

# Partnership, Coordination, and Accountability in Urban Disaster Management: A Review of Policies in Bangladesh

## Summary Report

Afroza Haque, Dr. A S M Maksud Kamal and S. M. Kamrul Hassan



## About the authors

Afroza Haque\*, Habitat for Humanity Bangladesh; Dr. A S M Maksud Kamal, University of Dhaka; S. M. Kamrul Hassan, University of Dhaka

\*Contact: reepa.142@gmail.com

## Urban Crises Learning Fund

This paper is part of a series of research pieces produced under the Urban Crises Learning Fund managed by the Institute for Environment and Development. Funded by the Department for International Development (DFID), the fund aims to build an in-depth understanding of how the humanitarian sector can most effectively operate in urban contexts. This publication was funded with the generous contributions of UK aid from the UK government (DFID). This is an independent report and does not necessarily reflect the views of IIED or DFID. Any errors are on the part of the authors.

## IIED's Human Settlements Group

The Human Settlements Group at the International Institute for Environment and Development (IIED) works to reduce poverty and improve health and housing conditions in the urban centres of Africa, Asia and Latin America. It seeks to combine this with promoting good governance and more ecologically sustainable patterns of urban development and rural-urban linkages.

## Citation

Haque, A, Maksud Kamal, Dr. ASM and Kamrul Hassan, SM (2017) *Partnership, Coordination, and Accountability in Urban Disaster Management: A Review of Policies in Bangladesh*. Summary Report. Urban Crises Learning Partnership (UCLP).



The Urban Crises Learning Partnership (UCLP) was a two-year (2015–17) learning initiative aimed at improving humanitarian preparedness and response in urban areas. It was a partnership between Habitat for Humanity GB, Oxfam GB, the Overseas Development Institute (ODI), and University College London (UCL). The project carried out primary research in Haiti and Bangladesh through the National Offices of Habitat for Humanity in both countries, and Oxfam in Bangladesh.

The UCLP had two primary objectives: to improve the way stakeholders in urban crises engage with each other to form new partnerships and make better decisions; and to improve disaster preparedness and response in urban areas by developing, testing, and disseminating new approaches to the formation of these relationships and systems.

The project addressed these objectives by exploring four related themes: the role of actors who are not part of the formal national or international humanitarian system; accountability to affected populations (AAP); urban systems; and coordinating urban disaster preparedness.

Some countries prone to recurrent crises, such as Bangladesh, have well-developed disaster management systems and plans, but these have evolved in response to crises in rural or camp-based settings. Like many international humanitarian organisations, national actors are often ill-prepared for urban crises. This paper by Dr. A. S. M. Maksud Kamal, S. M. Kamrul Hassan, and Afroza Haque assesses the strengths and weaknesses of public policies, strategies, and management plans for dealing with urban disaster preparedness and response in Bangladesh. It analyses the key instruments and mechanisms, with a particular focus on partnerships, urban systems, and AAP. It is hoped that the findings of this study may contribute towards enhancing the capacity of the government and humanitarian organisations. In addition to identifying strengths and weaknesses, a number of recommendations are made to address existing gaps. It is also expected that – with effective dissemination and if taken into account by relevant authorities – the research findings will lead to a significant improvement in the country's policy regime and an overall paradigm shift in urban disaster governance.

Alan Brouder, UCLP Coordinator  
Habitat for Humanity GB  
November 2017

# Contents

<b>Abbreviations and Acronyms</b>	<b>3</b>
<b>Summary</b>	<b>4</b>
<b>Introduction</b>	<b>6</b>
Background	6
Research Objectives	7
<b>Methodology</b>	<b>8</b>
Literature Review	8
Developing the Analytical Framework	8
Key Informant Interviews	9
Policy Analysis	9
Roundtable Discussion	9
Key Informant Interviews	9
Data Analysis	9
<b>Analytical Framework</b>	<b>10</b>
Problem Identification	10
Policy Analysis	10
Strategy and Policy Development	11
<b>Policy Analysis</b>	<b>14</b>
Standing Orders on Disaster	14
The Disaster Management Act	19
Disaster Management Policy	22
National Plan for Disaster Management 2016–2020	25
Emergency Response Plan	27
<b>Findings from Field</b>	<b>29</b>
Accountability Issues	29
Participation and Coordination	30
Recommendations	31
<b>Conclusion</b>	<b>32</b>
<b>References</b>	<b>34</b>

# Abbreviations and Acronyms

CBOs	Community-based organisations
CCDMC	City Corporation Disaster Management Committee
CDC	US Centers for Disease Control and Prevention
CPP	Cyclone Preparedness Programme
CRP	Contingency Response Plan
DDM	Department of Disaster Management
DER	Disaster and Emergency Response
DMA	Disaster Management Act
DMCs	Disaster Management Committees
DMP	Disaster Management Policy
DRR	Disaster Risk Reduction
EPAC	Earthquake Preparedness and Awareness Committee
ERP	Emergency Response Plan
FSCD	Fire Service and Civil Defense
GO	Governmental Organisation
GoB	Government of Bangladesh
HCTT	Humanitarian Coordination Task Team
HFA	Hyogo Framework for Action
IASC	Inter-Agency Standing Committee
ICTs	Information and Communication Technologies
IMDMCC	Inter-Ministerial Disaster Management Coordination Committee
INGOs	International non-governmental organisations
MPAs	Minimum Preparedness Actions
NDMAC	National Disaster Management Advisory Committee
NDMC	National Disaster Management Council
NDMP	National Disaster Management Policy
NDRCG	National Disaster Response Coordination Group
NGOs	Non-governmental organisations
NPDM	National Plan for Disaster Management
NPDRR	National Platform for Disaster Risk Reduction
OCHA	UN Office for the Coordination of Humanitarian Affairs
SFDRR	Sendai Framework for Disaster Risk Reduction
SOD	Standing Orders on Disaster
SOPs	Standard Operating Procedures
UZ	Upazila

# Summary

In an increasingly urbanised world, Bangladesh is facing an ever-rising threat of urban disasters. The country's geographic attributes, together with socio-economic vulnerabilities, are increasing the risk of suffering widespread casualties and other losses. The government of Bangladesh has formulated a number of national policies and plans, and has implemented several programmes that address disaster risk management, preparedness, and response mechanisms in an urban context.

This research study aimed to identify and assess the strengths and weaknesses of public policies, strategies, and disaster management plans designed to prepare and respond to urban disasters in Bangladesh. The research has been conducted in several stages following a well-developed methodology: a literature review and data analysis was followed by focus group discussions, key informant interviews, and another series of data analyses.

Policy analyses were also conducted. These began by identifying a problem and corresponding policy options, before assessing specific policies and the strategies developed to implement them.

The following national policies were considered for the analysis: Standing Orders on Disaster (SOD – 2010); Disaster Management Act (DMA – 2012); National Disaster Management Policy (NDMP – 2015); National Plan for Disaster Management (NPDM – 2016–2020); and Emergency Response Plan (ERP – 2014).

**Standing Orders on Disaster (SOD):** This is a comprehensive set of guidelines designed to organise the activities of government agencies and other non-government organisations involved in disaster risk reduction (DRR) and emergency response. The document clearly delineates the country's disaster management framework, and provides policy guidance under three thematic areas: Regulatory Framework, Policy Guidelines and Co-ordination Mechanism, and Roles and Responsibilities. It refers to a standard mechanism for partnership and co-ordination among inter-governmental, government, and non-governmental organisations: the formation of Disaster Management Committees (DMCs) at different levels of administration. The document specifically acknowledges urban disaster preparedness and response issues: it includes guidance for establishing

a special task force and additional committees, as well as formulating special plans for urban disaster risk management. However, it does not include policy proposals with regard to the supervision of meetings or local co-ordination between agencies and personnel.

**The Disaster Management Act (2012):** This Act provides the legislative framework and the legal basis for implementing disaster management activities. The document validates the activities put forward in the SOD and the National Plan for Disaster Management (NPDM). It also lays out the responsibilities of respective ministries, committees, and appointed officials. The Act has facilitated the establishment of a specialised government department, the Department of Disaster Management (DDM). Although urban disaster risk management issues are addressed in many of its clauses and sub-clauses, the document does not offer explicit legal guidance. The Act has proposed the formation of a National Disaster Voluntary Organization to promote cooperation and coordination among stakeholders. It also delineates provisions for seeking assistance from private entities, international organisations, as well as the country's armed forces and law enforcement.

**The Disaster Management Policy (2015):** This document directs aspects of disaster preparedness, risk assessment, risk reduction, and mitigation measures in Bangladesh. It has the distinct purpose of ensuring good governance and stakeholder accountability in the disaster management sector. Another feature of the document is that it lays out hazard-specific risk management strategies, whereas the rest of the policy documents lay out agency-based functions. The Disaster Management Policy (DMP) delineates specific strategies to mainstream DRR issues in multiple sectors including health, education, and poverty reduction. It also provides guidance on mainstreaming disaster management in urban planning. In addition, the policy emphasises the use of technologies, including information and communication technologies (ICTs), in disaster management, as well as specific strategies at the grassroots level. Despite being one of the most comprehensive policy documents, the DMP focuses on risks related to natural disasters, such as tropical storms, but not on human-caused disasters, such as chemical or oil spills.

**National Plan for Disaster Management (2016–2020):**

This follows an earlier version of the NPDM (2010–2015). It analyses the national disaster management framework and its links with international frameworks, while exploring contemporary issues in disaster resilience. The document recognises the critical importance of urban disaster risks as an emerging issue, and emphasises the importance of establishing an appropriate coordination mechanism, and a functional incident command system for managing urban disasters. The Plan also acknowledges the need for private investment while covering all areas where investment in risk-informed planning and implementation would be helpful.

**Emergency Response Plan (ERP):** This is a set of guidelines for co-ordinating the emergency management activities of non-governmental organisations (NGOs), international non-governmental organisations (INGOs), and other humanitarian agencies in any crisis. The planning document has developed a risk profile and contingency plans for three major hazards: earthquakes, cyclones, and flooding. An emergency response group has been created as directed by the ERP, comprising senior decision-makers from UN agencies, donors, and representatives from both NGOs and INGOs. This group has a mandate to ensure that national and international stakeholders coordinate around all aspects of disaster management.

Alongside the analysis of the policy documents, an extensive field study was carried out through focus group discussions and key informant interviews, in order to gain insight into the realities around policy implementation. The discussions also referred to practical implications.

The analysis found that the regulations and policies are formulated to ensure effective governance with increased accountability, participation, cooperation, and coordination among the implementing agencies.

However, they are not yet widely practised, due to the complexities associated with accountability and participation. Centralisation of power, politics, bureaucracy, conflicts, and confusion about the responsibilities of the multiple agencies involved are among the factors that have been identified as affecting aspects of accountability. In addition, the population is generally unaware of their rights and responsibilities, which leads to unequal participation in decision-making, inadequate data sharing, lack of a digitised management and monitoring system, a shortage of exercises and drills, and a lack of institutional coordination guidelines.

We propose potential solutions to the observed irregularities. To strengthen disaster management, operational activities and strategies need to be reformed to ensure increased accountability and participation of all relevant sectors and personnel. The dissemination of disaster risk information, along with raising awareness, are prerequisites to any changes in policy that are to be made. In this regard, what is needed is to support local authorities to better carry out their roles and responsibilities through training and workshops; also to encourage them to undertake voluntary activities. In addition, improvements are needed in the use of technology tools, as well as the digitisation of management systems for effective monitoring. Another recommendation is to enhance public-private partnerships, along with increased regional and global cooperation, to secure greater financial support and transfer of technologies that can build the capacity of disaster risk management bodies. The full engagement of institutions and stakeholders in all aspects of risk reduction – including decision-making and implementation, policy and structural reform, integration of scientific knowledge, and development of expertise – will enable an integrated vision of disaster management for reducing the loss of lives, damage to property, and environmental impacts.

# Introduction

The relationship between disaster preparedness and response is often viewed as non-linear – which is to say, good preparation for managing an emergency can boost the response after a crisis. The Hyogo Framework for Action (HFA) 2005–2015 and the Sendai Framework for Disaster Risk Reduction (SFDRR) 2015–2030 have underlined this connectivity and emphasised the significance of both. Priority 5 in the HFA states the need to “strengthen preparedness for response at all levels”, while priority 4 of the SFDRR makes reference to “enhancing disaster preparedness for effective response”.

However, conventional approaches to preparedness and response face several challenges in an increasingly urbanised world. Globally, at present, 53 per cent of the world’s population resides in cities, and this is expected to rise to 70 per cent by 2050. The rate of urbanisation is on the rise. Urban areas have been hubs of population growth as well as economic activity, promising a higher income and a better life. But the rapid and unplanned expansion of urban settlements, weak urban governance, and the inadequate living conditions of poor populations are a permanent threat to well-being and security (UNDP, 2010; IFRC, 2010; IFRC, 2017; UNISDR & UNOCHA, 2008).

Disaster risks from natural and man-made hazards are exacerbated by these conditions and tend to create a process of ‘risk accumulation’ specific to the urban areas. Brown (2013) articulates three newly emerging realities that render earlier approaches to disaster management obsolete: changes in patterns of social relationships in cities, urban livelihoods, and markets. Therefore, the task of disaster preparedness and response in an urban environment is multi-faceted, involving a wide variety of challenges.

## Background

Bangladesh is one of the most disaster-prone countries of the world because of its geographical location, and disaster risks are rising due to climate change. In addition to natural disasters such as cyclones, floods, and tornadoes, the country faces rising human-made hazards such as fire, drainage blockages, landslides, and incidents of building collapse in and around the major cities (Forni, 2014; GoB, 2014). The country ranked 5th in the 2016 World Risk Index Report (UNU-EHS, 2016), which reflects a combination of high exposure and high vulnerability.

Along with the increasing vulnerability to disaster, Bangladesh has experienced faster urbanisation rates compared with South Asia as a whole between 2000 and 2010. Over that period, the share of its population living in officially classified urban settlements increased by 1.69 per cent each year. Presently, approximately one third of the country’s population lives in urban areas – one third of these in slums, where basic services such as water, sanitation, and healthcare are poor.

Urban areas are fast becoming hubs for the country’s structural, economic, social, political, and cultural assets. Bangladesh is set to see half of its population residing in cities over the next four decades as people are increasingly migrating to urban areas to improve their livelihoods, get an education, or as a way of coping with the impacts of climate change in rural areas (WB, 2015; BBS, 2014; IR, 2012). Cities are characterised by high population density, resulting in greater exposure to risk.

Therefore, the mechanisms of disaster preparedness and response need to meet the challenges of this emerging urban reality in Bangladesh. It is time that the government, as well as humanitarian agencies, acknowledged the specific risks facing the urban population, and improved their operational capacity to respond effectively to emergencies.



The Government of Bangladesh (GoB) has formulated several national plans and policies, and has implemented a number of programmes for preparedness and response. The following are five notable policies:

- National Disaster Management Policy, 2015
- Disaster Management Act, 2012
- Draft National Plan for Disaster Management, 2015–2020
- Standing Orders on Disaster
- Emergency Response Plan

These policies are now in place, and the government has been updating them in accordance with international guidance and declarations on disaster risk reduction. However, public policy formulation and implementation in Bangladesh has always been challenging and problematic: although an array of policies have been produced for several sectors, many of these have not been implemented and face critical challenges for successful implementation. In the case of urban disaster preparedness and response, the forementioned policies have yet to be assessed. This lack of information on the strengths and weakness of national policies, as well as the lack of operational guidelines, have in many cases impeded much-needed innovation in interventions for urban disaster management.

## Research Objectives

This research study aims to identify and assess the strengths and weaknesses of public policies, strategies, and management plans for dealing with urban disaster preparedness and response in Bangladesh. This assessment will be made on the basis of the following aspects:

- **Partnerships** – To what extent do the existing policies address networking between formal and informal actors?
- **Urban systems** – How do policies address systems and relationships that are prominent in urban areas?
- **Accountability** – How are public authorities accountable to affected populations, and what are the existing strategies to ensure their accountability?

Bangladesh has been a global leader in disaster preparedness and response. At the same time, it has suffered from newer forms of crisis in urban areas. Hence, the importance of assessing the strengths and weaknesses of policies that aim to plug loopholes in terms of practice cannot be underestimated. The findings of this study are expected to enhance the capacity of the government and emergency management organisations. In addition to identifying strengths and weaknesses, a number of recommendations will be made to address existing gaps. It is also expected that – with effective dissemination and if taken into account by relevant authorities – the research findings will lead to a significant improvement in the country’s policy regime and an overall paradigm shift in disaster governance.

# Methodology

A well-developed methodology helps to delineate any research and keep it on the right track. Urban disaster policies cover a wide range of activities, therefore analysis needs to be framed in logical and practical steps. This study has been conducted in several stages (Figure 1): a literature review and analysis of statistical data on urban growth was followed by focus group discussions, key informant interviews, and another series of data analyses on secondary sources.

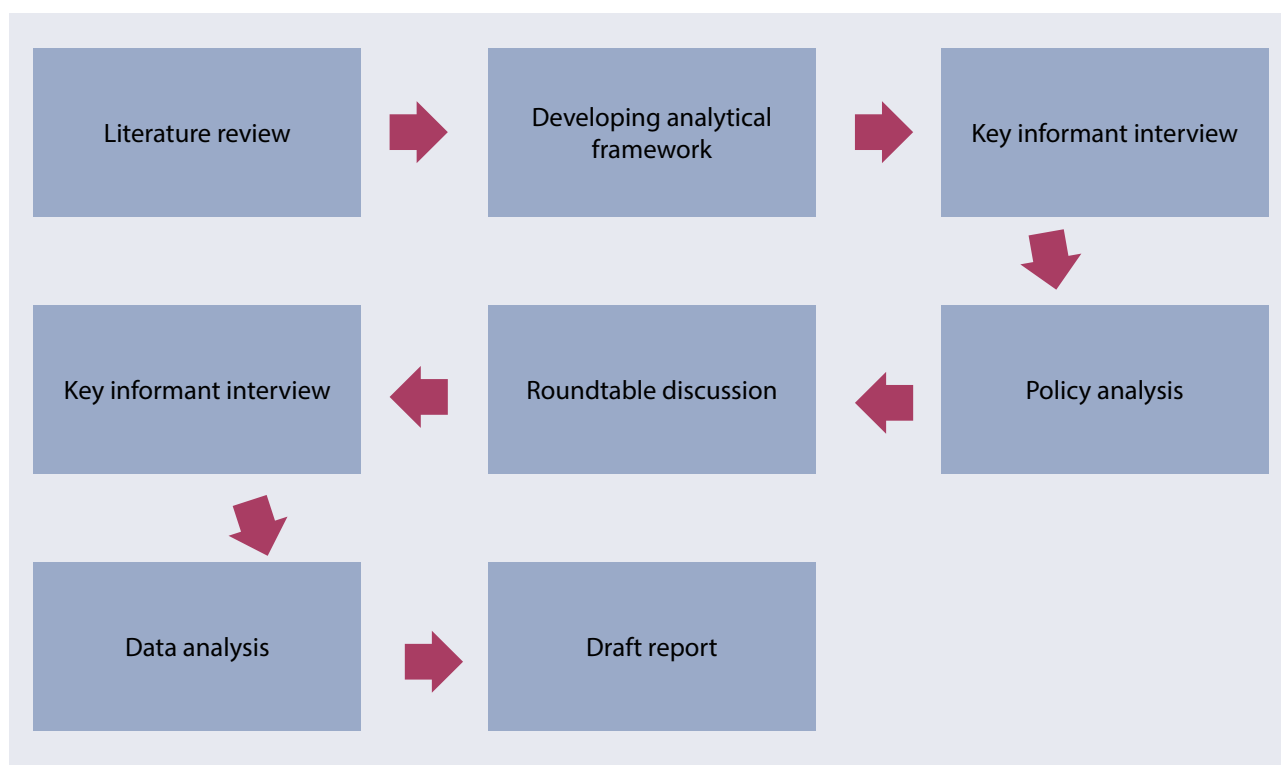
## Literature Review

A rigorous literature review was carried out during the first phase. Researchers looked into trends in urbanisation around the world, and compared them to trends in Bangladesh. A number of threats related to urbanisation in Bangladesh were identified, alongside an analysis of common disasters in Dhaka, Chittagong, and other urban settlements around the country. The literature review helped to develop a clear concept of urbanisation and urban growth, its dynamics, and trends in Bangladesh.

## Developing the Analytical Framework

The next step was to conduct a review of earlier studies on various policies in order to develop the analytical framework for the research. Most policy analyses developed a number of criteria before collecting data to analyse against those criteria. For this study, the researchers singled out two major criteria to inform the assessment of policies for urban disaster response and preparedness in Bangladesh: participation, and accountability.

Figure 1: Activity flow chart illustrating different stages in the research



## Key Informant Interviews

A number of key informants were interviewed by the research team, to make an initial assessment of urban disaster management in Bangladesh. The informants were asked open-ended questions about the requirements of public policies and other relevant policies for urban disaster management. The information provided helped the research team to identify the five major policies that address urban disaster preparedness and response in Bangladesh:

- National Disaster Management Policy, 2015
- Disaster Management Act, 2012
- Draft National Plan for Disaster Management, 2015–2020
- Standing Orders on Disaster
- Emergency Response Plan, 2014

## Policy Analysis

The research team then conducted a rigorous analysis of the policies, aiming to specifically explore the following features:

- Structural strengths and weaknesses
- Reflection of urban disaster management issues
- Focus on participation and accountability

A content analysis of the selected policies produced new insights; it also helped to develop a questionnaire to guide data collection in the field, with a view to examining the on-the-ground reality of implementing these policies.

## Roundtable Discussion

A roundtable discussion was then arranged by the research team, in order to discuss the content analysis of the selected policies. Prominent figures in disaster management were invited, including representatives from government agencies, non-governmental organisations (NGOs), and academia. They offered their views based on practical experiences and completed a questionnaire.

## Key Informant Interviews

A second series of key informant interviews was carried out after the roundtable discussion. This time, the informants were asked questions about the existing requirements of urban disaster management policies, experiences from their implementation, and challenges with regard to participation and accountability. Overall, the interviews aimed to gather reflections on the realities of implementing existing policies, their usefulness, as well as ways to improve current practices.

## Data Analysis

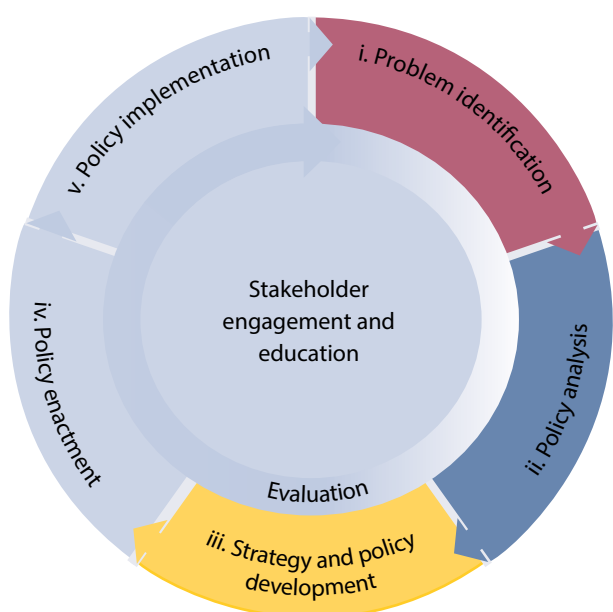
A holistic analysis was carried out at the end of the process, combining findings from the policy content analysis, the outcomes of the roundtable discussion, and the key informant interviews. This analysis focused on the practical issues and challenges of urban disaster management in Bangladesh: existing problems, solutions, and the way forward.

# Analytical Framework

The analysis of public policies, strategies, and plans developed by the GoB for urban disaster preparedness and response is a new area of research – no such studies have been done in this country. Policy analyses are always challenging, partly due to the increasingly complex societies in which they operate, and there are hardly ever correct answers (Patton *et al.*, 2012). In addition, no single discipline is enough to inform policy analysis (Jans, 2007). Multiple methods and a multi-disciplinary focus in social sciences are needed. Regardless, in recent years, many governments have set out to analyse policies and programmes to determine ‘what works’.(Nutley *et al.*, 2007, cited in Morestin, 2012)

The US Centers for Disease Control and Prevention (CDC) has developed an analytical framework for identifying, analysing, and prioritising policies that can improve health. This framework (CDC, 2013) is provided in **Figure 2**, which indicates that policy analysis is an essential component of the broader analytical framework. This means policy analysis is interconnected with preceding and subsequent stages in policy studies. It begins with the identification of a policy issue and proceeds with the development of strategies and policies.

**Figure 2: The CDC’s policy analysis framework**



## Problem Identification

The first step in policy analysis is to clearly identify the problem the researchers are aiming to address. This could be done by synthesising data on the characteristics of the problem, including the burden (how many people it affects), frequency (how often it occurs), severity (how serious of a problem it is), and scope (the range of outcomes). It helps to define the issue with as many specifics as possible – for example, referring to a ‘lack of access to fresh fruits and vegetables’ instead of ‘obesity’; or to ‘barriers in sustaining HIV treatment’ instead of ‘HIV/AIDS’.

This level of specificity can help understand how best to address the problem. It is also useful for framing it in a way that helps clarify possible policy solutions. For example, ‘providing safe places for people to be physically active in their communities’ implies clear policy solutions, whereas with a statement such as ‘increasing physical activity’ the policy options are not as clear.

## Policy Analysis

### Identify Policy Options

It is essential to research policy options that are relevant to the issue that has been identified. Strategies for gathering evidence included:

- Reviewing literature on the topic.
- Surveying best practices, including best practices in other problem areas.
- Coordinating activities between the jurisdictions of different ministries, to understand their activities.

The researchers need to ensure they collect evidence on various points of view on any given policy issue, including the option of maintaining the *status quo*.

## Describe Policy Options

The first step in the process of describing the identified policy options is to develop criteria and questions. For example, an analysis of policies for improving public health might involve three criteria on which to assess existing policies: health impact, applicability of the policy in the real world, and economic and budgetary impacts. For example, the CDC (2013) focused on the key components of each criterion in developing a list of sample questions that enable researchers to assess each policy option.

To answer the questions, information can be gathered from different sources and types of evidence. Some sources and study designs are of higher quality than others, and this can be taken into account. If information is lacking on a specific policy, data can be drawn from similar policies used to address a different problem or issue.

## Assess Policy Options

The policy options can be rated using the answers to the questions listed in **Table 1**. For each criterion, the researchers may note any concerns about the quantity or quality of data. At this point, each option can be assessed independently against the criteria included in the table. If appropriate, 'no policy change' can be an option. It should be noted that although the ratings provided by the researcher should be grounded in evidence, they are inherently subjective.

## Strategy and Policy Development

Once a policy solution has been prioritised, the next step is to define a strategy for getting the policy enacted and implemented.

For the CDC framework, this process includes clarifying operational issues, identifying and educating stakeholders through sharing relevant information, and conducting additional analyses as appropriate to support adoption, implementation, and evaluation.

Morestin (2012) also conducted an analysis of public health policies by developing a two-pronged analytical framework. His framework focused on both the effects of the policy being studied and the issues surrounding its implementation. Drawing on work in the field of political science (Salamon, 2002), and on policies aimed at combating obesity (Swinburn, Gill, & Kumanyika, 2005), Morestin broke down these two axes into six analytical dimensions that influence decision-making about public policies. For each dimension some questions were developed, which were answered with data gathered through individual reflections, group brainstorming, expert consultation, a deliberative process, and literature review.

**Table 1: Dimensions for policy analysis (Source: Morestin, 2012)**

<b>Effects</b>	Effectiveness	What effects does the policy have on the targeted health problem?
	Unintended effects	What are the unintended effects of this policy?
	Equity	What are the effects of this policy on different groups?
<b>Implementation</b>	Cost	What is the financial cost of this policy?
	Feasibility	Is this policy technically feasible?
	Acceptability	Do the relevant stakeholders view the policy as acceptable?

Patton *et al.* (2012) also developed a framework for a basic policy analysis (Figure 3).

According to this framework by Patton *et al.* (2012), a policy analysis includes the following set of characteristics running in parallel:

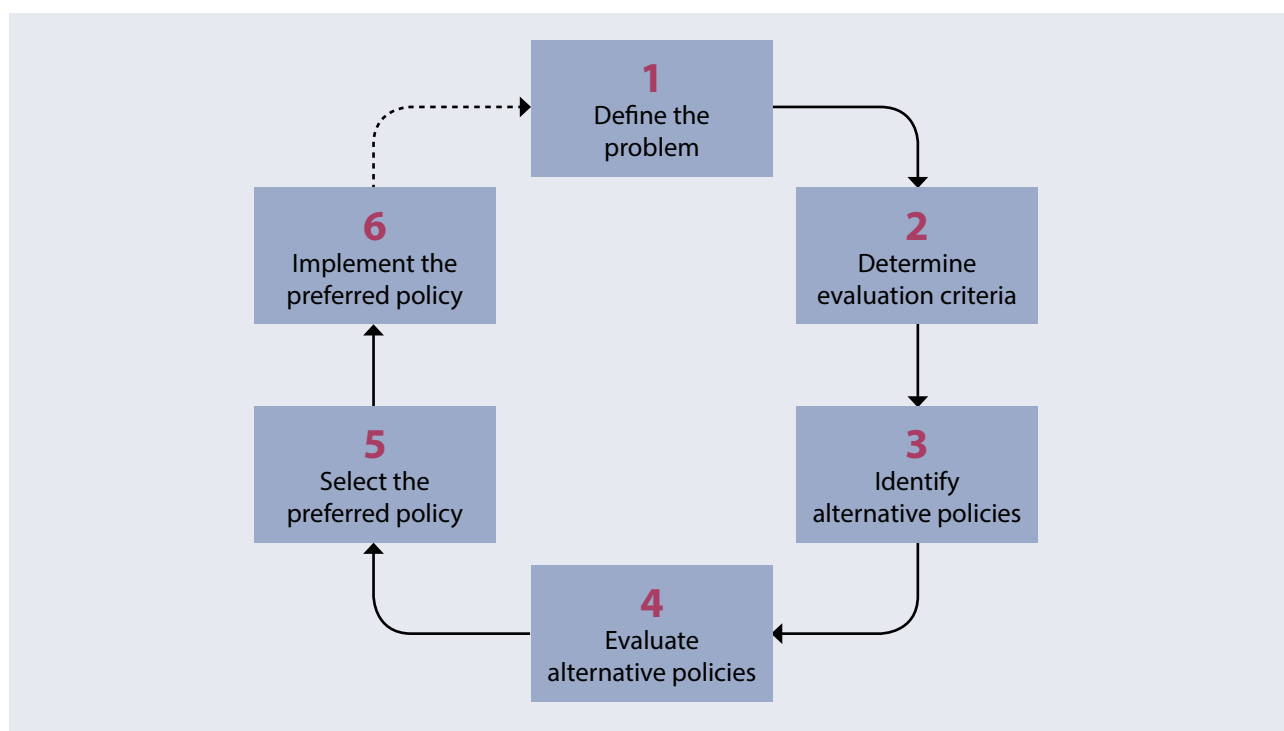
- An inventory or search phase, limited in scope and directed at a particular issue.
- A constrained search for alternatives, which are then evaluated and shown to the client.
- The preparation of memoranda, issue papers, policy papers, or draft legislation.
- A client – be it a chief executive, an elected official, a public interest group, a neighbourhood, or a bank – likely to have a particular perspective on the problem.
- A time horizon often compromised by the terms of elected officials and by uncertainty.
- A political approach to getting things accomplished.

The framework developed by the CDC (2013) will support a comprehensive policy analysis in any sector. The process involves mainly the identification of criteria or yardsticks that relate to the issue of concern, followed by the development of questions to assess the situation and formulate recommendations for changes in policy. The data collection tools used in such an analysis are usually qualitative.

In the seminal work *Handbook on Public Policy*, Fischer *et al.* (2007) identified a range of methods for policy analysis. They focused on several aspects of data in policy analysis, involving the use of quantitative and/or qualitative techniques to define a policy problem, demonstrate its impacts, and present potential solutions (Figure 4). Quantitative methods help to: demonstrate whether a relationship exists between the way a policy is designed and its outcomes; test whether the relationship can be generalised to similar settings; help to evaluate the magnitude of its effects on social, economic, and political factors; and find better policy alternatives. The use of such methods is part of policy analysts' scientific expertise. Among the techniques frequently used in policy studies are mathematical modelling, quantification of inputs and outputs, descriptive statistics, statistical inference, operations research, cost-benefit analysis, risk-benefit analysis, univariate and bivariate analysis, analysis of variance, multiple regression analysis, time-series analysis, event history analysis, factor analysis, path analysis, game theory, and simulation (Hair *et al.* 1998).

Qualitative methods are also available that fit with, and can be useful for, the ongoing policy analysis on urban disaster response and preparedness in Bangladesh. The use of qualitative methods in policy research is not new (Fischer *et al.*, 2007). Academic scholars and policy analysts have, for some years, been venturing out into the field as ethnographers or participant-observers to study first-hand the experiences of legislators,

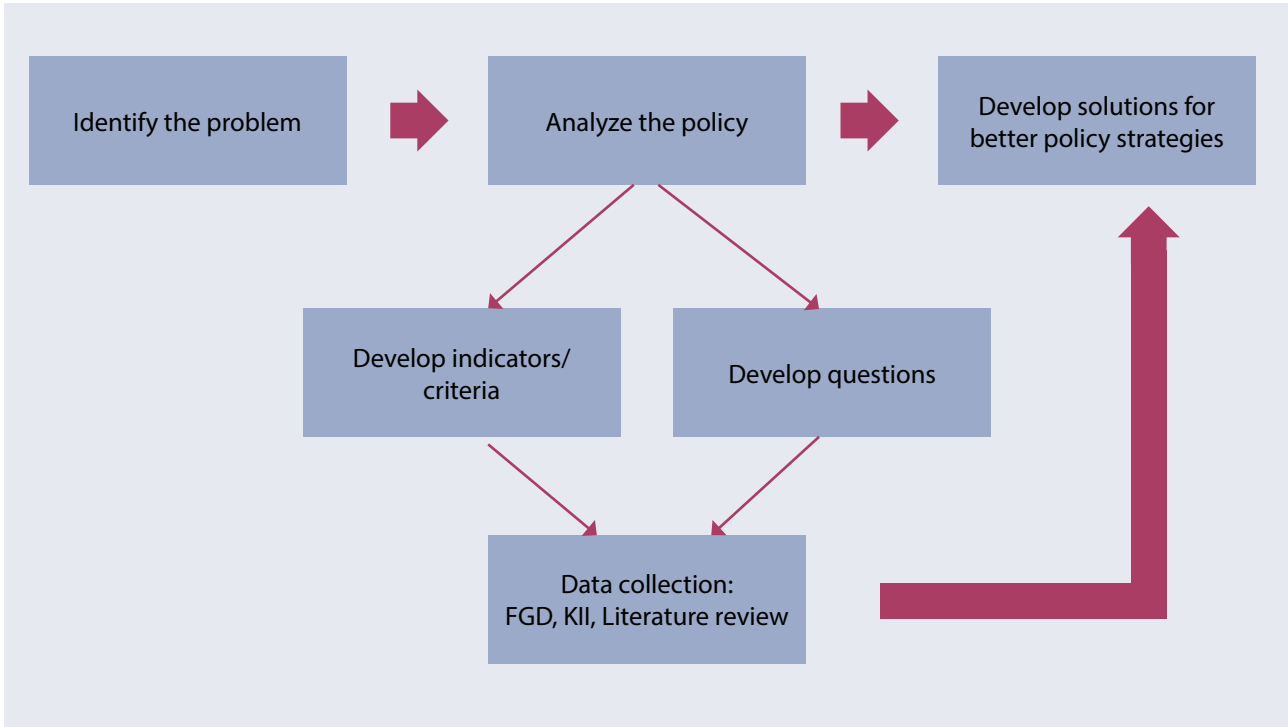
Figure 3: Framework for a basic policy analysis (Adapted from Patton *et al.*, 2012)



implementers, agencies, community members, and other policy-relevant stakeholders. Others have based qualitative studies on in-depth interviews with various policy actors; and still other studies draw on legislative, agency, and other documents.

Qualitative methods of generating data for policy analysis involve one or more of the following techniques (Rabinow and Sullivan, 1979; Schütz, 1962; Berger and Luckmann 1966): observation, interviews, and literature review.

**Figure 4: General framework for policy analysis**



# Policy Analysis

## Standing Orders on Disaster

The government of Bangladesh has had the Standing Orders on Disaster (SOD) policy in effect since 1997. The document was first published in 1997, in Bangla. It was then modified and translated into English in 1999. An updated version was released in 2010, incorporating the adverse impacts of climate change, the recommendations of the 2015 World Conference on Disaster Reduction as well as the SAARC Framework of Action (2006–15). The 2010 version also incorporated recommendations from the national workshop titled Options for Flood Risk Reduction in Bangladesh (2004), and from national learning workshops that took place after the extensive floods and Cyclone Sidr in 2007.

### Strengths

The SOD (2010) comprises a comprehensive set of guidelines for organising the disaster risk reduction (DRR) and emergency response activities of government agencies and NGOs. Issues specific to urban preparedness and response have been mentioned in some sections of the SOD. However, as the nature of the guidelines is very generic, they tend to apply to risk management in urban areas too.

### Structure of the Report

One of the strengths of the SOD is its well-structured format: a first-time user is greeted with a welcoming message and guided through a clear listing of contents, a succinct first chapter, and a historical background

about the need for the document. Overall the document is user-friendly and informative.

Its contents are arranged in three major sections or thematic areas, summarised in **Table 2**.

The first section consists of a brief description of the regulatory framework of the disaster management system in Bangladesh. This provides the relevant legislative, policy, and best-practice framework under which DRR and ERM activities are managed and implemented. This framework comprises the Disaster Management Act, the National Disaster Management Policy, the National Plan for Disaster Management, the SOD, and Guidelines for Government at all Levels (based on best practice models). Any rigorous analysis of existing institutional mechanisms for disaster management in Bangladesh must take account of these five major documents that make up the regulatory framework.

The coordination mechanisms and policy guidelines for disaster management in the country make up the second major component of the SOD. Several committees, councils, boards, and taskforces have been formed at the national and local level, mostly to make decisions on policy-related issues and emergency response mechanisms during a disaster.

The third component of the report includes the DRR and ERM responsibilities of ministries, agencies, officials, representatives, and NGOs – both at the national and local levels.

**Table 2: Thematic areas in the Standing Orders on Disaster (SOD) document**

Thematic areas	Major contents
Regulatory framework	Relevant legislative, policy, and best practice framework
Policy guidelines & Coordination mechanism	National-level policy guidelines and coordination mechanisms Local-level coordination mechanism
Roles & responsibilities	General and specific responsibilities of ministries, government divisions or departments, and government-owned corporations Responsibilities of field level officials (division, district, and Upazila) Responsibilities of local elected representatives (Pourasava/UPs) Responsibilities of NGOs



## Mechanisms for Coordination and Policy Guidance

The SOD (2010) has formulated 12 entities – councils, committees, platforms, groups, boards, or task forces\* – to look after policy-related issues and management of DRR and ERM initiatives at the top level of administration (Figure 5).

The SOD clearly lays out the functions and responsibilities of the committees, as well as the membership criteria and leadership structure to avoid any clashes within committees. Some can invite external experts to join. Most committees are required to hold meetings once or twice a year.

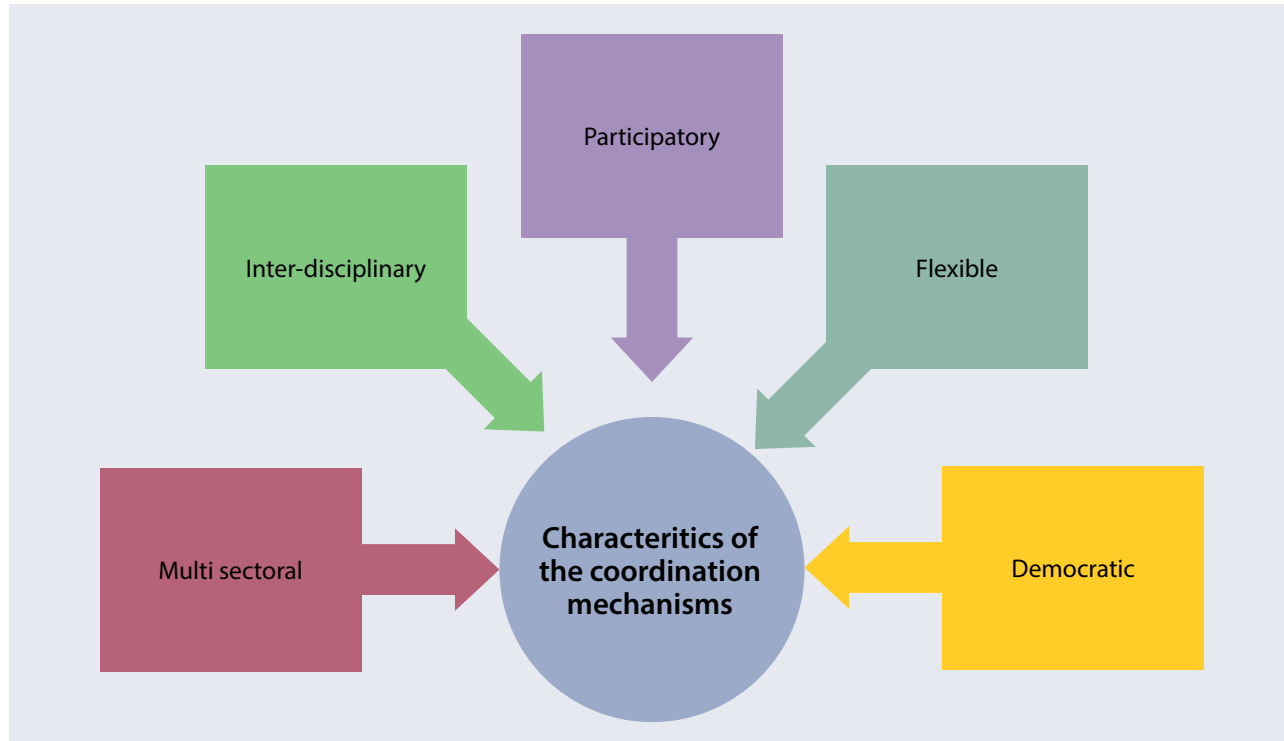
One key characteristic of some committees at the top administrative level\*\* is a system of ‘checks and balances’ in their mandates. They include the tasks of evaluation, assessment, and review of their policies in order to recommend improvements. Unless the policies are regularly updated, they run the risk of failing to produce timely guidelines for disaster management. Another issue addressed in committee mandates is the risk of overlap or conflict in the responsibilities of the large number of actors involved in disaster management in Bangladesh.

In addition to national-level coordination mechanisms, the SOD has also produced guidelines for local-level coordination at five tiers of administration: the City Corporation, District, Upazila (UZ), Pourashava, and Union. Disaster management committees have been formed at these tiers.

Local disaster management committees were created according to needs and depending on the context. These committees too are well-structured, with clear guidelines regarding membership, as well as their roles and responsibilities for both disaster risk reduction and emergency response (Figure 6). Their responsibilities for emergency response are also divided by stage of a disaster: the warning period, disaster onset, the period during a disaster, and the post-disaster recovery period.

It is worth noting that the meetings of local-level committees have been mandated to be held very frequently and at short notice. Table 3 delineates the frequency stated in the SOD.

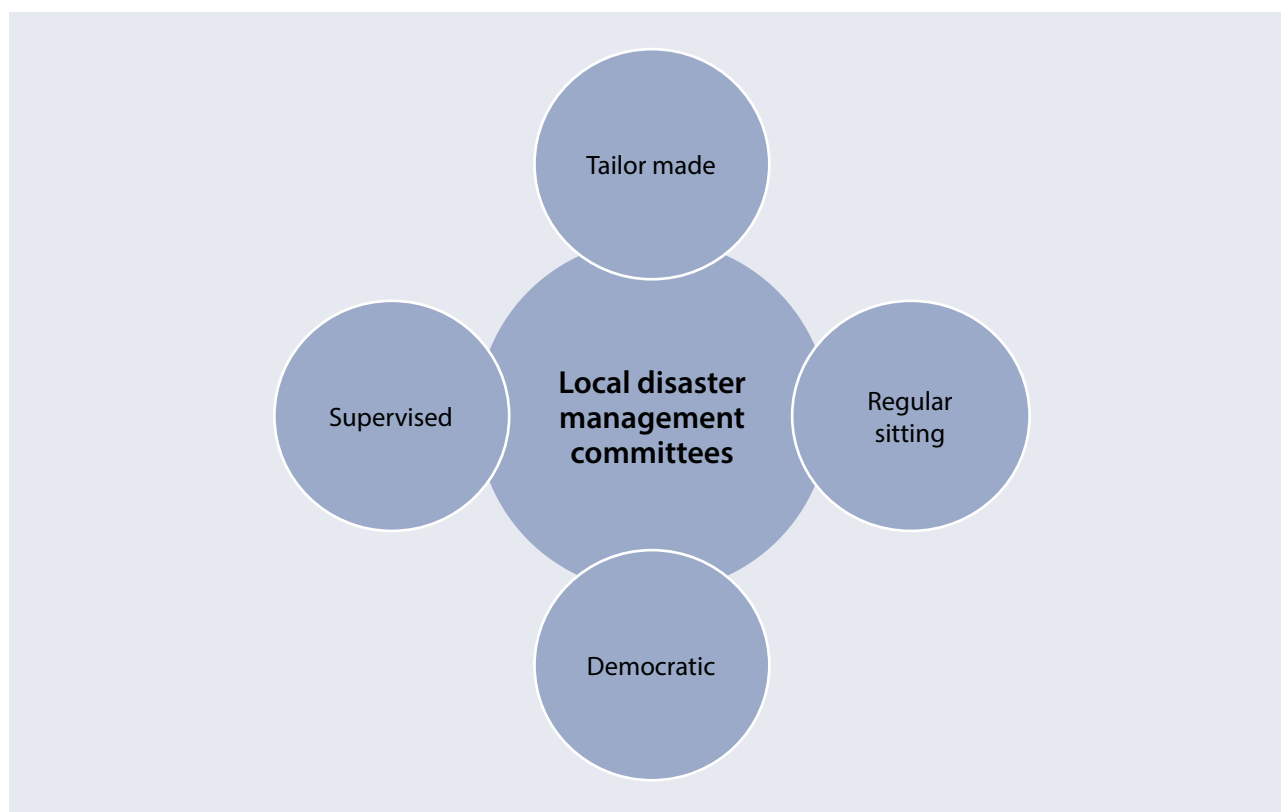
Figure 5: Characteristics of the SOD co-ordination mechanism



\* Hereafter in this document, we only use the word ‘committee’ to refer to these entities.

\*\* The National Disaster Management Council (NDMC), the Inter-Ministerial Disaster Management Coordination Committee (IMDMCC), and the National Disaster Management Advisory Committee (NDMAC).

**Figure 6: Local disaster management committee specifics**



**Table 3: Mandated frequency of meetings held by local disaster management committees (Source: SOD)**

Situation	Frequency of the meetings
Normal time	Once a month
Warning phase and pre-disaster period	More than once in a week
Disaster period	When needed (once daily), at least once a week.
Recovery phase	Once a week

**Specific Reflections of Urban Issues in the SOD**

- **Acknowledgement of Urban Disasters:** Bangladesh is at risk from earthquakes, tsunamis, and climate change impacts, with urban risks adding a new dimension. Climate adaptation issues in particular need to be considered both at a national and community level, as climate change has great impact on the frequency and severity of hazards, particularly in the case of floods and droughts. (SOD, Page: 4)
- **Establishment of Special Task Force:** The SOD calls for establishing a special task force, named the Urban Search and Rescue Taskforce, at the top level of administration. The Inter-Ministerial Disaster Management Coordination Committee (IMDMCC)

was given the responsibility for this (SOD, Page 12). The National Disaster Response Coordination Group (NDRCG) is responsible for supervising the operations of the Urban Search and Rescue Taskforce at the national level (Page 17). The Local Disaster Response Coordination Groups (LDRCGs) are responsible for this at the local level (Page 43).

- **Establishment of Committees for Urban Areas:** The SOD also calls for establishing a City Corporation Disaster Management Committee (CCDMC) to carry out all disaster management activities: prevention, mitigation, preparedness, and response and relief. Similarly, it calls for establishing Disaster Management Committees (DMCs) at the level of the District, Upazila, Pourashava, and Union (Page 23).

- **Delineation of Special Responsibilities for Officials:**

- **NGO Affairs Bureau:** Instructs NGOs working in urban areas to prepare an earthquake contingency plan and disaster management practices (Page 54).
- **Fire Service and Civil Defense (FSCD):** Develops an urban volunteer fleet to deploy in the event of an urban disaster such as an earthquake or fire. The volunteers are trained in coordination with DM&RD, DMB and City corporations (Page 76).
- **Ministry of Local Government, Rural Development and Co-operatives:** Mitigates earthquake risks in construction and urban planning; arranges training programmes for government engineers, planners, and architects (Page 118).
- **Ministry of Housing and Public Works:** Mitigates earthquake risks in construction and urban planning; arranges training programmes for government engineers, planners, and architects (Page 124).
- **Urban Development Authorities:** These are the Rajdhani Unnayan Katripakhaya (RAJUK), Chittagong Development Authority (CDA), Khulna Development Authority (KDA), Rajshahi Development Authority (RDA), and National Housing Authority (NHA) (Page 127).
- **Ministry of Primary and Mass Education:** Support earthquake drills in schools, especially in urban areas: Dhaka, Chittagong, Rajshahi, Rangpur, Sylhet, and Mymensingh (Page 149).

### Special Plans for Urban Areas

- **Pourashava/City Corporation Disaster Management Plan:** Pourashava is at the bottom of the urban administrative tier of Bangladesh. There is a Disaster Management Committee at this level, headed by the Pourashava Chairman. The members of the committee are Pourashava commissioners as well as representatives from all government departments, NGOs, and community-based organisations (CBOs). The Chief Executive Officer of the Pourashava is the secretary of the committee. The committee is required to meet monthly during normal, non-disaster periods, and as necessary during an emergency. As with Pouroshavas, the metropolitan cities of Bangladesh have City Corporation disaster management committees, with the Mayor as chairman. Each Pourashava/City Corporation has a disaster management plan, which is prepared by the committee and has linkages with the National Plan for Disaster Management (Page 202).

- **Special Focus on Dhaka City:** The National Disaster Response Coordination Group (NDRCG) coordinates disaster management activities at the top administrative level. The NDRCG has a special team for emergencies that might arise in Dhaka city (Page 17): the Chief Executive Officer of Dhaka City Corporation, the Chief Engineer of Dhaka City Corporation, the Managing Director of Dhaka WASA, the Managing Director of Titas Gas, the Managing Director of the Dhaka Electric Supply Company Limited / Dhaka Power Distribution Company (DESCO/DPDC), the Police Commissioner of Dhaka Metropolitan Police, and the Deputy Commissioner of Dhaka.

### Implications for Partnerships and Coordination

The DMCs have ensured that member inter-governmental departments, government, and non-governmental agencies work in close collaboration. There are special provisions for establishing such partnerships, as disaster management is multi-sectoral in nature. This requires an effective coordination mechanism, which is explicitly described in the roles and responsibilities of committees across all disaster management activities: prevention, mitigation, preparedness, and response and relief. The types of collaboration vary depending on the period – before, during, or after a disaster.

### Implications for Accountability

To be more accountable to populations affected by a disaster, humanitarian actors need to better understand the experiences, perspectives, and roles of the people who are most vulnerable to the impacts of urban crises. It is also important to look into their own perspectives, assumptions, attitudes, and experiences: how they view affected people in urban areas; how they engage with other relevant stakeholders at each stage of the programme cycle; what they perceive to be their responsibilities on accountability; what mechanisms they have in place to engage affected populations; and the extent to which they perceive there are shortcomings in the system.

The focus on Accountability to Affected Populations is especially important in urban areas. However, there is no mention of the word 'accountability' in the SOD. The government committees and officials are responsible to the people they serve. But any mention of official mechanisms to hold responsible persons to account for any failure to manage emergencies or reduce disaster risk is sorely missing.

## Weaknesses

### Inadequate Supervision of Meetings

The national level coordination committees are required to hold meetings at least once a year. However, some committees do not have a specific timeframe to hold meetings; they do so as and when it is required, and when called by the chairman in most cases.

**Table 4** lays out the national coordination committees and timelines for their meetings. The NDMC, IMDMCC, NDMAC, EPAC, and NPDRR committees are meant to hold meetings once or twice a year. The NDRCG committee can meet as and when required. However, the last four committees on the list do not have any guideline on when to hold the meetings. The greatest weakness is the insufficient supervision over holding the meetings. If the meetings are not held regularly, then there is no strong mechanism to get things right.

### Lack of Local Coordination Mechanism

Although there are strong coordination mechanisms in the local tiers of administration, there is no provision for a Ward Disaster Management Committee in Dhaka or in the Chittagong City Corporation area.

## Recommendations

- Regulation is needed to supervise the coordination committee meetings at different levels of administration, so that they are held regularly and following specific timeframes.
- Provisions should be made to establish Ward DMCs in urban areas, with a view to strengthening local coordination mechanisms.

**Table 4: National level co-ordination committees and their meeting timelines (Source: SOD)**

Name of the Committee	Meetings Timeline
National Disaster Management Council (NDMC)	At least once a year
Inter-Ministerial Disaster Management Coordination Committee (IMDMCC)	At least twice a year, or when called by the Chairman
National Disaster Management Advisory Committee (NDMAC)	Twice a year, and in addition when called by the Chairman
Earthquake Preparedness and Awareness Committee (EPAC)	Twice a year, and in addition when called by the Chairman
National Platform for Disaster Risk Reduction (NPDRR)	Twice a year, and in addition when called by the Chairman
National Disaster Response Coordination Group (NDRCG)	As and when required
Cyclone Preparedness Programme (CPP) Policy Committee	No fixed guideline
CPP Implementation Board	No fixed guideline
Committee for Speedy Dissemination and Determination of Strategy of Special Weather Bulletin	No fixed guideline
Committee for Focal Points Operational Coordination Group	No fixed guideline

## The Disaster Management Act

The Disaster Management Act creates the legislative framework under which disaster risk reduction and emergency response management is undertaken in Bangladesh. It also sets the legal basis for that management, as well as the responsibilities of ministries, committees, and other official appointments. It was drafted and finalised in 2012.

### Strengths

- The DMA provides the legal basis for the activities mentioned in the SOD, as well as the NPDM.
- The document clarifies disaster-related concepts at the outset, with an explanation provided for 22 relevant terminologies.
- The Act has led to the establishment of a specialised department, the Department of Disaster Management, which is unique to Bangladesh and sets an example at an administrative level. In an effort to promote decentralisation and local coordination, the Act allows for this to be established outside Dhaka. The document also clarifies the department's responsibilities and leadership.
- The DMA has promoted the adoption and dissemination of scientific evidence by proposing that a national institute for disaster management research and training should be established.
- The third chapter of the Act gives government the mandate to declare a particular area disaster-prone.
- Article 32 of the Act addresses the financial issues involved in tackling emergency situations.

### Specific Mention of Urban Issues

Articles 35 and 43 lay out the government's special responsibilities for saving lives and property. Despite the absence of any direct reference to urban issues, the following elements of urban disaster risk management are embedded in these articles as necessary actions:

- For key urban infrastructure such as hospitals, clinics, community centres, shopping malls, restaurants, factories, or warehouses: assess fire risk, take necessary precautions, and maintain facilities for firefighting, search and rescue, and first aid.
- For key urban infrastructure, and depending on occupant load: ensure there are several emergency exits with escape routes marked on the floor.
- In case of emergencies like earthquakes or fires: ensure there are no barriers that would prevent the smooth movement of firefighters and other rescue vehicles.

- Prohibit construction of any structure that impedes the movement of water and leads to water logging.
- Mark electric poles with the 'danger' sign.
- Prohibit storing chemical materials in residential areas without ensuring the proper safety precautions.

### Implications on Partnership and Coordination

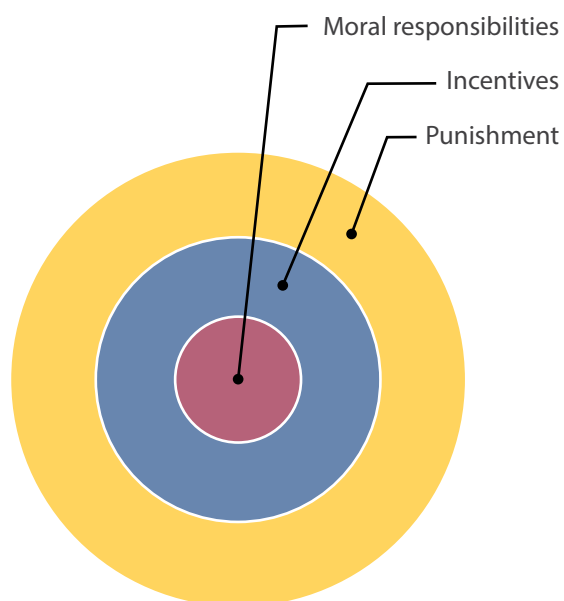
- Article 13, in the second chapter of the DMA, proposes establishing a National Disaster Voluntary Organisation. This aims for a sense of collaboration with people affected by the emergency being managed.
- The DMA provides a legal basis for, and defines, the responsibilities of ministries and government departments or divisions. It also clearly lays out the coordination mechanisms among inter-government agencies to avoid any conflicts (Figure 7).
- Article 34 clarifies the responsibilities of the media, and gives the government power to telecast news by during emergencies.
- Article 53 states that the government can also make international agreements for the purpose of disaster management.
- Article 25 provides for the "engagement of private organisations and people" in the management of disasters, if the need arises. The Act specifically mentions two examples of such potential partnership. One, it states the government can use hospitals, clinics, or medical centres run by NGOs or private organisations in a disaster situation. The administrative and clinical staff of those establishments are bound to government orders during emergencies; the government will also fix the rates of service delivery. Two, it legalises the occupation of private property in times of crisis. Under guidelines from the National Disaster Response Coordination Group (NDRCG), the district administration can take command of property, services, vehicles, buildings, and other privately run facilities.
- The Act clearly sets out the process by which help can be sought from armed forces and law enforcement. In case of emergency, the district commissioner can ask for help directly from the armed forces. Article 30 clarifies the coordination mechanisms between civil administration, the armed forces and law enforcement forces.

**Figure 7: Web of partnership**

### Implications for Accountability

There are two mechanisms of accountability visible in the document – the DMA takes a 'carrot and stick' approach for ensuring accountability (Figure 8).

- Chapter 5 sets out the legal consequences of violating the rules set forward in the Act. This can be regarded as a sign of the government ensuring its accountability to the people. The document sets out the legal codes to be applied (Code of Criminal Procedure 1898, Mobile Court Act 2009, Code of Civil Procedure 1908, Evidence Act 1872) depending on the gravity and nature of various charges, including negligence, obstruction, and fraud. Punishment ranges from financial penalties to 1–3 years' imprisonment (Ref: Chapter 5/ Page 22–24).
- On the other hand, Article 52 of Chapter 6 states that the government can offer incentives or pay special tribute to people who make a significant contribution to disaster management.
- Article 25 states that a disaster-affected person, family, or community can file a complaint about any mismanagement with local or national disaster management committees. Sometimes, in the case of local-level complaints, the affected people can file their complaint to the district commissioner whose decision, or that of the government, will be considered as final considering the situation. There is scope to launch digital facilities to file the complaints at all administrative levels. The complaints must be resolved within 30 days.
- Article 27 stipulates that marginalised groups have special rights to governmental disaster-recovery facilities. This clearly indicates the government's accountability towards the most vulnerable segments of society. Clause 2 of this article also ensures that the government will be responsible for making payments in compensation for the loss of personnel affected by disaster management activities during an emergency.

**Figure 8: Accountability mechanism**

## Weaknesses

The DMA has several weaknesses. For example, part of the document contains a Bengali translation of penal codes and other policies laid out in the SOD.

The greatest weakness, however, lies in ensuring the implementation of the Act. Although the document lays out some impressive points, putting them into practice remains a big challenge.

In addition:

- There is no clear indication of accountability at the local level of administration. The only step to launching a formal complaint is through the district commissioner – there are no options for complaining against elected representatives at the grassroots level.
- Issues around financial accountability, in case of corruption or fund mismanagement for example, have not been clarified in the document.
- Most of the liabilities specified in the Act relate to government officials – elected representatives at the community level are not covered by the mechanisms of accountability described in the document.
- The law fails to give clear direction on urban disaster management. Given the growing complexities of urban life, issues such as incidents of building collapse and fire hazards in garment factories should have received attention.
- Clause 22 makes it difficult for NGOs to operate in certain areas. For political reasons, the government will avoid declaring any moderately affected area as 'Impaired' (Durgoto) – but without such a declaration, NGOs cannot secure approval to intervene.

## Recommendations

- An analysis should be conducted to eliminate repetition in the policies laid out in the document.
- An appropriate mechanism should be put in place to ensure proper implementation of the policies.
- Issues around coordination and accountability at local levels of administration should be clarified. A feedback system for assessing the performance of the elected representatives at the grassroots level should be introduced.
- Financial accountability issues should be addressed effectively to ensure transparency in fund management systems.
- Responsibilities should be distributed appropriately between government officials as well as other elected representatives, and both groups should be held equally accountable for their execution roles – government officials should not be the only group burdened with implementation orders.
- Specific directions and regulations should be issued on urban dimensions of disaster management, considering the growing complexities with regard to hazards and disasters in cities.

## Disaster Management Policy

Authorised by Article 19 of the 2012 Disaster Management Act, the country's Disaster Management Policy was developed and published on September 14, 2015. The policy guides a range of activities: disaster preparedness, risk assessments and risk reduction strategies, risk mitigation measures, and other aspects of disaster management that require the active participation and coordination of governmental, non-governmental, public-private, and community efforts in Bangladesh.

### Strengths

#### Distinct Purpose and Holistic Analysis

The objective of the DMP, described at the beginning of the document, is to ensure good governance and stakeholder accountability. No other disaster management policy document in Bangladesh has focused on these issues.

Unlike the SOD and the DMA, the policy has a distinct presence among national level documents for disaster management. It describes disaster-related issues in Bangladesh and how they relate to socio-economic development priorities in a broader context, with reference to several national and international policies. The international guiding principles noted in the document include the Hyogo Framework of Action, the UN Framework Convention on Climate Change, the SAARC Comprehensive Framework on Disaster Management, the Millennium Development Goals, and the Sustainable Development Goals. Among the national guiding principles are the country's constitution, Annual Development Plans (ADPs), Five Year Plans, Perspective Plan, and the Climate Change Strategy and Action Plan.

The DMP also took stock of the existing mechanisms, strategies, and national policies beyond the Disaster Management Regulatory Framework. Although the Act of 2012 is regarded as the first to focus on disaster management in Bangladesh, several other Acts had previously dealt with disaster management issues. These included four laws to ensure disaster risk reduction, two laws to manage water logging, five laws to reduce earthquake risk, four laws to prevent industrial and human-made hazards, one law to ensure the land rights of disaster affected populations, and one law to ensure access to information by vulnerable people affected by a disaster.

The second chapter of the DMP describes the policy principles guiding the document – the first of which is Comprehensive Disaster Management.

#### Hazard-Specific Risk Management

The DMP differs from other policy documents in laying out the various activities for DRR and emergency management by hazard, not by agency. The type of hazard-specific management guidelines that have been produced include:

- Flood risk management
- Flash Flood Risk Management
- Cyclone and Storm Surge Risk Management
- Earthquake Risk Management
- Landslide Risk Management
- River Bank Erosion Risk Management
- Drought Risk Management
- Cold Wave Risk Management
- Nor 'wester\* and Lightning Risk Management
- Salinity Risk Management
- Water logging Risk Management
- Fire Risk Management
- Chemical & Nuclear Risk Management
- Biological Hazard Management

#### Rigorous Principles

The DMP has laid out a number of strong disaster-specific principles. **Figure 9** lays out the principles stated in the document.

#### Developing Strategies to Mainstream DM

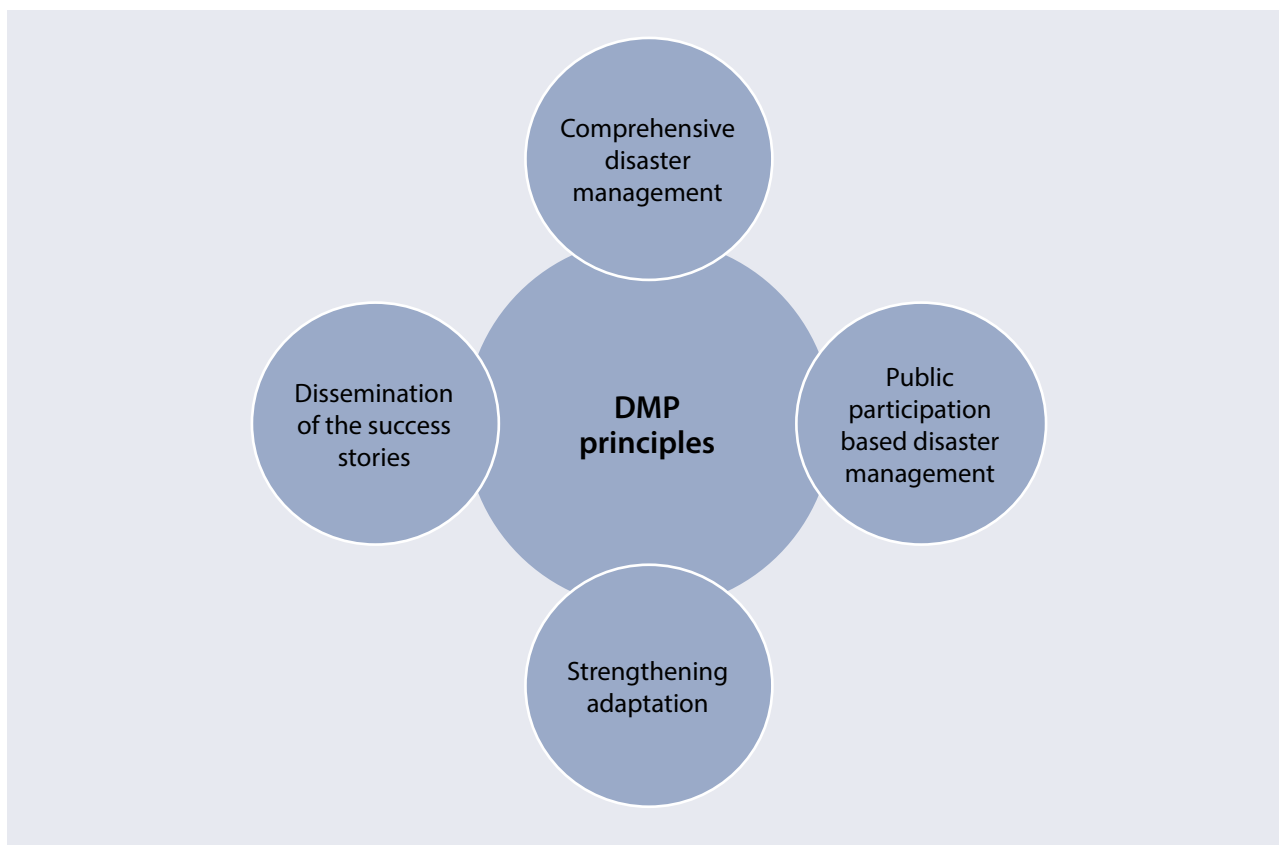
The DMP lays out a number of clear strategies for mainstreaming disaster risk reduction in several segments of the education system (general, vocational, madrassa, and English medium). The strategies also cover several other sectors: agriculture, health, water, food security, land management, and livestock management. Chapter 2 specifically refers to poverty reduction.

#### Digitisation of DM

Chapter 2 also discusses the use of information and communication technologies (ICTs) for disaster management in Bangladesh, encouraging the application of remote sensing and satellite imagery, geographic information systems (GIS), global positioning systems (GPS), and mobile technology. There is a separate provision for developing a digital database of previous disasters to help manage future ones.

\* This is a rainfall and thunderstorm event which occurs in India and Bangladesh. Otherwise known as Kalbaishakhi, it occurs with increasing frequency from March until the monsoon season over North-East India.



**Figure 9: Principles of the Disaster Management Policy (DMP)**

### Focus on the Grassroots

The document addresses disaster management strategies at the union level for the first time. The involvement of CBOs has been emphasised to ensure effective management at the grassroots, recognising that the government may not always be able to reach everyone in need of support.

### Reflections on Urban Issues in the Disaster Management Policy

- **Recognition of Urban Risks:** The Policy recognised unplanned urbanisation as a particular disaster risk in Bangladesh (Page 7245). This is also covered under the principle of comprehensive disaster management, citing the country's growing urban population (Page 7252).
- **Risk from Different Hazards Addressed:** The same hazard can produce different risks in urban areas compared with rural areas. An earthquake, for example, might be catastrophic for a dense urban area, while the number of casualties may be negligible in a sparsely populated rural area. The document's section on flood risk management (Page 7259) emphasises the need to organise urban volunteers and integrate them into the wider response, under Clause 13 of the 2012 DMA.

Several other issues that relate to urban risk are also mentioned in this section, such as assessing infrastructural vulnerability, risk modelling and risk mapping, and improving old infrastructures. Guidelines on reducing the risk from fire hazards are provided where the policy calls for critical infrastructures – such as hospitals, community centres, religious centres, and stadiums – to be built with fire and rescue service facilities. The document also encourages people living in urban areas to store water.

- **Urban Risk Assessment:** The DMP's section on risk assessment (Page 7273) contains a sub-section on urban risk assessment. This addresses several issues, of which the following are some of the most crucial:
  - The development of a master plan for assessing and reducing earthquake risks in several cities: Dhaka, Sylhet, Chittagong, Rangpur, Bogra, Rajshahi, Tangail, Mymensingh, and Dinajpur.
  - The assessment of disaster risk for warehouses, nuclear facilities, gas fields, chemical factories, fertiliser factories, and mines.
  - The assessment of flood risks due to water logging, or shrinking watersheds.

- **Mainstreaming Urban Disaster Management:**

The Policy has given special consideration to mainstreaming the management of several hazards and adapting it to the context of urban areas. For example, sub-sections of the document refer to health hazards and land-use planning in cities. Among the preparedness and response actions that have been prioritised as part of this mainstreaming are the following:

- Follow building codes in urban areas.
- Increase awareness for disaster management in urban areas.
- Enlist the risky infrastructures in urban areas.
- Prepare wide roads for ensuring smooth transportation of supplies for rescue operations.
- Compile names and contact details of doctors.
- Prepare DM plans at city corporations and wards.

### Implications for Participation and Coordination

- There are several participatory objectives listed in Chapter 2 of the DMP. The list draws boundaries and points of focus for the participation and coordination between governmental organisations, NGOs, communities, and international organisations. The document lays out the following strategies for ensuring and promoting the participation of the public, which depend on increasing the skills and capacities of communities:
  - Participatory strategy development
  - Locally adaptive policies
  - Public-private partnerships
  - GO-NGO joint drills
  - Community-based volunteers
  - Regional and international collaboration
- One of the principles of the DMP is public participation-based disaster management. This principle clearly lays out ways of promoting public participation in government interventions for risk and emergency management. Emphasis has been placed on increasing capacity at the grassroots level, through forming community-based organisations and encouraging people to work together. Less vulnerable population groups are encouraged to collaborate with more vulnerable groups. Another sub-principle is to develop a ‘multi-dimensional culture of participation and coordination’ among GOs, NGOs, and development agencies.

- A section in Chapter 2 focuses on increasing institutional capacity for disaster management, acknowledging that improvements are needed for government institutions, businesses, and development institutions.

### Implications for Accountability

- A clause directly relating to accountability is missing from the DMP. However, there are suggestions of accountability within the principles laid out in the policy. For example, there are several references to providing for the special needs of women, children, disabled, older adults, tribal and Dalit communities.
- The government’s accountability to the people is also emphasised with several constitutional clauses that have been added to the document, such as Article 15(a), 15(b), and 15(d). Article 19(1) of the constitution states that the government is responsible for ensuring equality of opportunities for its citizens. Article 19(3) ensures equality of opportunity for women.
- Section 9 of the last chapter in the DMP focuses on monitoring and evaluation of how the country’s disaster management agencies perform. Every government agency has been given the responsibility of assessing its own performance and is required to prepare an annual performance report.

### Weaknesses

The policy emphasises risks related to natural disasters, but has overlooked some human-caused hazards. Some of these, such as fire and water logging, can be serious and are highly prevalent in cities.

### Recommendations

- The disaster management policy should consider risks from both natural and human causes of disaster.
- Serious anthropogenic hazards that are highly prevalent in cities should be taken into account in developing policy guidance.

## National Plan for Disaster Management 2016–2020

The National Plan for Disaster Management 2016–2020 has been prepared under the leadership of the Ministry of Disaster Management and Relief, with financial and technical support from the UN Development Programme (UNDP). The plan follows from, and is based on, lessons and experiences from the earlier version of the Plan (NPDM 2010–2015).

### Strengths

#### Footprints of Transformation

The NPDM has brought about a transformation in the way disaster management plans and policies are prepared in Bangladesh. The Plan contains a thorough analysis of the national disaster management framework and its linkages with international frameworks. It references contemporary issues around disaster resilience. It states: “[The] NPDM is considered as a transformational instrument to build the resilience of the vulnerable people of the country”. The document emphasises the multi-dimensional nature of disaster management. It acknowledges the challenges of disaster risk management in urban areas, and the importance of involving the private sector in the disaster management architecture.

#### Emphasis on an Incident Command System

The country’s capacity to respond in an efficient and timely manner in times of a major disaster is often overwhelmed, and this is partly due to the lack of coordination and of an incident command system. There are no specific guidelines for civil-military engagement, and this leaves disaster management in disarray. The NPDM emphasises that the absence of an incident command system is a weakness of previous national plans, and calls for developing such a system.

#### Whole-of-Government Approach

The plan takes a whole-of-government approach to disaster risk management and response. It also seeks to promote the mainstreaming of climate change adaptation and mitigation in order to reduce existing and future risks.

#### Use of Statistical References

A large amount of well-documented statistical information has been used in the NPDM. This gives the document an edge over other national-level documents on disaster management. For example, the Plan includes statistics on loss and damage from disasters. It also provides statistical information on recent human-caused disasters such as fire hazards,

incidents of building collapse, floods, major cyclones, saline water intrusion, fires, and industrial incidents.

#### Hazard-Specific Plan

The document provides a hazard-specific plan that focuses on major hazards as a priority. It also identifies key investment areas, and agencies associated with those areas. It covers: sudden-onset events; slow-onset events; mega disasters; recurring disasters; regional disasters; early-warning generation and dissemination; capacity-building and monitoring.

#### Lessons from the Previous Plan

In its draft form, the NPDM included a sharp analysis of the previous NPDM (2010–2015), which helped ensure the new Plan was pragmatic and authoritative.

#### Reflection of Urban Issues in NPDM 2016–2020

- In the background discussion included in the document, the Plan recognises the “critical importance of the emerging issues such as urban disasters and lightning, and emphasises the involvement of the private sector in the disaster management architecture” (Page 1).
- The NPDM states that one of its major objectives is to “include emerging disaster risks (earthquake), emphasise urban disaster risks (fire, building collapse) and align those in the plan” (Page 3).
- The document regards urbanisation as the major driver of change in disaster risk. It states: “The speed of urbanisation will be an important driver of change as the majority of new migrants in urban areas will live in informal settlements, or in overcrowded and deteriorating conditions. Therefore, the urban design, planning, and delivery of services that improve quality of life for residents and increase the resilience of cities to natural hazards should be a priority” (Page 4).
- The section on the lessons learnt from the previous NPDM (2011–2015) states that “urban disasters pose particular challenges”. It also states: “A clearly defined pre-established coordination mechanism and incident command system for urban disasters is needed. The cadres of urban volunteers being developed can be effective in dealing with risk assessment and risk reduction, as well as crisis response, but this will require an institutional mechanism to manage and keep the volunteers motivated and engaged” (Page 24).

**Figure 9: Accountability framework for the implementation of NPDM 2016–2020**

### Implications for Partnership/Coordination

- As interest in private sector investment rises, the Plan attaches importance to engaging partners beyond the public sector. This covers all investment areas where risk-informed planning and implementation is valued. The NPDM has the following objectives with regard to encouraging partnership:
  - To incorporate aspects of disaster management in the plans and programmes of ministries and agencies, in order to ensure that development plans are informed by disaster risks.
  - To explore potential investment areas both in the public and private sectors, and also in hazard-prone regions and communities.
  - To illustrate to other ministries, NGOs, civil society, and the private sector how their work can contribute to achieving the strategic goals and government vision on disaster management. A proactive role by the government is expected in safeguarding such collaboration.
- The Plan provides guidelines for ministries and government departments to encourage collaboration among between them. They are expected to use this framework as guidance while producing their annual work plans.

### Implications for Accountability

The NPDM 2016–2020 acknowledges that an accountability framework is necessary for ensuring the proper implementation of the plan (Figure 9).

### Weaknesses

- A plan is only as good as its implementation and monitoring – as with other national policies, these are the greatest weaknesses of the NPDM. Its impressive provisions will be meaningless if they fail to bring about change in how people live in urban areas.
- In spite of the policies reviewed in this report, and several other relevant policies in this sector, urban areas in Bangladesh have experienced catastrophic human-made disasters, such as the collapse of the Rana Plaza building, or fires in Dhaka city factories. In addition to the loss of lives and economic damage involved, disasters in urban areas have attracted the attention of international media and hurt the country's reputation as an exporter of ready-made garment products.
- Urban citizens are also at the mercy of mismanagement by government agencies, even though they may not attract the international media due to absence of mass casualties. There is still a

great deal of misery and grief among people who live in cities. The troubles of daily life in the city persist and have a strong impact, in addition to the impact of a sudden and deadly disaster. Policies that aim to prevent such disasters have not been effective.

- Dependence on external agencies prevails. The Ministry of Disaster Management and Relief (MoDMR) appears not to be capable of producing the national plan without technical, and even financial, assistance from donors. This raises questions around the capacity to develop homegrown policies with local experts.
- The Plan does not discuss existing problems around coordination among agencies. Like other documents, it does not analyse weaknesses of the regulatory framework. Although there is emphasis on the need for an incident management system to deal with urban disasters, as well as for civil-military cooperation, the current problems in these areas

should have been explained through case-studies to support the recommendations made in the Plan.

## Recommendations

- A management and monitoring system should be developed for urban areas, to ensure the appropriate implementation of the plan and effective participation of local communities.
- Ministerial capacity should be developed in terms of human, technical, and financial resources, so as to reduce dependency on foreign assistance in generating national plans and policies.
- A well-defined coordination mechanism should be discussed in the document, so as to explicitly address existing challenges between coordinating agencies.

## Emergency Response Plan

The Emergency Response Plan (ERP) is a set of guidelines for the coordination of the activities of NGOs, INGOs, and other humanitarian agencies during periods of emergency management. The ERP was developed on the basis of Inter-Agency Standing Committee (IASC) guidance issued in August 2012. It focuses on practical, concrete preparedness and response actions and responsibilities, and it seeks to harmonise overall coordination between agencies.

### Strengths

#### A SOD for Humanitarian Agencies

The ERP is a document similar to the SOD. It is the first policy document to focus on organising the activities of humanitarian agencies in Bangladesh during a crisis period. The ERP clearly lays out the roles and responsibilities of major humanitarian organisations, and in doing so paves the way for a quick response system.

#### Enriched Context Analysis

The document includes a context analysis of hazards in Bangladesh. A distinct feature of this analysis is the inclusion of 'social instability' as a major hazard linked to political violence and other causes of instability in the country. The ERP also includes an analysis of several health hazards: infectious diseases including those that are water-borne, neglected tropical diseases, and sexually transmitted diseases.

### Development of a Country Risk Profile

The ERP has developed a country risk profile, with seven hazards identified as particularly serious. A Contingency Response Plan (CRP) was then developed for three of these hazards: earthquakes, cyclones, and floods (river flooding/water logging). The CRP includes scenarios, planning actions, assumptions, operational constraints, and strategies for coping with them.

### Well-Defined Agency Roles

A set of core preparedness activities known as Minimum Preparedness Actions (MPAs), as well as Standard Operating Procedures (SOPs) have been developed by the ERP to guide the coordination of different humanitarian agencies' activities. The SOPs, in particular, have laid out the responsibilities of different organisations during the early-warning phase and the response phase. The document clearly defines the lead and cooperating agencies to reduce overlap in remits and avoid misunderstanding between the agencies involved in emergency management.

## Reflections of Urban Issues in Emergency Response plan

This short document does not reflect the full range of urban disaster risk issues. Most references to urban risks revolve around earthquake hazards. The following sections illustrate this focus:

- “These faults are likely to generate large earthquakes over Magnitude 8. As per the seismic macro-zonation studies, urban areas such as Chittagong, Sylhet, Dhaka, Rangpur, Bogra, Mymensingh, Comilla, Rajshahi are located within possible seismic active zones” (Page 5).
- “In case of earthquake or collapse of urban structures, encourage the Government to call for assistance from the member countries of the International Search and Rescue Advisory Group (INSARAG)” (Page 20).
- “A strong earthquake affecting a major urban center like Dhaka, Chittagong, or Sylhet may result in damage and destructions of massive proportions and may have disastrous consequences for the entire nation” (Page 22).
- “The rapid increase in vulnerability of the city is evident from the rapid urbanisation, population growth, population migration and development of major economic zones in and around Dhaka. Major causes that lead to a very high seriousness of the risk analysis related to earthquakes, include the haphazard urbanisation and sub-standard construction of buildings” (Page 22).

## Implications for Participation/Coordination

The 2014 Bangladesh Response Preparedness Plan calls for the participation of disaster management committees at all tiers, as well as relevant government agencies and NGOs, in order to ensure emergency management proceeds smoothly. The ERP states that it “provides practical guidance to assist IASC members, other UN agencies and NGOs in preparing to respond to potential emergencies with appropriate humanitarian assistance and protection”. Chapter 3 of the ERP lays out the disaster management coordination structure between the government and NGOs. The Disaster and Emergency Response (DER) group is tasked with ensuring effective coordination between national and international stakeholders around all aspects of the disaster management cycle. This group is co-chaired by the secretary of the Ministry of Disaster Management and Relief, and the UN resident coordinator. Its membership consists of senior decision makers from UN agencies, donors, and a representative from each of the INGOs and NGOs involved.

## Implications for Accountability

The proposal to produce an ERP in Bangladesh was made by the country UN Office for the Coordination of Humanitarian Affairs (OCHA) and the Humanitarian Coordination Task Team (HCTT). It was developed with participation from the Ministry of Disaster Management and Relief, the Disaster Emergency Response group and other relevant stakeholders. However, as it is not a government document, there has not been a particular focus on accountability.

## Weaknesses

The ERP is a short document and therefore it could not be assessed in the same way as the national documents prepared under the DM Framework. Nevertheless, some major weaknesses have been identified.

- The ERP is a preparedness plan for emergency response to all kinds of emergencies, but appears to have taken a small number of hazards into account.
- The document has no legal power. It is not binding for humanitarian agencies working in the country.
- A key weakness of the Plan is that it makes no mention of the accountability of actors involved in implementing the emergency response.
- The Plan does not address urban issues adequately, considering that some hazards strike with high frequency and severity in urban areas (e.g. incidents of building collapse, landslides, water logging).

## Recommendations

- To ensure an effective and efficient contingency plan for emergencies in Bangladesh, the ERP should consider all possible hazardous events – both the natural and human-caused disasters that can have an extensive impact on people, infrastructure, and the environment.
- A legal mandate should be developed for humanitarian agencies to act in accordance with the plan.
- The roles and responsibilities of the relevant actors coordinating and engaging in emergency response activities should be more clearly defined. Guidance should be issued with regard to the accountability of personnel.
- The problems relevant to urban and rural areas need to be addressed separately. Emphasis should be given to emerging urban hazards that are expected to strike communities with greater frequency and severity.

# Findings from Field

Effective governance can only be ensured through increased accountability and participation. Accountability is not only the responsibility of individuals or organisations, but also of a government or relevant authority, whose duty is to increase the effectiveness of public strategies, policies, rules and regulations. The participation of all stakeholders ensures that decisions and actions taken to reduce the adverse impacts of hazards are inclusive. Coordination

between organisations, agencies, and volunteers is an integral part of the management system – along with the citizens of the country, as all efforts will be in vein if people do not follow the policies and measures taken for their well-being.

However, there are many challenges that affect accountability and participation in disaster management. The following are some examples of those challenges.

## Accountability Issues

1. The policies issued by the government are not practised as intended, and this becomes apparent by the desperate situation in which many people find themselves after a disaster. Corruption gets in the way of proactive, good governance. The government lacks efficient manpower, skills, and commitment to implement the policies. As a result of these factors, an Urban Policy has yet to materialise even though the work began in 2011.
2. There is no city government or a council with the power to lead on urban disaster management.
3. One of the major problems with accountability is that it is still centralised. It is impossible for 160 million people to be managed by only 300 officials. There are thousands of problems facing communities, and if we depend solely on the parliament, the situation will not improve. Therefore, accountability mechanisms need to be moved to local areas: local agencies should develop capacity, get more resources, and get empowered. The NGOs need to cooperate with the government.
4. The SOD has issued directives for some disaster management committees, from the central government to the bottom tier of the administration. But it appears that the committees, particularly at the local level, do not meet regularly outside emergency periods. Therefore, the committee members are not immersed in the concept of disaster risk reduction. They need to be trained and monitored using digital technology.
5. Response can be delayed when multiple agencies are involved. Therefore, accountability and participation must be improved at the local level.
6. Conflicts and confusion around the responsibilities of different authorities complicates the situation and gets in the way of formulating sound urban policy.
7. Most officials working in various agencies are keen to exercise their power, but refuse to be accountable for using that power. They always refer to senior officials when questioned on any issue.
8. The significance of the SOD and the Disaster Management Policy documents needs to be understood in order to improve the disaster management structure and to ensure accountability.
9. Most of the policies assessed hold bureaucrats accountable, but not the politicians. Respondents from many organisations reported that political interference often complicates the management process. When people break laws using their political power, then it becomes impossible for government agencies to maintain their accountability. If their orders are not followed from the outset, this works as a disincentive for the accountability of agencies to the people.

10. Sometimes lifestyle habits get in the way of the effectiveness of policies. In spite of awareness raising campaigns by the government and NGOs, as well as repetitive fire incidents in urban areas, most people continue to use flammable products in the interior design of their houses. It is impossible for authorities to check every home. People tend to break the rules regularly, and this renders policies useless. It has been reported that many high-rise buildings in Dhaka and Chittagong have been built without permission from the authorities.
11. Most poor and illiterate people tend to live in high-risk areas with poor health and sanitation facilities, and without full knowledge of their rights. They do not hold anyone accountable because they know they live in hazardous conditions and in violation of government rules and regulations that were put in place to ensure their safety.
12. The urban elite in power will hardly hold themselves accountable to the landless, poor people busy living hand to mouth and unaware of their rights in country that operates under a capitalist system.

## Participation and Coordination

1. A sustainable and comprehensive disaster risk reduction strategy requires that appropriate planning and coherent policies are in place. But in urban areas, development of these policies has stalled. The Local Government Engineering Department and the Ministry of Housing and Public Works are in conflict about plans to put together an urban policy.
2. Reports suggest there are 54 agencies responsible for managing Dhaka city, but they lack coordination. There are no regular meetings between the agencies to talk about cooperation problems. As a result, it's not unusual for the same road to be dug up several times by several agencies.
3. The poor coordination between government agencies is particularly obvious in the case of data sharing. The information gap between different departments persists. For example, the FSCD may respond with a delay because of a lack in adequate information about traffic while on their way to the crisis location.
4. Several policies are not implemented or officially approved. For example, no open space is available to be used as shelter during an earthquake. If any such spaces are available, they cannot be accessed because they have been protected by a wall and labelled as private property. A new policy known as the National Debris Management Guideline awaits approval from the ministry. This is also the case with the Dead Body Management Guideline.
5. There is clearly unequal participation of socially disadvantaged or marginalised population in decision-making processes. Inequality prevails in this era of capitalism, where elites always benefit from policy decisions at the expense of the poor.
6. A limited understanding of disaster risk reduction concepts means disaster managers may practise disaster management poorly, or may fail to ensure adequate participation and coordination within or between organisations.
7. Population growth in urban areas is a challenge. It results in rapid urbanisation, which puts extra pressure on all sectors and on government agencies. This may be one of the reasons for a lack of cooperation between some agencies.
8. The lack of a digitised management and monitoring system that can be operational for disaster management and response also hampers coordination among agencies. Digitisation increases the efficiency of coordination, thus ensuring more effective dissemination of the information required.
9. Coordination can be hindered also because the necessary data is not always available. One reason is that different departments collect data to meet their specific objectives. One of the respondents gave the example of the Urban Development Directorate, which needed a 0.5-metre resolution satellite image to produce maps at the Mouza (local administrative) level. The Survey of Bangladesh provided them with a 5000-metre resolution image instead, where identifying features was not possible.
10. While urban development agencies are usually involved in risk reduction activities, other actors coordinate with the volunteers. But there is no policy or appropriate mechanism for recruiting volunteers. The involvement of untrained volunteers only increases the vulnerability of both the victims and the rescuers.



11. A respondent said: "There is absence of institutional coordination guideline in SOD since it is only a disaster instrument".
12. According to the guidelines of the SOD and other policies, the disaster management committees should be active well before a disaster, and during an emergency. Therefore, meetings should be held every month – however, they tend to take place only when disaster strikes.
13. Unclear directions in local government policy create confusion in developing proper systems and implementing them. This makes the response more time-consuming and ineffective in times of need.
14. The fact that multiple governmental bodies are tasked with managing a city creates some conflict, overlaps, repetitive work, and waste of resources. There is no single body that can command and control the affairs of the different agencies. Utility service providers do not listen to each other.

## Recommendations

1. Bureaucrats who care for their country, a devoted political leadership and a responsible citizenry are all required to transform policies into good practices, and thus ensure good governance.
  2. Education on the value and practice of cooperation should start early, at the school level. Students need to participate in social work alongside other regular activities. The education system needs to be transformed so it no longer focuses on knowledge gained from books only.
  3. For a disaster risk reduction strategy to succeed, what is needed is proper implementation of policies, good governance, and digitisation of governing structures.
  4. A disaster awareness programme should be introduced in order to disseminate knowledge about risk and ensure the participation of people from every social sphere. This will help make disaster risk reduction activities more productive.
  5. Different ministries should divide area and monitoring activities between them, in order to effectively manage the whole city. Progress will not be possible without proper monitoring, training, and a problem identification process.
  6. One of the respondents suggested that the number of fire stations should be increased, and the FSCD should be transformed into a modern fire service where each institution is part of a system of firefighting and fire safety that is integrated with daily practices in the community.
- He also suggested that every housing society needs to have a proper fire service. The City Corporation should maintain the fire service system. More generally, every institution needs to develop its own policies and actions for DRR.
7. Development plans should be based on the city, and for this to happen, it is necessary to establish a city government.
  8. The policy review process should focus on identifying residual risks, and policies that generate new risks. A review of the political economy should also be conducted, to enable population management in urban and rural areas of the country.
  9. The disaster management system is still in an analog or manual form. It needs to be digitised, to allow for greater participation on the part of citizens and the government, as well as among and between the agencies. The monitoring of DMCs at all levels need to be digitised as well, and the committees need to meet with the frequency required by the SOD.
  10. Changes are also needed in the country's political culture and democratic practices. The problems of urban mismanagement should receive attention in the parliament. People need to follow the rules, and agencies should practise good governance. Good democratic practices for city management will lead to change in other areas.

# Conclusion

The need to strengthen disaster preparedness at all levels has been emphasised in several global policies, frameworks, and legislative acts. Preparedness plays a crucial role in disaster risk management, reducing adverse impacts on the population. Although Bangladesh is a signatory to global policies such as the priority actions of the Hyogo and Sendai Frameworks, very few of the measures they stipulate have been implemented effectively. Complexities associated with accountability and participation at all levels have been identified as a major challenge for policy implementation in the country.

The disaster management policies of Bangladesh clearly define strategies that relate to accountability and participation for several sectors, organisations, or individuals involved. But these strategies are not yet widely practised. Centralisation of power, bureaucracy, conflicts, and confusion about responsibilities due to the involvement of multiple agencies and political entities are all factors that affect accountability.

On the other hand, inadequate participation and coordination among the sectors and organisations involved in disaster risk management leads to incoherent preparedness activities. Among the reasons are a lack of the following: data sharing; digitised management and monitoring systems; exercises, drills, and institutional coordination guidelines; and unequal participation of stakeholders in decision-making processes.

It is not always the government or the authorities that need to be held accountable for all failures – the public is also to blame to some extent. People are often responsible for not adhering to the policies, rules, and regulations that are in place. The average citizen has little or no knowledge of disaster risk reduction concepts. Many people are often unaware of their rights and responsibilities. All these factors together result in a reduced sense of accountability and participation in policy implementation among both government agencies and the public.

In order to change the current situation and move towards more effective disaster risk management, state governments need to cooperate with agencies to promote the collection, analysis, and use of relevant data and other information that can help to

understand the risks. It will be necessary to empower local authorities, train staff and share experiences, encourage more skilled volunteering and proper resource allocation, and increase the investment of both the public and private sector into scientific and technological development. The Urban Resilience Project, a five-year programme being implemented by the World Bank, is one example of initiatives that contribute to strengthening capacity and building resilience (**Box 1**).

Cooperation among members of parliament at global and regional levels should also be encouraged – it plays a significant role in supporting the development and adoption of normative instruments as indicated in the Sendai Framework. International cooperation is also required for financial and technical support, capacity-building, technology transfer, and knowledge exchange.

Accountability in disaster risk management was a much needed and much debated issue during the consultations and negotiations leading to adoption of the Sendai Framework. The national framework for disaster risk reduction of Bangladesh should be adapted regularly to meet the requirements and further developments of such frameworks. For example, building codes should be revised and enforced. In addition, national strategies and plans with targets, indicators, and timeframes, as well as mechanisms for follow-up and reporting, should be established along with mechanisms to ensure transparency in the financial sector.

Policies are considered to be the backbone of a country's formal institutions. The disaster management-related regulations and policies of Bangladesh have been formulated to integrate internationally agreed agendas and strategies to combat disaster risks. Therefore, implementing the policies widely and in a comprehensive manner can build resilience against all types of disasters. But putting these policies into practice is profoundly affected by a range of factors, including a lack of effective governance; irregularities associated with accountability, participation, coordination and cooperation among implementing agencies; a complex socio-political context; and corruption of personnel associated with implementation.

## Box 1. Bangladesh Urban Resilience Project

The **Urban Resilience Project (URP)** aims to strengthening the capacity of the country's government agencies to respond to emergencies, and to increase resilience to disasters in the cities of Dhaka and Sylhet. It began in July 2015 and will run until 30 June 2020.

The URP is the first phase in a series of projects – the second phase addresses construction standards for future developments, and the third phase considers broader investment in infrastructure development. It is being implemented by the The World Bank, RAJUK, the Dhaka North City Corporation, and the Department of Disaster Management (DDM) of Bangladesh.

The project is made up of the following five components:

### Component A: Reinforcing the Country's Emergency Management Response Capacity

This involves designing and putting in place a management system through setting up response facilities such as emergency operations centres, and through training. The aim is to mobilise resources and improve the efficiency of roles and responsibilities, in accordance with the 2012 Disaster Management Act and the 2010 SOD.

### Component B: Vulnerability Assessment of Critical and Essential Facilities

This involves developing the consensus-driven, analytical foundation required for longer-term investments to reduce risk in the built environment of Dhaka, Sylhet and other cities in Bangladesh. It concentrates on two activities: a vulnerability assessment of the built environment in Greater Dhaka, and the development of risk-sensitive land use planning as a practice across Bangladesh.

### Component C: Improved Construction, Urban Planning, and Development

This involves putting in place the institutional infrastructure and competencies needed to reduce long-term disaster vulnerability in Dhaka. It covers four areas of investment: integrating risk information into development planning; ensuring an effective mechanism for land use planning and building regulations; improving professional competency in these areas; and strengthening the enforcement of building regulations.

### Component D: Project Coordination, Monitoring, and Evaluation

This involves ensuring the necessary funding is available to coordinate, monitor, and evaluate the project. It will be done through tracking mechanisms to analyse the actions of key stakeholders, an independent mid-term review, and an end-of-project evaluation. The URP plans to engage relevant government ministries to carry out this work.

### Component E: Contingent Emergency Response

This involves creating a mechanism that would allow the government to request the national bank to reallocate funds in an emergency, to partially cover response and recovery costs. This could also be used to channel additional funds that may become available as a result of the emergency.

Therefore, a strategic change is needed to ensure the effective implementation of disaster risk management policies. Proper governing mechanisms should be introduced to address the complexities associated with accountability and participation. In addition

to this, public awareness raising and mobilisation should be emphasised to ensure policies are effective in substantially reducing the losses and impacts of a disaster.

# References

1. A.abedin, z., 2013. *A Study of Urban Heat Island Effect in Dhaka City*. [Online] Available: [https://issuu.com/aurathenewera2007/docs/a\\_study\\_of\\_urban\\_heat\\_island\\_effect\\_in\\_dhaka\\_city](https://issuu.com/aurathenewera2007/docs/a_study_of_urban_heat_island_effect_in_dhaka_city) [Accessed 2017].
2. ADB; ILO, 2016. *Employment and the Labor Market in Bangladesh: Overview of Trends and Challenges*, s.l.: s.n.
3. Ahmed, I., 2012;a. Migration and urban labour markets. In: H. Z. Rahman, ed. *Bangladesh Urban Dynamics*. s.l.:Power and Participation Research centre.
4. Ahmed, S., 2012;b. Level, Structure and Distribution of Urban Public Finance. In: H. Z. Rahman, ed. *Bangladesh- Urban Dynamics*. s.l.:PPRC.
5. Angeles, G. et al., 2009. The 2005 census and mapping of slums in Bangladesh: design, select results and application. *International Journal of Health Geographics*.
6. Anon., 2015. *Demographia World Urban Areas*, s.l.: s.n.
7. Bangladesh Bureau of Statistics (BBS). 2014. Bangladesh sample vital statistics
8. BBS, 2015. *Population Monograph of Bangladesh*, s.l.: Statistics and Informatics Division (SID);Bangladesh Bureau of Statistics (BBS).
9. Berger, Peter L. and Luckmann, Thomas. 1966. *The Social Construction of Reality*. New York: Anchor BooksBrown, C., 2011. *The 21st Century Urban Disaster*, s.l.: s.n.
10. Brown C. 2013. *The 21st Century Urban Disasters*. Global Communities.
11. Centers for Disease Control and Prevention (CDC). 2013. *CDC's Policy Analytical Framework*. Atlanta, GA: Centers for Disease Control and Prevention, US Department of Health and Human Services.
12. CUS, 2006. *Slums of Bangladesh: Mapping and Census 2005*, s.l.: Centre for Urban Studies.
13. Das, M. K. & karmakar, S., 2015. *Urban Heat Island Assessment for a Tropical Urban Air-shed in Bangladesh*. s.l., International Conference on Urban Climate.
14. Das, P., Chowdhury, T. R. & Kabir, T., 2016. A Comprehensive Study on Road Accident Scenario of Dhaka-Aricha Road. *Asian Journal of Innovative Research in Science, Engineering and Technology*, Volume 1.
15. Ferris, E., 2012. *Urban disasters, conflict and violence: implications for humanitarian work*, s.l.: Brookings-LSE Project on Internal Displacement.
16. Fischer F., Miller G.J., Sidney M.S. (Eds.) 2007. *Handbook of Public Policy Analysis: Theory, Politics, and Methods*. CRC Press. Taylor and Francis Group. NY. US.
17. Forni, M. (2014) *Is Dhaka Ready? Towards Urban Resilience in Bangladesh*. World Bank.
18. Gallion, A. B. & Eisner, S., 1986. *The Urban Pattern, city planning and design*. s.l.:CBS Publishers.
19. Government of Bangladesh (GoB). 2014. *Bangladesh Urban Resilience Project: Social Resilience Framework*.
20. Hafiz, R., 2007. The Urban Frontiers of Dhaka: Creating Space Above the Water . In: S. Jahan & K. M. Muniruzzaman, eds. *Urbanization in Bangladesh*. s.l.:s.n.
21. Hossain, S., 2008. Rapid Urban Growth and Poverty in Dhaka City. *Bangladesh e-Journal of Sociology*, Volume 5.
22. Hunga, T., Uchihama, D., Ochi, S. & Yasuoka, Y., 2005. Assessment with satellite data of the urban heat island effect in Asian megacities. *International Journal of Applied Earth Observation, ELSEVIER*.
23. Huq, S., 2016. Is rapid urbanisation good or bad for Bangladesh?. *The Daily Star*, 21 december.
24. International Federation of Red Cross and Red Crescent Societies (IFRC). 2010. *World Disaster Report*.
25. International Federation of Red Cross and Red Crescent Societies (IFRC). 2017. *Urban Disaster Risk Reduction*.
26. Islam, M. S. & Khan, M. N. U., 2012. Urbanization: spatial dynamics. In: H. Z. rahman, ed. *Bangladesh: Urban dynamics* . s.l.:PPRC.
27. Islam, M. S. & khan, M. N. U., n.d. *Urban Spatial Growth: The Case of Bangladesh*, s.l.: s.n.
28. Islam, N., 1995. *Dhaka: From city to megacity*. s.l.:s.n.

29. Islamic Relief (IR). 2012. Collective Actions for Resilient Urban Areas.
30. Jans M. T. 2007. *A framework for public policy analysis and policy evaluation*. IES Research Colloquium (<http://www.ies.be/files/070904%20Jans%20Policy%20Analysis.pdf>)
31. Jones, D., Mahbub, D. & Haq, M. I., 2016. *Urbanization and Migration in Bangladesh*, s.l.: UNFPA.
32. Kamal, A. S. M. M., n.d. *BANGLADESH National Conservation Strategy; Disaster and Disaster Management*, s.l.: s.n.
33. Kamruzzaman, P., 2016. *Industrial accidents in Bangladesh are another symptom of an unequal society*, s.l.: The Conversation .
34. Khondker, B. H. & Raihan, S., 2008. *Poverty Impacts of Remittance and Ready Made Garment Growth in Bangladesh*, s.l.: s.n.
35. Mahmud, M. A., 2012;a. Mass Transit Challenges of Dhaka City. In: H. Z. Rahman, ed. *Bangladesh Urban Dynamics*. s.l.:s.n.
36. Mahmud, M. A., 2012;b. Management of growth and planned development of Dhaka city: the necessity of proper enforcement of planning standards. In: H. Z. Rahman, ed. *Bangladesh Urban Dynamics*. s.l.:s.n.
37. Mandal, P., n.d. *YourArticleLibrary.com*. [Online] Available at: <http://www.yourarticlelibrary.com/society/the-consequences-of-urbanization-on-indian-society-essay/4674> [Accessed june 2017].
38. Mandal, R. B., 1998. *Urban geography*. s.l.:concept publisher company.
39. Morestin F. 2012. *A Framework for Analyzing Public Policies: Practical Guide*. National collaborative center for health public policy. Quebec. Canada
40. Muzzini, E. & Aparicio, G., 2013. *Bangladesh: The Path to Middle-income Status from an Urban Perspective*, Washington. s.l.:World Bank.
41. Nath, D. K., 2016. *Making cities and human settlements inclusive, safe, resilient and sustainable*, s.l.: Sustainable urbanization summit.
42. Nutley, S. M., Walter, I., & Davies, H. T. O. 2007. *Using evidence: How research can inform public services*. Bristol: The Policy Press.
43. O'Sullivan, A., 1996. *Urban Economics*. s.l.:McGraw-Hill.
44. Patton, Carl V, David S. Sawicki, and Jennifer J. Clark. 2012. *Basic Methods of Policy Analysis and Planning*. New York: Routledge. 3rd Edition.
45. Rabinow, Paul and Sullivan, William M., eds. 1979. *Interpretive Social Science*. Berkeley: University of California Press.
46. Rahman, H. Z., 2012 . Urbanization: Crisis or opportunity . In: H. Z. Rahman, ed. *Bangladesh Urban Dynamics* . s.l.:PPRC.
47. Rahman, H. Z., 2012. *Bngladesh Urban Dynamics Exploring a Holistic Perspective* . In: H. Z. Rahman, ed. *Bangladesh: Urban Dynamics* . s.l.:PPRC.
48. Raihan, S., 2016 . Making the most of the demographic dividend. *The Daily Star*, 19 January.
49. Rouf, M. A. & Jahan, S., 2007. Spatial and Temporal Pattaerns of Urbanization in Bangladesh . In: S. Jahan & K. Mniruzzaman, eds. *Urbanization in Bangladesh; Patterns, issues and approaches to planning*. s.l.:Bangladesh institute of planners .
50. Roy, M. & Kayesh, M. S., 2016. Reaping Demographic Dividend in Bangladesh: Challenges and Prospect. *Global Journal of Human and Social Science economics* , 16(2).
51. Salamon, M. L. (2002). *The new governance and the tools of public action: An introduction*. In L.M. Salamon (Ed.), *The tools of government: A guide to the new governance* (pp. 1–47). New York: Oxford University Press
52. Sarker, M. F. H., 2010. *Urbanization in Bangladesh: causes and consequences*, s.l.: Daffodil International University Forum.
53. Schendel, W. V., 2009. *A History of Bangladesh Cambridge*. s.l.:Cambridge University Press.
54. Schütz, Alfred. 1962. "On Multiple Realities." *Collected Papers*, ed. Maurice Natanson, 3 vols., 207–59. The Hague: Martinus Nijhoff
55. Shakhawat, L., 2013. Bangladesh Industrial Disasters: Playing with people's lives.*The Daily Star*.
56. Shohag, A. A. M., 20015. Demographic dividend : Reality and possibility for Bangladesh. *The Independent* , 22 august , p. editorial .
57. Slotema, M., Shahi, I. A. & Ali, S. S., 2010. *Urban Risk Assessment* , s.l.: Islamic Relief Worldwide, Bangladesh; Plan Bangladesh.
58. Stott, C. & Nadiruzzaman, M., n.d. *From urban landscape analysis to opportunities for DRR integration*, s.l.: World Vision.
59. Swinburn, B., Gill, T., & Kumanyika, S. (2005). *Obesity prevention: A proposed framework for translating evidence into action*. *Obesity Reviews*, 6, 23–33. doi: 10.1111/j.1467-789X.2005.00184.x

59. Tc, P., 2014. *The Prospects of Demographic Dividend of India and The Need for Pre-Emptive policy initiative. Global Journal For analysis*, 3(7).
60. The World Bank, 2015. Leveraging Urbanization in Bangladesh. <http://www.worldbank.org/en/country/bangladesh/brief/leveraging-urbanization-bangladesh>
61. United Nations, 2014. World Urbanization Prospects.
62. United Nations Development Program (UNDP). 2010. Urban Risk Management.
63. UN/ISDR & UN/OCHA, 2008. Disaster Preparedness for Effective Response Guidance and Indicator Package for Implementing Priority Five of the Hyogo Framework. United Nations secretariat of the International Strategy for Disaster Reduction (UN/ISDR) and the United Nations Office for Coordination of Humanitarian Affairs (UN/OCHA), Geneva, Switzerland, 51+iv pp.
64. UNU-EHS (2016) *World Risk Report 2016*. Stuttgart. Available at: <http://weltrisikobericht.de/wp-content/uploads/2016/08/WorldRiskReport2016.pdf>
65. Woahid, M. S. M., 2009. *The trends of labor market in Bangladesh and its determinants*, s.l.: s.n.



Some countries prone to recurrent crises, such as Bangladesh, have well-developed disaster management systems and plans, but these have evolved in response to crises in rural or camp-based settings. Like many international humanitarian organisations, national actors are often ill-prepared for urban crises. This paper by Dr. A. S. M. Maksud Kamal, S. M. Kamrul Hassan, and Afroza Haque assesses the strengths and weaknesses of public policies, strategies, and management plans for dealing with urban disaster preparedness and response in Bangladesh. It analyses the key instruments and mechanisms, with a particular focus on partnerships, urban systems, and AAP. It is hoped that the findings of this study may contribute towards enhancing the capacity of the government and humanitarian organisations. In addition to identifying strengths and weaknesses, a number of recommendations are made to address existing gaps. It is also expected that – with effective dissemination and if taken into account by relevant authorities – the research findings will lead to a significant improvement in the country’s policy regime and an overall paradigm shift in urban disaster governance.

Published December 2017

This paper is part of a series of research pieces produced under the Urban Crises Learning Fund managed by the Institute for Environment and Development.

This research was funded by UK aid from the UK Government, however the views expressed do not necessarily reflect the views of the UK Government.

