

PROGRESS REPORT

Thesis Title

**“Assessing the Inclusivity of Persons with Disabilities in DRR Interventions
in the Flood Prone Areas of Kurigram”**

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Introduction

The effects of disasters are felt by each person living in a society or environment that is vulnerable or hazardous. However, the intensity of the repercussions might be different for everyone. The misfortunes that individuals experience because of natural catastrophes can vary widely, depending on a variety of factors. However, persons with disabilities are more likely to be affected by natural disasters, and to a greater extent, than people who do not have disabilities. This is because persons with disabilities come across a variety of obstacles during different phases of disasters, such as the phases of preparedness, early warning, rehabilitation, and so on. It is now an overdue task that persons with disabilities be considered with special treatment in every phase of disaster risk reduction activities.

For a more holistic and inclusive version of DRR and sustainable development, persons with disabilities need to be treated with special considerations. The efficacy and effectiveness of such efforts have not yet yielded significant and widespread results; this is even though various stakeholders (NGOs, the government, civil society, and so on) are making efforts to make disaster risk reduction activities more inclusive of people with disabilities. Areas under Kurigram districts that are selected for this study are extremely prone to repetitive floods each year. The population of persons with disabilities in these districts suffer a lot during these floods. At times their sufferings fold multiple times due to lack of inclusivity in the DRR interventions. Especially during the early warning, rescue/evacuation, and rehabilitation phase their hardships become indescribable.

Persons with disabilities have always been an ignored and over-looked group of the population when it comes to enjoying proper citizen rights. Just like in other sectors, they have been given less attention in the disaster risk management activities as well. Societal taboos, vicious norms, and stereotypes regarding persons with disabilities have made them even more vulnerable and prone to the impacts of disasters such as floods, cyclones etc. Although the government, NGOs and other concerned stakeholders have been putting in efforts to increase the capacity and decrease the vulnerabilities of the persons with disabilities, the effectiveness of such efforts are not widely evident or documented as of now. This is because, there have hardly been researches

and evaluation projects aimed at determining the level of inclusivity of the DRR interventions and

whether the persons with disabilities are being properly mainstreamed in such interventions. Although some NGOs have run some evaluation programs but that are limited to finding out the effectiveness of the NGOs' own projects for the persons with disabilities in a small area (few villages, an union, or an upazila at best). This study will be instrumental in filling up this research gap and go onto show the status of inclusivity of persons with disabilities in DRR interventions in the flood prone study areas. This study will also propose recommendations that may turn out to be resourceful for future endeavors of the government and other stakeholders working for the persons with disabilities.

This study aims to explore the status of inclusivity of persons with disabilities in the DRR activities in their respective areas through a mixed-method research method where various concerned stakeholders including the persons with disabilities themselves would be consulted and interviewed. Following the field observations, the researcher will propose potential interventions that may help to scale up the inclusivity of persons with disabilities in DRR interventions.

Objectives

The focus of this study can be distributed into broad and specific objectives.

Broad Objective: Assessing the status of inclusivity of persons with disabilities in DRR interventions in the flood prone study areas.

Specific Objectives:

- To find out the level of awareness of the persons with disabilities regarding their rights and facilities that they should be getting under DRR interventions.
- To sketch out the status of inclusivity of persons with disabilities in DRR activities.
- To determine the extent of capacity building activities addressing the livelihood vulnerabilities of the persons with disabilities.
- To identify the major drawbacks of DRR interventions that limits the inclusivity of such the interventions.

Literature Review

Conceptualizing Disability

The term "disability" lacks a uniform and precise definition, as its usage varies based on societal norms, cultural settings, socio-economic landscape and the institutions, medical establishments, and government bodies that deal with disability concerns. The most popular and holistic definition used in disaster studies is the one provided by the World Health Organization's International Classification of Functioning, Disability, and Health (World Health Organization, 2001). The International Classification of Functioning (ICF) considers disability as the result of the interplay between an individual's health condition and their personal and environmental settings. Disability, as it is defined, refers to a deficiency in bodily functions or structures, a constraint in a particular activity, or a limitation in social inclusion.

(Kailes & Enders, 2007) have suggested a 'functional needs' approach to define disability in disasters, highlighting the specific assistance persons may require across the spectrum of communication, health, functional autonomy, supervision, and transportation.

Global Disability Demography

Approximately one-seventh of the world population lives in developing countries. Impoverished people are more likely to experience disabilities due to their economic circumstances. Approximately 20% of the global population lives with disabilities, according to the World Health Organization (WHO).

Global Frameworks: Disability Inclusion in Disaster Risk Reduction

There is an increasing agreement among the scholars that the persons with disability should be prioritized, as they have been generally ignored in disaster risk reduction (DRR) efforts. The lack of disability considerations in the Hyogo Framework for Action (HFA) and other policy frameworks is seen as both unacceptable and faltering in foresight (UN Special Representative of the Secretary-General for Disaster Risk Reduction, 2013).

The ongoing concern for disability-inclusive disaster risk reduction has garnered steam, in part, as a result of the incentive generated by the enactment of the Convention on the Rights of Persons with Disabilities in 2006 (Soldatic, 2013).

Fast forwarding to post Hyogo Framework for Action, as a fundamental premise of disaster risk reduction, inclusiveness has been widely acknowledged by the international community. The United Nations General Assembly recognized this, and it's represented in the Sendai Framework for Disaster Risk Reduction (2015-2030). It recognizes that DRR necessitates a societal-wide involvement and partnership, one that encourages the participation of all people who are disproportionately affected by disasters. Therefore, all DRR policies and practices need to take into account differences in gender, age, disability, and culture if they are to be effective (Ronoh et al., 2015).

(Munsaka & Charnley, 2013) argue that although there have been advancements and forward-moving drives in global policymaking, there is still a dearth of thorough implementation and practices at the local level to address the requirements, rights, and expertise of those with disabilities. Empirical studies show that such global policy frameworks are disorienting for the practical realities and personal encounters of individuals with disabilities, resulting in little impact. They further added that the misalignment between policy and practices regarding persons with disabilities in the global south has a lot to do with the heightened vulnerabilities of persons with disabilities.

Impacts of Disasters on Persons with Disabilities

The immediate and long-term repercussions of disasters have a much greater impact on persons with disabilities individuals who have limited access to social and material resources, such as women, children, the elderly, disabled individuals, and those living in poverty (Fjord & Manderson, 2009).

Persons with Disabilities are disproportionately affected by poverty, isolation, and lack of social support. This makes them even more helpless in times of crisis (D. L. Smith & Notaro, 2009). Especially in less developed countries, during disasters and emergencies, children and adult individuals with disabilities or mobility difficulties face a higher likelihood of death (Aldrich et al., 2008; Neumayer & Plu, 2007).

From a global standpoint, the research confers that individuals who have disabilities are at a higher risk of experiencing death, injury, displacement, poverty, or loss of independence, even in places with well-functioning systems and knowledge. To understand the correlation between

disability and disaster, one must consider the association between disability, impoverishment, and societal alienation (Priestley & Ma, 2008).

Persons with disabilities have unique and unforgiving obstacles during emergency and catastrophe situations, such as inaccessible alerts, evacuation procedures, response efforts (including the establishment of shelters/camps and distribution of food), and long-term recovery. Furthermore, the effects on physical, social, and environmental networks and support systems disproportionately affect those with disabilities. It is a common experience that those with disabilities are at a higher risk of being ignored during evacuations in catastrophes. They may also experience the possibility of being separated from their family members and their assistive devices, such as wheelchairs, which may become unfunctional or malfunctional due to a lack of electricity or batteries (F. Smith et al., 2012).

The insufficiency of comprehensive statistical data on persons with disabilities and the inadequate understanding of how to address their specific requirements increase their susceptibility to harm during a disasters (F. Smith et al., 2012).

Factors Amplifying Vulnerability of Persons with Disabilities to Disasters

Persons with disabilities usually share risk factors that heighten the likelihood of experiencing adverse physical consequences during and after a disaster (Rooney & White, 2007). Due to the impact of impairments (e.g. motor, sensory, cognitive-linguistic) and activity constraints (e.g. mobility and communication), this community is at a higher risk than the general population during emergencies (Peek, 2008; D. L. Smith & Notaro, 2009; Zakour, 2015) when it comes to preparing for, evacuating from, and recovering from disaster events (Rooney & White, 2016).

Individual, societal, and environmental concerns, such as loss of freedom, lack of evacuation help, and difficulties managing health conditions, compound the difficulties experienced by persons with disabilities during natural disasters (Good & Phibbs, 2017). These problems have a negative effect on disaster prevention, evacuation, and restoration efforts. Persons with disabilities are scared of responding to emergency evacuation activities as they have developed a popular yet criminal perception that the evacuation shelters will not provide them with the facilities specifically needed for them (Kelman & Stough, 2015; Peek, 2008; Willigen et al., 2002).

The pervasive influence of cultural beliefs, practices, and attitudes, both at the national and local levels, culminates in the stigmatization of persons with disabilities. This stigmatization leads to their alienation and discrimination, especially in terms of their access to services, the physical environment, and overall capacity building opportunities (Munsaka & Charnley, 2013).

The IFRC identified another pressing issue as to why persons with disabilities may get overlooked during disaster response efforts. They state that during a crisis, organizations have significant political, temporal, and resource constraints in delivering safety, housing, clean water, food, sanitation, and medical treatment to the entire affected population which results in the neglecting and overlooking of the specific needs of minority populations like persons with disabilities. Consequently, the act of adjusting humanitarian interventions and disaster risk reduction techniques to address to the needs of individuals with disabilities is often seen as excessively costly, time-consuming, strenuous, and diverting attention away from fulfilling fundamental needs (The International Federation of Red Cross and Red Crescent Societies, 2007).

Persons with Disabilities in Disaster Preparedness

(Adams et al., 2019) study adds to the literature on disability and disaster studies by studying the correlation between personal self-confidence, collective benefit, and disaster readiness. The discussion in the study put emphasis on the significance of psychological elements in developing adaptive behaviors, as they unearth the intermediary function of self-efficacy in the link between health and preparedness.

A study by (Quaill et al., 2019) finds that when asked about any resources that would enable them for disaster preparedness, the study participants unanimously agreed that there were none whatsoever. On top that, none of the participants had been a part of in any disaster planning activities, nor could they recall the names of anyone else who had been included.

(Fox et al., 2007) outlines that there are knowledge gaps within emergency management teams that may necessitate the expansion of disability-related training in both new and existing training programs for disaster preparedness. Hence, they recommend novel actions to strengthen knowledge-base, pertinence, and involvement in education and training related to disaster preparedness and emergency response for persons with disabilities.

(Rooney & White, 2007) narrated on the comprehension of disaster preparedness and the challenges encountered by those with mobility impairments. They found that colleagues, relatives, acquaintances, neighbors, and unfamiliar individuals frequently established impromptu networks during and following calamities to offer essential help. The absence of community and workplace evacuation strategies, instances of individuals being left behind during evacuations, the unavailability of suitable shelters or temporary housing, and the failure of infrastructure such as power, public transit, and elevators etc. are vividly experiences by the persons with disabilities.

Persons with Disabilities in Disaster Response (Evacuation and Emergency Sheltering activities)

Individual, social, and environmental factors all play a role in how well persons with disabilities can plan for, respond to, and recover from disasters (D. L. Smith & Notaro, 2009). In a comprehensive study by (Quaill et al., 2019), The majority of participants stated that evacuation shelters were not upto the standards to meet their specific requirements, and hence that they would only seek shelter in such facilities if compelled to do so by the concerned but not voluntarily. Participants were not sure whether they would be able to cope within the confines of an evacuation shelter setting that does not accommodate their concerns and requirements. The concerns envelope issues like limited accessibility & mobility, insufficient toilet facilities, challenges in managing personal health needs (such as bladder and bowel care, pressure relief, and mental health), and reliance on unfamiliar individuals for assistance.

In another study by (F. Smith et al., 2012) it was found that the persons with disabilities experience the possibility of being separated from their family members and their assistive devices, such as wheelchairs, which may become unfunctional or malfunctional due to a lack of electricity or batteries. Shelters and relief camps are not easily accessible for individuals with impairments, preventing them from quickly obtaining food and water supplies.

(D. L. Smith & Notaro, 2009) opine that while there have been many risk-communication messages aimed at persons with disabilities groups, there is not enough understanding on how vulnerable individuals and their families respond to this information in comparison to the general public.

Persons with Disabilities in Disaster Recovery

Emotional anguish and the financial cost of property destruction can postpone recovery and lower standards of living for persons with disabilities after a natural disaster (Quaill et al., 2018). (Willigen et al., 2002) suggest that when preparing recovery help, emergency management staff must duly take into the account of the concerns related to the accessibility of persons with disabilities, such as the identification of disaster recovery support centers, delivering handouts in different formats etc.

Psychological Vulnerabilities of Persons with Disabilities

There is a prevailing insufficiency of research regarding the psychological impact of disasters on individuals with impairments. According to several official reports, persons with disabilities may experience emotional discomfort, depression, or anxiety after a disaster (Rooney & White, 2007). However, it is crucial to note that most of these reports did not involve a proper psychiatric evaluation.

Recommendations to strengthen inclusivity status of Persons with Disabilities in DRR interventions

(Istiaryah et al., 2016) in her study highlights on the implementation of reformations and advancements of disaster preparedness services for the persons with disability in Indonesia. The study shares techniques that bring about useful ideas and practices from other countries, providing a comprehensive framework for uplifting disaster preparedness specially for persons with disabilities.

In a qualitative study conducted by (Rooney & White, 2007), it was found that both general and disability-specific disaster preparedness were beneficial for the survival, independence, health, and safety of individuals with mobility impairments.

(Fox et al., 2010) suggest that disaster resilience of persons with disabilities could be enhanced by preparedness, robust personal communication network, adaptability, dependable caregivers, and prior experience with disasters. It further adds that enhancement of disaster resilience is subject to adjustment of resources and services according to the needs of persons with disabilities to empower them, as well as including them in community organizations and activities.

Inclusion of persons with disabilities in disaster planning along with policy formulation are imperative for minimizing their exposure and susceptibility to disasters as persons with disabilities require specific preparations and assistances in the face of emergencies. (Charne et al., 2016; Rooney & White, 2007).

(Quaill et al., 2019) state that for better disaster preparation and execution, including at the individual, community, and policy levels active participation of persons with disabilities and their respective organizations is vital in all aspects of disaster risk reduction. They further recommend that solutions for DiDRR must prioritize enhancing crucial environmental and personal aspects to meet the varying demands of persons with disabilities throughout a disaster event.

The research conducted by (Ronoh et al., 2015) put emphasis on the potential contribution that children with a variety of disabilities may make to disaster preparedness, which is frequently disregarded. This demographic has unique challenges and capacities, and the study highlights the need for a policy-based framework that addresses these issues.

In conclusion, these studies give importance on the vulnerability of individuals with disabilities to disasters, shedding attention on the deficiencies of existing institutional interventions and the immediate and urgent necessity for targeted policies and interventions.

Collectively, these studies emphasize the vulnerability of individuals with disabilities to disasters and underscore the significance of enacting targeted policies and interventions to ensure inclusivity and resilience in response to evolving climate-related challenges.

Disaster Context in Bangladesh & the Study Area

The world's most densely populated country, Bangladesh is also among one of the most vulnerable countries due to its geographical location, as stated by the Ministry of Environment and Forests (MOEF) in 2002 (MOEF, 2002).

Bangladesh shows an upward pattern of flood calamities, which are impacting people's means of livelihoods and leaving rural impoverished communities with limited resources to tackle the situation (Parvin et al., 2016). The country is susceptible to the impacts of climate change because of its unfavorable geographical position, flat and low-lying terrain, dense population, poverty, and dependence on climate-sensitive industries such as agriculture and fisheries (Haque et al., 2019).

Bangladesh is extremely prone to natural disasters, making it one of the most disaster-prone countries. Additionally, over 28% of the population residing in coastal areas is at risk of climate change-related calamities (Raja et al., 2013).

The flood-prone areas of Bangladesh have to experience the most calamitic food shortages, acute poverty, inadequate income, illiteracy, and a significant portion of wage laborers (Shahabuddin & Ali, 2006). Approximately 3.4 million people inhabit regions that are susceptible to flash floods, suggesting the possibility of menacing casualties and property damage (Sarfaraz et al., 2019).

The Kurigram district in Bangladesh exhibits a significant susceptibility to climate change as a result of its elevated exposure, moderate sensitivity, and relatively lower to moderate adaptive capacity. A staggering 72.2 percent of the population residing in Kurigram district, Bangladesh, exhibits a high susceptibility to the adverse impacts of climate change (Islam et al., 2019). The district has the highest level of vulnerability in terms of a low Climate Resilience Livelihood Index (CRLI) (Rabbi et al., 2021).

Status of Persons with Disabilities in disaster situations in Bangladesh

Persons with disabilities in Bangladesh encounter exacerbated difficulties and challenges during disasters, such as adverse circumstances (44%), psychological impacts (24%), physical impediments (20%), and environmental obstacles (12%) (Hasan et al., 2016).

Various demographic characteristics, such as women, children, adolescent girls, elderly individuals, disabled individuals, and other marginalized populations, have disproportionately severe impacts from floods in Bangladesh (Leya et al., 2020).

Approximately 63% of individuals with disabilities residing in flood-prone regions of Bangladesh needed full support, while 38% required partial assistance, and 20% necessitated supervision. Furthermore, over 9% of these individuals experienced a significantly low quality of life (Mahmud & Azad, 2017).

Pre-existing discrimination in Bangladeshi culture and society hinder the availability of assistance, acute trauma care, and relief services, hence exacerbating the vulnerability of persons with disabilities after a disaster. Often, a destructive pattern emerges when individuals who already have disabilities or acquire disabilities during a disaster encounter even more inequalities

during the process of recovery and reconstruction. This is mostly due to difficulties in reintegrating the persons with disabilities into the labor market, locating suitable accessible housing, securing essential health and social services, and becoming more dependent as a result of inaccessible infrastructures (Raja et al., 2013).

The issue of excluding persons with disabilities from policy discussions was found in a study by (Kabir, 2017), where he rooted for inclusive policies that can curb the vulnerabilities persons with disabilities. Furthermore, he suggested that this can be achieved through formulating policies for persons with disabilities that also address climate change adaptation.

(Mahmud & Azad, 2017) added a socioeconomic lens to the discussion as he went onto assessing the living conditions of persons with disabilities at its depth. He addresses the intricacies that corroborate the problems for persons with disabilities in areas susceptible to flooding with a deplorable quality of life. The complexities embedded in disaster preparedness interventions were highlighted by the findings of the same study through the analysis of the association between demographic variables and quality of life.

(Chisty et al., 2021) studied the disability inclusivity status in early warning systems (EWS) in flood-prone districts of Bangladesh addresses significant shortcomings in the current systems. The study exposes deficiencies in the monitoring, warning services, distribution, communication, and reaction capability, which provide cumbersome challenges for persons with disabilities in responding effectively and efficiently to flood warnings.

To address the disproportional risk of persons with disabilities, CBM in partnership with a national civil society organization called Centre for Disability in Development (CDD), have started disability-inclusive disaster risk reduction (DiDRR) programming in rural communities in few disaster-prone districts of Bangladesh. While this minimum level of inclusion may be happening, the most recent literature evaluated provides no such evidence of disability inclusive disaster risk reduction on a wider and more nationwide level.

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