apex training institute for media professionals, so this institute can arrange training for local journalist throw workshop or seminar.

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Annexure-I Questionnaire schedule (flood-hit areas people)

Journalism for Preparedness to Face Floods Risk in North-Eastern Part of Bangladesh

Name of Participant:	Gender:
Age:	Profession:
Designation/Address:	Phone:

- Have you/someone known to you been affected by the three consecutive devastating floods that hit the northeastern region in Bangladesh in 2022?
 (a) First Flood (b) Second Flood (c) Third Flood (d) All of them (e) Not at all
- 2. How did you/your family/people known to you get affected by the devastating floods?

(a) Had to leave home (b) Stayed in waterlogged home (b) Stayed in roof/loft (d) Others

- 3. Where did you take shelter if you were homeless due to the terrible flood?(a) Shelter Centre (b) Relative's house (c) Neighbour's house (d) Town (e) Any high place (f) Others
- 4. Who was more involved in rescue and relief efforts?(a) Government bodies (b) Non-government bodies (c) Local social organizations(d) Local rich people (e) Expatriates (f) All of them (g) Others
- 5. What kind of damage do you face during the unprecedented floods?
 (a) Houses washed away/damaged (b) Belongings washed away/damaged (c) Has to suffer with livestock/cattle damaged (d) Crop loss (e) All of them (f) Others: ...
- 6. Have you/your family and relatives received any forecast or warning message regarding Sylhet floods in 2022 and previous floods?
 (a) Yes (b) No (c) Sometimes (d) Never
- 7. If you received forecast or warning, how did you get it?s
 (a) Newspaper (b)TV (c) Radio d) Messages from government bodies concerned
 (e) Internet / Social media (f) Others:...
- 8. If not received, who should have forecasted and warned?
 (a) Miking on behalf of government (b) Local public representatives (c) Mass media (d) Civil society/experts (e) All of them (f) Others:-----
- 9. What kind of preparedness do you think would have reduced suffering from the floods?
 - (a) Moving to shelter centres (b) Rescue operation/movement to safe place (c) Relief activities (d) Efforts for livestock (f) Others:-----

- 10. Who are the worst victims of frequent devastating floods in the northeastern region of the country in 2022?
 - (a) Farmers (b) Poor people (c) People of rural areas (d) Backward people of remote and isolated villages (e) People of all strata in rural-urban areas (f) Others:-----
- 11. Have you seen flood forecasting and news items on preparedness and awareness in media before the floods?
 - (a) Yes (b) No (c) Other:-----
- 12. Do you think that the mass media played an appropriate role through investigative reporting on disaster journalism or forecasting prior to the floods?
 - (a) Yes (b) No (c) Other:-----
- 13. Do you think there is a deficiency in institutional preparedness in disaster risk management?
 - (a) Yes (b) No (c) Other:-----
- 14. What kind of deficit do you think there was?
 - (a) Crisis of skilled manpower (b) Mismanagement c) Technological crisis (d) Resource shortage (e) Security (f) Belongings and grain storage system (g) Cattle shelter centre (h) All of them
- 15. Do you think that civil society has failed to play a proper role in preparing, alerting, creating awareness and providing appropriate advice and guidance to policy-makers in the frequent floods that occurred in 2022 in the northeastern part of the country?
 - (a) Yes (b) No (c) Other:-----
- 16. Do you think that there has been any damage to the education of students in this terrible floods?
 - (a) Severe damage (b) Minor damage (c) No damage
- 17. Do you think that the frequent devastating floods are the main reasons behind Sylhet Education Board's SSC results being relatively bad?
 - (a) Yes (b) No
- 18. Give your specific views/suggestions on preparing for unexpected floods.
 - (a)
 - (b)
 - (c)

Name of Data Collector

Phone

Signature

Annexure-II Questionnaire schedule (Media activists)

Journalism for Preparedness to Face Floods Risk in North-Eastern Part of Bangladesh

Name of Participant:	Gender: Male/Female
Name of Media:	
Type of Media: Local/National/Newspaper/TV/News Portal	

Designation:

Working Area/Bit:

- Have you seen the forecasting, preparedness and awareness news in the media before the three devastating floods that hit the northeastern region in Bangladesh in 2022?
 - (a) Yes (b) No
- 2. Did you get any forecast or warning message from anywhere before this terrible floods?

(a) Yes (b) No (c) Other:-----

3. If not, who do you think should have given the forecast and warning information to the media activists?

(a) Flood Forecasting and Warning Centre of BWDB (b) Bangladesh Meteorological Department (c) Department Of Disaster Management (d) Water Development Board (e) Institute of Water and Flood Management (IWFM) of BUET (f) Department of Agricultural Extension (DAE) (h) Mass Media (j) Others: ----

4. Is the flood situation in Sylhet region during the flood and post-flood adequately covered in the media?

(a) Yes (b) No

5. When did your media cover the worst floods of 2022?

(a) Before floods/Forecasting (b) During floods (c) After occurrence of floods (d) After taking a terrible shape (e) Other:-----

- Did you send news to your media outlet immediately when the flood hit your area? (in case of local journalist)
 - (a) Yes (b) No
- 7. Did your media house cover the news at the beginning of the flood?(a) Yes (b) No

- 8. What is the reason if your media house does not publish the news seriously?(a) News about the disaster get less importance (b) could not understand at first(c) Manpower shortage in central desk (d) Lack of direction (e) Any other reason
- 9. Do you think that the media played a vital role in reporting on disaster journalism or forecasting prior to the flood?
 - (a) Yes (b) No (c) Other:-----
- 10. What kind of news/programs do you think the media should have on flood pre-preparedness?

(a) Investigative news item on forecasting (b) Civil society/expert views (c) News item on awareness programs (d) Institutional preparedness, planning and implementation progress (e) All of them (f) Others:-----

11. What do you think the media should do in future?

(a) Introduction of bit on disaster journalism (b) Publication of reports/articles on disaster forecasting (c) Arrangement of separate training on disaster journalism (d) Collection and publication of disaster forecast information using modern technology (e) All of them

12. What was the role of mass media in forecasting, warning, preparedness and creating awareness in frequent floods?

(a) Media failed completely (b) somewhat (c) Media played a vital role (d) Media should have played more

13. If the media and disaster journalism fail to play a role, what is the reason?

(a) Bangladesh media does not give any importance to disaster journalism (b) No separate bit on disaster journalism (c) Local journalists do not provide information(d) Lack of skills of local journalists (e) Lack of skills, experience, orientation (f) All of them

- 14. What emphasis is placed on disaster journalism in your media?
 - (a) Necessary importance is given (b) No importance is given (c) Some importance is given
- 15. Is there a separate bit on disaster journalism in your newspaper/TV/online news portal?
 - (a) Yes (b) No (c) Other:-----

- 16. Do you think every mainstream news media in the country should have a separate bit on disaster journalism?
 - (a) Yes (b) No (c) Other:-----
- 17. Do you think there was a lack of awareness and coordination between the media, civil society, experts, government bodies concerned, and policy makers regarding flood forecasting, pre-preparedness and actions?
 - (a) Yes (b) No (c) Other:-----
- 18. How were the flood forecasting, pre-preparedness and precautionary measures of the concerned institutions?

(a) As expected (b) Not as expected (c) Not at all (d) Wrong step

- 19. Give your specific views/suggestions on flood preparedness in the North-Eastern part of the country.
 - (a)
 - (b)
 - (c)

Name of Data Collector

Phone

Signature



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