

## Disaster Management, Development and Sustainability Nexus: Bangladesh perspective

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### ABSTRACT

*Undeniably, disaster management certainly cuts across different aspects and sectors of sustainable development. Without implementation, policy frameworks for sustainable disaster management are a meaningless exercise that will impose float-up answers on top-down interpretations. Therefore, this effort will uncover the level of enforcement of legal obligations as well as the level of implementation of disaster management activities by the relevant disaster management institutions. National policy and strategies for integration of DRR in emergency preparedness, response and recovery programmes in the light of national level policies pertaining to the DRR for the reconstruction of affected communities are still remain challenge for the Government of Bangladesh to accelerate the paradigm shift from the relief culture to the DRR culture. Rural development has been identified as all efforts to improve the livelihoods of rural people such as change in rural productivity, employment opportunities, income and wealth distribution, social structure and social mobility, resource management, access to information, rural people's strength, health and education and so on. The success of rural development has been broadly measured by these changes and disaster management issues have been set aside. investment and sustainable development are under great threat due to frequent disasters. It is true that we need to work more diligently to reduce the risk of disasters. In line with the policy framework, this study also aims to assess the viewpoint on how political economy influence the government of Bangladesh on governance and institutional strengthening to help identify obstructions and opportunities for mainstreaming Disaster Management into development and how does governance work in the implementation of DM programmes in Bangladesh.*

**Keywords:** Disaster Management, Disaster Risk Reduction, Community Exposure on Disaster Management, Disaster Vulnerability, Sustainable Development

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## 1.0 Introduction

Bangladesh is one of the disaster-prone countries in the world. The geophysical location, land characteristics, river system, and the rainy season climate render Bangladesh highly vulnerable to natural hazards. The coastal morphology of Bangladesh influences the impact of hazards on the area. The causes and types of catastrophic floods in the lower reaches of India's Ganges, Teesta and Brahmaputra basins and in Bangladesh are a few. Excessive precipitation is certainly a major factor in global warming due to increased water vapor capacity of the atmosphere at higher temperatures. The main cause of floods in the Ganges and Teesta basins is definitely the damming upstream and the one-way withdrawal of water due to loss of current and accumulation of sand in the river and the decrease in the depth of the river.

In order to bring a transformation in disaster management from orthodox response and relief practice to a more inclusive risk reduction culture, Bangladesh Government endeavors to define the vision of disaster management (UN 2002). Consequently, legislative and institutional set up have been redesigned to expand the concept of Disaster Management (DM). For example, Standing Order on Disasters (SOD, first published in 1997; revised in 2010 & finally in 2019), National Plan for Disaster Management (NPDM) and Disaster Management Act 2012 are the best examples of legislative development. The NPDM from 2010 to 2015 made a fair attempt to assimilate disaster readiness in the long-term development plan.

As a signatory to the Hyogo Framework for Action from 2005 to 2015, Bangladesh extended best efforts in attaining through a clear paradigm shift from relief centric disaster management to DRR. Besides, Ministry of Disaster Management and Relief and its affiliated department known as Department of Disaster Management imply the presence of institutional aspects of DM in Bangladesh (GoB, Disaster Management Act 2012 2008). Since the late 1990s, discourse of mainstreaming DM into development in Bangladesh was evolved. Bangladesh Awami League after assuming the office revisited the vision and objectives of Comprehensive Disaster Management Project (CDMP) Phase II and launched the programme in late 2009.

The political government under the leadership of Prime Minister Sheikh Hasina for the first in the history of Bangladesh mainstreamed the

concept of DRR with the enactment of legislature and institutional rearrangements from national level to local level. In reality, absence of governance is hindering the professional spirit of overall disaster management programs in Bangladesh where intersection between DM and development is apprehensive (Islam 2018). The important question is thus framed as whether community exposed to natural disaster vulnerability would be able to minimize the loss and damage associated with probable disaster in consequence of the appropriate legislative and institutional arrangements of the government of Bangladesh.

With these edges, this research undertaking addresses two research questions: How does legal and institutional framework of the government of Bangladesh speed up mainstreaming Disaster Management into development process? And to what extent, Disaster Management mainstreams into development process of the government of Bangladesh?

## **2.0 Disaster Management System in Bangladesh**

In order to mend its ways, the legal and institutional frameworks pertaining to disaster management (DM) has been apparent over the years. It is deceptive that, legislative actions and structural set up have duly apprehended the essence of disaster management as an integral approach of Disaster management system of Bangladesh. Paradigm change from relief and recovery culture to risk reduction culture have been streamlined through Disaster Management Act 2012 and Standing Orders on Disaster (revised in 2010; 2019). It is also evident from the study findings that; Bangladesh is well ahead with DM laws where comprehensive disaster management is duly aligned nevertheless level of enforcement is not well-run regrettably. Henceforth, relevant stakeholders are to be endowed to execute laws/policies under the auspicious of the national government to get all-out advantage out of DM Laws (GoB, The Standing Orders on Disaster (revised) 2008).

The Sendai Framework for Disaster Risk Reduction (SFDRR, 2016-2030), adopted in March 2015, calls for a transformed focus on studying and firming up legal frameworks. Disaster management laws are devoted to beginning the priorities, institutional directives and a number of other features of a national disaster management system (Burlington: USA, 2007). The geographic location and low-lying appearances of Bangladesh marks it more exposed and susceptible to diverse natural and climate-induced disasters (UNDP, DM Profile of Bangladesh 2018). It is

the world's third most vulnerable state to sea-level increase in terms of the number of people, and among the top ten states in terms of percentage of people living in low-lying coastline zones.

Since freedom, Bangladesh has been pre-emptive in articulating several policy frameworks like Standing Order on Disaster, Bangladesh National Building Code, but in many cases, our accomplishments are not creditable in executing the policy frameworks. Bangladesh was earliest to visualize the DM Act among the south Asian countries in mid 90s but it took over 20 years to catch the DM Act enacted. Many countries like India and Sri Lanka took Bangladesh as an instance and authorized DM Act 2012 and SOD quite earlier. Bangladesh has formed a simplistic model to monitor disaster management and emergency response supervision efforts in Bangladesh (ADB 2004).

Unlike many other countries, Bangladesh started its disaster management policy and institutional reform in mid-nineties by proceeding with the Standing Orders on Disaster (SoD), first issued in 1997. The SoD defined mainly the response related roles and responsibilities of different actors & players and created the national, district and upazila level Disaster management Committees (DMCs) for managing disaster in a coordinated<sup>3</sup> manner. Yet, it did not carry much legal value despite being a prime policy document on disaster response management (Ahmed and Islam 2012). The National Policy for Disaster Management (NPDM) and the National Disaster Management Plan has proved their importance for strategic guidance but similarly lacked the bindings or enforcement from legal viewpoint (GoB, National Disaster Management Plan (Draft) 2008). The civil society organizations were repeatedly pushing the government to formulate effective disaster management policy. Finally, the government enacted the Disaster Management Bill 2012 that appears as success in this area (DDM, Cyclone Shelter Center: Best Examples of Disaster Loss Mitigation in Bangladesh 2012).

### 3.0 Study Method

The study applied qualitative approach because the study dealt with disaster vulnerable community that qualitative methodology. In this study

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<sup>3</sup> The coordination of disaster response is demanding as it involves requirements typical of an emergency or peaceful situation that include for example, high uncertainty and necessity for rapid decision making and response under temporal and resource constraints.

all the data were collected from both primary and secondary sources. The study made an attempt to analyse the legislative and institutional dimensions of the government of Bangladesh in order to understand the implication of DM initiatives on the areas where people are exposed to the natural disaster vulnerability. In view of the different kinds of natural disasters, this study has been conducted in two locations of Bangladesh: SarankholaUpazila of Bagerhat district and ChauhaliUpazila of Sirajganj. Both data collection areas were purposively selected considering first one as cyclone prone in the coastal area and second one as flood prone area. Moreover, these two locations are also exposed to different types of disaster.

For primary data collection, a total 40 with 20 from each location were selected to interview. Based on the checklist prepared to achieve the objectives of the research, informants were interviewed. Key informants have been categorized into two cluster/group such I) Disaster Management Officials of the Government of Bangladesh and DM Professional working in local NGOs to Donor agencies; and II) Academicians; Journalists; Local Elites and so on. Hence, the study applied sampling method to define key informants for the semi-structured interviews. The key informants were selected from four professional groups mentioned above by considering cluster sampling to ensure the inclusion of key informants who are able to cover a diverse range of issues. Ten (10) from each cluster/group are interviewed over phone/skype. Those specific stakeholders were defined as key informants in the semi-structured interview stage. A semi-structured questionnaire also carried out to facilitate face-to-face interview of the key informants. Again, instead of face-to-face interview, the research team had to rely on phone/skype interview because of COVID-19 pandemic.

Like any sector is affected by the unprecedented COVID-19, the research was also highly affected and that forced to follow the special mechanism to collected data. Emphasis was also shifted from rigorous process to comfortable approach in line with the COVID-19 health protocol. As the qualitative research and ethical perspective value people's wellbeing, comfortability of informants was considered. Since data was collected during the peak time of coronavirus spread and restriction was strictly followed, FGD was dropped. The study utilized content analysis, which was likewise strengthened by the primary data collected through various means.

#### **4.0 Disaster Management nexus Sustainable Development in rural Bangladesh: An Empirical Analysis**

Because of geographical location disasters are common characteristics in these areas. Every year floods, cyclones, and drought are frequently attacked in these areas. Our regional position is southern that's why maximum time people faced cyclone, in rainy season they always faced flood and in summer season they faced the drought mostly. Based on the field data, among the respondent, 41% shows their fears against flood and 44% talked about cyclone. Rest of the respondent indicates to the drought, heat stroke and others. At a glance, several times this locality suffers various types of disaster and this disaster such as drought stays a long time, flood stays also a long time and cyclone stay one or two days but causes lots of losses that's why people always feel panic for disaster.

Needless to say, it is not just a matter of paper, the Disaster Risk Reduction Strategy Paper will be a living document. It has to be adapted over time. On the basis of this document, it will be right that doing any work will not endanger people, infrastructure, economy, livelihood. Will not increase the level of damage in disasters. To put it more bluntly, every step of so-called development should be scrutinized before it increases our risk of disaster. In the past, we gave birth to many disasters knowingly or unknowingly by taking the so-called development pills without thinking ahead. I have created the risk of a big disaster. The disastrous floods in the south-west came from polders and ring dams. Now not only the waterlogging, but the extreme salinity has filled the floodplains by the hands of shrimp farming. Therefore, before the cyclone reached Visakhapatnam in Odisha, the Betkashir dam collapsed.

In a nutshell, people of these areas commonly faced the disasters like flood, cyclone, and drought mostly and land slide, heat stroke as well in some cases. These are the most common disasters based on geographical location. Maximum time cyclone is turned devastating and make the people vulnerable in that areas and affected so much, Flood also common and that destroys all the things and hampers people's life, Drought also frequently common in the summer season. Disaster is the part of life in northern and southern region in Bangladesh.

Although government has taken many initiatives to mitigate the immediate losses in the disaster prone areas, but it is evident that based on

the voice of the respondent, government initiatives are on average and that are not enough for these areas. Disaster affected these areas frequently and that's why here need regular and strong strategy to mitigate the pre, during, and post-disaster management. For Disaster management, the NGO also showed the average concentration for diminishing disaster risk reduction that not enough and effective for the disaster affected people. Only a few people are facilitated by dent of this NGO for mitigation the disaster risk reduction and disaster management (DDM, Urban Disaster Risks in Bangladesh 2012).

The local leaders also same as here, local leaders only help the people which are involve in the same local politics and here cultivate nepotism and personal relationship measures for distribution the relief and other governmental initiatives or facility. Here lack of transparency for equal distribution of Disaster management related facilities. Most regretfully no respondent mentioned the presence of private organization activeness in disaster management activity in the study areas.

One of the UP Member shared his thought in this issue. According to him, NGOs don't help people. In his area there some NGOs working but they also thinking their gain always. Temporary NGOs help the disaster affected people and they provide the loan for agriculture and diminish their vulnerability. In front that is good but in back sight it is harmful to the people. It creates the people's dependency on them and due to high interest, people become poor and never overcome poverty. Natural disaster management is not about challenging nature or natural disasters; Rather, disaster risk mitigation through technical and strategic management; Advance, immediate and long-term measures to minimize loss of life and property.

As mentioned earlier, despite having several initiatives, the services of the government in disaster responses are not up to the mark against expectation, which reflection shows in the above graph also. Before disaster time, government responses only confined in early warning system but this early warning system are not effective for the disabled, child and senior citizen in this areas, during disaster period all people here gathered in shelter chanter that not enough for all people and after disaster period the government services provide the embankment and arrangement of relief.



As same as the before, majority of the respondents argued that the initiatives and willingness of the legal institutions of the government are not satisfactory in that areas. Because every year cyclone, flood, drought etc. causes lots of damage in that areas, but the government only emphasis EWS, repair the embankment, and arrange the relief and shelter center and that initiatives are not enough for disaster risk management. Every year losses of lives, damaging property and agricultural crop, losing source of income are very common in these areas.

Capacity development related activities are almost out of thought here. Disaster mitigation learning, disaster management guideline, training is hardly found here. The government does not provide training against disaster preparedness, correct instruction on how to minimize the loss, damage, and death and how to learn the dealing with disaster mitigation process to the vulnerable people. Statistics shows that, among the respondents only 15% people got training or attend awareness raising activates whereas 70% of them are living in dark.

For disaster management, the legal institution of the government needs to take principles and practices such as ensuring proper disaster preparedness, establishment of the emergency response assessment, technical training for local people that effective of indigenous coping mechanism that diminish the loss, ensure damage and need assessment recovery etc. which can foster disaster planning and management in regional and community level, organize capacity building activities and training for a disaster resident society. A local leader expresses his ideas n government effort towards disaster management.

According to his voice, for sustainable disaster management, relief programme, call broadcasting, interactive voice response, SMS service to disseminate disaster early warning during and after disaster instruction, and cyclone shelters are the main service of government in those areas. He further added that, in his community, UNO, DC, and members of the Ministry of Disaster Management and Relief are providing disaster-related grants to diminish the vulnerability of the people (ADPC 2008). By telling the story of safe water, we are now drowning in arsenic poisoning. Knowing that iodine is poison for thyroid sufferers, leaving no alternative for them, we wanted to champion goiter prevention by mixing iodine with all salts. By planting foreign trees like Ipillpil, Acacia, Chambal, Eucalyptus etc. in the name of fast-growing trees, we have not



only killed native sustainable trees, but also increased the death rate of people in storms.

The effectiveness of policy, consensus, compromise depends on how the specific country is running, that is, on its governance system. Along with increasing the field of knowledge about disaster risk reduction, emphasis has been placed on strengthening the governance of disaster risk management. Priority has been given to investing in risk reduction and building stronger infrastructure. Based on the data from key Informant Interviews, the following strategies can be measured to mainstream the sustainable disaster management activities in Bangladesh.

- 1) Foster education on disaster risk, mitigation, emergency response, and disaster preparedness.
- 2) Changing agriculture pattern according to flood, salinity tolerance varieties, etc, and continuous improvement in food production.
- 3) Prioritizing health sector to improve medical and hospital preparedness.
- 4) Proactive community based early warning system
- 5) Disaster Management Community system at all level
- 6) Wider social safety net program
- 7) Coastal afforestation, Cyclone, and Flood shelters
- 8) Polders & Embankment in the coastal belt
- 9) River embankment for flood

Statistics shows that people (Among the respondent) are less happy with the experience of accessing the services related to disaster risk and impact mitigation. Majority of the respondent said that it is hard to get help from govt. offices during or after the disaster occurred. They faced hassle to receive relief or financial help, sometimes it takes long time to issue govt. assistance. NGOs activity is not different from the govt. activities. Sometimes, microfinance related NGOs tried to pressurize to pay the debt even after devastating disasters.

A major part of the respondent (statistics given in the graph) shares their experience that they do not have any facility to mitigate their misery situation due to disaster. But every year The Government of Bangladesh

take many initiatives for disaster risk reduction. Many of these initiatives remain unsuccessful due to lack of transparency, surveillance and gap of disaster-prone areas people and government body or government service provider. A major portion (65%) of the respondents claimed that they are not facilitated by dent of VGD, VGF, TR, and GR. Only a few people are fortunate to get that facilities but they have given some bribe to the influential people and in some cases they arranged that for only their relatives or also depends on a personal relationship.

This problem is also indicated by some local leaders. One of the local representative argued that the top authorities always show their negligence. He added that he is very familiar in his area and have a good relation with the villagers, but when top authority arrange the relief they are not discussing with the local representatives. This amount of relief is not enough for the disaster affected people. But when time comes to evaluate, all pressure come over to them. Again, problems not only raise from the agencies sides every time but also occurred for people's lack of knowledge about the mitigation service strategies of disaster risk reduction. Lack of proper knowledge and capacity to mitigate the challenges of the disaster of the general people (UNDP, Diminishing Disaster Risk—A Challenge for Development, United Nations Development Programme 2004).

It is essential to assess the needs where government service is need to ensure to help the disaster-prone areas citizen. This consequence can enable the mobilization of resources based on an accurate estimate of the need for disaster-affected people. The rapid problem-solving institutions have to innovate, adapt, and improvise strategic plans and procedures which don't fit the circumstance in this situation. The predetermined sector changes rapidly and abolish the complexity. Ensuring anticipation for effective emergency management captures the need to anticipate future problems and creating their solution before the occurrence of any kind of disaster. Establishment of strong coordination and communication measures with the disaster-affected people which can update their misery condition. It is also important to create strong effective network availability for stabilizing the disaster uncertainty.

Again, based on the opinion of the local people among the respondents, there is no observation station in that localities. Observation station is the particular place where many technician bodies and technical instruments

for the identification of disaster location, direction, and the potential date and its speed actually and also provide the early warning system that helps of disaster-prone areas people for taking preparation. Observation station is a very empirical that provides the actual information of upcoming disaster, situation, and update also. As there is no observation station, so it's its indicating the poor disaster management and direction. Government, NGO, local leader, Private Organizations aren't showing their activeness to monitor and build observation stations.

From the northern part where the study was conducted, there are many canals but most of the canals are not deep. Majority of them are abolished for lack of digging and there is no government and local service for managing that canals regularly. Exercising of local power many people capture the river occupation illegally. But the government does not take any initiative to rescue the illegal authorization of river occupation. Based on people's voice, to overcome this situation, government and local people can work together and to do the following activities to rescue the situation (CEGIS 2009).

Accessing clean and safe drinking water one of the major challenges for the people of disaster prone areas. Respondents of the study argued in this point very strongly how they face trouble to get drinking water. Besides, during flood all the tube-well drowned under water. During drought, they faced many difficulties to collect drinking water. The condition of a large number of tube-wells are so poor that is not fulfill the people's need of drinking water. In the flood situation, all tubes well are underwater and this create a shortage of pure drinking water and other household need. Government can take sustainable and innovative initiatives that can help to diminish the lack of tub-well in those localities.

Who will understand the difference between disaster risk reduction and disaster mitigation? Writer SelinaHossain harassed to teach that girl children and girl child are not the same thing. He even wrote a book explaining the matter with tafsir, but could not. Now gave up. Realized that there is no point in worrying about 'small' issues. In a country where a whole horse-tree can be called a divine banyan tree, it is idle to pretend to speak intelligibly.

Ministry level members are well known about disaster characteristics such as predictability, controllability, duration of impact, speed, and the

impact that's why this knowledge applied in disaster-prone areas that help to cope with disaster risk. Ministries can provide sectoral support in organizing for relief campus, supplying food, essential commodities, medical facilities, fund allocation, alerting local administration etc. Sector wise ministries should take effective steps during disasters including physical visits, monitoring the relief camps, and handling emergency crisis. They can initiate special teams for training, commanding, control, and coordination of the disaster mitigation and prevention activities practically (USAID 2007).

The local leader can contribute to disaster management in their particular areas. Because local leaders are well known about the disaster affecting sectors in their region, and which initiatives should be taken from the government. The local leaders also have good understanding about the needs of that regions people's need and demand, weaknesses against disaster, people capability to protect disaster etc. As the whole characteristics of a disaster-prone area are known by a local leader that helps in decision making process of disaster management. And most crucial things local people expect from the local leader that's why local leaders desire to contribute to disaster management, it can be much better than others.

## **5.0 Conclusion and Way Forward**

Given the nexus between Disaster Management and Sustainable Development, this study hopes to specifically understand the consequences of legislative and institutional frame of the government of Bangladesh, which will help understand the limits on disaster resilience ability of the community exposed to disaster vulnerability in Bangladesh. The study envisions knowing how Policy framework of Bangladesh enables communities to establish potential solutions to their vulnerability to disaster hazards. Without execution, the policy framework of sustainable disaster management is a meaningless application that will cause in top-down explanation imposing float up answers. Therefore, level of enforcement of legislative obligations as well implementation of the Disaster Management programme by the concerned disaster management institutions would be unveiled with this endeavor.

It is widely known that the demand of people from disaster prone area of Bangladesh and international community directly influence to frame

policies in order for reducing disaster risks and administering intuitively with a view to have safer community. Government usually undertakes policy framework that previously taken and worked well; even accepts what non-government organizations adopted or supported. Thus, policies lack inherent limitations of the previous strategies and affect the total DM system. This limitation brings effect in all stages such as, policy formation, implementation, monitoring and even in evaluation (UNRCO & MoFDM 2012).

Environmental assessment should be given utmost importance for every development project, avoiding the practice of sweeping environmental issues under the carpet. How much stone and sand can be extracted from the rivers of Sylhet, the decision should be based on research. We have a long history of incompetence in making forward-looking inputs to development projects. It is seen that traditionally Bangladesh emphasizes on immediate solution for disaster as mark of DM system because of frequently occurrences of disasters that also demand quick solutions. However, quick-fixing solution does not work well.

Regarding the legislative arrangements for disaster risk management, the level of execution is not found satisfaction because of misinterpretation and implementation problem. Usually, disaster risk reduction is an issue of DDM that becomes shortcoming of the system because reduction in disaster risks necessitates an all-encompassing national agency to determine the role, strategy. Since DDM handles in single hand, the system lacks of leadership, appropriate strategies, and implementation of strategies.

National policy and strategies for integration of DRR in emergency preparedness, response and recovery programmes in the light of national level policies pertaining to the DRR for the reconstruction of affected communities are still remain challenge for the Government of Bangladesh to accelerate the big shift from the relief culture to the DRR culture. At the same time, improve consideration of DRR and relevant tools are still out of conception of the Government of Bangladesh. The national capability in disaster response has been advanced based on the statement that the country may look one national-scale disaster a year. But

Bangladesh has faced two national scale disasters in 2007 and 2009, lesson of which essential further endorsement of the underlying

supposition, mainly in the context of climate change in a determination to move onward the motion grown in the area of DRR (UNDP, Diminishing Disaster Risk—A Challenge for Development, United Nations Development Programme 2004). When the coast of Bangladesh comes within the effective range of the weather radar, all the time information is available and analysis is possible. It is important to keep these radars on all the time. Relief activities should be conducted with priority given to the issues of Covid-19, strong winds, heavy rains and floods, new moon. Disaster management should also include long-term post-cyclone activities. Initiatives should be taken to conduct scientific and social research in the future.

The ownership of policy relating disaster management should not belong to one ministry rather it must be of all government agencies so that a strategic ‘joined-up’ methodology can be essentially developed and institutionalized for disaster risk reduction to a certain level. The joined-up strategy is accompanied by the capacity building training programme for all concerned officials to successfully implement DRR guidelines. Leadership is a critical factor particularly for managing the disaster.

Upstream water will flow downstream—that is its natural nature. But India and Bangladesh are well aware of how dire the results can be if that normality is challenged or interrupted by short-sighted development or inter-country violence and competition. It is not possible for any strong state or organization to challenge and radically change the natural order. If the river is obstructed on one side, the course it takes on the other side is much more destructive. Since disaster is not a country specific originated issue, rather it is intensified by number of issues including climate change globally because of exponential increase of industrialization. That’s why managing disaster becomes a concern of global agenda and it requires holistic approach to be handled internationally. Country’s experience of managing disaster can be backed by technology. It shows the necessity of strengthening diplomatic relationship.

India and Bangladesh can expand the area of cooperation in flood management based on weather satellite data and satellite image processing through joint ventures. River embankment management can be designed to drain excess rainwater into the Bay of Bengal ahead of time. Software and data science-based hydrological simulation models

can be developed to determine efficient strategies for managing hydroelectric dams. Introducing disaster management and risk reduction mechanism in the basic education system may enable young students and teachers in order to practically exercise the learning and eventually contribute to reduce the risks. This process may produce a socially developed disaster management system and sustain for a long time. Additionally, a specialized training institute for capacity building of community, public officials and other relevant stakeholders can be establishing to jointly work to reduce risk reeducation (UNISDR 2004).

Land use planning for DRR is deemed as the most significant obstacle because of fixing the suitable criteria that relate to social, cultural, geographical, political and economic. The absence of these criteria may lead to wrong planning. Therefore, the execution of regulations determining the physical shape and quality of environment becomes as an imperative. Thus, land use preparation is potentially powerful mitigation tool as it seeks to mitigate the threats and vulnerability from some geological and other hazards. For effective land use strategy and planning considering DRR, making of “National Land Use Policy” is required.

South Asian countries and Bangladesh have some common challenges in achieving the Sustainable Development Goals (SDGs) related to climate change challenges, protection of ecosystems, biodiversity, sea level rise and intrusion of saline water on land, drinking water protection. For instances, although India and Bangladesh are separated by a physical border on the map, our air, water, rivers, forests and many other natural resources are identical. Map boundaries are useless in these. Natural disaster management is not about challenging nature or natural disasters; Rather, disaster risk mitigation through technical and strategic management; Advance, immediate and long-term measures to minimize loss of life and property.

Right now, we need proper disaster management and awareness at the rural areas where around seventy two percent people reside. Bangladesh is a role model in the world in disaster management. It will be a new experience for us to deal with integrated disasters like cyclones with efficient management through protection from the spread of coronavirus in highly populated areas. Effectiveness of UDMC is a must for building disaster awareness through frequent meeting relating to three phases (pre, during and post) of disaster.



Because this meeting contributes to raise fund, establish disaster warning stations in each UP office, establish disaster shelter, create volunteer team for emergency response, organize training covering three phases of DM, create social awareness, encourage community participations in the assessment following disaster events and execute government programmes. As this UDMC works at the grassroots level and combines community support, this committee sustains. However, involvement of women must be mandatory so that the need and vulnerability of this community during disaster is realized and effectively addressed.

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