Final Report

Study on Communication with Communities (CwC) Gap Analysis in Bangladesh

Prepared by

Bangladesh Centre for Advanced Studies (BCAS)

March 2016

Acknowledgement

The Study Team

Adviser

Dr. A. Atiq Rahman

Team Leader and Editor

Md. Golam Rabbani

Study Coordination and Reporting

Nazria Islam and Nazzina Mohsin

Field Study Monitor

Mohammod Ariful Haque

Field Study Teams

Ramna Union, Chilmari Upazilla, Kurigram

Dewan Ali Emran (Team Leader)

Sazzadul Karim

Rahima Akter

Firoza Ahmed Minu

Beheli Union, Jamalganj Upzilla, Sunamganj

Tofayel Ahmed (Team Leader)

Md. Mahfuzul Alam

Monuara Begum

Mahmuda Islam

Charduanti Union, Patharghata Upazilla, Barguna

Billal Hossain (Team Leader)

Md. Jahangir Alam

Shelly Sultana

Jesmin Akhter Reshma

Ward 14, Chittagong City, Chittagong

Md. Asaduzzaman (Team Leader)

Md. Ayub Ali Alisco

Jebunnahar Ahmed Tuli

Shamsunnahar Lucky

Database

Sabakun Nahar Parash

Other Contributors

Dr. Dwijen Mallick

Rukhsar Sultana

Md. Romiz Raihan

Mahbub-Ur-Rahman

Khalilullah Jibon

Tasnuva Hoque

Table of Content

Executive Summary

Bangladesh is highly vulnerable to climate change and non-climate disasters and hazards. Many poor communities and vulnerable areas across the country are highly affected by these changes. Therefore, in order to reduce the risks and vulnerabilities, the country requires an enormous humanitarian response and disaster management programme. The Communicating with Disaster Affected Communities (CDAC) Network identifies communication as an aid, and sets this understanding central to delivering effective humanitarian responses during disasters. The network promotes design, implementation and enhancement of two-way communication with communities (CwC) to serve disaster affected communities. In order to have an effective impact, the network engages with affected population through consultation programmes by prioritizing their immediate and intermediate needs. This project aims to undertake an analysis of pre, during and post national policy and policy drivers related to Communication with Communities (CwC); conduct case studies illustrating best practices, effective lessons learned, and community's perceptions about CwC; and to identify the gaps and challenges of CwC in Bangladesh from previous disasters in different hazard zones.

Bangladesh Centre for Advanced Studies (BCAS) collected data from Charduani village of Charduani Union under Patharghata Upazilla of Barguna from southern coastal area; Kharkharia village of Ramna union under Chilmari upazilla in Kurigram district from flood-prone northern area; Ward 14 of Chittagong City under Chittagong district from southeast urban disaster-prone location; and Shibpur and Chandipur villages of Beheli union under Jamalganj upazilla in Sunamganj from northeast flash-floods-prone *haor* area of Bangladesh. The methodology includes literature and policy reviews, consultation workshop with some of the experts and the members of the Multi-Stakeholder Platform (MSP), key informant interviews with some of the experts on disaster management, communications and humanitarian response from diverse organizations. At the field level, focus group discussions with the disaster communities, interviews with some of the informed individuals from local level, and case studies.

From the respondents' narratives the study identified four eco-zones vulnerable to disasters and hazards in Bangladesh: Flood-prone area, Urban location, Flash Floods affected zone, and Coastal zone. In all four zones, the disasters and hazards have a huge negative impact on the livelihoods and socio-economic well being of people. As a result, it leads to an increase in poverty, homelessness, income generation, and forced migration followed by severe health issues, nutrition, lack of sanitation and drinking water. Our findings also, suggest that women, elderly people and disabled people are among the most affected class in these communities comparing to males, who receive alert messages and information regarding disaster earlier. Additionally, minority groups in these communities also receive information much later compare to other major groups. Delayed information dissemination leaves many, especially women and the most vulnerable members of the society, in high risks of mental, physical and economic distresses, as these people have very limited time to react to approaching disaster. Many women in the urban disaster zone mentioned that they were forcefully evicted during a disaster time, leaving them homeless and helpless not knowing where to seek shelter and whom to seek help from.

Additionally, findings suggest that information and message sharing process lacks two-way actions as the warnings are sometimes transmitted without clear guidance to the vulnerable people about where to seek safe shelter, and also, the process lacks a clear mechanism to capture the voices of the communities in reaching the authority about their helplessness during and post-disaster time.

There is a wide-spread understanding on the importance of communication with communities among the key individuals and institutions involved in disaster response. However, gaps in knowledge and understanding exist when it comes to two-way communication. The key reasons behind the lack of understanding of two-way communication are ambiguity on the subject matter and its design, implementation and maintenance; influence of established power-relations and power-structures on vulnerable communities where usually the decision making process is a top-down process rather than a bottom up with limited resources and capacity.

Finally, to ensure impactful and community-oriented disaster and emergency humanitarian response in Bangladesh, the team has consulted with communities, various local key informants, relevant experts from various national and international organizations and agencies, and analysis of policies assisted in gathering a number of key recommendations for effective two-way communication with communities (CwC). For a more effective two-way communication with communities- the team suggest, Awareness Building and Empowering Communities in Disaster Responses; Policy Advocacy and Raise Awareness Among Policymakers; Communication with Communities Strategy for Bangladesh; Improve Understanding and consistency about CWC; Develop and Nurture a Cluster of Common Platform for CWC through better Information Channel and Effective Technologies; Better Coordination, Cooperation and Experience Sharing; Special Consideration for the Most Vulnerable Members of Communities; Improve Concept Clarity Among Key Stakeholders, including MSP; Resource Mobilization; Awareness Among Development Partners and Donors on Flexibilities; Special Attention Requires for Urban Disaster Risks Reduction and Response; and Improve Trust Building with Communities are the sections need to be addressed.

1. Background and Introduction

The need for humanitarian response has significantly increased worldwide since the Second World War. By 2015, the total number of displaced people has been estimated around 60 million. This number includes human flights from internal conflicts, violence and other major issues throughout the world. According to the United Nations estimation around 100 million disaster affected humans require humanitarian assistance globally. Between 69th and 70th sessions of the United Nations General Assembly, the world leaders pledged to *leave no one behind* while working towards achieving sustainable development goals.[1] However, in the wake of increasing climatic and natural disasters, and escalating conflicts along with various other man-made hazards in many parts of the globe, humanitarian responders across the world have been facing serious challenges to meet life-saving needs. Despite these challenges, coordinative and collective humanitarian responses are designed and delivered progressively to minimize the loss of lives and damages in livelihoods. With an aim to enhance the collaboration for minimizing human suffering throughout the world, the first World Humanitarian Summit is going to be held on May 23rd to 24th 2016 in Istanbul, Turkey. . The Summit's agenda is to work towards upholding the safety and dignity of the affected people, build resilience among both the responders and the communities, develop a framework for partnerships and cooperation, and generate a better managing resources to improve efficiency. The Summit is also going to advocate for better design and implementation of two-way communication and feedback mechanism during humanitarian response to raise dignity and safety of the affected communities.[2]

A well and timely planned communication with disaster affected people with an accurate and appropriate information, helps protect the lives and livelihood of disaster affected people during and post disaster episodes. Implementation of timely communication and share of accurate information, provides effective and valuable outcomes to disaster affected areas both in the long and short terms. It also helps build resilience in the communities for a better scope of survival during and post-disasters. Communication is, therefore, a key form of humanitarian response and a fundamental aid along with other basic needs such as food, water, shelter and medicine. .[3]

Consequently, the lack or absence of communication with disaster affected communities results into catastrophic consequences. As a result of the absence of communication with communities, the scope of rescue and recovery from disaster is reduced leaving long-term and drastic impacts on the lives and livelihoods of vulnerable individuals and communities. The Communicating with Disaster Affected Communities (CDAC) Network recognises this notion by identifying communication as an aid, and sets this understanding as central to delivering effective humanitarian responses during disasters. The network promotes design, implementation and enhancement of two-way communication with communities (CwC). In order to serve disaster affected communities effectively, the network engages with vulnerable affected population through consultations and prioritization of actions as per their

---

[1] United Nations, "The Secretary-General Address to the General Assembly", 28 September 2015, gadebate.un.org.
[2] World Humanitarian Summit, "Restoring Humanity Global Voices Calling for Action: Synthesis of the Consultation Process for the World Humanitarian Summit Executive Summary", Accessed: 10 December 2015, worldhumanitariansummit.org.
[3] InfoAsAid, "Communication Is Aid - An infoasaid.org animation", CDAC Network, 14 July 2011, cdacnetwork.org.

immediate and intermediate needs. This facilitates a better management of limited resources, and also reduces the level of stress among the disasters and hazards affected population.[4]

Since Bangladesh is highly predisposed to both climate and non-climate disasters and hazards, a well-coordinated, timely and accurate communication with communities is vital for millions of people in the disaster-affected communities.   The impacts of Climate Change, and risks involving non-climatic and

natural disasters such as earthquakes, and man-made hazards such as construction of unplanned and fragile infrastructure, are among the highly lethal risks and challenges Bangladesh face. Thus, many vulnerable and poor communities across Bangladesh frequently require humanitarian response and disaster risk management supports and programmes. Moreover, because Bangladesh is among the Least Developed Countries (LDC) with a high population density with a comparatively small geographical land located in the Bay of Bengal, the country faces serious challenges in terms of maintaining its people's well-being and meeting their basic demands. The country struggles to provide sufficient basic human needs such as basic healthcare schemes, food, clean drinking water and shelter.   Hence a huge number of people in the country live below poverty line, whose lives and well-beings are highly vulnerable to disaster and hazards.

However, despite being highly prone to natural disasters, Bangladesh has been progressively coping well in tackling these challenges. In particular, the country addresses climate disaster through development programmes by implementing, a number of large-scale disaster risks reduction programmes and policies.. The programme is and has been particularly significant in the coastal areas where cyclones endanger the livelihoods and environment. Prior to early 1990s, cyclones had drastically killed thousands of human lives and destroyed households, livestock, livelihoods and environment in these areas. After the 1991 deadliest tropical cyclones in Bangladesh, the country has developed variety of programmes and ways to prevent from human and environmental catastrophes. The country has created cyclone shelters, developed early warning systems and evacuation programmes, and has built capacity, to prevent from natural hazards and disasters. These programmes have significantly improved the number of death tolls.   According to WHO, Bangladesh has been able to reduce death and causality

---

[4]*Ibid.;*Key Informant Interview of Richard Lace, Country Director, BBC Media Action.

numbers by "100 fold" compare to causalities and devastation in 1970.[5] Bangladesh has done quite well in coping with the disaster management, yet the government needs to work further on this problem.

Additionally, other than natural disaster, Bangladesh is also highly prone to man-made disasters and hazards. Due to the country's high population density with nearly 160 million people, and with a large number of industries and factories in the country, there have been huge environmental challenges in the country. The management of man-made and urban disasters and hazards have often been more complicated and has received less attention than the natural disasters in Bangladesh due to limited resources, expertise, concerns and awareness presented to address these risks.[6] Hence, the country requires effective programs in reducing man-made disasters that brings about huge and serious environmental and other lethal problems to the country.

Communication with Communities (CwC), is therefore, imperative to reduce risks associated with various disasters, deliver better response during and post disaster periods, and build resilience of the communities in Bangladesh for a sustainable and manageable outcome. CwC assists the affected communities to make informed and appropriate decisions to save lives and livelihoods, and to take effective actions to recover their own communities from disasters without waiting for relief and rescue operations to reach from central commands. Considering these background information, Bangladesh Centre for Advanced Studies (BCAS) conducted this research to gather information and get an understanding on the gaps of the two-way communication with communities in Bangladesh, to find the best practices that have helped save lives, to study the lessons learned to make response and actions more effective, and to learn about the associated policies addressing disaster communication, information sharing and knowledge dissemination.

2. Objectives, Research Questions, and Outcome

The primary objectives of this study are to:

- undertake an analysis of national policy and policy drivers related to Communication with Communities (CwC), including, pre, during and post disaster;
- conduct case studies illustrating best practices, lessons learned and community perceptions of CwC;
- identify gaps and challenges of CwC in Bangladesh from previous disasters in different hazard zones.

Followings are Research Questions that guide the study in achieving the research objectives and setting the segments of the study findings and analysis of this report:

1. What are the risks associated with various natural disasters and hazards the local communities are facing in their lives and livelihoods?

---

[5] Ubydul Haque, Masahiro Hashizume , Korine N Kolivars, Hans J Overgaard, Bivash Das , and Taro Yamamoto "Bulletin of the World Health Organization" *World Health Organization.*
[6] Key Informant Interview of Major Shakil Newaz, Director Operations and Maintenance, Fire Service and Civil Defense.

2. What are the existing key policies and strategies that address CwC aspects in Bangladesh and how do they address?
3. What is the state of "effectiveness" of communication with community (CwC) in disaster and hazard prone communities in Bangladesh?
4. What are some of the best practices and lessons learned with respect to CwC to address the challenges and impacts of disaster risks in pre, during and post disaster periods?
5. What are the barriers/limitations/gaps/challenges of communicating with disaster and hazard prone communities and how can those be addressed effectively?

Information and communication are critical forms of aid for disaster and crisis affected communities. As a humanitarian response, the two-way CwC help address crisis situation and disaster-affected areas. In order to effectively manage and cope with disaster crisis, a well structure and organized communication system is essential. It is because, when communities are well informed and are well aware, it is easier for the vulnerable areas to deal with disaster related crisis.

This qualitative study conducts an analysis of the communication system with communities living in major disaster-prone areas such as areas prone to flood, drought flash floods-, cyclone salinity- and urban-cyclone-landslide disaster-prone areas.; identifies the gaps in the communication process and provides recommendations to address the gaps identified throughout the study. . This research aims to identify and study, how communities in Bangladesh can withstand, recover from natural disasters events and respond to humanitarian emergencies by actively engaging in decision-making, recovery processes through the efficient use of information and communication tools. As a whole, the research aims to assist decision-makers, agencies and the organizations involved in humanitarian response for better communication with their target groups and beneficiaries in the vulnerable communities as well as to ensure their accountability with the affected communities of Bangladesh.

3. Field Study Areas

For the purpose of this research, which is to understand and identify gaps regarding CwC during disaster response, the BCAS research team has conducted a field study directly from the vulnerable communities at the grass-root level. The locations that the study teams have identified and conducted this research, are highly vulnerable to natural disasters, climate change and non-climate factors. The four specific study locations are given below in brief (details in Annex):

1. Charduani village of Charduani Union under Patharghata Upazilla of Bargunafrom southern coastalarea;
2. Kharkharia village of Ramna union under Chilmari upazilla in Kurigram districtfrom flood-prone northern area;
3. Ward 14 of Chittagong City under Chittagong district from southeast urban disaster-prone location;
4. Shibpur and Chandipur villages of Beheli union under Jamalganj upazilla in Sunamganj from northeast flash-floods-prone *haor* area of Bangladesh.

Some of the following basic criteria were kept in primary consideration when selecting the locations of the study:

1. Vulnerability
   1.1. Exposure to different type of climatic and non-climatic hazards
   1.2. Sensitivity to different hazards/disaster
2. Poverty situation
3. Social deprivation of the districts (Reference from 7th Five Year Plan Draft Final version, National Disaster Report 2013)
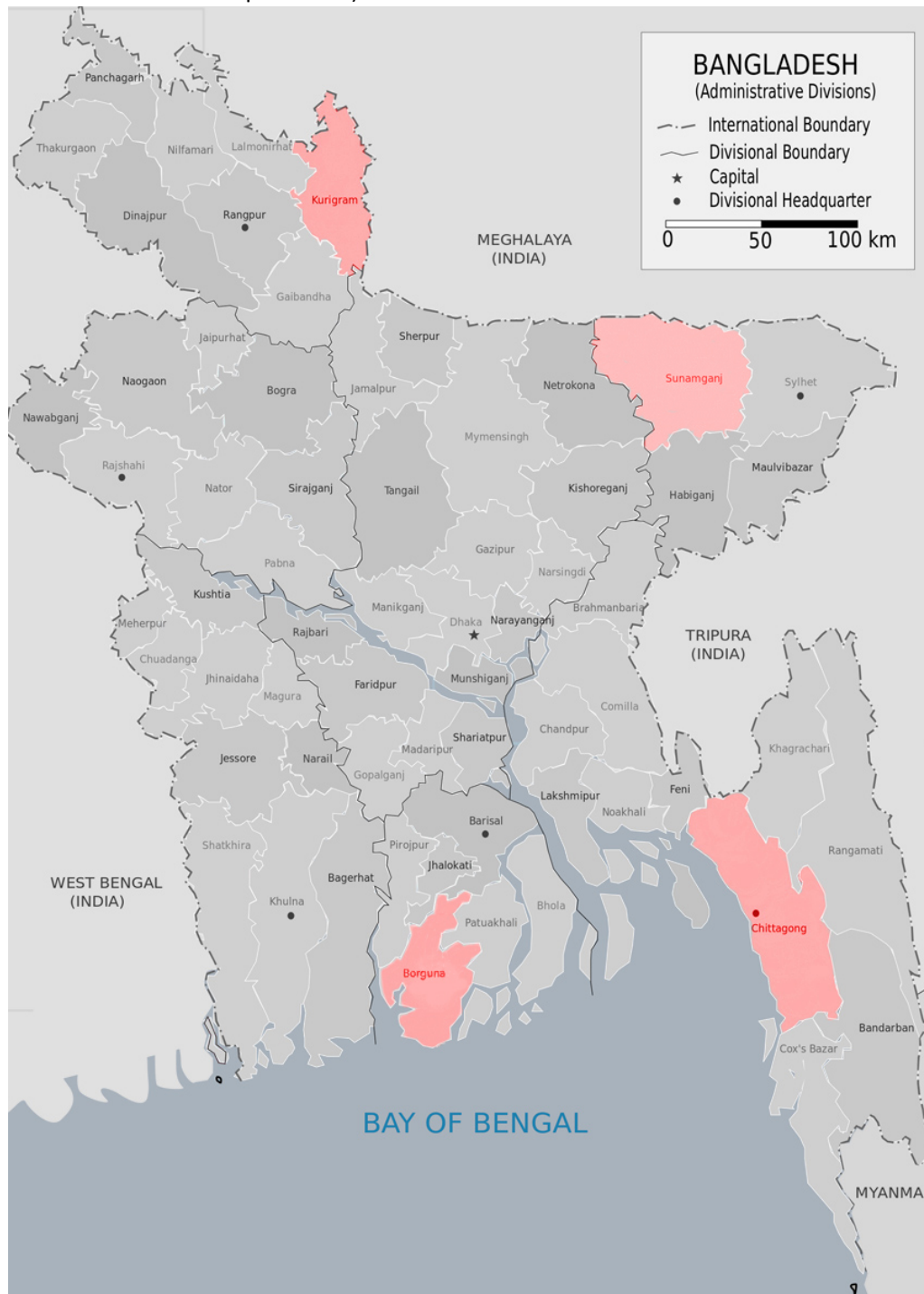
Figure 1: Four districts: Kurigram (north), Barguna (south), Sunamganj (northeast) and Chittagong (southeast) of Bangladesh are identified to conduct a study on Communication with Communities (CwC) gap analysis in Bangladesh.

4. Methodology of the Study in Brief

The methodology of the study consists of conducting literature and policy reviews, consultation workshop with some of the experts and the members of the Multi-Stakeholder Platform (MSP), key informant interviews of some of the experts on disaster management, communications and humanitarian response from diverse organizations and institutions, field study involving focus group discussions with the communities, key informant interviews with some of the informed individuals from local level, and conducting the case studies. (details in Annex)

5. Literature Review

There have been a number of international peer-review journals and book-chapters on topics of communication with communities in relation to disaster management and response, however, not many have focused on Bangladesh specifically. This literature review provides an analysis of what other academicians and researchers have explored on this particular issue.

Bangladesh is identified as one of the most vulnerable countries in the world. Due to its geographical location between the Himalayas and the Bay of Bengal, the country faces huge problems and threats related to natural disasters, huge population density, socio-economic status, and various other livelihoods related challenging factors (Huq 2001; Huq and Ayers 2008;). In the recent years,, Climate Change has intensified this vulnerability as the frequency, strength and diversity of disasters has increased affecting the development process and sustainable livelihood generation (Huq and Ayers 2008; First National Communication 2002; Second National Communication 2012).

Around 70 percent of the country's population live in rural areas (Worldometers 2014) with majority of them involved in farming and fishing sectors where they are exposed to natural disasters and Climate Change impacts (Huq and Ayers 2008). Though the human mortality rate due to Climate Change disasters such as cyclones has decrease significantly since the establishment and implementation of disaster risk management (Adger et al. 2003; Haque et al. 2012), the costal and agricultural based rural locations are among the highly vulnerable communities due to an increase in Climate Change impacts (Shovo et al. 2013). This vulnerability can be associated with, increasing health hazards, decreasing access to safe water and sanitation system, impacts on sustainable cropping practices and food insecurity, or dependency on services and livelihoods deriving from ecosystems.

As rapid industrialization has become a global phenomenon, which is transforming the livelihoods of people, Urban Disaster risk management needs high attention, and if this trend continues, at least two out of three people will be residing in urban areas by 2030 (Sharma et al. 2011). A report stated that at least 78 percent of the urban habitants in the least-developed countries, including Bangladesh, live in unrecognized slums with limited or even no basic services available to them, making the lives of many millions the most vulnerable among urban dwellers (Patel and Burke 2009). Bangladesh, in particular, is

identified as one of the seven fasting growing urban landscape in developing countries in Asia (ADB Urban Report 2003).

However compare to climate disaster, urban hazards are not given equal attention. This has been reflected in several journals, including Ahammad's research in 2009, where the researcher shared that while landslide is identified as a growing risk due to heavy rainfall and increasing population dwelling in slums at the foot of the hills, it was not clearly recognized by the Chittagong City disaster management committee and thus, the process lacked systematic communication with the Meteorological Department. While local Meteorological Department usually provided forecasts for heavy rainfall and early warnings, no specific responses were initiated by the local disaster management committee because of their undefined roles in addressing this hazard (Ahammad 2009).

Moreover, women are disproportionately vulnerable compare to men to the impacts of climatic disasters due to their socio-economic differences, discriminatory actions and gender inequality , and climate impacts affecting them in coastal, floods and drought eco-zones in Bangladesh (Huq and Ayers 2008; MOEF, 2013). From 171 natural disasters happened between 1971 and 2005, women mortality rate has been significantly higher than men mortality rate in these disasters, for women have been reported to have lower socio-economic statuses and less capital than men. With increasing frequency and intensity of disasters, women are predicted to be the worst affected population in Bangladesh as climate change impacts continue to increase (UN Women and BCAS, 2014).

Hence, two-way, effective communication with communities is crucial to raise awareness on disaster risks management and response among vulnerable people (IFRC 2009;). Karim and Mimura in 2008 shared that it is pertinent to ensure participation of all in local-level planning, such as construction of cyclone shelters, which should be designed and developed in consultation with the local people. In absence of transparency and accountability in disaster preparedness, response and resilience building, where two-way communication with the vulnerable communities remains missing, social power in relation to class and politics have higher scope to take control of the communication process to influence and make decisions in the affected communities on behalf of the larger yet vulnerable people. These controlled communication and decision-making by the powerful elites can impact detrimentally on the lives and livelihood of the voiceless people who are also the most vulnerable members in the communities due to their fragile socio-economic condition.

6. Policies Review

There are several policies in Bangladesh that address disaster sat various stages. The policies have played significantly crucial role in saving lives, particularly since the 1991 deadly cyclone that cost hundreds of thousands of lives and left unprecedented damages on the survivors, their livelihoods, and overall infrastructure. Some of these policies specified various strategic actions on communication with the key stakeholders, including the communities, through awareness campaigns, capacity and resilience building actions. Since the deadly cyclone in 1991, a huge importance has also been given to the communication with disaster affected communities.   Much of the programme has focused on ensuring

the mass populations, particularly the vulnerable communities, to be aware of various actions such as building preparedness, evacuation process, and relief operation in post-disaster period, for saving lives during disaster. However, in none of the policies, communication with disaster affected communities is identified as an aid, although actions indicate that providing appropriate and correct information is vital to save lives and livelihoods.

In the policies in Bangladesh, communication is recognized as a key step that cannot be ignored for information, early warnings and messages dissemination. While some of the policies do mention that receiving information and feedback from the affected communities on their needs and concerns are important for an appropriate disaster response and relief distribution, the policies, however, do not specify comprehensively on how this issue can be made functional. The establishment of a two-way communication with the disaster affected communities appears to be not the top priority since minimizing loss of lives and damages is set to be the primary priority and thus, planning and resources mobilization focuses from this context.

The policies, therefore, offer limited focus on generating disaster response plan based on the grassroots need, and consequently, present limited guidance in building community resilience and empowerment in a way that can assist the vulnerable people in making informed decisions and choices for themselves. Disaster management and responses are being implemented from the central decision-making system. The system has now decentralized the distribution of relief items and information dissemination to the local government and related leadership. . However, the process provides limited opportunity for two-way communication with the vulnerable and also marginalized members of the communities where the affected people can play an active role in ensuring to receive aid as per their appropriate needs and priorities, and with dignity.

Globally, the Sendai Framework for Disaster Risk Reduction 2015 - 2030 urges and promotes prioritizing national and local actions to design new policies, plans and programmes for disaster preparedness, and also review the existing documents and actions to update and match the appropriateness and timely communication during disasters. It also encourages participation of stakeholders in designing and updating the policies, though, it does not specify community engagements for this purpose. Community engagement is rather mentioned in the knowledge, experience and lessons sharing process for better results in the future. Though the Framework does not specify *two-way communication*, it promotes importance of engaging with vulnerable communities in disaster preparedness.

At the regional level, the Disaster Management in South Asia: A Framework for Action 2006-2015 notes a number of expected outcomes in the region's disaster management, which include establishing an efficient Disaster Management System in the South Asian nations and the region; greater levels of coordination and cooperation at national, regional and international levels; and provide enhanced information, warning and reporting systems within governments at all levels to save lives in the region.

 The Disaster Management Act 2012 in Bangladesh was designed with an aim to provide guidelines and rules to ensure the activities and actions associated with disaster management and response function in a coordinated way. The Act mentions that there would be several committees, boards and platforms at

national level to fulfill the objectives of the Act. Among these groups, some are designed to raise awareness on disasters and response which have broader capacity to engage with communities and other relevant key stakeholders. Some of these arrangements, headed by the government ministers and officials, may have scopes to establish communication with communities for better disaster response through the listed initiatives in the Act such as 'Policy Committee of Cyclone Preparedness program', 'Cyclone Preparedness Program Implementation Board', ' Earthquake Preparedness and Awareness increase Committee', ' National Platform for Disaster Risk Reduction', and 'Committee for speedy propagation of disaster warning message, strategy determination and implementation'.

These initiatives in the Act can also be reviewed to provide clearer information on how these formations can engage with affected communities besides various humanitarian and disaster responders for coordinated effort. There is a clause available in the Act that provides a scope for the government to develop additional formation based on needs. This clause leaves an opportunity for the Multi Stakeholder Platform (MSP) of CDAC Network, to develop a proposal to the Government of Bangladesh for enacting an advanced communication platform involving government agencies, officers, development partners, humanitarian responders and the communities, to ensure a comprehensive , two-way, and continued engagement with the vulnerable communities to disasters and hazards across the country.

The Act is inclusive of all citizens in Bangladesh and mentions that the government may take programmes for affected, vulnerable people, particularly ultra-poor and under privileged communities such as tribal group, small ethnic group, anthropological communities who have limited socio-economic scope, as well as elderly persons, women, children and persons with special needs.

Additionally, the Act also states that designated individuals of various media and broadcast centers should oblige to the directives provided by the government on imminent disaster and associated early warnings as well as information on disaster preparedness. These media and broadcast entities are identified as "any radio or Betar, television, satellite television channel, printing media, telecommunication network or electronic or cable network or any such information and technology based broadcast media to broadcast, publish and display the information, picture or news etc". The Act also iterates that disobeying or assisting to disobeying these directives from the government will have punitive outcomes which may result to paying a fine of maximum Taka 500,000.

In order to address the challenges of disaster response, in 2010, the Government of Bangladesh established the Standing Orders on Disaster, also known as SOD. This Order allows the most decentralized actions in the country during and post-disaster time. Under the SOD, the most local-level disaster management involves Union Disaster Management Committees (UDMC). Unions are composed of a group of villages, involving the grassroots leaderships and communities. The UDMC members are given the roles to respond to disasters and inform the communities about early warnings as well as assisting and organizing relief operations to safe lives during disasters. In SOD, it has a number of specific roles and responsibilities of various agencies, including the media and broadcast center. . However, it does not provide any specific mechanism that can assist in coordinating communication

with communities, and thus, it may be relevant to the MSP to support the Department of Disaster Management and any other relevant bodies of the Government of Bangladesh to review and make an inclusion of a two-way communication process with the grassroots communities for a stronger disaster response involving the vulnerable people and households.

In the National Disaster Management Plan (NDMP) 2010-2015, under the cluster 1 on emergency operations and overall command and coordination section, it is mentioned that in the emergency response phase, communications with media is expected to be delivered for information dissemination for the welfare of disaster victims, information on the missing people and the ones who are found, as well as sharing information on the results of damage assessment surveys in disaster zones. It is also expected that the information sharing is done through presentations on the outputs of need assessment surveys. The plan also aims to facilitate media coverage by media agencies on reporting earthquake and other disaster event through designated individual's offices of various key stakeholders to share the information to wider audience, including emergency declaration.

In Bangladesh, one of the key areas that the nation still lacks strong preparedness and policies is the urban disaster risk reduction and response. In most cases, those who are involved in the humanitarian responses have their own set of guidelines and strategies in taking actions and to take actions and responding to urban disasters. The lack of strategic guidance or policy on urban disaster, complicates the rescue and recovery process. The collapse of the commercial structure *Rana Plaza,* in 2013, is a great example of such problems.

In the 7th Five Year Plan on Disaster Management, the Government of Bangladesh has a vision on the disaster management which aims to reduce the risks of people, especially the poor and the disadvantaged people. The Plan aims to take effective actions against natural, environmental and human induced disasters and hazards to ensure a manageable and acceptable humanitarian response. It also aims to place an efficient emergency response management system that will be capable of handling large-scale disasters. This Plan acknowledges the fact that it is not possible to address disasters by the Government of Bangladesh and its associated agencies and departments alone, therefore, the Plan invites all relevant stakeholders to work together in strong collaboration and coordination. The Plan also aims to scale up outreach initiatives to ensure all vulnerable communities can be reached, and acknowledges a need to invest on inventing effective measures to widen the reach. This Plan is clearly an area where the MSP may have a greater scope to make contributions in assisting the Government of Bangladesh in enhancing better coordination and promotion of two-way communication with communities.

7. Study Findings and Analysis from the Consultation with the Communities

The field study provided an insight to affected communities perspectives, experience, knowledge and expectation from the context of communicating with them effectively during disaster response. The findings contain experience and knowledge of impacts of disaster and hazards on individual's lives from the disaster affected area; their perception and understanding of various means of disaster information dissemination and sharing; and their evaluation of actions of communication. Based on their responses, the research has drawn some of the best practices as well as gaps and challenges of communication with communities effectively in Bangladesh.

7.1 Impacts of Disasters and Hazards in Bangladesh

Key Insights:
- *The respondents in the focus group discussions identified followings as the primary disasters and hazards in the four vulnerable eco-zones in Bangladesh:*
  - ✓ *Flood-prone: Floods, river-back erosions, rainstorms, extreme cold and cold waves, temperature rise, heat waves, dense fog, drought, hail storm, rain storms, tornadoes, sand-storm, lightning, fire and earthquake;*
  - ✓ *Urban: Landslides, excessive rainfall, water-logging, cyclones, nor'westers, hill slides, fire, water crisis, earthquakes, unclean environment, limited space for burial and dense habitats;*
  - ✓ *Flash Floods-prone: Floods, flash floods, nor'westers, sudden surge of hilly and mountain water, seiches (afal), excessive rainfall, lack of rainfall, drought, lightning, hail storms and poisoning from pesticides;*
  - ✓ *Coastal: tidal bore, cyclones, salinity intrusion, drought, floods, river and coastal erosions, excessive rainfall, pests and insects attacks.*
- *Impacts of disasters and hazards on lives and livelihoods in all four zones – particularly affecting socio-economic wellbeing, increasing poverty, limiting income generations, increasing homelessness and forced migrations, and affecting food security and nutrition, health, water and sanitation, and overall wellbeing of vulnerable communities.*

In the introductory chapter and the literature review part, it has been identified that Bangladesh is highly prone to disasters and hazards due to various concerning issues. The level of vulnerabilities has been increasing due to socio-economic insecurity and the geographical location of the country. For this reason, the field research teams have gathered knowledge on various disasters and hazards from four highly vulnerable disasters-prone zones, by gathering information from the people, and who have experienced the impacts of disasters and hazards in their lives and livelihoods in these areas.

The respondents were divided into four focus groups representing i) female, ii) male, iii) elderly and physically challenged, and iv) minority and socially excluded people. Each group discussed and identified various types of disasters and hazards that have beenaffecting their lives and livelihoods in the four eco-

zones. The groups also spoke about the consequences of the disasters and hazards such as extreme poverty, long term negative impacts on the socio-economic well-being, health and other related issues.

Flood-prone Zone:

Floods, river-bank erosion, rainstorms, extreme cold or cold waves are the major disasters and hazards impacting the lives in Kurigram, a flood-prone zone in Bangladesh. Group discussants also identified earthquake, temperature rise, extreme heat, dense fog, fire, drought, hail storm, tornadoes, sand-storm, and lightning as other major disasters and hazards in this eco-zone...

All groups from flood-prone zone identified floods as the top disaster in their area. Female respondents, in particular, identified drought as a significant disaster affecting their lives.

Urban Location:

In the urbandisaster-prone areas of Chittagong City located at the southeast of Bangladesh, landslide is identified to be a strongly significant recurring disaster. Despite the importance of this issue and its high disastrous impact, an initial observation gathered from the field study, showed people's hesitation and reluctance in sharing information and discussing about the hazards.

Reasons for the community's reluctance in sharing information was found to be attributed to the issues related to their local politics, risks of being evicted or confronted with local elites, and stakeholders of makeshift shanties. The invited vulnerable community members, however, agreed to participate in the discussion after the study team had assured them that their participation was going to assist in improving access and receiving timely and supportive information during disasters and hazards.

The urban disaster zone participants identified landslides and excessive rainfall as two most significant hazards affecting their lives. Water-logging, cyclones, nor'westers, hill slides, and fires were identified as other major disasters in the urban location. Additionally, the male participants in particular, thought lack of clean environment was hazard, while the group representing minority people in the community felt crisis of pure water was hazard. The elderly and physically challenged group, with a strong concern on the matter, identified dense habitation, earthquakes and lack of availability of burial places and shrouds after death as hazards.

85-year old Mohammad Abdur Rahman lives in a congested shanti of Chittagong City, struggling daily to survive another day. He spoke about his painful life in poverty which increases significantly when a disaster strikes. While the younger respondents talked about various natural disasters impacting their lives, this ailing senior citizen spoke about his worries of finding a burial place after death and the money that will be needed to complete the ritual. He identified this concern as an important hazard.

Flash Floods Affected Zone:

The participants from Sunamganj, a flash-flood prone zone at the northeast of Bangladesh, identified floods, flash floods, nor'westers, and sudden surge of hilly and mountain water as some of the primary causes of disasters in their areas. Beyond these, the male group and the minority group in this particular zone, identified seiches (locally known as *afal*), drought, lightning and hail storms as other key disasters impacting their lives and livelihoods. Additionally, the male group also identified crop pestilence to be a major problem affecting their socio-economic well-being.

> *Jahanara is in her mid-30s, has witnessed and struggled through a number of disasters in her locality that is situated in the flash-floods zone of Bangladesh. She said Afal, which is one of the major threats in her area, appears suddenly and often leaves hundreds of homes marooned in flash floods, and many running to higher ground to save their lives.*

Moreover, the female group identified both excessive and lack of rainfall, as hazards having huge impacts on their lives. Similarly, the disabled and elderly groups also also attributed drought, off season rainfall and hail storms as major causes impacting their livelihoods and socio-economic well-being.

Coastal Zone:

In Barguna, which is located in the coastal zone of Bangladesh, all four focus groups from Chardunai village of Patharghata union identified tidal bore, cyclones, salinity intrusion, and drought as some of the major disasters in their lives and livelihoods affecting their socio-economic well-being. The female group, in particular added river and coastal erosion, excessive rainfall, attacks by various insects, and certain infectious and non-infectious diseases to the hazards impacting the community. Also, in addition to other problems, the minority group identified floods as a disastrous cause impacting their lives.

Impacts of Disasters and Hazards on Lives and Livelihoods:

Jeopardized Livelihoods and Increasing Poverty

In general, in all the studied areas the participants share a similar experience and concern about the impacts of the disasters and hazards on their socio-economic well-being. In all the four studied area, the livelihoods are endangered, socio-economic well-beings are being damaged and many lives are being lost as a result of disasters.

As a main concern about the impacts of such disasters, all the respondents from our studied areas expressed that such disasters increase the level of poverty in the community. It is because, multiple floods, river erosions, hail-storms, cyclones, salinity intrusion and drought have high negative impacts on crops, plantations, cattle, poultry and other means of generating livelihoods in the communities of these four vulnerable disaster-prone zones in Bangladesh.

> *Lal Charan Das, a 75-year old minority in the flood-prone zone spoke about the extreme sufferings he has seen in his life due to the impacts of disasters. He spoke about washed away homes, poultry and food crisis that left many households in severe hardships.*

> *Gita from flood-prone zone said not only the flood season brings damages in their lives and livelihoods but also during extreme winter, she said, "Many cannot go out to work. There is no sun, no work, no clothes to be warm. We sleep at night wrapped in jute rags. The sufferings are unbearable – there is hardly any food at home. Elderly, children, pregnant women fall sick and sometimes, they do die."*

Moreover, the rise in temperature and also hampers people's daily routine. People, especially women, who are involved in domestic chores and poultry works, are unable to work in the extreme weather. It becomes a challenging task for them to raise cattle, poultry and goats in the extreme temperature. Since these tasks make an important part of these people's incomes, irregularities due to the disasters, have huge impact on their well-being.

People are unable to go out for work in order to generate income As a result, people are forced to stay indoors

Homelessness and Migrations

Homelessness and migration are among the high negative results of natural disasters such as floods, cyclones, storms and etc. The respondents from the four vulnerable study locations spoke about how the disasters such as cyclones, tornadoes, nor'westers, hail storms destroyed their houses and the floods washed away their homes. According to the elderly respondents from flood-prone zone many of the houses, arable lands and localities disappear in the rivers due to river erosions in the beginning and receding of the floods. From their experience, in a one occurring flood incident, four wards in their union had vanished in the river during the river erosions. Hence, as a result of such sudden incidence, hundreds of households become homeless and poor overnight. They are forced to seek shelter on higher grounds or stay on the streets. Many, as a result, migrate to other locations and to their neighbouring wards to rebuild their lives from the scratch. Economic hardship continues as they spent their inadequate savings in migrating to new locations.

Nutrition, Health, Sanitation and Overall Wellbeing

Another main problems caused by disasters are food crisis and impacts on nutrition health. Crisis in food and malnutrition rise during and after disaster periods, as cooking and arranging food become extremely challenging. This affects health of the communities and causes long-term illness and sometimes causes to the deaths of people.

Moreover, various types of water-borne diseases and chronic illnesses due to extreme weather and heat spread affecting health and the overall wellbeing of these communities. Children, elderly and disabled people are highly vulnerable to the crisis.

> *Momtaj Begum in a coastal village expressed the distresses she faces during floods after excessive rainfall or a cyclone, "The pond water becomes dirty after floods and then my family and I, also my neighbours face tremendous crisis of fresh water. In my area, majority of the people are dependent on the pond water, and for this reason, it is very important that someone experience visits our households to teach us how to purify water during disasters."*

Additionally, having access to drinking water, sanitation is another acute problem the communities face. In particular, female, children, elderly and disabled people are highly affected by the lack of clean water and sanitation.

Moreover, according to some of the respondents, extreme cold or cold waves, causes deaths. In particular it is lethal to elderly people, children and pregnant women. During the winters, many of these people do not have access to basic needs such as safe shelter, warm clothes, or dry woods and hays for burning. As a result of not being able to have access to the basic needs for living, cause serious challenges to them. In addition, lack of awareness on a number of issues, including fire hazards and earthquake also injures people, because when an earthquake strikes, many of the community members are unaware of how to protect themselves and the panic leads to rampage which causes injuries.

As a result of the disasters, affected community members also showed concern regarding their children's education disruption along with all the other problems.

7.2 The State of Effectiveness Communication with Communities in Bangladesh

Key Insights:
- *Disaster Information Sources:*
  - ✓ *Flood prone:*
  - ✓ *Flash flood prone:*
  - ✓ *Coastal:*
  - ✓ *Urban:*
- *The respondents receive information and messages about disasters in varied levels as often it is the male group that receives the information earliest while the female and elderly, physically challenged people receive the information much later when their lives are already in extreme risks. The minority group also receives information much later.*
- *Delayed information dissemination leaves many, especially women and the most vulnerable members of the society in high risks. They also suffer from mental, physical and economic distresses for having limited time to react to a disaster.*
- *Many women in the urban disaster zone mentioned that they are forcefully evicted during a disaster time, leaving them homeless and helpless as they do not know where to go to seek help, find shelter locations, and thus, this situation leaves them highly distressed.*
- *Information and messages sharing process also lacks two-way actions as the warnings are sometimes transmitted without clear guidance to the vulnerable people about where to go to save their lives, and also, the process lacks a clear mechanism to capture the voices of the communities in reaching the authority about their helplessness during and post-disaster time.*

Is it timely and two-way information and messages dissemination?

When it came to exploring if the information and message are timely shared with the residents during a disaster, the respondents provided mixed responses in all four eco-zones. The responses varied among the segregated groups due to diverse needs and different levels of access to information. The messages and information are also often delivered in a one-way manner, as per an understanding gathered from discussing the issues with the research respondents, as the concerned communities are often unaware of how to convey their messages from the affected areas to the centralized system from where the messages and information are being distributed. Some of the officials, experts and representatives, however, mentioned that there are processes to capture the voices from the grassroots but, perhaps, the affected communities are not fully aware of the mechanism.

The male respondents from the flood-prone location informed the study team that there is no particular time or schedule that is being followed to communicate disaster related information with them. The female and minority groups from the same location, however, said that they are informed about an impending disaster around one or two days earlier. According to the minority group, often, the warnings are given in a very short period of time; for instance around an hour before a disaster lands in their area. They expressed that this issue creates panic among the members of the communities which leads to unavoidable injuries. In addition, the physically challenged and elderly group, from flood-prone location, mentioned that while it is possible to receive warnings on floods, it is understandably not possible to receive warnings on river erosions. According to them this particular disaster is a *fate* and they prepare themselves against river erosion based on their practical observations in their local areas.

75-year old Sakhina is a widow living in poverty and limited mobility in flood-prone Kurigram. She said, "I never saw anyone official coming to inform me about a disaster. Sometimes I heard from younger people in my neighbourhood that a flood is coming. I do not know how to manage my life at this old age. I wish someone heard about my sufferings and helped me."

The male group said that they receive warning around 12 to 24 hours prior to the disaster, and the elderly and physically challenged group mentioned that they receive the warning around 8 to 10 hours before the disaster happens. Sometimes they receive messages only 4-5 hours before the disaster, which extends the stress level on saving lives and livelihoods.

Similarly, in the costal zones, male respondents get information about disaster sooner than their female counterparts. According the male participants in the area, in a situation, the male were informed around 24 hours earlier about disasters, while the female were informed only an hour earlier. In another cases, during the cyclone Sidr, the male respondents had received the message five days ahead of the disaster through television, radio, and officials from upazilla, while according to a number of female respondents, they had received warning messages by megaphone services when cyclone Sidr had already been emerging in their locality. Similarly, according to the elderly and physically challenged discussants , during the time of cyclone Sidr, they had received messages only two-three hours prior to the disaster , which meant that there had been not enough time for moving out and seeking safe shelter for disabled, the elderly and pregnant women.. Hence, as a result, many people were hurt during the cyclone Sidr.

Moreover, the minority group respondents had similar opinion as the elderly and physically challenged group about the time when they generally receive warning messages. However, like the male groups, they had received warning messages about Sidr around three days earlier to the incident..

In the urban disaster prone area, all of the four focus groups discussants mentioned they had received warning messages one or two days earlier about a landslide disaster after an excessive rainfall. Information is disseminated by the City Corporation, District Administration, Magistrate's office or Ward Council offices in the urban locations. In these areas, during a megaphone announcement, the authorities ask vulnerable people living live in the temporary community or slum in the foothills, to move out from their homes and seek shelter to safe locations. However, many respondents had shared their high concern in having less knowledge about finding safe shelters in the chaotic situation. According to the female participants, although they are informed to move out, they do not receive aid or support in the chaotic situation from any authority, organization or individuals in assisting them seek safe shelters.

Monowara Begum is a resident of an urban slum, she mentioned that, "I do not know where to go when authority comes to my place and asks us to leave. If we do not leave, they force us out of our homes and locksour door. If they helped us to move to a safe shelter then our sufferings would have been less."

Jasmine Begum added, "We need more support than forced eviction which leaves us poor and helpless. We need financial support, food, shelter, employment, and education for our children but we suffer a lot in managing them during and after disasters."

Moreover, according to some male respondents, however, there are temporary shelters in local schools where they have previously been during a disaster. These shelters provide separate space for men and women.

Additionally, according to the female participants in the group women often times in their community do not receive any warning or messages during and post-disaster time, rather they learn from others, particularly from the male members in their households and community. Hence, some of these women in the community are highly vulnerable since they rely on men for receiving timely information about during and post disasters and other related issues.

Thus, from the discussions with the groups in all four eco-zones, it can be inferred that the information dissemination does not only vary from people to people based on individuals' and groups' levels of access to information, it is also not delivered in a two-way process all the times. The information is delivered only during disaster time, but not necessarily with an affirm aim in capturing the voices of people in ensuring safe and dignifying ways to protect their lives. This requires the local and central government, with the support from the civil society, volunteers, and development partner to come up with a well-planned and coordinated mechanism to ensure the needs and wants of the most vulnerable communities are captured - both during and post-disaster periods, so that the communities livelihoods and socio-economic security are not jeopardized.

How early the warnings should reach communities?

When the respondents were asked about when the early warnings should be disseminated, the indications had variations due to the nature of the disasters, the respondents' needs and the locations of the disaster zones.

In this study, the groups in the flood prone zones, identified floods, cold waves, heat waves and storms a the primary causes of disasters, and for their survival they sought assistance and information on preparedness both during and post disaster.

The elderly and physically challenged and other groups from the flood-prone zone mentioned that some disasters such as floods have slow onset and therefore, receiving warning messages at least a week ahead, or 5 to 2 days earlier of the impending disaster would be more helpful to save lives, household items and livelihoods. Additionally, the elderly and physically challenged group in this location also expressed their despair hopes for having high chances of risks in disasters for not being able to receive information about disasters in the right time. They expressed even if the information is is delivered to their community members, this highly vulnerable group is often times left out from the information dissemination process, therefore, they are often times the last ones to find out about an impending disaster.

Moreover, the respondents from flash flood-prone zone expressed varied needs depending on their groups. the male group mentioned that the early warnings transmissions are needed at least 2 to 10 days before the disaster- depending on the type of hazard, whereas most female members stated that they needed the warning messages at least 1 to 2 days earlier. From the elderly and physically challenged group' perspectives, they need longer time to be prepared against a disaster and thus, warnings should be sent to them around 7 to 10 days earlier., similarly, the minority group also, demanded 7 to 15 days earlier warnings for an occurrence of a disaster in their areas.

In the urban disaster prone locations, the male and minority groups expressed that receiving warning messages at least 2-3 days early would be helpful supportive as they will have enough time to able to move to safer location and take refuge in a safe shelters, and in the meantime will be able to make decisions and action in protecting their lives and valuables. The male group also preferred receiving information about upcoming disasters directly by the Ward Councillors' visits of door to door households. According to them, this way is much more effective and helpful in saving their lives. The elderly and physically challenged group not only mentioned about the importance of timely sharing of early warnings prior to disasters, they also wished for getting information about every weather forecast warnings about disasters. The female group, however, demanded more times in order to facilitate safe evacuation for the family members.

According to the male group, physically challenged and elderly group from coastal zones, receiving warning messages at least 2 days ahead of the disaster event is more beneficial. For instance, during the cyclone Aila, warning messages had spread out earlier to the communities prone to disaster, resulting in saving many lives. Also, during cyclone Mahasen, the information and messages about disaster were delivered through "door-to-door" information dissemination had helped the community to seek safe shelters with a sufficient time in their hands for evacuation. Moreover, according to the

female group in this area, they should be warned at least 4 to 5 hours earlier.. In case of the minority group, the female minority members felt that the early warning messages should be relayed 12 hours ahead of the disaster event and the male members said that the messages should be given 48 hours ahead so that lives, important belongings, domestic animals could be saved, and children, the disabled and the elderly could be moved to a safe place on time.

Awareness about responsible personnel and organizations to communicate disaster information:

Speaking to the local government representatives, many of the key informants mentioned that all the members of their local communities receive appropriate, accurate and timely information that assist them in preparing during disaster periods. The chart below shows the information flow during disasters, according to the representatives of the local government in flood prone study location:
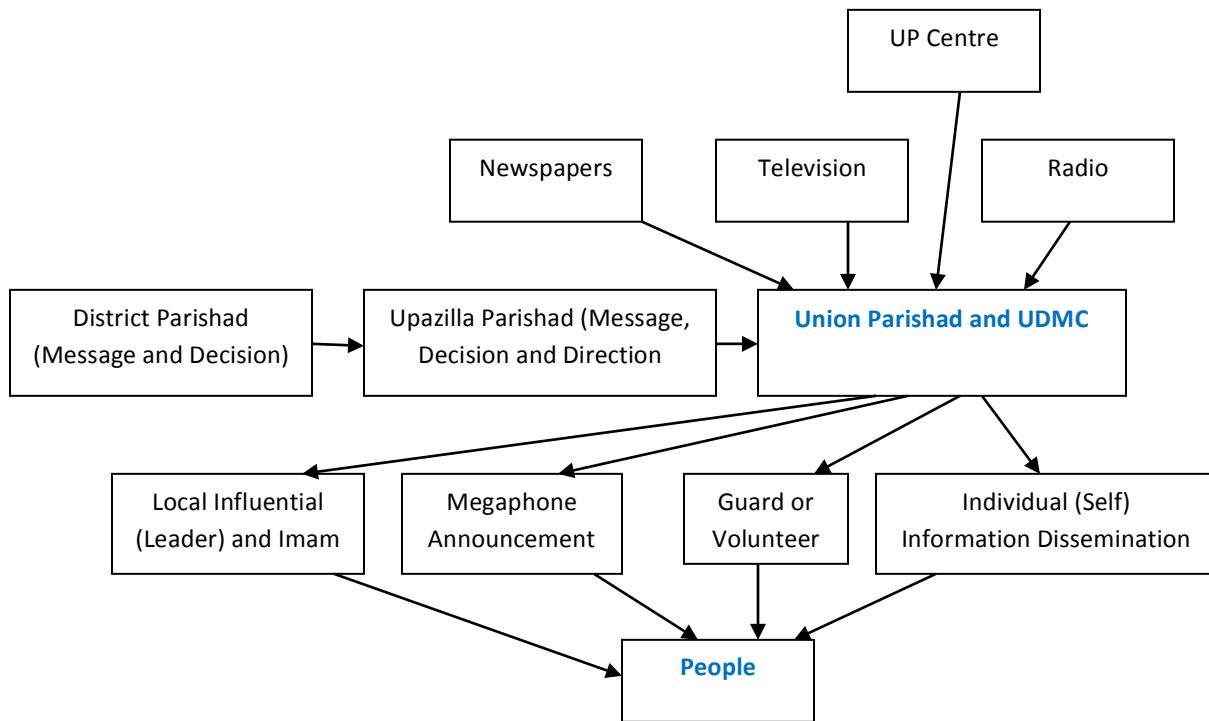
However, the vulnerable members of the communities from all four locations, however, provided diverse responses on this issue. The male respondents from flash flood-prone location mentioned that the reputable individuals such as member of the union, Chairman, Upazilla Executive Officer, local MP and NGOs are primarily responsible personnel and institutions to share information and messages on disasters and hazards. The female participants from this zone mentioned that the volunteers in their village, Union Parishad Chairman, Imams of the mosques, reputable individuals are primarily responsible in sharing information. Added to the female respondents points, the elderly and physically challenged

respondents mentioned that the education institutions are also responsible in sharing information. The minority group, however, identified only volunteers from their village and NGOs as responsible leaders in disseminating information.

Surprisingly, the male, elderly and physically challenged groups of flood prone zones are not fully aware of which individual, personnel, organization or offices are responsible for sharing information and disseminate messages of disasters and hazards. The elderly and physically challenged group in the area, mentioned that the reason behind this unawareness is because they have never seen anyone in particular helping in disseminating messages and information to them. Mostly, they have learned about disasters from watching television and thus, they think it is Bangladesh Television's responsibility to share information and messages. According to the male group assumed that it is the responsibility of the various NGO workers and community radio station Radio Chilmari as well as government office and journalists to spread messages.The female group from this location also felt that various NGO workers, including the ones from Care Bangladesh, along with Chairman, members of their union, reputable individuals, village heads have the core responsibility to share information. According to the minority group from flood-prone zones, scientists and journalists are primarily responsible to disseminate information about disasters and hazards, along with various NGOs, including BRAC that has visited them previously to inform them about cold waves and raised awareness on how to protect their families from extreme winter.

Moreover, all respondents from the coastal zone identified the Union Council Chairperson and members of the union, as well as the BDRCS community volunteers as responsible personnel to provide door-to-door information about early warnings particularly by using megaphones and sirens, and also through communication with cell phones. They have seen such action during cyclones Sidr, Aila and Mahasen and thus, it is the process that they identify in their locality.

The discussants from the urban disaster prone location, however, provided a mix set of responses on this issue. The male group appeared to be supportive towards forced evacuation as they view it as a life-saving action by the police and the magistrates from District Commissioner's office. They also said that as it is the responsibility of the Fire Services, DC Office, City Corporation, Councillors to look after the welfare of the residents in their locality, they are the responsible offices to send warnings on disasters. According to the female and minority groups along with the government offices and personnel religious leaders and NGOs are also responsible in sending timely warning messages. Also, a number of respondents in female group were not fully aware of who were responsible, but by their assumptions, the visitors on behalf of the councillors, police and Fire Services who visit their homes and make them evacuate their homes, are responsible for dissemination of information.

Who are the most reliable information providers?

The groups from the flood prone zone identified some of the appropriate individuals and institutions such as, television channels, particularly Bangladesh Television, the imams of the mosques, government offices, members of the union and UDMC, NGO workers, local community radios, journalists and local newspapers, young male members of the households, reputable individuals and village heads, and also

school teachers, children attending schools and colleges, to share information and messages prior to, during and post disaster periods

The male, female, and elderly and disabled participants from the flash-flood prone zone, primarily identified the chairman and the member of the union, imams of the mosques, upazilla executive officer, member of the parliament (MP), NGOs, education institutions, mosque committees, and also women who are aware of disasters and hazards for providing reliable messages and information during and post disasters. The minority group, however, mentioned only the local volunteers of their village as appropriate and reliable individuals to disseminate information.

Moreover, the male respondents from the coastal study area mentioned that the Upazilla Council Chairperson, the Upazilla/Thana Executive (Nirbahi) Officer or TNO, the Union Council Chairperson and other members of the local governing system, as well as the respected community leaders at their village level are the reliable sources of information. The female group identified the Union Council members, BDRCS community volunteers and respected community leaders, who convey weather related messages to them, as the reliable information providers during disaster. The physically challenged and elderly persons in the coastal zone found the Union Council Chairperson or members most suitable because their messages were more trustworthy as they gave the example of cyclone Mahasen warning case. The minority group also stated that the Union Council members and BDRCS community volunteers are more reliable messages providers for them.

In the urban disaster prone location, the male and minority respondents identified megaphone announcements by the City Corporation and ward council as the most reliable sources of information. Also, they regarded the weather forecast offices, for their well-information and knowledge of weather, as a reliable source. In addition to the City Corporation and ward councillors, the physically challenged and elderly group felt that television, neighbours in their community and also information sent from the schools for the special needs are reliable sources for information.   The female respondents, however, identified a particular individual, who is a local commissioner and also a school teacher, as their reliable informant during disaster time. They did not find the local influential people and the people from various organizations as the most reliable information providers during disasters.

Salma from Chittagong City spoke about reliable sources of information for women in her community. She said, "Sometimes the local influential people give them false information to occupy their homes and belongings which is why many women do not trust local influential. Sometimes people from various organizations come to our place to give immunization shots but we do not know if they are government approved and so we do not trust them."

Do the communities trust their current information providers?

The respondents from the coastal zone stated that they have full trust and confidence in their sources of information which they identified earlier. They gave examples from cyclones Sidr and Mahasen when

they received reliable information from those sources. The minority group stated that they suffered during cyclone Sidr when they refused to believe the volunteers from the BDRCS and decided to wait until the last minute to evacuate to shelters. Since then, the minority respondents said that they trust BDRCS volunteers and also Union Council members with the information about disasters.

The male, female and minority groups of flood prone zone expressed without hesitation that the means of communication through which they receive disaster warnings and related information to protect their lives and livelihoods are trustworthy and they do trust on their messages. The elderly and physically challenged group from flood prone location specified that the reason they trust in television and radio messages is because these information come from the government. However, they also expressed that sometimes the information are not accurate for the communities as, for example, when there is an announcement on television about a storm brewing in their locality, they take preparations, but sometimes the storm occur in their neighbouring communities instead of their communities. This type of inaccuracy leaves impacts on individual's psyche and sometimes, even after warnings, some of the members in their community do not take the disaster preparedness serious thinking the information might be false. The elderly and physically challenged group showed support their trust in the local religious leaders such as Imams of the mosques, because according to them the imams would not lie and would not deliver a false information on impending disasters and available assistance in post-disaster responses.

The female and minority groups from flash-flood prone location mentioned, as they did not receive any information and message during and post disaster time directly, they could not express any reason for trusting their means of receiving information. The male group, however, mentioned that as the information was accurate during previous disasters when they were able to save crops at least a day before the disaster appeared, they trusted their current sources of information.

The female respondents from the urban area said that they have trust on the local commissioner '*Manik bhai*' and the school teacher '*Moni apa*' particularly more than any other sources since they are always available to assist and guide them during and post-disaster time. While the television, radio or megaphone announcements are good sources of information, they are not always accurate as the disasters do not appear as per their announcements. The minority and the male respondents from the urban study area mentioned that while they trust government officials, city corporations and ward councillors since they also live in the same area, and visit their neighbourhood to inform about disasters and hazards, they do not trust the information from television as the warning signals televised sometimes do not match the situation on the ground. The elderly and physically challenged also provided similar responses as the male and minority groups in terms of trusting the local councillors for information.

Why do the respondents trust or not trust their sources of information?

When the participants in group discussions were asked about reasons behind their trust on the means of information from where they receive disaster related messages, the groups from the four study areas provided various responses. Some of the respondents trusted television and radio services because of its consistency and accuracy of their previous experiences of receiving information - particularly for the elderly and physically challenged respondents from the flood prone location. Nearly all the respondents felt that historically accurate and appropriate delivery of information about disasters and hazards develop a trust on the message source. According to them, people trust some of the sources based on the popular belief- for example, if majority of the people in the community believe that a particular message from a particular source is correct, the ones who are a bit sceptical will also follow the popular decision to trust the source of the information.

Golamjan an elderly citizen of Kurigramspoke about the trustworthiness of the information by print and electronic news media. He mentioned "if the news says the water will increase then we see it, if it says cyclone will come then cyclone comes. Moreover, when I see weather forecast in the newspaper such as the next week will be foggy we see it. For these reasons we rely on the news completely.

The elderly and physically challenged group from flood prone location, however, pointed out that the reason they trust a particular source of information in their area is because they do not have any other alternatives available source, but to trust what is available to them. Also, they identified vagueness of the messages as another cause for not fully trusting a source. According to them, often times a share information is about all Bangladesh and not specific to their community and area. In those cases, it is hard for them to infer where their communities are vulnerable to coming disaster or not leaving them in a state of confusion, and dilemma.

Similarly, some other respondents mentioned that even if they believe in the information completely, when few times the received information turns out false, there are high possibilities that some members of the communities stop trusting on receiving certain information on disasters from the particular source. For instance, in a one particular incident announced by television that a particular area will be affected by the cyclone but later when no cyclone occurred, the people had questioned the accuracy of some of the hazards related messages that are being shared nationally.

Similarly, some of the male respondents who work in the crop fields in flash flood prone location also said that though they trust their sources of information, sometimes inaccurate information dissemination jeopardizes their livelihoods. To give an example, they informed the research team that they once received a message saying there would be lightning and thunderstorm in their areas but in reality, hail storm appeared. They were unprepared and thus, counted damages in the crop fields. Similarly, another group spoke about receiving information about a nor'wester which was said to hit their locality at the rate of 80km, but in reality, it was more powerful and was at least 40km stronger which left them unprepared to protecting their homes and household items.

In a very few instances, disaster information dissemination in the consulted communities involve two-way communication as the information is only provided to evacuate people to safe locations and provide a guidance to post-disaster recovery as well as relief operations. Systematic mechanism is

necessary for the vulnerable people through which they can also reach their trusted sources regularly to share their needs and priorities in preparedness, during disasters and also post-disaster recovery periods. As it was mentioned earlier by some of the respondents regarding close connections of some the trusted local leaderships such as commissioners or counselors in reaching vulnerable people directly, their capacity could be increased to capture the voices of the vulnerable people to manage limited resources in prioritized way, and effectively.

7.3 Best Practices and Lessons Learned in Bangladesh

Key insights:

- *The respondents from the field study identified a number of channels of communication as the "best practices" in Bangladesh as these resources helped saved many lives and livelihoods over the past two decades:*
    - ✓ *Television and radio broadcast providing information on disasters and hazards*
    - ✓ *Mobile-phones, SMS services, and internet are increasingly becoming life-saving channels, particularly during disaster period through dissemination of warning message.*
    - ✓ *Megaphones are considered to be highly useful to those who do not have access to various other channels such as television, mobile phones or radios to receive information. Women and elderly persons who cannot visit village markets often are dependent on the megaphone announcements.*
    - ✓ *Door-to-door information sharing is the key for women, elderly, disabled persons due to their limited access to information. This action is usually delivered by the neighbours, local leaders, volunteers, male and young members of the family.*
    - ✓ *Imam and other religious leaders are considered to be trustworthy persons in many communities to receiving disasters related messages and information.*
    - ✓ *Government offices at both local and central levels are considered to be a trustworthy source of information due to their ability to access to the latest and accurate information on disasters.*
    - ✓ *Newspapers are also good sources of information about various hazards and as well as of messages containing guidance regarding pre, during and post disaster periods.*
    - ✓ *NGOs and non-profit organizations are also trustworthy sources to provide guidance during and post-disaster periods. Many also rely on these organizations on receiving information on pre-disaster time.*
    - ✓ *Village markets are also identified to be good source of information despite it is being limitedly accessed by the male and young persons mostly.*

Television and Radio Broadcast

Although many participants criticised the role of television and radio channels in broadcasting inaccurate information sometimes, it is still one of the best options in receiving information on pre, during and post disaster periods asserted by most of the participants in this research. The respondents

in flood prone location mentioned that the news from television (particularly from Bangladesh Television) had been useful and should continue broadcasting keeping the importance, accuracy and timely information in mind.

The elderly and physically challenged group additionally specified that they learn about disaster warning and messages from the televisions that are placed at the tea-stalls in their villages which provides them timely information. The minority group from Kurigram also added that radio is a good source of learning and sharing information on disasters. Radio Chilmari in Kurigram is a good example of two-way communication where the listeners can send their feedback and receive responses to their queries regarding disaster preparedness. Hence, attention needs to be given to the development of community radios such as Radio Chilmari and build their capacity to become a bridge between the government offices and the communities for a two-way communication.

Fatema from Kurigram spoke about the best ways to get information on upcoming disaster. She reported that "Television is the best way to disseminate information. Moreover, if the teachers in the school explain it to the students, they can inform it to us at home."

Moreover, the female group from the coastal location asserted on having a radio per household for receiving timely and accurate information about disasters. They added that the village people should be made aware of the importance of early warning signals using radios.

Though many participants identified television and radio as their top means of receiving information, some of them suggested using local languages in the televisions and radio for better understanding of the situation. The elderly and physically challenged respondents particularly found the television and radio language to be too formal, mixed with English and Bengali and often times ridden with jargons. They suggested to use simple language for everyone's better understanding.

Information through Mobile Phones and Internet

Many of the respondents found information that are shared through mobile phone are helpful and can be identified as one of the increasing best practices. Very few yet still notably , mentioned internet as a source of information to address disasters and preparedness during and after a disaster strikes.

According to the minority group, cell phones are commonly used by the community people to send and receive urgent messages and warn family, friends and neighbours of the expected disaster event. The example all the groups in coastal zone gave was that of cyclone Sidr which occurred in November 15, 2007, when this channel of communication had helped them.

Some respondents also thought that the use of cell phones to pass on early warning messages in Bengali was a good option, especially when the young girls and boys attending schools in the village could alert others immediately after reading the messages.

Megaphones

Announcements through megaphones during disasters are also identified to be helpful means of disseminating warnings by many of the respondents and thus, can be noted as one of the best practices that can save lives and livelihoods. According to a number of respondents, passing on messages using megaphones have been the best way to relay messages. According to them during cyclone Mahasen, after receiving the warning message early on in this way had helped them go to the shelters on time and save their lives and belongings.

Door-to-Door Information

The respondents, particularly in coastal area, expressed that the common source of early warning message has been through door-to-door communication, with the help of siren and megaphone by the BDRCS community volunteers and Union Council members, including the chairperson. Other times Sometimes the messages are also being delivered by the young and male members of the community who receive the information from various other sources. Thus, this way of receiving information has helped member of the community to be aware of the impending dangers and has built their trust. Also, involvement of community leaders in the villages by joining in giving door-to-door information has also helped them trust the source of information.

Imams and Other Religious Leaders

Several of the respondents in all four locations mentioned their trust on the religious leaders such as imams of the mosques on providing disasters related messages. The respondents thought that when imams from the mosques share information that are related to disaster preparedness and risks reduction of hazards, and also disaster response and resilience building, these information become effective and helpful to reduce disaster impacts in the lives and livelihoods as the imams and other religious leaders are seen as one of the most trustworthy individuals in their communities.

Government Offices and Local Government

The participants in nearly all the groups mentioned government offices, local government leaders such as commissioners and councillors, along with city corporations, union parishad members and chairmen as reliable sources of information, indicating that their inclusion and leadership in informing their communities is an effective mechanism. The responses gathered from the female members of urban disaster prone area regarding their trust on the individual such as a particular local commissioner also indicated that local leaders who are engaged with the community in a possibly two-way communication, can develop better understanding and trustworthiness of the vulnerable people.

Newspapers

The respondents from the flood-prone area particularly informed that newspapers is a good source of information as it provides news of all areas in the country, including information on disasters and actions that can be taken to save their lives and livelihoods. Literate people of the community can read the weather forecast of their area and can inform the community.

NGOs and Local Non-Profit Organizations

Some of the members in the female group particularly mentioned BRAC staff members and weather forecasting offices as good sources of information and giving messages on disasters and risks. As some of the local staff members of the NGOs have been identified to be a trustworthy source to provide accurate and appropriate information as well, they can be further empowered to ensure timely dissemination of information to the affected communities. The minority group from flash flood prone area specified that an NGO can be selected as a medium to disseminate messages and information sharing to the affected communities.

Village Markets

The female group also mentioned that the male members of the households who can go to village markets and local government offices are able to bring in knowledge and share information on addressing and preparing during and after disaster time.

Understanding the Information

All the groups in coastal area said that they did not have any difficulty in understanding the early warning messages and information provided to them by the Union Council members and the community volunteers of BDRCS through the use of megaphones because the messages were spoken in Bengali and in the local dialect if necessary. However, some of the respondents mentioned that many had difficulty in comprehending cell phone messages which were in Bengali but written with English alphabets, and so the messages should be written in Bengali and in the local dialect if possible.

The respondents from flash flood prone location particularly mentioned that the benefits of receiving timely and accurate information prior to and during disasters are: repairing embankments to protect communities from being marooned in flood water, families can evacuate to safe locations such as shelters or arrange safety measures to protect their homes, crops and other means of livelihoods, can protect their children from drowning, can strengthen homes from being washed away by flood water, take items needed for emergency, including food, money, fuel, medicines, candles, and preserve seeds, find boats for transportation.

The members of the groups from flash flood areas also mentioned that the information can provide guidance from where the affected communities can receive humanitarian assistance and from where and with whom they should communicate to receive support and relief items.

According to all the coastal area respondents, the perceived benefits from getting early and timely information result to saving lives including the lives of the disabled, the elderly, the children and the pregnant women, and seeking refuge to safe shelters. Also, with timely and accurate message, necessary things can be carried and important belongings, domestic animals can be saved as well.

7.4 Policies and Communication with Communities in Bangladesh

While humanitarian responses and disaster management actions implemented in many parts of the country, particularly in coastal areas, have assisted in reducing the level of vulnerability which is associated with saving lives and minimizing death-tolls, often long term impacts are not considered when designing and implementing actions and policies. The participants of this research asserted that in most cases, the communities are not consulted and considered in the decision making process, in designing the programmes, taking actions and creating policies. As a result, when it comes to implementation, the communities are forced to accept the conditions that are advocated and provided to them not considering communities wills and demands.

Although it is the main goal and vision of the Government of Bangladesh to reach the most remote locations of the country, and meet their demands, there are gaps in effectively implementation of the aim. And perhaps it requires a thorough study to ensure the process is fully inclusive in reaching each individual, particularly the most vulnerable people.

All respondents from Kurigrams were completely unaware of their rights to information. Some of the participants in the elderly group mentioned that nobody spoke to them on such issues and thus, they had no idea about the programme. The group also mentioned that they did know where to go and seek assistance for receiving drinking water, food and medicines. They did not have any idea whether there was any assistance available to mitigate their sufferings during disaster time. Some of the participants from Kurigram expressed interest to learn about their rights to information and know how the given information could further protect and improve their lives and livelihoods while they wait for humanitarian response during and post disaster time.

Similarly, other than 3 participants from the elderly and physically challenged group in Sunamganj, no one was aware of their rights to information.The Male and Minority FGD groups of Barguna had no idea about it. However, the Female FGD group knew through participation in various NGO awareness programmes. The "Disabled and Elderly" FGD group said something interesting that the women knew better than the men about this law because they participated in the different NGO programmes.

The groups from Kurigram, Sunamganj said that there was no special information provided tochildren, pregnant women, physically and mentally challenged, elderly population of their communities. The male group from Kurigram mentioned that besides sharing information on any special assistance available for the most vulnerable members of their community, they needed specific information on humanitarian rescue responses and assistance and on facilities available at shelters during disaster time. The female group Kurigram shared that special messages on women's health, nutrition, child marriage, violence against women, healthcare facilities- including delivery services for pregnant women, should be shared with the communities. The elderly and disabled participants shared that there was no special action taken to take care of their special needs. They were unaware whether any special facility was available for the people with special needs and senior citizens or no. additionally, they also expressed to have awareness campaigns among regular members of their communities to be supportive towards them during disaster time through special messages and information dissemination.

The Male and female FGD group of Barguna, the "Disabled and Elderly Group" and the Minority FGD group said that they received no such special message. However, they mentioned that the messages request to move the elderly, the disabled and pregnant women before everyone else to the safer place or shelter. The minority FGD group suggested women to wear *shalwar-kammez* instead of *sari*, and brad their hair instead of leaving it open.

7.5 Gaps and Challenges in Communication with Communities in Bangladesh

The four focus groups from each of the four study areas identified some of the specific issues related to disasters and hazards on which they felt are important to receive information and messages. The participants from the study villages of Behali union under Sunamganj felt there were needs in getting early warning messages and related information on major disasters and hazards such as floods, flash floods, nor'westers, tornadoes, hills slides, hail storms. Additionally, the male participants from Kurigram also felt warning messages and related information on river erosion, cold wave and earthquake were needed. They also specified some key components of the messages that they think are needed during and post disaster time, such as in association with floods, information on the health related issues, seeking safe shelter, and food conservation process for during and post disaster for survival. They also associated needs for information related to various diseases that spread during cold waves, also information on how to protect families from hazard, prepare and repair homes during and post tornadoes and storms, on building awareness to protect lives during earthquake as well to avoid rampage and injuries.

The female group from Sunamganj also felt the need to receive more information and warnings on excessive rainfall and lack of rainfall that may lead to possibility of drought. The early warning messages and information may not be enough if the continuation is not maintained during and after the disaster strikes and thus, the representations from Sunamganj felt that there were needs for humanitarian responding entities to communicate with the local and affected communities with guiding instructions and information to save lives and livelihoods. The female participants from Kurigram, felt that informing the communities about disasters and hazards through television might be helpful. They also mentioned that megaphone announcements during disaster, yard meetings for pre and post disaster periods, and reaching out women in each household through individual visitation, preferably delivered by female volunteers, would be helpful for the female participants to be aware of disasters, associated risks and addressing those risks. The female respondents from Kurigram also said that the teachers from schools and colleges may play a responsible role in disseminating appropriate information and messages, besides union members and Chairman sharing those information. Similar to the female group in Kurigram, the minority group also thought television, yard meetings and union Chairmen to be good sources to receive information. They also added that sharing information through journalists may also be helpful. They particularly emphasized on sharing information through NGO and government officials working in their union.

Some of the discussants from Baheli union of Sunamganj also expressed specified needs for accurate information such as how and when the rescue operations would take place during disaster time, what

are the ways to reach higher grounds when disaster strikes, in which higher grounds the villagers can move their cattle and poultry for their safety, what are the measures the farmers can take for crop protection during disaster, what are the cleanliness, health and sanitation measures during disasters to ensure wellbeing, what facilities would be available for pure and drinking water.

The group representing elderly and physically challenged members of the community in Kurigram expressed that they receive information from younger male members of their households as they receive information and messages from the village market places and share those with the members of their families. This group also mentioned that it will be helpful for them if they could receive information and early warnings on floods, earthquake, river erosions, cold waves. If they receive early warning and appropriate informative messages on cold waves, they might be able to find ways to prepare themselves. As the people in their community are extremely poor, often times they do not get enough resources available and household items to protect themselves during harsh winter. Early warnings on floods would also assist them in safeguarding their household items which are highly valuable to these economically and physically marginalized people. They could also attempt in stocking food and build a cooking stove on higher place if they received early warnings on floods. Additionally, they also spoke about their fear about fires in summer time during heat waves and drought periods.

All the FGD groups from Barguna felt that they should be well informed particularly about the cyclone disaster.

The Male FGD group and the 'Disabled & Elderly' FGD group mentioned that if there was a Local Weather or Cyclone Information Office at the union level, or as the Male FGD group suggested that if there was a village level Disaster Management Committee, or as the Female FGD group suggested that if there was a village level Volunteers Committee, it would have been systematically much easier for the community people to get the "early warning signal" and timely messages. This is because, according to the Female FGD group and the 'Disabled & Elderly' FGD group there was indeed delay in conveying the early warning message "door-to-door" using megaphone of cyclone Sidr by the community volunteers of the Bangladesh Red Crescent Society (BDRCS) and Union Council chairperson and members. The Female FGD group said that because the cyclonic storm had already started by the time the message was transmitted, and the loud noise of the storm created disruption in communication of the message in terms of its clarity, which led to the village people not giving heed to message and, therefore, caused damage to the village people's important assets and belongings. And again, because the message of cyclone Sidr was received late, according to the 'Disabled & Elderly' FGD group many of the village people were injured while traveling to the cyclone shelter. But the Minority FGD group did mention that the cell phone calls made by the Union Council members to warn them early on about cyclone Sidr did help them tremendously. The Female FGD group gave an example that because the warning message in the event of cyclone Mahasen was relayed to them early on by the community volunteers "door-to-door" through the use of megaphone, which seemed to be their most important source of receiving the warning messages, all the village people were able to go to the shelter or a safer place on time.

The Female FGD group also felt that the people of the village should be encouraged to own a radio, the use of which is becoming scarce these days. They also felt that information communicated should not

only be that of the disaster event but also messages that include how to tackle certain issues that occur after disaster; for example: correctly advice on how to treat diarrhea which can take the form of an epidemic during and post a disaster event, advice on avoiding open defecation and to take care of one's personal hygiene; advice on drinking tube well water; and, on how to purify pond water that they rely on the most as source of fresh water and which can be polluted after a flood event causing scarcity. They felt that all the advice should be given as part of an awareness campaign "door-to-door" by individuals who have the expertise and knowledge about such issues. Additionally, they even felt that farmers who owned farmlands should be provided information through training on how and when to use pesticides to protect their crops from pest attacks. The respondents from Chittagong City expressed that they needed information on landslides, waterlogging, cleanliness of their environment primarily along with rainfall, cyclones forecasts.

8. Study Findings and Analysis from Key Informant Interviews

The Key Informant Interviews provided their expert understanding on the issues concerning communication with communities in response to disasters and also, identified some of the gaps and challenges that are constraining from designing and delivering two-way communication with disasters affected communities in Bangladesh. The following five segments in this chapter highlight the key points from the information gathered through the interviews with the experts.

8.1 The Importance and Understanding of Communication with Communities (CwC) in Bangladesh

Key Insights:

- *Key informants expressed that there is a wide-spread understanding on the importance of communication with communities among the key individuals and institutions involved in disaster response. However, gaps in knowledge and understanding exist when it comes to two-way communication.*
- *The key reasons behind lack of understanding of two-way communication are: ambiguity on the subject and how it can be designed, implemented and maintained; influence of established power-relations and power-structures on vulnerable communities;a perception exists that the decision-making is a top-down and one-way approach; limited resources and capacity.*

All of the experts, who were interviewed for this research purpose, expressed that communication with communities is the key to ensure effective disaster response, recovery and resilience building in vulnerable communities. Recollecting their familiarity of working with various groups of people, some of the experts also mentioned that majority of the key individuals in government,non-government and international institutions and organizations do acknowledge the importance of communicating with communities in disaster response and recovery. However, this understanding of communication with communities is sometimes limited to dissemination of information and messages during, as well as pre and post disaster time.

According to some of the key informants, authentic two-way communication is not clearly understood by many and it is almost non-existent in practice while working with the vulnerable communities. Some of the experts identified that the primary reasons for the lack of two-way communication in practice is because-

- there is a need for clarity on how an effective two-way communication mechanism can be designed, implemented and maintained;
- established power-relations and power-structures impact vulnerable communities as often they suffer from insecurity, lack of confidence and motivation in raising their voices and sharing their concerns;

- a perception exists that the decision-making process is expected to be a top-down and one-way approach since the local population may not have adequate capacity to make decisions for themselves;
- limited availability of resources and capacity for continued two-way communication with the communities.

Nearly all the experts interviewed for this research acknowledged that more need to be done by all parties involved in humanitarian response in Bangladesh to ensure that the communication with communities becomes a two-way process. According to some of the key informants, two-way communication will allow timely reception of information and messages, but also importantly, the communities can relay back their needs and concerns to the humanitarian responders, particularly the national disaster management system at the central government level to ensure the appropriateness of the assistance that they will receive. Communities will be able to make choices for themselves through informed decision-making process.

Some of the respondents shared that two-way communication not only empowers the communities to make informed decisions, it also reduces the level of stress and anxiety that the communities go through in post-disaster time. Communities are informed in a timely and reassuring manner that the support is coming and are also made aware of how long it would take the aid to reach.

If continued two-way communication with communities is maintained, preparedness against disasters becomes better as a result, the community's capacity and resilience to protect themselves with the available resources in their community improves and they become aware of their capacity to cope against calamities while they wait for the help which is on the way. The timeframe between the schedules when the help reaches an affected community and the time the disaster has taken place when is crucial as the affected people suffer from high level of stress, despair and confusions. During this timeframe, the members of the community need to feel confident to engage in protecting and recovering actions, and be assured to sustain this timeframe until the rescue and relief operation reaches them. This confidence building mechanism can be better designed and established in vulnerable communities through effective engagement with communities.

Some of the respondents mentioned that the importance and needs for communication with communities is not completely unknown to many humanitarian and emergencies responders as well as policymakers and media practitioners. However, CwC that promotes two-way communication in which the community should be empowered in making informed decisions and their dignity must be maintained while responding to disasters is relatively new to many. Though it is mentioned in the policies about setting feedback arrangements from the communities, in reality, most of the institutions and personnel involved in disaster response often do not prioritize engagement with communities elaborately on both-way information sharing, but rather sending a one-way message on an impending disasters. There is a need for a better understanding about the importance of two-way messages sharing. While sending pre and during disaster information to the communities to save lives is critical, it is also equally important to ensure continued informative programmes and actions in a two-way system

so that the affected communities feel supported during recovering their own lives and livelihoods and also receiving appropriate aid as per their needs in post-disaster periods.

Some of the respondents expressed that often what is seen on various media sources, government information, donors messages, or even UN agencies responding to disasters reflects a rather public relations message and information on disaster affected communities. This mindset in communication need to change to understand the difference between news and information, and also between fundraising and working on assisting disaster affected communities - particularly important for communication specialist, media or press officers where they focus primarily on visibility of the work but not in-depth engagement on playing a role in establishing mechanism for communication with communities.

Some of the key informants also added that there are also gaps among the people working in various organizations who are involved in disaster management and response. Sometimes the head of the organization may be aware of CwC and its roles on effective humanitarian response but it is not reflected throughout the system and the others involved in designing and delivering the actions. Also, often decisions are made without understanding and effecting CwC, and products are developed and delivered skipping several steps of engaging with the communities first. For these reasons, sensitization of the individuals and experts involved in disaster management and humanitarian response is needed, as some of the respondents reflected.

8.2 Communication with Communities (CwC) Reflections in Policies Associated with Disaster Management and Response in Bangladesh

Key Insights:

- *The respondents expressed that raising awareness on two-way communication in the policymaking process will help bring advancements in the policy design which will also assist the government and non-government agencies to mobilize and utilize limited resources in the most effective ways.*
- *Clear directives are needed in the policies in terms of engaging with the communities in a two-way manner. The respondents particularly praised the Standing Order on Disaster (SOD) but at the same time, highlighted that there is a need to bring clarify in communication issues to strengthen communication with the communities.*
- *It was suggested that a coherent communication strategy in the policy will be the most effective way to ensure all key stakeholders involved in the humanitarian response are engaging in two-way and effective communication with communities.*

A number of respondents mentioned that it is highly important to sensitize policymaking process on the importance of prioritizing two-way communication with communities as it allows the government to understand what are the needs of the people, plan utilization of limited resources to gather appropriate aid as per communities' needs, and also help communities develop a better understanding on how to

better use the limited aid that they receive to improve post-disaster recovery. The CwC allows the communities to make plans for their own lives and thus, restores their dignity to make informed choices.

Some of the key informants mentioned that while Bangladesh has come a long way in designing and implementing policies that saved millions of lives across the country in a very short period of time since the Bhola Cyclone in 1991, not all the policies have clear directives on ensuring two-way communication with the communities during humanitarian response. Advancement in the policies will bring more effectiveness in saving lives and livelihoods in both short and long term, and will also bring efficiency in policy implementation. For example, some of the experts highlighted that many are not clearly aware of the directives of the Standing Order on Disaster (SOD) due to indistinctness on the issues concerning communication with communities.

Some of the respondents identified that there is no clearly defined communication strategy available within the policies, especially in the SOD, on how communication coordination with communities can be done while involving various key stakeholders who are pertinent to humanitarian response. A few of the respondents also mentioned that many are also unsure about the directives SOD provides in terms of information flow.

The respondents suggested that the policies can re-emerge with updated versions to meet the changing traditions of humanitarian response where human dignity is upheld, community-inclusive planning are designed, and informed choices by the vulnerable communities are set as priorities. These can be done, as suggested by some of the respondents, by providing clear and accommodating clauses in the policies on the issues concerning two-way communication with communities. Such policies will allow the government and humanitarian responders to gather more accurate information through CwC mechanism to identify immediately on what are the needs of the affected communities.

Although SOD provides a directive to media and broadcasters on disseminating information, which is a proper direction to disseminate information, it is also not fully clear among the media and broadcasters on who should be responsible to disseminate information and on what ways. Thus, there is a need for media practitioners, broadcasters to be aware of their particular roles and responsibilities that reflect their engagement in disseminating disaster information as per the policy-directives.

Some of the respondents suggested that raising awareness among the policymakers and also key personnel involved in policymaking process is needed to assist them in generating stronger understanding on the benefits of two-way communication. Also, the national leaders and policy-experts should be given opportunities to think why are they making a policy and how their policy will influence lives, why is it important to plan a two-way information sharing system, and how enhanced way they can articulate their policies in reaching larger group of people- especially the vulnerable communities, to help them understand their rights.

There is also a need for increasing involvement of media and allowing them to have the freedom for in-depth engagement with communities to honestly capture and reflect the needs and concerns of the affected communities- as suggested by some of the respondents. Accountability and transparency is needed in both the government and non-government disaster response activities to lessen vulnerable

status of the communities. Accountability and transparency also assist in allowing better understanding and outlook in receiving additional support and coordination to save more lives - lack or absence of these, may lead to jeopardizes such as the collapse of the *Rana Plaza.*

Capacity building and motivating actions of Union Disaster Management Committees (UDMC) is needed where the members will be able to engage with the communities in a better way. Enhanced ability of the members of UDMC will not only help indisseminating information but also assist in understanding the needs and concerns of the affected communities, and relay those concerns from the communities to the central system.

8.3 Challenges and Gaps of Communication with Communities in Bangladesh

Key Insights:

- *Bringing changes in the mindsets of the people and institutions are need;*
- *The primary challenge is to raise confidence and capacity in the communities that their voices will be heard. Equally important challenge is to ensure that the key stakeholders, including the leaderships in policy and programmes, are well aware and accommodating to designing community-based two-way communication and information sharing system;*
- *Coordination in information sharing is needed which is currently a challenge in disaster response in Bangladesh;*
- *Quality aid delivery, accountability and transparency in humanitarian response is still a challenge;*
- *Enhanced, diverse and sustainable technologies are needed to reach every corner and every individual during disasters;*
- *Lack of urban risk preparedness and strategic response is a major challenge which is directly linked to absence of communication with the urban communities;*
- *The stakeholders platform for communication with communities needs to be less bureaucratic procedure which will assist in making the platform more effective in planning and engaging in CwC process.*

Some of the respondents highlighted that there is a need to bring changes in the mindsets of the humanitarian responders and associated key stakeholders to make communication with communities during humanitarian response a grassroots based, localized and bottom-up approach. In this process, the communities will have opportunities to assist in designing information and messages based on their needs. Currently, the primary challenge is to raise confidence and capacity in the communities that their voices will be heard. At the same time, equally important challenge is to ensure that the key stakeholders, including the leaderships in policy and programmes, are well aware and accommodating to designing community-based two-way communication and information sharing system.

Some of the respondents also mentioned that there is an issue concerning various organizations sharing uncoordinated messages on one topic in a community on disaster response and resilience creating confusion among the community members. The communities become confused and thus, cannot make

an accurately right decision on which action they should prioritize. For example, the respondents identified that some organizations or agencies are informing the community to save dry food under the soil prior to a cyclone, while some of the other ones are informing the same community to take their important belongings including dry food with them to the shelters. This creates a problem for the community as they become unsure of which action would reduce their sufferings in post-disaster time. Thus, it is important to bring in all stakeholders involved in disaster management and response in one platform to collaboratively work in ensuring for the communities' maximum benefits and precise information from the communication efforts.

Some of the respondents mentioned that resources mobilization based on the communities priorities is also a challenge due to inflexible position among the resources contributors. There is also a need for resources investments that should reflect communities' priorities and not donor-driven goals. This is a huge problem in any development work in Bangladesh and across the world and thus, it is highly important to have donors mindsets changed to achieve sustainable and effective benefits for the affected people.

According to some of the experts, the technologies that are being used now are not highly sustainable and robust. For this reason, continued efforts, investments and advancements need to be brought in to the technologies. It is also important to diversify the channels of communication so that all the members of the community receive equal support and benefit from disaster warnings and responses.

One of the other challenges that some of the respondents mentioned is the inaccuracy in information dissemination. Communities are still at risk of receiving false and inaccurate information that often times jeopardize their lives and livelihoods, and sometimes even causes injuries and deaths. A key informant provided an example on this issue from the cyclone Aila. A false information known as 'dry flood' was spread after Aila which resulted injuries among many survivors. These risks still exist and to minimize the damages, communities, local and national stakeholders need to be made aware of receiving appropriate and accurate information from some of the trusted sources.

One of the most critical part of the humanitarian response is to ensure quality delivery. Some of the respondents mentioned that many humanitarian efforts undermine this concern as they engage indelivering average and poor quality aid supplies and assistance. Some of the experts felt that it is also due to availability of limited resources and the lack of transparency in distributing relief items to the affected communities. Low quality assistance and delays in relief programmes affect community and brings further sufferings and damages to their motivation towards recovery process.

A number of the experts also highlighted that it is important to come out from theories of communication with communities to actively and practically engage with the communities. Consistency is needed in the process to ensure that the communities are aware of what the disasters responders are communicating and what are they delivering. There is a trend of paying less attention to the needs of communities during disaster response and it is recommended that this mindset and plan of action needs to be changed to effectively deliver two-way communication with the communities.

According to some of the experts, many practitioners also do not have the right skills to appropriately and effectively engage with the communities. It was highlighted that often for research purpose and programme development, the study teams are sent out for a very short period of time to capture the needs of the communities. While this saves time and resources, it does not provide an in-depth information required to effectively design the programmes and thus, the gaps and challenges continue to exist.

A few of the experts also mentioned that awareness needs to be built among general population on crowd control during disasters. This is an on-going challenge that is hampering live-saving work in the country. One of the respondents also added that it is important to train more volunteers who can professionally provide support during humanitarian crisis as untrained volunteers will cause more harms than assisting in saving lives. Community-based clustered volunteers and first-aid responders can help save many lives if they are properly trained for emergency purpose and provided appropriate guidance.

Some of the respondents mentioned that there is also a lack of coordination existing among civil, armed forces and volunteer services and if these can be coordinated effectively, more lives could be saved and disaster response would be delivered efficiently. Communities also need to be made aware about the joint rescue and recovery missions during disasters. While there are emergency contact numbers and information available to reach humanitarian responders, and also receive information on forecast, these numbers are not easy to memorize and so, it is suggested that memorable numbers should be popularized among all.

Urban disaster risks are one of the core concerns that are not being exclusively explored. The challenges during disaster response in urban areas are more daunting than in the rural locations due to density of the population, highly risky fragile infrastructure, limited access to water and other resources, traffic congestions and unavailability of shelters. There is no active evacuation plan available if disasters such as earthquake strike in urban areas. Majority of the people and disaster responders are also not aware of where to go, what to do and how to minimize risks to save lives during disasters in urban locations.

Some of the experts also mentioned that access to key individuals is also limited in Bangladesh for the vulnerable and poor people; often times they do not have the comfortable and approachable environment to various offices and institutions to share their thoughts, concerns and opinions for a two-way communication process.

Some of the respondents also spoke about how the lack of understanding about the essence of coordination and two-way communication with communities makes the humanitarian efforts during disasters a complex and panic driven action. The key informants felt that it is important to revisit the CwC engagement process to ensure complete clarity on the roles of each stakeholder. It is important to ask the questions such as- who can be the members of a humanitarian response communication platform, why should their involvements matter, what is the relevance of their involvement to their regular work.

In terms of challenges that may be associated with the Multi-Stakeholders Platform, a couple of respondents added that they felt that the lack of clarity in CwC design and implementation process,

along with the roles and responsibilities of each member may influence a platform to turn in to a bureaucratic, tedious system. The complex process in which every member's suggestions must be recorded for a decision making will delay and hamper the core aim- which is to engage with the communities effectively and in a two-way process.

8.4 Communicating with the Most Vulnerable Among the Vulnerable Affected People in Bangladesh

Key Insights:

- *While a couple of experts expressed that specialized information is needed for the most vulnerable groups, some other experts mentioned that instead, raising sensitivity level among the humanitarian responders in both government and non-government agencies will be more useful actions.*
- *A couple of experts also raised an issue concerning the documented and undocumented refugees, especially the Rohingyas, and recommended that special communication programmes need to be developed to assist these highly vulnerable group as they have limited access to assistance unlike the citizens of Bangladesh.*

The poorest people in Bangladesh live in the most vulnerable communities. Often they live in makeshift homes with high risks, such as landslides and other lethal disasters. . The key informants mentioned that, due to lack of programmes, policies or actions available to support these vulnerable people from becoming homeless, often they do not leave their houses. Local political influential people also play a significant role in risking the lives of the most vulnerable people.

A couple of experts also mentioned that children, elderly people, physically challenged persons, people with special needs, pregnant women should be given positive-discriminative assistance in which they receive priorities during disaster response, including receiving specialized disasters related information.

Contrary to this expression, some of the key informants mentioned that no special messages are required for each special and the most vulnerable groups, other than those with hearing impairment, but rather more work should be done to improve sensitivity among community members, households, humanitarian responders, media practitioners and government officials towards these special people so that they become more responsive and caring in assisting the most vulnerable members of the affected communities.

When responding to disasters for humanitarian action, it needs to ensure inclusivity of all human lives. A couple of experts mentioned that there is a need to bring refugees, particularly Rohingyas, both documented and undocumented ones in a systematic approach through which their lives can be protected and saved along with the citizens when a disaster strikes.

Though the government has allowed Rohingyas access to various shelters during the last couple of cyclones that affected Cox's Bazaar, many of them do not feel completely comfortable and do not have

trust being in these shelters due to the discriminations they face. The undocumented refugees suffer more than the few documented ones as they do not have an identity to feel secure and receive life-saving assistance. Thus, a mechanism needs to be developed to ensure communication with refugee communities for inclusivity in protecting all human lives equally. Interactive community radio programmes perhaps can be a good start to communicate with the refugees in pre, during and post-disaster time, according to the experts.

8.5 Best Practices and Lessons Learned about Communicating with Communities in Disaster Response

Key Insights:

- *The best practices are often limited to the actions and programmes that have been saving lives-from early warning message dissemination to policies that supported communities volunteerism in saving their own lives.*
- *Often the existing best practices do not necessarily include two-way communication which is emerging as increasingly a new process for many humanitarian responders.*
- *The BBC Media Action, in association with the government agencies and various other stakeholders and partners, delivering coordinated and messages during cyclone Mahasen is considered to be modern day two-way communication.*
- *Community radios are increasingly identified to be one of the best examples of the two-way communication.*
- *While the number 10941 is considered to be a positive way forward, it needs to be popularized and made free for all.*
- *The community-led shelter development by the BDPC is identified to be one of the best practices of two-way communication.*

When it comes to identifying the best practices in communication with communities, the respondents provided a number of strong examples. However, they also identified that many of these practices that are considered to be the best in Bangladesh are not two-way communication precisely. Most of the best practices in Bangladesh are considered to be those which saved lives during previous disasters- from timely dissemination of warning messages to developing SOD that engaged community leaders and members to save the lives in their own communities.

Considering this issue concerning effective communication, the respondents provided some key examples of the best practices. One of such recent examples had been the message sharing process during cyclone Mahasen. The BBC Media Action and various other humanitarian responders, along with the Government agencies, took effective, coordinated actions during cyclone Mahasen. The actions particularly focused on highly vulnerable areas such as Barguna, Patuakhali, Barisal, in association with government broadcasters. The dissemination of appropriate, timely and accurate information with easier language to communities, through multi channels, and particularly through community radio, reflected that more lives could be saved with such actions. The field study also found that the information sharing during cyclone Mahasen was supportive for the communities to make informed decisions to save their own lives.

The BBC Media Action's consultative role in advising and improving message dissemination and information sharing has played a positive result during cyclone Mahasen, particularly in Barguna, and also during tornadoes in Brahmanbaria. The message library that the organization uses to help could be developed, accessed and utilized by the relevant authorities for rapid and clear information to assist affected communities in taking informed actions.

Some of the experts also expressed that it is also important to identify all the channels first and provide unified, coherent, locally language based information and messages. Information should not only be about sending early warning messages and what to do during disasters but it also needs to ensure that the messages are relevant to the communities. The channels should also have options open to accept feedback from the receivers. From this perspective, the respondents mentioned that the community radio channels are increasingly identified to be one of the best examples to stay engaged with the community through a two-way communication process. The community and FM radios should receive more support as it is becoming increasingly popular among many across the country and thus, may have more access to various disasters related information and messages for better preparedness through these services.

Some of the respondents also spoke about the number 10941 which can be accessed by anyone from any mobile services operators in Bangladesh to receive forecast and early warnings on imminent natural disaster. While this needs to be popularized, majority of the respondents mentioned that it must be made free to have access for all.

A couple of the experts identified a strong example to help safe not only human lives but the livelihoods as well. The one example is the joint programmes between Agriculture Information Office and Bangladesh Television on disaster and livelihoods, particularly focusing on agriculture and fisheries. The programme provides information on saving lives and livelihoods and messages to the vulnerable, poor communities. Individuals from the programme also provides opportunities to engage with the communities through letters and calls, and often they visit various locations and meet the community members. This programme has made the best example of existing two way communication in Bangladesh so far. -

Another example of the best practices was provided by one of the key informants who mentioned two-way communication helped build comfortable community shelters, considering their needs and expectations. Bangladesh Disaster Preparedness Centre (BDPC) once developed shelters with support from the Swiss Development Cooperation (SDC), that reflected the needs of the communities through active consultations with them. During the process, the community members were kept actively engaged to assist in ensuring accountability and transparency during the constructions of the shelters.The community was given a voice to express concerns and power to reject the ideas and building-materials that were considered to be substandard quality. The outcome of this process had been strongly positive as the shelters became multi-purpose centres which were transformed in to schools in peace time. The shelters also included medical facilities, particularly for the pregnant women. The materials that were used were quality assured by the community itself to strengthen and improve safety measures of the shelters. The recent study and analysis of several shelters programmes reflected

that the ones BDPC developed in two-way communication with the communities delivered better results and the communities felt safer in taking refuge there during disasters.

9. Conclusion and Recommendations

Over the past decades, the number of documented disasters has remarkably doubled causing millions of lives to death, damaging properties and bringing billions of dollars damage to the government and individuals.   The lack or absence of communication with disaster affected communities act as a triggering affect resulting to catastrophic consequences towards disaster impact. A well-organized, sensible, time demanding accurate and rapid communication with the disaster affected communities is the key to protect lives and livelihoods during and post disaster episodes. Communication with Communities (CwC), hence, is imperative to reduce risks associated with innumerable disasters, deliver better response during and post disaster periods, and build resilience of the communities in Bangladesh for a sustainable and manageable outcome. Bangladesh Centre for Advanced Studies (BCAS) conducted this research study to gather an understanding on the gaps of two-way communication with communities in Bangladesh, the best practices that have helped save lives, the lessons learned to make response and actions more effective, and associated policies addressing disaster communication, information sharing and knowledge dissemination.

Research study identified a number of short term and long term disasters for the four vulnerable eco-zones in Bangladesh whereas Flood-prone area of Bangladesh comprises disasters like floods, river-back erosions, rainstorms, extreme cold and cold waves, temperature rise, heat waves, dense fog, drought, hail storm, rain storms, tornadoes, sand-storm, lightning, fire and earthquake; In Urban area of Bangladesh faced with a variety of disasters like landslides, excessive rainfall, water-logging, cyclones, nor'westers, hill slides, fire, water crisis, earthquakes, unclean environment, limited space for burial and dense habitats; the flash Floods-prone area is composed with disasters like floods, flash floods, nor'westers, sudden surge of hilly and mountain water, seiches (afal), excessive rainfall, lack of rainfall, drought, lightning, hail storms and poisoning from pesticides; and finally major disasters of coastal area were identified as tidal bore, cyclones, salinity intrusion, drought, floods, river and coastal erosions, excessive rainfall, pests and insects attacks. All these disaster in four eco-zones of Bangladesh predominantly affect socio-economic wellbeing, increase the level poverty, limit income generations, increase homelessness and rise forced migrations, and affect food security and nutrition health, water and sanitation, and overall wellbeing of vulnerable communities.

After having a depiction of whole study, a lot of observations come from the study field that were needed to be incorporated within some major points as recommendations for further betterment of communities regarding disaster response. This section is derived from the consultation with communities, various local key informants, relevant national experts from various national and international organizations and agencies, and analysis of policies assisted in gathering a number of key recommendations for effective two-way communication with communities (CwC) during research study to ensure impactful and community-oriented disaster and emergency humanitarian response in Bangladesh:

1. *Awareness Building and Empowering Communities in Disaster Responses*

    The study generated an understanding that, awareness Building and Empowering Communities could be further enhanced and made effectively efficient to save and protect more lives and

livelihoods through various awareness building and community-empowerment programmes. A number of the participants are not fully aware of various aspects of communication during disasters - such as, their own capacity to turn their lives and livelihoods resilient to disasters; importance of timely sharing of collected information to vulnerable female, physically challenged and elderly persons of the households and communities; the responsible institutions and individuals officially designated to disseminate accurate and appropriate information; who to reach for assistance about disaster information; what are the mechanisms available to actively participate in providing feedback and informing their needs during disaster time; as well as their rights to access information to protect their lives and livelihoods as citizens of Bangladesh.

Although some of the policies and programmes support the importance of engaging with the communities in making decisions on humanitarian aid, for example, the practice is not common across the humanitarian clusters and responders to provide in consultation with the communities. The **mindsets need to be changed** to capture the importance of putting communication with communities as a priority to make vulnerable communities resilient and ensuring dignity.

Formal Inclusion of Local Social and Religious Services Providers need to be ensuredas a number of respondents; particularly minorities and elderly persons, informed about their trust in local NGO representatives and religious leaders such as imams respectively; initiatives to formally including them in the process of communication with communities for disaster response may deliver effective results.

As some parts of the field study reflected that the affected vulnerable people are not clearly informed, or sometimes are evacuated without administrative support, **it is recommended that programmes and workshops can be arranged to train** local level leaderships, government officials, volunteer networks and relevant other stakeholders in better communication with communities prior to, during and post disaster time.

As Bangladesh is identified a disaster-prone nation, with both rural and urban disasters and hazards are increasing due to various reasons, **more highly skilled and trained volunteers are needed to ensure** rapid response to humanitarian crisis in the country. These volunteers can also play a role in assisting communities to engage with disaster responders in two-way communication as well from the grassroots level.

Often **media practitioners** are not sensitized to the needs and sufferings of the communities during disasters as they seek to gather information and news items to be shared urgently for their audience. **An initiative to train journalists should be taken** to ensure better, effective, respectful, supportive engagement of journalists with the affected communities where they will be able to prioritize dignity of another human being and assisting them in sharing messages and information to wider audience in building understanding of their needs and concerns. Media can play a role in effectively introducing communication with communities' related aspects to wider audience, including the vulnerable communities. Media can also play a significant role in transparency and accountability of disaster response and aid distributions. These issues can be covered through workshop programmes with grassroots, national and senior level journalists in the country working in both national and international media.

2. *Policy Advocacy and Raise Awareness Among Policymakers*

Policy advocacy with the policymakers is recommended to open avenues for the current policies and Acts that address disaster management and response to consider prioritizing communication with communities (CwC) for dignified, timely, effective and efficient disaster response in which the communities will not be the recipients of relief only but can actively participate in protecting their lives and livelihoods, make appropriate and informed decisions and choices to improve their lives, make use of limited resources effectively, and share consultative information to assist in better disaster response by humanitarian clusters.

3. *Communication with Communities Strategy for Bangladesh*

To bring together all the recommendations and prepare a plan of action to achieve an effective outcome of changing, inspiring, engaging stakeholders to work towards developing CwC implementation inclusive programmes, policies and action, a strategic direction is suggested. It is also recommended that the policymaking process needs to be inspired and urged to design Communication with Communities Strategy at national level, in consultation with communities and various humanitarian and disaster management stakeholders. This will also assist in providing guidance, monitoring and evaluating actions and programmes engaging with communities and contribute in saving and improving lives and livelihoods affected by disasters in Bangladesh.

Two-Way Communication with Communitiesis important to plan programmes and training-workshop with various relevant stakeholders, including the communities and local leaders and volunteers, to clearly define, introduce, re-introduce, and assist with technical support in designing two-way communication with communities for effective disaster response and better utilization of finite resources.

4. *Improve Understanding and consistency about CWC*

As humanitarian response globally is shaping towards ensuring dignity while preparing, assisting and recovering vulnerable communities affected by disasters and hazards, it is recommended that advocacy and awareness campaigns can be initiated to bring improvement in the understanding of dignity for affected communities. *Consistency in Early Warning and Ensure Inclusivity*requires more attention to ensure the level of stress can be managed better among the affected people and all may have equal opportunity to protect their lives and livelihoods.

5. *Develop and Nurture a Cluster of Common Platform for CWC through better Information Channel andEffective Technologies*

Some of the national key informants recommended that it is important to bring together specialists who understand, have the skilled or experience in disaster response and

communication with communities and develop a cluster comprising them to advise, assist and lead messaging and information sharing with the communities.

Improve Access to Information, message and communication system needs to be made easily accessible for all through awareness raising programmes, providing toll-free services to gather information as well as enabling opportunities to safely and anonymously provide feedback to ensure accountability, transparency, concerns and needs.

Diversify Channels for Information Sharing: Besides working to support best channels for message sharing with the communities, it is imperative, as a number of experts said, to diversify channels so that no one is left behind from receiving early warnings and information on preparedness, disaster response and post-disaster recovery processes. Not only diversification of channels is needed for maximum outreach of disaster information but it is also imperative to continue finding ways to ensure the best and advanced technologies that can brought in and relevant expert individuals trained to utilize the systems to ensure better response to disasters and engagement with the communities

Nurture and Scale up Community Radio Establishments, Access and Programmes: Radio Bangladesh still continues an important role in disseminating and engaging with the vulnerable people across the country and thus, the channel should be supported, included in designing messages. Community radios are also becoming popular. Resources and efforts should be given to scale up the services to ensure stronger engagements with communities in their local areas. Community radios can also relay information, feedback, concerns of their local audience to a central system to capture community's needs, perception and queries in various issues. The central point of contact can relay back the responses to the community to ensure two-way communication effort is continuing.

It is recommended that the **effective technologies such as mobile phone messaging, radio and television broadcast, community radio, individuals who play significant roles in information sharing** should receive continued support and enhanced scope for further advancements. People should also have access to easy and memorable limited digit number to dial and learn about the weather forecast, disaster information and early warnings. These numbers should be toll free or free of charges to allow maximum access and affordability any time, from any part of Bangladesh.

6. *Better Coordination, Cooperation and Experience Sharing*

For effective and coordinated action, communication with communities initiative needs to include not only government, volunteers and NGOs to respond effectively to disasters, but also armed forced need to be included as these national services play a key role in disaster response as well.

Though most respondents said that the disaster warning messages and information are not difficult to understand from television or radio broadcasts, a number of elderly and physically challenged persons mentioned that the messages are mixed with Bengali-English, highly formal Bengali, making the information high complicated for them to understand. Information and messages on disaster preparedness, during and post disaster time should be relayed in local

language for the communities to immediately understand the message and make decisions for their lives and families.

The study identified a number of trustworthy and popular channels among various communities - depending on whether they are male, female, elderly, disabled and minority in the country. In a number of cases, there had been few channels that were nearly common among all participants. Those channels need to be supported, trained and better equipped for timely and accurate information dissemination. It is also important to ensure that the best channels that were identified make an effort in engaging with the communities for two-way communication process.

For effective and coordinated action, communication with communities' initiative needs to include not only government, volunteers and NGOs to respond effectively to disasters, but also armed forced need to be included as these national services play a key role in disaster response as well.

7. *Special Consideration for the Most Vulnerable Members of Communities*

As Bangladesh is one of the most densely populated countries with rising number of people migrating to urban areas , risks associated with urban disasters are also increasing. A number of respondents mentioned that there is no specific urban-focused disaster response plan or any available strategy. . Awareness, knowledge, information relating to urban disasters is also highly limited. To save lives, it is now imperative to work on developing urban disaster risks reduction and response plan, and also make key stakeholders as well as urban dwellers informed about urban disaster response plans.

8. *Improve Concept Clarity Among Key Stakeholders, including MSP*

Some of the experts who have known about CwC for some time expressed that there is still needed some clarity to ensure maximum understanding of the roles and responsibilities of each personnel and institutions involved in it. The network, inclusive of all members, is recommended to make time to sit as a complete group to discuss and share these concerns and come up with the best and agreed solutions to work collaboratively to assist the vulnerable people of Bangladesh.

9. *Resource Mobilization*

Donors, government, development partner's engagement is key to maximum utilization of the limited resources and finding mechanism and draw efforts to raise additional support to continue the flow of responding timely, coordinated way during disasters

10. *Awareness Among Development Partners and Donors on Flexibilities*

From resource mobilization to understanding the idea, it is key to provide aid and humanitarian assistance to affected communities as per needs and requirements of the affected people. As often donor driven actions are delivered, the support that the affected communities receive does not reduce their suffering completely, and in some cases, prolongs it. To reduce the level

of stress and ensure dignity of the people, and to make informed decisions for themselves on receiving external aid, donors and development partners' awareness is be needed at the highest level.

11. *Special Attention Requires for Urban Disaster Risks Reduction and Response*

As Bangladesh is one of the most densely populated countries with rising number of people migrating to urban areas rapidly, risks associated with urban disasters are also increasing. A number of respondents mentioned that there is no specific urban-focused disaster response plan or strategy is available. Awareness, knowledge, information relating to urban disasters is also highly limited. To save lives, it is now imperative to work on developing urban disaster risks reduction and response plan, and also make key stakeholders as well as urban dwellers informed about urban disaster response plans.

12. *Improve Trust Building with Communities*

Trust varies community to community and group to group, depending on who are the informers and who are the recipients of the information and what social, cultural, economic and political barriers are involved. To reduce risks of being misinformed during and post-disaster time, it is important that the communities gradually learn to trust all available channels of communication to ensure maximum benefits derived from the services in engaging and sharing information with the communities.

SUNAMGANJ

Sunamganj district is geographically located in the north-east *haor* region of Bangladesh. All the upazillas of this district are surrounded by *haors.* Jamalganj is a flash-flood prone upazilla of Sunamganj. Our study villages Shibpur and Chondipur villages of Beheli union under Jamalganj are the most affected villages by flash flood occurrences. Besides that, there are incidences of floods, *Afal* wave, Nor'wester storms, heavy or excessive rainfall, drought and hail storms, the frequency of which have increased, and the intensity of these disasters, including flash floods, have increased as well.

Case Study 1

Name: Md. Afzal Mia

Age: 55   Date: 26 November, 2015

Father: Md. Nasir Uddin Mia; Age: 80

Village: Shibpur, Union: Beheli, Upazilla: Jamalganj, District: Sunamganj

Md. Afzal Mia are six-members in the family, of which four are sons. He belongs to a farmer's family and farming is his main occupation. He owns 60 percent of the crop land that he cultivates, while another 40 percent of the land he cultivates is through crop sharing. He shared that, "Despite my financial difficulties, I had sent one of my sons to Iran in the search of work. In recent times, I am doing quite well financially. My son has been sending remittance amounting to one lakh in BDT annually. With the financial support of my son in Iran and my own income, I continue to support my family, including my wife and other three sons, and the education of my two younger sons."

He expressed that every year he and his family had to combat either flash floods and/or the other climatic hazards to survive. He continued by saying, "As we live in a *haor* area, we have to combat flash flood and other climatic hazards and disasters every year to survive; we are still surviving, in all our hardships, combating these hazards and disasters. Due to the current problem that comes with a flash-flood, there is always a tendency that the houses of our village people to collapse. We protect the houses in the village by fencing around the houses using bamboos, straws and tree branches, which have enabled us to save most of our assets and belongings, though many of our assets have been lost as well. Cattle and poultry are taken to the hilly areas around the border in our small boats and we bring them back after 15 days." He gave an example that, "In the year 2007, when our house went under water because of inundation from flood waters, we were forced to take shelter on the WAPDA embankment. We made *Mancha* to keep our half ripe paddy and other essential items on top of it. Thus, I had to struggle to save my family." He hopes that now since his house is better built because of his improved financial condition, his house will not get submerged under water even if there is a flood like that of 2007.

He mentioned that he gets to know about the various early warning messages relating to a disaster event that may occur in his village area through radio, including BBC Bangla, and television. Besides that, he also learns new information from the Union Council through meetings which take place, as well as from the Department of Agricultural Extension (DAE) local office and the Bangladesh Water Development Board (BWDB) local office.

In discussing the importance of receiving early warning messages on time, he spoke about a particular event and asserted that, "In 2007, when we received message and information from the Upazilla administration through its Council chairperson and members that there was a chance of a flash-flood and landslide taking place, we took it upon ourselves to try and save the local area embankment using our own spades to dig around the embankment and we were successful in doing that. It was because I received message about the possibility of a flash flood early on, I could in that instant, decide upon hiring some daily wage labor from outside, and including my own labor was able to take out the paddy in my own crop land, which was only half ripe at that time, and put it away safely in my house before it was too late. In that Boro season, almost 80 *maun* (3200 kg) of paddy was saved from being affected by the flash-flood, which has a market price of nearly BDT 48,000/-. Although, I did have to bear the additional labour cost of BDT 14400/-, but that additional cost saved my crop because most of the village people's crop lands' paddy was marred for not taking such preparatory measure at the right time like I was able to."

He concluded by saying that, "Due to the negligence and insincerity of the local government office, we usually do not receive information and early warning message of a possible disaster event on time. If the information and messages of a disaster event are sent through text messages in Bengali from cell phones, it will be better for us. And, if the disaster event related warning messages and information on what needs to be done are disseminated in the local dialect frequently through radio and television during the time of a possible disaster taking place, it will be more useful, credible and reliable for us."

Case Study 2

Name: Shrimoti Nirmolarani Shorker   Date: 26 November, 2015

Age: 40

Spouse: Makhon Shorker; Age: 52

Village: Chondipur, Union: Beheli, Upazilla: Jamalganj, District: Sunamganj.

The family of Nirmolarani Shorker consists of six members. Her three sons and one daughter-in-law live with her and her husband.

She shared that, "My husband and I are involved in crop agriculture. We have our own 30 decimal agricultural crop land and another 20 decimal land in crop sharing. My husband and I consult one another regarding any family related decision that needs to be made. My eldest son works in a shop and my youngest son helps us in our agricultural activities."

In discussing about the importance of early warning messages, she mentioned that last year before a certain flash flood and hail storm occurred, she had heard it from someone that there was dissemination of information and early warning messages about the possibility of such an occurrence two days before the actual event had taken place. She said, "After hearing about it, we arranged for harvesting the crop of our 50 decimal of agricultural lands by our own labor and hiring labor from outside the village area. We shifted the poultry and cattle to a safer place quickly as well. The crops that we saved from the disaster last year helped us in running our family expenses for a six month period." However, she mentioned that there was food scarcity in the family after six months. And both husband and wife had to work in other people's agricultural land to run their family in much hardship.

She concluded that, "If the information and warning messages of any disaster event are sent through text messages using cell phones in Bengali, it will be very useful for us. If these disaster event related

information and warning messages are given 10 to 15 days beforehand, we will be benefited. If we can receive such warning messages and information on flood, flash-flood, Nor'wester and hail storm early on, it will be possible to cut the ripe paddy and shift poultry, cattle and people from the *haor* on time."

BARGUNA

Case Study 1

Name: Reba Rani

Spouse: Shomir Shikder

Village: Charduani, Union: Charduani, Upazilla: Patharghata, District: Barguna.

"I have a four-member family. Before cyclone Sidr hit on November 15, 2007, I heard the news of a possible cyclone on the radio and got the message from a community volunteer of CPP BDRCS, Mr. Harun-Al-Rashid Jomaddar. But I did not give any heed to that information. But when we found water right in front of our house at 10 in the morning, we took shelter at the cyclone shelter of Grameen Bank. Before leaving our home, we left behind our poultry, cattle, furniture and staples like rice and pulse, and our essential documents safely away in a box or trunk, the market price of all of which was well worth BDT 3,00,000 (three lakh taka). When we went to the cyclone shelter there was no place to even stand and we had to pass the night amid those circumstances. The next day, the Union Council chairperson and members and the CPP volunteers announced through megaphone that the weather was normal and there was no more water and that we could all go back to our houses. And so, we went back home. Because everything took place on short notice, we did not receive any particular assistance on an individual level, except that everybody stayed safe in the cyclone shelter. Children, women and the elderly were all safe there. Upon returning home, we found all our poultry and cattle. But the crops, fishes in the pond and trees were heavily damaged and destroyed, the cost of which amounted to BDT 1, 50, 000 (1.5 lakh taka). However, we believe in the messages and information of the above mentioned people and the organization, and, therefore, could save our lives and protect our resources worth almost one lakh 50 thousand taka."

Case Study 2

Name: Md. Alhaj Mujibur Rahman Munshi

Father: Late Ahmed Hawlader

Village: Charduani, Union: Charduani, Upazilla: Patharghata, District: Barguna.

Md. Alhaj Mujibur Rahman Munchhi has a four-member family.

"In November 15, 2007 after receiving the early warning message of cyclone Sidr from the announcement made by megaphone of the Union Council chairperson and members and the CPP BDRCS community volunteers, we went to the Grameen Bank cyclone shelter at 4 pm and took with us our essential belongings, some dry food, drinking water, and our cattle and poultry. Many did not go to the shelter even after getting the message and information of the cyclone and they did not believe the information either. Later when the storm and wind took a dangerous turn, it was too late to move to the shelter. Roads got blocked by fallen trees, many were wounded; cattle, poultry, houses, valuables, furniture and crops all were washed away.

We were in the shelter for two days, when an announcement was made by the CPP volunteers that there was no longer any danger of the cyclone recurring and that we could all go back to our homes. Then we went back home.

During our stay at the cyclone shelter, the Upazilla Nirbahi (Executive) Officer or UNO, Union Council chairperson and members distributed dry food among all who were staying in the shelter. Men and women stayed in separate spaces and no unpleasant incident had occurred. The community police and local Police administration were in the responsible for our security at all times. Besides that, drinking water and oral saline were provided by the medical team.

Had we did not have paid attention to the early warning messages that were disseminated to us and then go to the shelter centre that day on time based on that information, we could have lost much more resources and many more lives."

11. References

Adger, W.N., S. Huq, K. Brown, D. Conway, M. Hulme (2003) 'Adaptation to Climate Change in the Developing World' Progress in Development Studies 3(3): 179-195

Ahammad, R., 2009. Understanding institutional changes for reducing social vulnerability to landslides in Chittagong city, Bangladesh. Ecosystem, Governance and Globalization, Stockholm Resilience Cetre, Stockholm University.

Asian Development Bank: Annual Report 2003. [Online]. Retrieved from: http://www.adb.org/documents/adb-annual-report-2003

Bangladesh Fire Service and Civil Defense: Government of the People's Republic of Bangladesh.[Online]. Available from: http://www.fireservice.gov.bd

Bangladesh: Climate Change and Gender Action Plan. [Online].

Bulletin of World Health Organization, Reduced death rates from cyclones in Bangladesh: What more needs to be done? *World Health Organization.* (2011). [Online].

CDAC Network, Communication is Aid, an infoasaid Animation. (2011). [Online].

General Assembly of the United Nations: General Debate of the70th Session. (2015). [Online].Available from: http://gadebate.un.org/70/secretary-general-united-nations

First National Communication of Bangladesh to the United Nations Framework Convention on Climate Change: Ministry of Environment and Forests Government of the People's Republic of Bangladesh. (2002). [Online].

Haque, U., Hashizume, M., Kolivras, K.N., Overgaard, H.J., Das, B., Yamamoto, T., 2012. Reduced death rates from cyclone in Bangladesh: what more needs to be done? Bull, W.H.O. 90, 150-156

Huq, S. 2001: Climate change and Bangladesh. Science 294, 1617.

Huq, S. and Ayers, J. 2008. Streamlining Adaptation to Climate Change into Development Projects at the National and Local Level. In European Parliament (2008) Financing climate change policies in Developing countries. European Parliament, Brussels.

International Federation of Red Cross and Red Crescent Societies. (2009). [Online]. Available from: http://www.ifrc.org/en/news-and-media/opinions-and-positions/opinion-pieces/2009

Karim, M., and N. Mimura. 2008. "Impacts of Climate Change and Sea-Level Rise on Cyclonic Storm Surge Floods in Bangladesh." Global Environmental Change 18 (3): 490–500.

MoEF, (2013). Bangladesh Climate Change and Gender Action Plan. Ministry of Environment of Forest, Government of the People's Republic of Bangladesh, Dhaka, Bangladesh. xvi+122 p

Patel RB, Burke T (2009) Urbanization – an emerging humanitarian disaster. New Engl J Med 361: 741–

743. doi: 10.1056/nejmp0810878.

Restoring Humanity Global Voices Calling for Action: Synthesis of the Consultation Process for the World Humanitarian Summit. *Executive Summary*. [Online].

Second National Communication of Bangladesh to the United Nations Framework Convention on Climate Change: Ministry of Environment and Forests Government of the People's Republic of Bangladesh. (2012). [Online].

Sharma, Anshu, Srujan, Akhilesh and Shaw, Rajib, (2011) Chapter 1Overview of Urban Development and Associated Risks, In: in Rajib Shaw et. al (Eds.), Climate and Disaster Resilience in Cities, (Community, Environment and Disaster Risk Reduction, Vol.6), Emerald Group Publishing Limited, pp. 1-16

Shuvo, T. A., Howlader, M.H., Kumar, T., 2013.Risk and Vulnerability of Climate Change on Coastal People: A study form Socio-economic and Environmental Perspective. Bangladesh Res. Pub. J. 8(3): 195-202.

Sustainable Development, Climate Finance Take Centre Stage as General Assembly Opens Annual Debate: Meetings Coverage and Press Releases. (2015). [Online]. Available from: http://www.un.org/press/en/2015/ga11692.doc.htm

UN Habitat: For a Better Urban Future. (2007). [Online]. Available from: http://unhabitat.org

UN Women and BCAS. 2014. Baseline Study on the socio-economic conditions of women in three eco-zones of Bangladesh. Published by UN Women, United Nations Entity for Gender Equality and the Empowerment of Women, Dhaka, Bangladesh.

Worldmeters. (2014). [Online]. Retrieved from: http://www.worldometers.info

Annex

i. Field Study Areas

For this research purpose, the BCAS research team conducted a field study to understand and identify the gaps regarding communicating with communities during disaster response directly from the vulnerable communities at the grass-root level. After the discussions with the representatives of Multi Stakeholders Platform (MSP) of CDAC Network and BBC Media Action, four highly vulnerable districts Barguna, Kurigram, Chittagong and Sunamganj were chosen. These locations were chosen because they are increasingly combating the challenges of both climatic and non-climatic disasters.

Barguna district is located in the southern coastal zone of Bangladesh under Barisal division. The district is highly vulnerable to cyclones and many other increasing impacts of climate change such as salinity intrusion, sea-level rise, temperature and seasonal variations, changes in rainfall patterns, coastal erosion, storm surges and so on. Barguna is also identified to be the second most vulnerable location in terms of socio-economic status in the Seventh Five-Year Plan of Bangladesh. Agriculture is central to Barguna's economy; however a large group of population in the area depend on fishing as well. Being located at a highly natural disaster prone zone of Bangladesh, the people of Barguna often face the challenges of tackling various types of disasters and hazards and associated risks, while protecting their lives and livelihoods. Additionally, for the research purpose another highly vulnerable village name **Charduani village** of **Charduani Union** under **Patharghata Upazilla** of **Barguna** was selected to study communication with communities in disaster response with the coastal communities of Bangladesh. Charduani village is about 12 km from the upazilla and located quite close to the Bay of Bengal. The river Boleswar flows by the village and the Sundarbans forest stands on the other side of the river.

Field study observations and discussion with villagers, show that that around 900 households reside in this village, of which 500 of them are Muslims and 400 are followers of Hindu religion. The rate of education is about 60 percent and the village has nearby schools, madrasas, college, mosques and temples. The village has good communication system for commuting. Most of the villagers are involved in farming and providing day-labour services. Unfortunately, the community is often affected by various natural disasters such

as tidal surge, cyclones, salinity intrusion, excessive rainfall etc that brings huge damages to houses and roads, arable lands, crops , plantations and to the live stock of the community.

Kurigram district is situated in the northern flood-prone area of Bangladesh under Rangpur division. A part of the district consists of *char* islands. Most of the communities residing in this location are subjected to adversities of floods, river erosion, droughts, storms and extreme winters and the risks are gradually increasing due to both climatic and non-climatic hazards. Kurigram's economy is dependent on agriculture and some of the most vulnerable households from socio-economic context reside in this district. Kurigram is identified in the Seventh Five-Year Plan as the most vulnerable district from the perspective of socio-economic well-being as poverty level in this district is among the highest (60 percent) compared to the overall situation in the country. The research from this area helps understand

the status of communication with the flood affected poverty stricken communities in Bangladesh.

For the research purpose, **Kharkharia village** of **Ramna union** under Chilmari upazilla in Kurigram district has been selected as it is a highly disaster prone area, having majority of the people living in extreme poverty. The river Brahmaputra flows by the area. Flood, river erosion, cold wave, drought, excessive rainfall, extreme heat wave are some of the primary disasters in this area.

Every year floods happen at least 2 to 3 times in Chilmari. In addition to the floods, other natural disasters , such as fires, sands extraction from rivers causing erosion, dusty and dry environment, plantation of similar types (eucalyptus) trees, pestering of rats, attacks by new species of insects etc are also occur in the area.

Chittagong City under the Chittagong district and division is the urban location and the study team explored both natural and non-climatic hazards affecting urban areas and gathered an understanding of the status of communication with the hazard affected communities. Chittagong City, aside from the weak infrastructure and unplanned housings, is also vulnerable to water-logging, increasing landslides due to deforestation and destruction of natural hilly locations, increasing climatic disasters, primarily, such as cyclones, floods and flash-floods, temperature rise and excessive rainfalls.

Ward 14 of **Chittagong City** has been identified for this research purpose. From the observation, it was noted that most of the people participating in this research had been living in a highly risky and temporary slum community of the Ward with little or no access to some of the basic needs for living. The people in the area were mostly poor, and most had migrated from various locations in search of work, and had limited literacy.

Most Livelihoods were generated from rickshaw-pulling, day-labour work, households work, van-pulling, construction work with a very minimum of income making them highly vulnerable. Due to

limited resources and livelihoods opportunities, most of residents and their families lived at foothills with extreme risk of landslides, particularly during rainy and stormy seasons.

Sunamganj district is located in the northeast of Bangladesh under Sylhet division. This district has unique sets of wetland ecosystems as the location has many *haors*, *baors* and *beels*. The majority of the vulnerable population in this district earn their living through fishing and aquaculture.. The impacts of natural disasters and climate change are evident as many of the unions of this district tackle flashfloods and seasonal floods affecting the lives and livelihoods of the poor and vulnerable people regularly.

Shibpur and **Chandipur villages** are two of the most vulnerable locations of **Beheli union** under **Jamalganj upazilla** in **Sunamganj** and are chosen for this research to study on communication with

communities in flash-flood prone remote location in Bangladesh. Majority of the people residing in these villages and union are ultra poor. Communication system for commuting in these villages and union is very poor as the people can utilize only boats as means of transportation during rainy reason and walk during dry season. From the observations, it is noted that most of the arable lands in this area can be cultivated only once a year and majority of the time, most of the households sources of livelihoods are from limited scope of fishing as the most important lake *Shonir haor* is being leased to influential individuals and thus, the villagers do not have any access to fishing which further impacts their socio-economic status. The state of education attainment is also significantly low, with only 35 percent people having literacy.

Some of the following basic criteria were kept in primary consideration when selecting the locations of the study:

4. Vulnerability
    4.1. Exposure to different type of climatic and non-climatic hazards
    4.2. Sensitivity to different hazards/disaster
5. Poverty situation
6. Social deprivation of the districts (Reference from 7th Five Year Plan, Draft Final version, National Disaster Report 2013)

Figure 1: Four districts: Kurigram (north), Barguna (south), Sunamganj (northeast) and Chittagong (southeast) of Bangladesh are identified to conduct a study on Communication with Communities (CwC) gap analysis in Bangladesh.

```
                                                    ┌──────────────────────────────┐
                                                    │ Literature review (Secondary │
                                                    │ Data)                        │
                  Synthesize a small                └──────────────┬───────────────┘
                  group of 10 MSP                                   │
                  members as advisers                               ▼
┌──────────────┐                                    ┌──────────────────────────────┐
│ MSP          │                                    │ Consultation workshop with   │
│              │                                    │ MSP                          │
│              │                                    └──────────────┬───────────────┘
└──────────────┘       Sharing                                     ▼
        │              the report                  ┌──────────────────────────────┐
        │              with the                    │ Field Work (FGD, KII, Case   │
        │              MSP                         │ Study)                       │
        │                                          └──────────────┬───────────────┘
        │                                                         ▼
        │                                          ┌──────────────────────────────┐
        │                                          │ 1st Draft Report Preparation │
        │                                          └──────────────────────────────┘
        │
        │                                          ┌──────────────────────────────┐
        │                                          │ Final Draft Preparation and  │
        │                                          │ completion                   │
        │                                          └──────────────────────────────┘
```

Feedback and recommendation
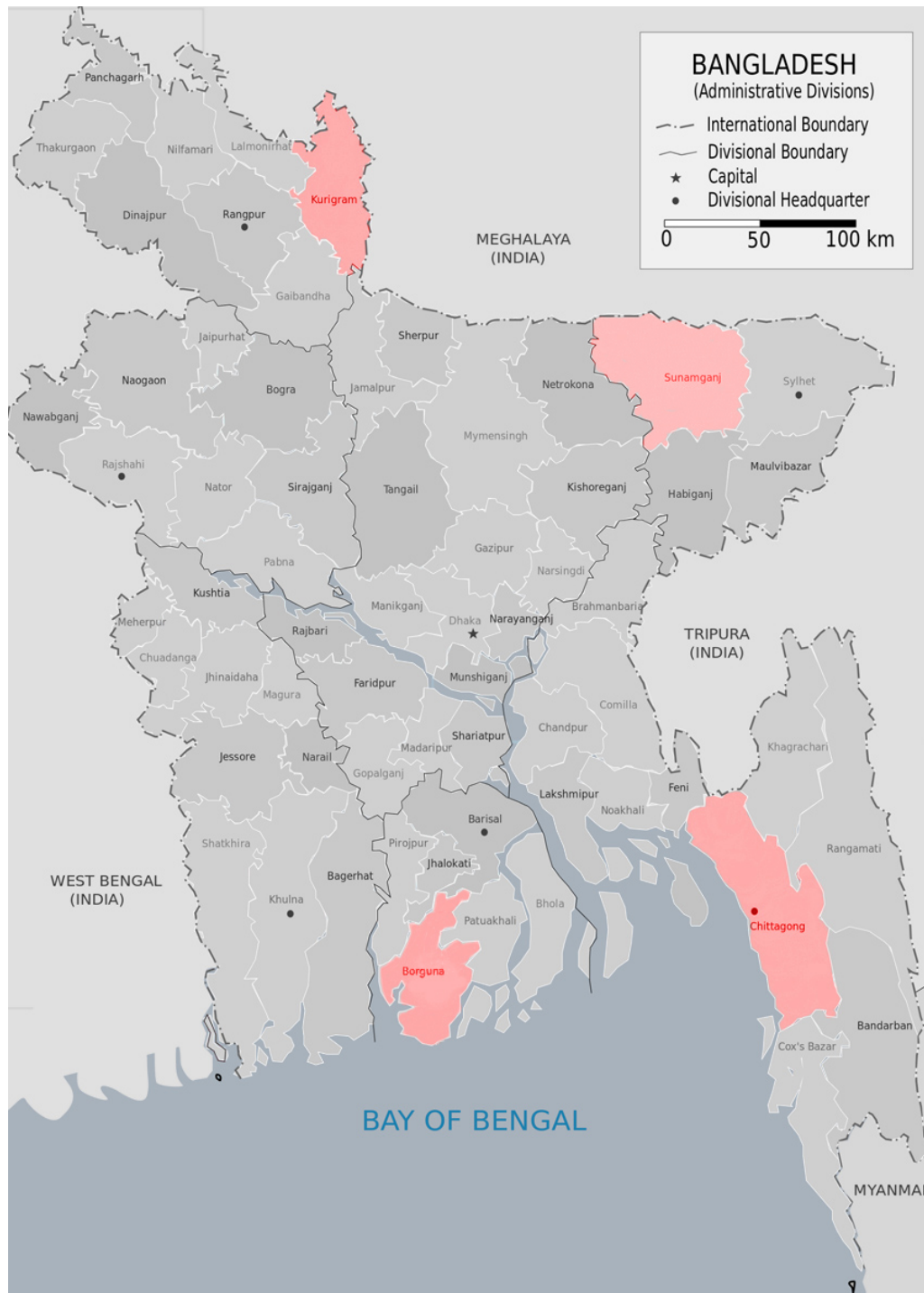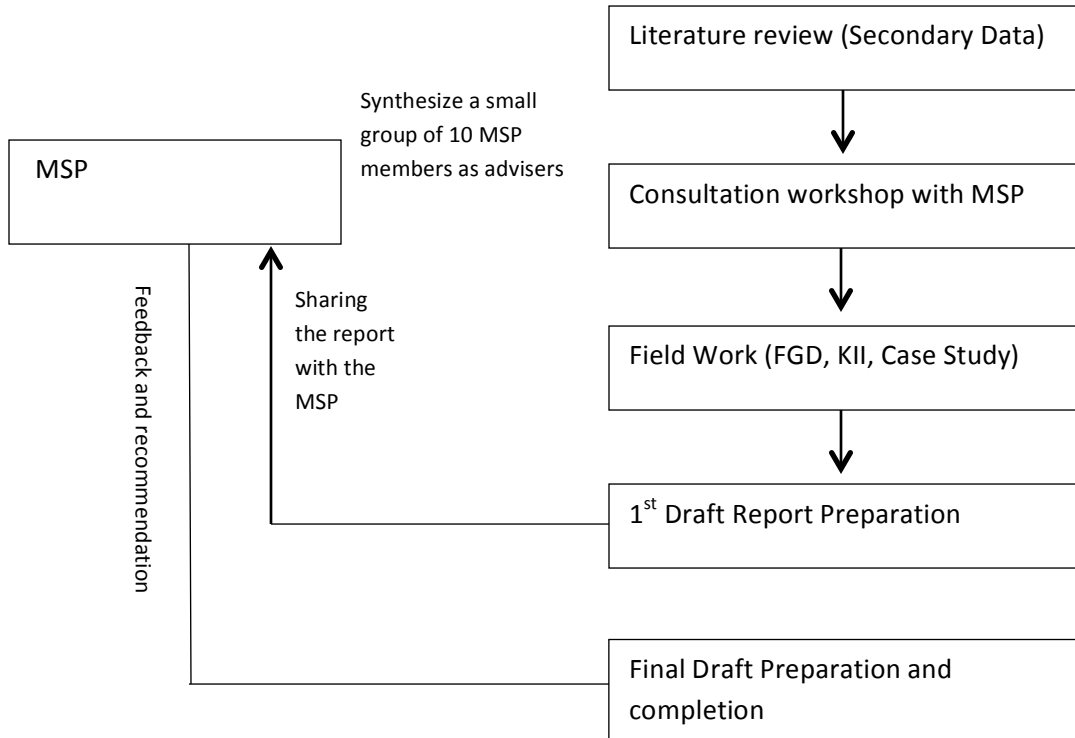
Figure 2: Methodology flow chart

AT NATIONAL LEVEL

Desk Work:

For the desk research, BCAS conducted a Literature and Policies Review relating to 'communicating with communities' issues. Through the secondary literature review of relevant policies, programmes, projects and drivers related to communication to address disasters and hazards in communities living with risks in Bangladesh have been examined to understand gaps and to generate recommendations on scope of interventions. This past of the research also provides an understanding about the relevant issues and current situation of communication with disaster affected communities in Bangladesh. The literature review also includes important examples related to the relevant issue of communication from elsewhere in a global context. Followings are relevant policy/strategy that were reviewed to meet the objectives of the study:

1. Disaster Management Act 2012
2. Standing Orders on Disaster (SoD), 2010
3. National Plan for Disaster Management 2010-2015
4. Bangladesh Climate Change Strategy and Action Plan (BCCSAP), 2009

5. Seventh Five-Year Plan - Disaster Management and Communication relations
6. Delta Plan 2100 (available related documentations)
7. Disaster Report 2013
8. Policies/Actions related to Urban Disaster Risk Reduction
9. Bangladesh's Disaster Management Lessons Learned 2005-2015
10. Sendai Framework for Disaster Risk Reduction 2015-2030
11. Few other relevant documents and plan of actions to influence future policies

The literature and policies review helped set a ground work for the field research and also a baseline understanding to conduct the national and local level consultations. The review also helped establish a theoretical framework and develop tools that had been used to collect data from the local consultations. Some of the following basic questions have guided the policy review process:

1. What are the risks associated with various natural disasters and hazards the local communities are facing in their lives and livelihoods?
2. Do these policies consider "communication with communities" aspects to address disaster issues and response?
3. If they do, how do these policies directly or indirectly mentioning CwC?
4. What are the potential gaps in relation to CwC in policies while responding to disasters in Bangladesh?

Consultation Workshop:

After a review of relevant literature for the study, BCAS conducted a Consultation Workshop with the Multi-Stakeholder Platform (MSP) and other relevant key stakeholders to capture their expert views and opinions, including gaps that they have identified, their feedback and recommendations on designing the study and addressing the gaps, their experience on working in disaster risk reduction and response projects/programmes and how those are handling the communication process with the vulnerable communities, particularly with the women, children, the elderly, the disabled, marginalized, socially excluded groups, and also learn from their experience about some of the best practices that are assisting in better delivery of communication process with the affected communities. The consultation workshop was conducted in Dhaka and attended by 10 experts from various national and international organizations - representing government offices, development partners, voluntary networks, national and international non-government organizations working on disaster management.

Key Informant Interview (KII) at Central Level with Key Stakeholders:

Relevant target persons were:
1. Government offices
2. Non-government organizations (both national and international)
3. Development Partners, including United Nations agencies, programmes

4. Academicians, researchers and DRR experts
5. Media practitioners

A total number of 14 significant expert and resourceful individuals experienced working in disaster response communication from government offices, national and international non-government organizations, development partners, national and international volunteer services, disaster risk reduction expertise, research and academic expertise and media were interviewed for an in-depth understanding of the status of CwC in Bangladesh from disaster response context. The key informant interview at national level covered some of the fundamental aspects to capture an understanding on the gaps in communication with communities in Bangladesh, with a focus on issues concerning the importance of CwC in Bangladesh during humanitarian response; the issues concerning synergy and coordination communication during disaster response; the policies that are playing, or not playing roles in communication with communities; the key challenges of CwC implementation in Bangladesh for effective humanitarian response; issues concerning vulnerable groups such as elderly persons, special needs and physically challenged persons, pregnant women, children, minority communities; the best practices and lessons learned from previous experiences on communication with communities during disaster response; and, a set of recommendations that can be further explored to develop new dimension for better and two-way communication with communities in Bangladesh during disaster response.

FIELD WORK AND TOOLS:

On completion of the consultation workshop with experts, tools were developed for field studies to conduct Focused Group Discussions (FGDs), Key Informant Interviews (KII) and Case Studies at local level, vulnerable communities. The tools were finalized in consultation with the research implementation team of BBC Media Action. The study team left for four selected locations for grassroots group discussions and interviews with the most vulnerable communities to capture the status of CwC in Bangladesh during disaster management and response.

In each study zone, 4 FGDs consisting of 15 participants in each group (with a total number 240 respondents), 6-8 KIIs (with total 28 interviews) and 2 Case Studies (total 8) were conducted.

Focused Group Discussion (FGD):

Target audience or groups for FGDs

1. **Female(socio-economically vulnerable, 15 years and above)**

2. **Male (15 years and above; the most vulnerable sectors such as farming, fishing, daily labour)**

3. **Physically challenged, special needs, and elderly persons, with an attempt to include an equal number of both genders in this FGD.**

4. **Minority groups   (included people from socially excluded groups, religious minorities, indigenous groups; equal number of both genders were included in this FGD)**

In each zone 4 FGDs were conducted and the 4 groups were classified as listed above. Through the FGDs, communication disparities with the vulnerable communities were identified. The FGDs also helped identify if the vulnerable communities were included in the diverse channels of communication; if they were made aware of early warning, disaster risk reduction and response; if vulnerable communities understood the messages that were being delivered; what were their preferred channel or platform for communication in their locations; and which technologies worked best for their communities as the source of DRR information. The FGDs also helped explore the communities' knowledge on right to information, and also if any separate priorities wre given to women, children, physically challenged and elderly population as well as other vulnerable groups during dissemination of information. By consulting with the communities on their experience from previous disasters, effectiveness of communication was explored. Thus, the FGDs helped identify the key challenges in communication that were limiting the most vulnerable communities from receiving comprehensive communication support and helped identify possibilities for effective implementation humanitarian response. Field observations by the field study teams also captured some of the important elements of the research which has been used in this report as well.

Key Informant Interview (KII)

Target interviewees for KII are:

1. **School teacher/Local Media**

2. **Project Implementation Office (PIO)**

3. **Local NGO/Community Based Organizations worker**

4. **Local leader at the union (Chairperson)**

5. **Local community member/ Local Union Disaster Committee member (two males and two females altogether in four unions)**

6. **Local Agriculture Extension Officer, Livestock Officer and Fisheries Officer**

A key informant interview with individuals listed above was conducted in each zone. The KIIs with the leaders and respected representatives of the communities helped capture a perspective from leadership standpoint of the communities. It also helped draw an understanding of any difference or gap from the knowledge and understanding between local leadership and the most vulnerable individuals in the communities. Some of the KIIs at local level also helped provide a more detailed and elaborated information about the previous and on-going activities around disaster response and communication implemented by different institutions, local government and humanitarian partners in their locality and the level of effectiveness of the actions delivered.

Case Studies:

Two Case studies from each study area were conducted utilizing with few open ended questions to have stories captured associating communication during disaster response, benefits, best practices and

lessons learned. Individuals or organizations for case studies were selected after knowledge and information were gathered from the field observations and other related consultations in the field. The case studies illustrated the best practices in the field and lessons learned, as well as identified what more could be done to ensure further engagement with the most vulnerable people in pre, during and post disaster periods. The case studies also highlighted that how communication with communities could help address community's vulnerabilities and help overcome them.

Feedback:

After completion of data and information collection from the field, the first draft report and database are being prepared by the research team from BCAS and submitted to the research implementation team of BBC Media Action. A presentation will be also delivered for the MSP to present the findings from the study. After the approval on the first draft report, it will be circulated amongst the Multi Stakeholder Platform (MSP) for their feedback and recommendations. A group of 10-12 members from the MSP/key stakeholders will be requested to join for a small group discussion for an in-depth analysis of the findings from field and to endorse the finalization of the final report.

iii. Limitation of the Study

There were time and resource constraints which only allowed the Study to be conducted in fewer locations of Bangladesh. Broader area coverage could have made it possible to give a more comprehensive picture of what the analysis is meant to present in terms of identifying the various gaps in communication with communities. The scope of analysis from the research conducted was also limited by a short duration in which the Study had to be completed. The Study was conducted at both community and urban level. This field research was subject to the time required in field organization to conduct the research exercises and depended on the availability of the community people and local level government officials and non-government representatives. Overall, the gathering and consolidation of the information acquired was an exhaustive task, and, therefore, the time needed for analysis was restricted. The field research also had to be strictly designed, when we could have conducted more research exercises, because it was necessary to keep the time and resource constraints maintained.

ivParticipant list

Area: Mandal Para

Union: Ramna

Upazila: Chilmari

District: Kurigram

Conducted on 25 November, 2015

List of participants

Sl no.	Name	Age	Guardian's name (if applicable)	Address
1	Lata	17	Md. Lutfur Rahman	Mandal Para 01939174234
2	Ambia	16	Md. A. Aziz	Mandal Para 01716778320
3	Brishty	17	Md. Badshah Mia	017782408240
4	Nurnahar	40	Nur Mohammod	Mandal Para 01934923354
5	Ayesha	27	Md. Mukul	Mandal Para 01914342253
6	Mojida	46	-	Mandal Para
7	Fulbanu	35	A. Rahim	Mandal Para 01934135288
8	Morsheda	27	Mokbul Hosain	Mandal Para 01910262494
9	Julekha Begum	60	-	Mandal Para
10	Afrin	16	Ful Mia	Mandal Para 01954726506
11	Nurbanu	28	Asadul	Mandal Para 01923495145
12	Fatema	47	Ful Mia	Ful Mia
13	Monowara	48	-	Mandal Para 01986144536
14	Ramisa	50	Delowar	Mandal Para
15	Ayesha Begum	51	Lutfor Rahman	Mandal Para 01936096424

Area: Khorkharia

Union: Ramna

Upazila:Chilmari

District: Kurigram

Conducted on 25 November, 2015

List of participants

Sl no.	Name	Age	Guardian's name (if applicable)	Address
1	Md. Abdur Rahman	50	Azizul Haque Bepari	Jorgach, Mandal Para 01936091632
2	Lutfur Rahman	60	Jashim Uddin	Khorkhori, Mandal Para 01980207611
3	Andharu	40	Tasharuddin	Bhottopara
4	Shakawat Hossain	60	Nasir Uddin	Khorkhori, Mandal Para 01920627902
5	Joynal Hossain	30	Abdur Sattar	Khorkhori, Mandal Para 019143710735
6	Md. Ali	80	Late Fajar Mamud	Mandal Para 01951009085
7	Anowara	55	Moslem Uddin	Mandal Para 01963920646
8	Hafijarnessa	70	Late Karimullah	Mandal Para
9	Basirun	75	Late Noyamondol	Mandal Para 01963920646
10	Sokhina	75	Late Faraj Mondol	Mandal Para 01965924467
11	Golamjan	60	Md. Janu	Mandal Para 01951009085
12	Kulsun Bewa	70	Hafizuddin	Mandal Para
13	Jahanara	50	Eshadul	Bhottopara
14	Mossammat Khaimon Bibi	55	Khoimuddin	Mandal Para
15	Md. Habibur	60	Tobibur Rahman	Mandal Para

Area: Mondon Para

Union: Ramna

Upazila:Chilmari

District: Kurigram

Conducted on 26 November, 2015

List of participants

Sl no.	Name	Age	Guardian's name (if applicable)	Address
1	Md. Moklesur Rahman	50	Late Abul Kasem	Mandal Para 01937334765
2	Tyeb Ali	70	Late Basetullah	Mandal Para 01949029829
3	Asgar Mondol	60	Late Ansar Mondol	Mondol Para 01989524283
4	Abu Bakar	65	Abul Kashem	Mandal Para
5	Mukul Mondol	65	Nisabuddin	Mondol Para 01954718395
6	Khoimuddin	70	Late Tesar Mamud	Mandal Para
7	Golap Udding	70	Amir Uddin	Mandal Para 01951009166
8	Md. Malek	35	Lalmia Mondol	Mandal Para 01965640728
9	Mukul Mia	38	Md. Ali	Mandal Para 01914342253
10	Khoibar Mondol	60	Hesab Uddin	Mandal Para 01980987153
11	Anisur Rahman	50	Khamir Uddin	Mandal Para 01937334765
12	Suja Mia	60	Hossain Ali	01991395725
13	Abdul Hye	45	Josijol Mondol	Mandal Para 01955745447
14	Pavel Mia	21	Anisur Rahman	Mandal Para 01937334765
15	Md. Shahidul Islam	48	Late Sirajul	01980790980

Area: Basonti

Union: Ramna

Upazila:Chilmari

District: Kurigram

Conducted on 26 November, 2015

List of participants

Sl no.	Name	Age	Guardian's name (if applicable)	Address
1	Shoshi Bala	48	-	Bashonti
2	Gita	45	-	Bashonti
3	Jatri Bala	42	Sudhil Das	Bashonti
4	Kousholi Rani	40	Songkor Chandra Das	Bashonti
5	Joshna Rani	42	Bimol Pal	Bashonti
6	Sorisha Bala	30	Putul Das	Bashonti
7	Shantona Das	26	Bhojon Chandra Das	Bashonti
8	Madhob Das	32	-	Bashonti
9	Milon Das	23	-	Bashonti 01745476958 (on req)
10	Dinu Das	30	-	Bashonti
11	Fulel Das	55	-	Bashonti 01745476958
12	Lal Charan Das	75	-	Bashonti
13	Dhiren Chandra Das	45	-	Bashonti
14	Ramesh Chandra Das	55	-	Bashonti
15	Dulal Chandra	45	-	Bashonti

Area: Ramna Khamar

Union: Ramna

Upazila: Chilmari

District: Kurigram

Conducted on 26 November, 2015

List of participants

Sl no.	Name	Age	Guardian's name (if applicable)	Address
1	Md. Atiqur Rahman	45	Md. Anisur Rahman	Ramna Khamar
2	Nurjahan	55	Md. Dolil Uddin	Ramna Khamar

Area: Khorkhoria

Union: Ramna

Upazila:Chilmari

District: Kurigram

List of participants

Sl no.	Name	Designation	Organization	Address/phone
1	Md. Nur Mostafa	Head Master	Khorkhoria 2 no. Govt. primary school	01724089255
2	Md. Mojibur Rahman	Central Monitoring officer	MJSJS	01721517948
3	Md. Bodrujjaman Rana	UFO	DOF	01717013886
4	Md. Sirajuddowla	PIO	DDM	01971004466
5	Mossammat Khoteja Begum	UP & UDMC member	UP & UDMC member	01945661233
6	Md. Thamjad	Business		Khorkhoria 01972744091

Area: Chittagong City Corporation

14 no. Ward, Motijhorna

List of participants (KII)

Sl no.	Name	Designation	Organization	Address/phone
1	Md. Mahbubur Rahman	Chairman	-	Chittagong City Corporation 14 no. Ward, Motijhorna
2	Md. Abul Kalam Azad	Teacher	UCEP Motijhorna School	Motijhorna
3	Md. Rafiqul Alam	Slum Inspector	CCC	01818126184
4	Mahbub-e-Khoda	FO	DSK	01818596282
5	Md. Abdur Rajjak	Senior station officer	Fire Service	Agrabad fire station
6	Monowara Begum	Councillor		01919630927

Area: Motijhorna, Chittagong City Corporation

Chittagong

Conducted on 23 November, 2015

List of participants

Sl no.	Name	Age	Guardian's name (if applicable)	Address
1	Kamrunnahar Rina	38	Abul Hossain	Thana: Kulshi Daspata
2	Babul Hossain	58		0186069926

Area: Chittagong City Corporation, 14 no ward Motijhorna, Chittagong

Conducted on 26 November, 2015

List of participants

Sl no.	Name	Age	Guardian's name (if applicable)	Address/phone
1	Md. Sobir mia	62	Late Geda Ullah Mia	Bulu Commandar Goli 01795482740
2	Md. Dulal	35	Late Baula Mia	Bulu Commandar Goli 01843780194
3	Md. Helal	33	Md. Hossain	Bulu Commandar Goli

				01843780194
4	Md. Momtaz Mia	57	Late Monsur Akon	Bulu Commandar Goli 01826361274
5	M. Tofazzal Mia	45	Late Osman Goni	Bulu Commandar Goli 01864972866
6	Md. Ali Akbor	55	Late Asirullah	Bulu Commandar Goli 0175848507
7	Md. Johir Uddin	48	Late A. Gofur	Bulu Commandar Goli 01789272638
8	Md. Mohiuddin	42	Late A. Khaleq	Bulu Commandar Goli 01984266163
9	Md.Abu Sayed Roni	20	Abul Hossain	Bulu Commandar Goli 01858444994
10	Md. Dulal Mia	50	Late Zaher Mala	Bulu Commandar Goli 01843780194
11	Md. Tota Mia	52	Late Sidullah	Bulu Commandar Goli 01834773598
12	Md. Kamal	27	Md. Sofiul Alam	Bulu Commandar Goli 01843780194
13	Md. Masud Rana	38	Late Md. A. Kader	Bulu Commandar Goli 01850625630

Chittaginf City Corporation, 14 no. ward, Chittagong

Conducted on 26 November, 2015

List of participants

Sl no.	Name	Age	Guardian's name (if applicable)	Address/phone
1	Md. M. Hosain	83	Late Amju Mia	Commissioner house 01779357030
2	Md. A. Rahman	85	Late A. Latif	14 no. Ward, 6 no. Goli 01855855430
3	Md. Haresh Mia	75	Late Nurl Mia	14 no. Ward, 6 no. Goli 01779357030
4	Md. Ledu Mia	80	Late Mamud	14 no. Ward, 6 no. Goli 01829978158
5	Abul Hashem	80		Chittagong City Corporation 14 no. ward, 6 no. Goli 01836776805
6	Md. Amir Ahmed	75	Nur Ali	Chittagong City Corporation 14 no. ward, 6 no. Goli

7	Mossammot Hajera	58		Chittagong City Corporation 14 no. ward, 6 no. Goli 01830985795
8	Mossammot Khurshida	65	Late Romjan	01830984599
9	Anwara	70		01830106178
10	Sumi	22	Bijoy Chandra	Chittagong City Corporation 14 no. ward, 6 no. Goli 01849959804
11	Baby	62	Md. Mia	01814463198
12	Morsheda Khatun	70	Late Mir Ahmed	Chittagong City Corporation 14 no. ward, 6 no. Goli 01855539524
13	Amena Begum	65	Sultan Ahmen	Chittagong City Corporation 14 no. ward, 6 no. Goli 01732111444
14	Abul Khayer	60	Late A. Sobhan	6 no. Goli, Motijhorna 01863981100
15	Bulbul Das	58	Late Subol Das	Motijhorna, 10 no. Goli 01868053515

Area: Chittagong City Corporation, 14 no ward Motijhorna, Chittagong

Conducted on 26 November, 2015

List of participants

Sl no.	Name	Age	Guardian's name (if applicable)	Address/phone
1	Ranu	30	Md. Alamgir	Batali Hill
2	Asma	45	Abul Kalam	Batali Hill
3	Moktar Begum	26	Md. Anwar Hosain	Batali Hill
4	Minu Begum	30	Md. Saiful	Batali Hill
5	Romu Begum	24	Johidul Hoque	Batali Hill
6	Nesa Begum	60	Md. Lonu	Batali Hill
7	Rekha Begum	40	Md. Selim	Batali Hill
8	Salma Khatun	70	Late Monu Mia	Batali Hill
9	Moyna Begum	40	Md. Shopon	Batali Hill
10	Monowara Begum	60	Md. Monsur Alam	Batali Hill
11	Jesmin	37	Md. Alamgir	Batali Hill
12	Anjuman	16	Md. Rajjak	
13	Soma Akter	25	Md. Mojib	Batali Hill

Area: Chittagong City Corporation, 14 no ward Motijhorna, Chittagong

Conducted on 26 November, 2015

List of participants

Sl no.	Name	Age	Guardian's name (if applicable)	Address/phone
1	Priya Chakraborty	18		01855855298
2	Daisy Sen	25		01838514851
3	Shelly Das	35		01671803638
4	Panna Biswas	35		01816306514
5	Joy Kumar Das	21	-	01704043310
6	Prosanjit Chowdhury	15	-	01815660793
7	Krishna Chowdhury	23	-	01840746324
8	Swapan Deb	40	-	01820096919
9	Dolon Chowdhury	40	-	01798076826
10	Prodeep Das	37	-	01814187743
11	Ratree Biswas	-	-	01878507000
12	Promi Biswas	-	-	01828846579
13	Susmita Chowdhury	40	-	01831032810
14	Rupali Das	40	-	01825333450
15	Madhury Chowdhury	42	-	01816306514

Area: Chandipur

Union: Beheli

Upazila: Jamalganj

District: Sunamganj

Conducted on 25 November, 2015

List of participants

Sl no.	Name	Age	Guardian's name (if applicable)	Address/phone
1	Babulal Sarker	55	Late Dhanonjoy Sarker	Chandipur 01756072977
2	Anukul Das	40	Late Bikul Das	Chandipur
3	Subol Chandra Das	50	Late S. Das	Chandipur
4	Montu Sarker	45	Rosonjoy Sarker	01792537196
5	Anil Das	40	Late Kartik Chandra Das	Chandipur
6	Bajendra Sarker	70	Late Ramjay Das	Chandipur

7	Gokul Das	35	Late Bikul Chandra Das	Chandipur
8	Nirmala Sarker	40	Makhon Sarker	Chandipur
9	Sukta Sarker	22	Monoranjan Sarker	Chandipur 0175602977
10	Ela Rani Sarker	26	Foresh Sarker	
11	Suprity Sarker	40	Orun Sarker	Chandipur
12	Sushoma Rani Das	35	Kobironjon	Chandipur
13	Joba Rani Das	30	Shibendra	Chandipur
14	Kolpona Rani Das	40	Jonenda Das	Chandipur
15	Mossammat Hanifa	42	Gobed Ali	Chandipur

Area: Chandipur/Shibpur

Union: Beheli

Upazila: Jamalganj

District: Sunamganj

Conducted on 25 November, 2015

List of participants

Sl no.	Name	Age	Guardian's name (if applicable)	Address/phone
1	A Salam	32	A Hashem	Shibpur 01760825530
2	Dhon Mia	30	Late Kashem Ali	Shibpur
3	A Mannan	30	A Hannan	Shibpur
4	Md. Abul	40	Kashem Ali	Shibpur
5	Abul Motaleb	35	Late Ali Hossain	Shibpur
6	Rubel Rana	15	Alaluddin	Shibpur
7	Abdur Rob	40	Late Hobi Ullah	Shibpur 01749711719
8	Md. Alal Uddin	45	Nasir Uddin	Shibpur 01741953623
9	Bitul Das	30	Bokul Das	Shibpur
10	Konok Das	32	Koirobi Das	Chandipu
11	Poresh	32	G Chandra Das	Shibpur 01772775922
12	Sobuj Mia	33	Late Somur Uddin	Shibpur 01782714166
13	Kobiranjan Das	42	Gobinda Chandra Das	Shibpur 01773700514
14	Md. Ainuddin	28	Abdul Rajjak Master	Shibpur 01783580636

15	Abdur Nur	29	Late Hobiullah	Shibpur 01783580636

Area: Chandipur/Shibpur

Union: Beheli

Upazila: Jamalganj

District: Sunamganj

Conducted on 25 November, 2015

List of participants (FGD)

Sl no.	Name	Age	Guardian's name (if applicable)	Address/phone
1	Md. A. Mutaleb	60		
2	Md. A. Hashem	55		
3	Md. Mofiz Ali	65		
4	Sorufa Begum	61		
5	Khokon Mala Das	55		
6	Sukur Banu	58		
7	Raj Banu	65		
8	Md. Mowlana Joynal Abedin	51		Shibpur 01752931842
9	Safia	55		
10	Protima	51		
11	Jorina	53		
12	Sufia	50		
13	Lal Banu	55		
14	Sondha	54		
15	Protima Das	50		
16	Nurul Islam	55		Shibpur
17	Abdul Mojid	72		Shibpur
18	Afzal Mia	55		01770051637
19	Abdur Rahman	60		

Area: Chandipur/Shibpur

Union: Beheli

Upazila: Jamalganj

District: Sunamganj

Conducted on 25 November, 2015

List of participants (FGD)

Sl no.	Name	Age	Guardian's name (if applicable)	Address/phone
1	Otul Begum	44	Moksud Ali	
2	Shilpi	38	Habibur	
3	Hajera	30	A Goni	01709008013
4	Hutna	36	Fulu Mia	
5	Rina Akter	32	Mohrom Ali	01795619060
6	Suborna Rani Das	17	Kobita Ronjon Das	01783954285
7	Nasima Akter	17	A Hashem	017667030683
8	Majeda Khatun	17	A Sobhan	01765015788
9	Jahanara	35	Morom Ali	
10	Nabiya	30	Khokon Mia	01724294404
11	Asma	30	A Rashid	
12	Anowara		A Hashem	01781170330
13	Sajeda Khatun	19	A Sobhan	01706518147
14	Ajeda Khatun	22	A Sobhan	01765125788
15	Umme Hani Anna	27	Khokon Mia	01759855033

Area: Chandipur/Shibpur

Union: Beheli

Upazila: Jamalganj

District: Sunamganj

List of participants (Case studies)

Sl no.	Name	Age	Guardian's name (if applicable)	Address/phone
1	Md. Afzal Mia	55		Shibpur, Jamalganj
2	Srimoti Nirmola Rani Sarker	45	Makhon Sarker	Chandipur, Jamalganj

Area: Chandipur/Shibpur

Union: Beheli

Upazila: Jamalganj

District: Sunamganj

List of participants (KII)

Sl no.	Name	Designation	Organization	Address/phone
1	Md. Abdur Rahman			Shibpur. Beheli, Jamalganj
2	Md. Kamrul Hasan	Upazila Thana Officer	Thana Office	Jamalganj 01918733422
3	Dr. Safayer Ahmed Siddique	Upazila Krishi Officer	Upazila Krishi Office	Jamalganj 01819837842
4	Md. Sirajul Hoque	Chairman	Beheli Upazila	01711012632
5	Selim Talukder	FF-FP	CNRS	01728648194
6	Md. Sahadat Hossain Bhuiyan	LIPIO	DDM	01675354042
7	Roti Ranjan Purakayastha	Head Master	Beheli High School	01710705957

Union: Charduwani

Upazila: Patharghata

District: Barguna

Conducted on 25 November, 2016

List of participants (FGD)

Sl no.	Name	Age	Guardian's name (if applicable)	Address/phone
1	Sunil Kumar Halder	45	Late Surendranath Halder	Charduwani 01713959839
2	Monmoth Somaddar	30	Dilip Somaddar	01721690639
3	Mahbubur Rahman	40	Late Ahmed Hawlader	01747049629
4	Abdul Latif	45	Late Kashem Alu Munshi	01719856293
5	Dipankar Hawlader	45	Late Dinesh Hawlader	Charduwani 01774889592
6	Orun Mistry	38	Late Srikanta Mistry	Charduwani 01729809214
7	Shuvongkor	40	Late Onukul	Charduwani 01731046134
8	Bikal	40	Dinesh	Charduwani

9	Dilip Somaddar	48	Late Debendra Nath	Charduwani 0192268793
10	Indrajit Halder	50	Late Ishan Halder	Charduwani 01712417612
11	Selim Mridha	30	Md. Jalal Mridha	Charduwani 01731620841
12	Milon Roy	20	Gopal Roy	Charduwani 01729322029
13	Ratan Hawlader	48	Norendranth	Charduwani 01730929266
14	Md. Emadul Talukder	40	Md. Fazlul Hoque Talukder	Charduwani 01734617248
15	Sunil Mistry	28	Niranjan mistry	Charduwani 01742403737
16	Md. Hares Mia	55	Late A Hamid	01720449584
17	Liton Somadder	28	Biren Somadder	01757826620
18	Tapan	35	Sukhoranjan	01753234199
19	Hiren Gharami	45	Late Kartik Gharami	01719835016
20	Satindra Hawlader	55	Shyamakanta	01781832195

Union: Charduwani

Upazila: Patharghata

District: Barguna

Conducted on 25 November, 2016

List of participants (FGD)

Sl no.	Name	Age	Guardian's name (if applicable)	Address/phone
1	Beauty Rani Biswas	32	Nilanjan Biswas	Charduwani
2	Putul Rani	30	Bipul Chandra Mistry	Charduwani
3	Shova Rani	31	Sushil Mistry	Charduwani
4	Shikha Rani	37	Sukhranjan Biswas	Charduwani
5	Nomita Mistry	30	Sonjib Biswas	Charduwani
6	Dipali Roy Rani	35	Late Bidhan Roy	Charduwani
7	Putul Rani	35	Porimon Mistry	Charduwani
8	Atul Prashad	50	Late Anil Chandra Bepari	Charduwani
9	Nironjan Mistry	38	Late Nirod Chanra Bepari	Charduwani
10	Songkor Chandra Mistry	40	Late Ruhi Das	Charduwani
11	Sonjib Biswas	40	Late Shakha Nath	Charduwani
12	Suvangkar Biswas	42	Late Dhirendra Nath	Charduwani
13	Krishna Kanti Bepari	42	Late Nikunja	Charduwani

| 14 | Dhiren Gayen | 52 | Lata Bordakanta | Charduwani |
| 15 | Monmoth Bepari | 50 | Late Nikunja Bepari | Charduwani |

Union: Charduwani

Upazila: Patharghata

District: Barguna

Conducted on 25 November, 2016

List of participants (KII)

Sl no.	Name	Designation	Organization	Address/phone
1	Bimal Krishna Hawlader	President	UDMC	Hoglapara, Charduwani 01757963852
2	Arafatsagir	CCP member	CCP	Patharghata 01721690398
3	Mehedi Hasan	Krishi Somprosharon Officer	Krishi Department	Pathorghata 01739575115
4	Ranjit Chandra Adhikari	Head Master		01720556411
5	Md. Yusuf Mollah	Community leader		01727082556

Union: Charduwani

Upazila: Patharghata

District: Barguna

Conducted on 25 November, 2016

List of participants (KII)

Sl no.	Name	Designation	Organization	Address/phone
1	Dr. Md. Habibur Rahman	Upazila Livestock Officer	Upazila Livestock Office	Patharghata, Barguna 01718623474
2	H. M. Mahbub Hossain	PIO	Upazila Disaster management	Pathorghata 01717477801
3	Ranjit Chandra Adhikari	Head Master		Pathorghata 01720556411

Union: Charduwani

Upazila: Patharghata

District: Barguna

Conducted on 25 November, 2016

List of participants (FGD)

Sl no.	Name	Age	Guardian's name (if applicable)	Address/phone
1	Topoti Rani	30	Narayan Sikder	Middle Charduwani Gomostapara
2	Opu Rani	25	Sonjoy Somadder	Middle Charduwani Gomostapara
3	Reba Rani	25	Somir Sikder	Middle Charduwani Gomostapara
4	Baby Rani	32	Nirmala Mistry	Middle Charduwani Gomostapara
5	Putul Rani			Middle Charduwani Gomostapara
6	Shanti Rani			Middle Charduwani Gomostapara
7	Shikha Rani			Middle Charduwani Gomostapara
8	Shilpi Rani			Middle Charduwani Gomostapara
9	Anjana Rani			Gomostapara
10	Minoti Rani			Middle Charduwani Gomostapara
11	Sheuli Rani			Middle Charduwani Gomostapara
12	Nazma Begum			Middle Charduwani Gomostapara
13	Purnima			Middle Charduwani Gomostapara
14	Momtaz Begum			Middle Charduwani Gomostapara
15	Dulia			Middle Charduwani

				Gomostapara

Union: Charduwani

Upazila: Patharghata

District: Barguna

Conducted on 25 November, 2016

List of participants (FGD)

Sl no.	Name	Age	Guardian's name (if applicable)	Address/phone
1	Shipra Rani	28	Noni Sikder	Middle Charduwani Gomostapara 01706231805
2	Mossammat Hashi Begum	30	Babul Akon	01846604696
3	Nupur Ranu	32	Bipul Chandra	01786677090
4	Nargis	25	Firoj Munshi	0174271783
5	Pushpo Rani	42	Amol Roy	Middle Charduwani Gomostapara 01706231805
6	Sima Rani	28	Khokon Hawlader	Middle Charduwani Gomostapara 01745154979
7	Basudeb Gomosta	36	Bokul Chandra Gomosta	Middle Charduwani Gomostapara 01756484785
8	Nironjon Mistry	70	Late Babu Ram Mistry	Middle Charduwani Gomostapara 01724541070
9	Jagdish Chandra	48	Late Raj Bihari	Middle Charduwani Gomostapara
10	Oshim Sikder	17	Anil Chandra	Middle Charduwani Gomostapara 01748130511

11	Horshit Sikder	55	Late Raj Bihari	Middle Charduwani Gomostapara
12	Md. Jamal Hosain	42	Late A Rashid	Middle Charduwani Gomostapara 01736594359
13	Md. Salam Munshi	36	Late A Rob Munshi	Middle Charduwani Gomostapara 01745320917
14	Sos Majhi	45	Late Suyen Majhi	Middle Charduwani Gomostapara
15	Harkanta Sikder	40	Boikantha Sikder	Middle Charduwani Gomostapara 01856242382