

Non-Economic Loss and Damage in Climate Migration: The Case of Korail Slum in Dhaka, Bangladesh

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A thesis submitted to the Department of Economics and Social Sciences in partial
fulfillment of the requirements for the degree of Bachelor of Social Sciences in
Anthropology

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Declaration

I hereby declare that:

1. The thesis submitted is my own original work while completing my degree at BRAC University.
2. The thesis does not contain material previously published or written by a third party, except where it is appropriately cited through with full and accurate referencing.
3. The thesis does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
4. I have acknowledged all main sources of help.

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Approval

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Abstract

This thesis explores the non-economic loss and damage of climate induced migration in Korali Slum in Dhaka, Bangladesh. With climate change on a horizon, vulnerable communities in Bangladesh are increasingly displaced especially by various environmental factors, especially natural disasters like the erosion of riverbanks, flooding, and the intrusion of saline waters. While much of the discourse on climate change is on the economic loss and damage, this research emphasizes the often-over-looked non-economic loss and impact of climate change. This includes displacement, loss of cultural identity, traditional knowledge, inter-generational impact and psychological impact of the climate migrants. By utilizing the secondary data analysis approach, the study synthesizes academic literature, governmental reports, NGOs and media publications to document the non-economic impact of climate experienced by climate migrants in Korali. The thesis highlights the loss of traditional livelihood and fragmentation of the society, resulting in a state of disorientation and loss amongst the migrants. The findings further demonstrate how non-economic losses, though clearly visible, are largely neglected by policy makers especially when it comes to climate justice of the vulnerable communities. Grounded by the principle of climate justice, the thesis calls for the incorporation of NELD in both national and international policy frameworks. By presenting Korail Slum as a case study, the current research contributes to the growing body of discourse advocating for understanding and recognizing of NELD so that all spectrums of climate impacts are fully addressed to fight against climate change and justice is ensured.

Keywords: *Non-economic loss and Damage, Migration, Climate Impacts, Climate Justice, Vulnerable Communities*

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Abbreviations & Acronyms

AOSIS	Alliance of Small Island States
BCCSAP	Bangladesh Climate Change Strategy and Action Plan
COP	Conference of the Parties
CGI	Corrugated Galvanised Iron
DDM	Department of Disaster Management
ELD	Economic Loss and Damage
FFWC	Flood Forecasting and Warning Center
IPCC	Intergovernmental Panel on Climate Change
ICCCD	International Centre for Climate Change and Development
IOM	International Organization for Migration
NELD	Non- Economic Loss and Damage
PTSD	Post-traumatic stress disorder
UN	United Nation
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WIM	Warsaw International Mechanism for Loss and Damage
WMO	World Meteorological Organization
NGO	Non-Governmental Organization
FGDs	Focused Group Discussions

Chapter One

1.1. Background Context

Over the last twenty years, human-induced climate change and global warming have become areas of growing concern for scientists, environmentalists, and public policy makers. The warming atmosphere, rising sea level, extreme weather patterns and loss of biodiversity poses unprecedented challenges to both human and natural systems. Climate change is a reality and the international community headed by the United Nations has recognized climate change as a serious problem for several decades. The establishment of the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) which established the Intergovernmental Panel on Climate Change (IPCC) in 1988 marked the urgency to address the climate issue. Over the years, various UN agencies including the United Nations Framework Convention on Climate Change (UNFCCC), have organized various conferences and summits to address the accelerating global climate problem. One significant way to combat climate change was the adoption of the Paris Agreement in 2015 (COP 21) which saw significant global commitment to combat climate change by aiming the threshold limit to 2 degree Celsius above pre-industrial levels and effort to limit global temperature to 1.5 degree Celsius (Tikkanen, 2019). However, in recent years the concern of climate change has accelerated with increasing impact on human health, ecosystems and global economy. According to the Intergovernmental Panel on Climate Change (IPCC), given the current rate of greenhouse gas emissions the average temperatures will rise by 0.2°C per decade reaching the threshold of 2°C by 2050. Recent evidence

suggests even more rapid change, to the extent of irreversibly not just to human lives but also other species and ecosystems (Elizabeth et al., 2010).

While adaptation and mitigation came as the best possible solution in addressing climate change, they are not enough on their own to address the dynamic impact of climate change. Mitigation involves the long-term process of climate change reduction with efforts to reduce greenhouse gas emissions, transition to green energy, enhancing energy efficiency and reforestation. Adaptation on the other hand includes responding to climate change, making adjustments, building climate resilient infrastructure like building sea walls, developing drought resistant crops and installing early warning systems. Despite the adoption of various mitigation and adaptation strategies, Island States in the Pacific such as Kiribati, Tuvalu and Marshal Island are already facing existential threat with rising sea level and salt water flooding into drinking water. In Africa, countries like Mozambique and Madagascar are experiencing increased frequency and intensity of hurricanes, while in Latin America countries like Honduras and Guatemala are experiencing unprecedented weather conditions and extreme droughts (Salem, 2020). Amongst all, due to their geographical location, and socio-economic backwardness, developing nations including the nations in South Asia are expected to face the most brunt of climate change (Islam et al., 2009). These vulnerabilities highlight the severity of climate change impact and need for action to address climate change including compensation through Loss and Damage.

1.2. Loss and Damage and Its Importance

The concept of Loss and Damage emerged within the global climate discourse as a response to the recognition that mitigation and adaptation alone are not enough to deal with the full spectrum of climate effects, especially for the most vulnerable countries. The compensation to vulnerable

countries through Loss and Damage becomes crucial because these most vulnerable countries are not fully not responsible for climate change and certainly not for their current situation. Loss and Damage is described as the impact of climate change that is beyond the country's capacity to adapt to, either because the damage is irreversible or the country lacks the means to adapt to (SIWI, 2023). The history of Loss and Damage has its roots in the early 1990s when the Alliance of Small Island States (AOSIS) commenced advocating for monetary assistance to address the impact of rising sea level. Their campaign culminated with the inclusion of Loss and Damage in deliberations under the United Nations Framework Convention on Climate Change (UNFCCC) *What Is Climate Loss and Damage?* 2023). At COP13 in Bali in 2007, Loss and Damage became officially recognized, resulting in the establishment of the Warsaw International Mechanism for Loss and Damage (WIM). The WIM strives to improve understanding on Loss and Damage, strengthen conversation and coordination, and help vulnerable countries execute Loss and Damage related measures (Adamczak-Retecka, 2016). The COP 28 at Dubai saw the global commitment to loss and damage. The establishment of the Loss and Damage fund with an initial pledge of over USD 700 million marked the global solidarity and climate justice reflecting the urgency to address climate change and international support to most vulnerable countries (Chowdhury 2023).

1.3. The Need to Focus on Non-Economic Loss and Damage (NELD)

The economic impact of climate change is profound and multifaceted. Various studies have documented economic losses associated with climate change. For instance, in 2017 Bangladesh received about \$40 million to build climate resilience from Green Climate Fund (Fund, n.d.) Similarly, in 2023 The World Bank approved \$50 million financing to Bhutan to make a more resilient and sustainable economy and ensure green growth (World Bank Group, 2023). While the

economic impact of climate change including the loss of infrastructure, agricultural production, and cost of adaptation are extensively discussed and studied, not much attention has been given on Non-economic Loss and Damage (NELD) of climate change are largely ignored (Serdeczny, 2016). Non- Economic Loss and Damage (NELD) contain a variety of indefinable effects which are hard to set a monetary value on however, are very significant for human beings and the environment. This encompasses the loss of human lives, displacement, deterioration of cultural heritage, loss of biodiversity, social and psychological effects, erosion of traditional knowledge and degradation of ecosystem services (Chiba et al., 2017). Against the backdrop of Bangladesh, the status quo becomes worse on environmental susceptibility, further accelerating the country's circumstances in regard to the dynamic climate change system.

1.4. Research Questions:

1. How does climate-induced migration affect the non-economic dimensions of loss and damage, specifically in relation to identity and cultural heritage, among the residents of Korali Slum?
2. What coping mechanisms and adaptive strategies do the residents of Korali Slum employ to mitigate the non-economic losses associated with climate-induced migration.
3. What role do governance structures and climate adaptation policies play in addressing non-economic loss and damage in Korail Slum, and how can they be improved to ensure climate justice for displaced communities?

1.5. Research Focus and Objectives

To address the Non-Economic Loss and Damage in Bangladesh, it must necessitate a local outlook that will recognize regional challenges while also integrating global climate change impacts. Climate change is occurring worldwide that stresses beyond international boundaries, initiating a shared problem that calls for a collaborative discourse, exchange of information, and proper allocation of resources. While effectively responding to the Non- Economic Loss and Damage (NELD) of climate change, it is important to involve local communities, indigenous people, and other stakeholders in the analysis process to certify that diverse perspectives and knowledge are included. In this accord, the research aims to classify and outline Non-Economic Loss and Damage (NELD) prompted by climate change in Bangladesh, distinctively climate induced migration. Hence, by assimilating local perspectives, it advocates for funding to address non-economic loss and damage notably in a nation that is most impacted by climate change.

The research also seeks to provide a platform for policy reforms within the climate adaptation and disaster risk reduction frameworks, ensuring that policies reflect the full spectrum regional climate impacts. This will enhance the capacity of local institutions and communities to understand, manage, and mitigate non-economic losses through education, training, and resource allocation. Additionally, the thesis aims to emphasize the global responsibility in adaptation and mitigating the impacts of climate change on vulnerable regions. Ultimately the paper aims to advocate for the equal recognition and compensation of both Economic and Non-Economic Loss and Damage of climate change to fight against the global threat- the climate change.

1.6. Significance of the Study

Recognizing non-economic loss and damage in the climate discourse becomes essential for a number of reasons. First it acknowledges the holistic approach to understanding the impact of climate change on humans and the natural environment beyond merely immediate economic implications. This holistic approach acknowledges the voices of all, including the community most affected by non-economic loss and damage (NELD). This also encourages change in policy and inclusion of NELD in policy discussion equally important to economic loss and damage (ELD). Addressing non-economic loss and damage (NELD) also highlights the importance of conserving the natural environment, acknowledging the relationship between environment and human culture. This also highlights the importance of preserving unique cultural heritage, conserving biodiversity and psychological wellbeing of vulnerable communities. This enables policy makers and the world at large to develop more inclusive and effective measures to address and fight climate change that goes beyond economic measures. Furthermore, recognizing non-economic loss and damage (NELD) fosters deeper understanding to the impact of climate change, emphasizing then equitable support and climate justice for communities experiencing non-economic loss and damage.

Academically and anthropologically this study is of importance in that it enriches the discipline of climate anthropology, where it addresses the experiences of climate affected communities, especially the cultural, social and psychological aspects which are often ignored by other branches of anthropology. Thus, this thesis places NELD in the framework of climate change and migration, and provides a clearer picture of how migration affects social order, cultural practices, and other deep-rooted customs. It also discusses the culture and the importance given to concepts such as land, culture, and national identity, especially for people like those living in Korail Slum whose society is affected by environmental transformations. The findings of this research would be of

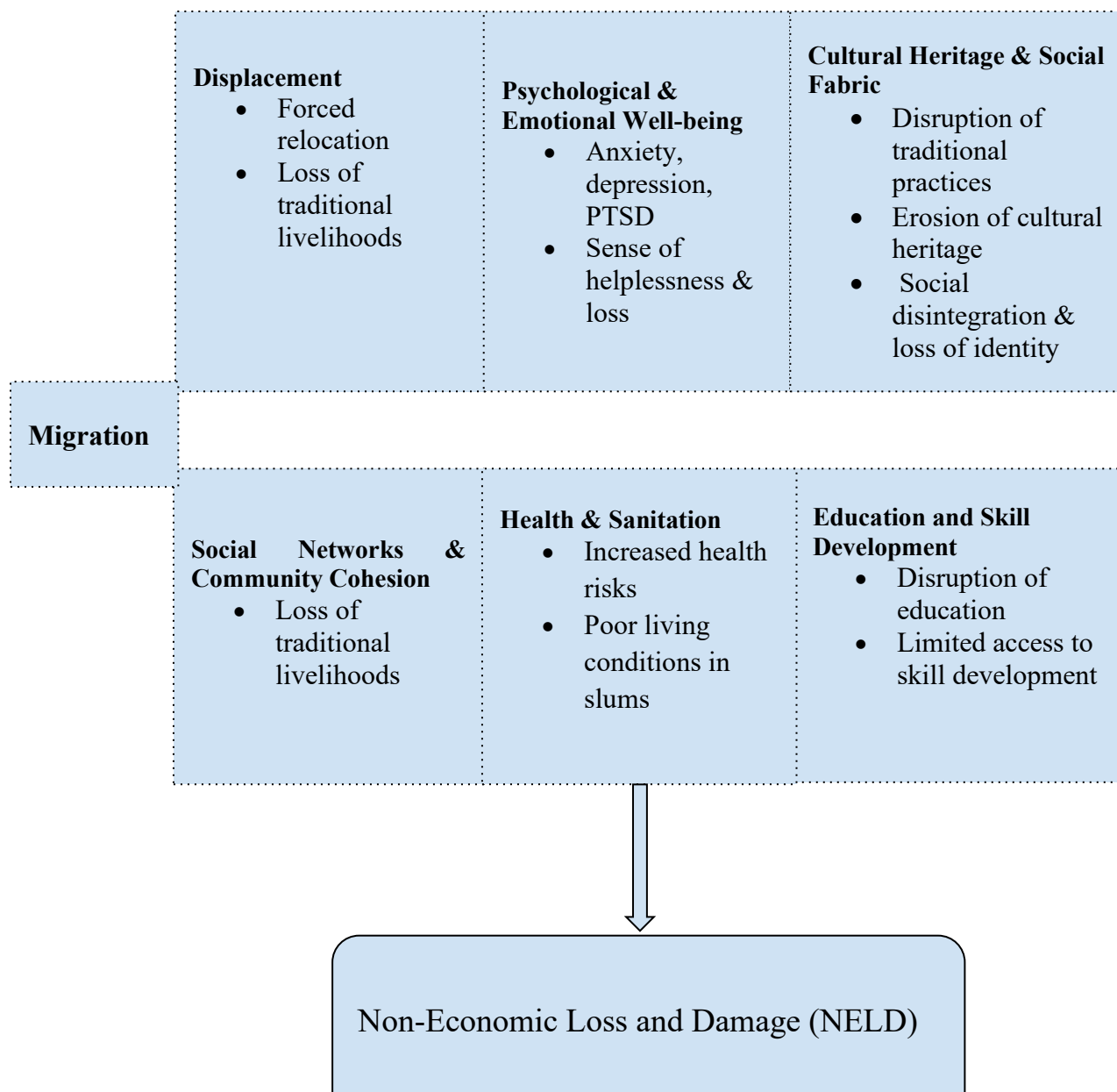
use to anthropologists involved in eagle studies, as well as climate scientists and policy-makers who wish to adopt a more humane and culturally-sensitive approach in response to climate crises.

1.7. Theoretical Framework

The research uses the climate justice framework to understand the non-economic loss and damage of climate change in Bangladesh. According to Dmitrievna 2020, climate justice is a paradigm for viewing global warming as an ethical issue and considering how climate change causes and consequences are related to notions of justice, particularly environmental and social justice. Today, all the debates on climate change are in one way or other related to the concept of justice. The core debate includes the debate on mitigation (who cuts?), adaptation (who pays?) and governance (who decides?) (Dmitrievna, 2020). Climate justice highlights the disproportionate impacts of climate change on low-income countries around the world and acknowledges their least contribution to climate crises (*What Is Climate Justice? - UC Center for Climate Justice*, 2022). The Mary Robinson Foundation- climate justice believes that the principle of climate justice emphasizes balances of human rights with development to establish a human centered approach that protects the rights of the most vulnerable country in the world and shares equal burden and responsibility as well as the benefit of climate change. This also includes the burden to address and restoration to the climate crisis. Silina, 2015 believes that those who are unavoidably affected by climate change or climate policy decisions should be adequately compensated for their losses. She further believes that everyone has the right to challenge law and policy on climate related issues if affected, so injustices would be fairly addressed. Furthermore, the framework emphasizes the political and ethical aspect of climate change especially in budget, highlighting the principle of fairness and justice in distribution of climate impact and addressing climate crises. This

highlights the core argument that those nations who are least responsible for greenhouse gas emission and climate change, typically the poor and the most vulnerable, should not disproportionately suffer from the adverse impact of climate change alone. The climate justice theory also emphasizes the importance of incorporating regional perspectives, essentially the voice of the most impacted communities around the world. It is crucial to take a different direction or outlook at the issues of international relations and international security apart from conventional ones stressed Harries et al., (2010, 2013).

The use of climate theory and the participation of climate immigrants in Korali imparts an ethical lens through which the extreme impacts of non-economic loss and damage of climate change can be addressed, which is quite overlooked in climate related discourses. The displacement, loss of biodiversity and erosion of cultural heritage are some of notable non-economic and non-tangible impacts of climate change (Serdeczny, 2016). By confronting these intangible losses and damage of climate change, the climate justice theory recognizes the need for an equal approach while addressing climate impacts. This gives a platform for the unheard voices to be heard ensuring diverse perspectives, knowledge and experiences as that of the Korali slum Bangladesh in global context. This provided more diverse and comprehensive approaches in assessment and addressing climate change fairly and justly.



Chapter Two

2.1. Literature Review

Climate change has emerged as a global threat that has possessed a significant threat to both human and natural environment. The impact of climate change is large and multifaceted, having a huge effect on the ecosystem, economy and communities all over the world. Amongst these with the rising climate impacts, Loss and Damage remains the most pressing area for discussion in the climate realm. While economic loss and Damage (ELD) is widely discussed, non-economic loss and damage (NELD) remains often overlooked despite the need for, especially in countries like Bangladesh. By highlighting the various challenges faced by the climate-induced migrating population of Korail slum in Dhaka, Bangladesh, this literature review aims to provide a comprehensive examination of the impact of climate change, various mitigation and adaptation strategies in place as well as the gap in research in addressing climate change, especially non-economic loss and damage.

2.2. Climate Change and Migration in Bangladesh

Bangladesh, with its low-lying deltaic geography faces significant challenges brought by the changing climate. Various hydro-geological factors added by socio-economic factors such as flat topography with very low elevation, large population density, extreme climate variability, high poverty rate, and large number of population dependent on agriculture, all highly influenced by

climate variability and change (Ahmed, 2006). The Notre Dame Global Adaptation Index Country Index ranked Bangladesh as 20th most vulnerable countries amongst 181 countries and is identified amongst the first countries to face the severe consequences of climate change including migration (Castellano et al., 2021).

2.3. Impact of climate-induced migration

Bangladesh is exceptionally vulnerable to rising sea level, cyclones, and riverine flooding amongst other disasters. These events are becoming more frequent with widespread displacement of populations including loss of homes, agricultural land, and various socio-economic problems associated with it. From 2000 to 2019, Bangladesh incurred \$3.72 billion climate loss and had experienced 185 extreme weather events as a result of climate change (Rojas, 2021). In a study conducted by the United States Agency for International Development, it is found that 90 million people in Bangladesh (56% of the country's population) live in high exposure areas and 35 million living in very high exposed areas (Busby et.,al, 2018).

Bangladesh also faces significant threats from cyclones and storms. Over the decades, the country experiences regular cyclones which have become more severe with increasing climate change. This has resulted in significant loss of life, mass displacement and extensive damages to property. In May 2024 a severe cyclone with the wind speed 111 km/h landed on the Mongla and Khepupara coasts in Bangladesh and West Bengal of India (FIRC, 2024). According to the Department of Disaster Management (DDM), the Tropical Cyclone Remal caused the death of about 16 people and affected around 4.59 million people in the region.

The country's deltaic topography further makes the country vulnerable to riverine flooding. The exacerbated glacial melt at the Himalaya and the erratic monsoon patterns have caused significant

loss of lives, property, displacement and extensive damages to crops. The country's major river system, the Ganges, Brahmaputra, and Meghna are prone to overflowing, resulting in widespread flooding especially during monsoon seasons (Bangladesh Flooding, n.d.). The flood disturbs agricultural activities, social harmony leading to food insecurities and economic loss to communities dependent on farming. For instance, in May 2022, heavy monsoon rains in the upstream of northeast India have caused large flash flooding in Sylhet in Bangladesh leading to massive displacement of people and thousand deaths. According to the Flood Forecasting and Warning Center (FFWC), about 84% of Sylhet were submerged by the flood and about 481,827 people temporarily displaced. It has also damaged about 83,394 hectares of cropland, and infrastructures including roads, hospital and water sanitation facilities (2022-12 FactSheet - Bangladesh Flash Flood 2022 (Shelter Cluster, n.d.). Moreover, the cultural and social fabric of Bangladeshi communities, particularly those reliant on traditional practices tied to the land and water, faces disruption as environmental conditions change. For instance, the Sundarbans located at south-west of Bangladesh, a UNESCO World Heritage site and the largest mangrove forest in the world is under threat from rising sea levels and increasing salinity, impacting both biodiversity and the livelihoods of millions of people. This is a serious threat brought by climate change.

One of the primary causes of displacement in Bangladesh is due to the increase in tidal height in the coastal areas often causing flooding and river bank erosion in the main land. The riverbank erosion displaces 50,000 to 200,000 people each year and thousands migrate to cities particularly Dhaka when major cyclones hit the coastal area (Szczepanski, 2018). Other factors include the rapid growth of population and shortage of land in the rural areas and increased rural employment that pushes the people to migrate to urban areas. According to the report by the World bank 2007,

300,000 to 400,000 migrants go to Dhaka each year. Hence, most of the migrants in urban places are poor, particularly Dhaka, the capital city (Rahman, 2004).

Poverty in Bangladesh is high with many immigrants forced to travel to make their living for themselves and their families (Ahmed, 2005). The International Organization for Migration (IOM) estimates that about 70% of the slum population that have moved to Dhaka has its reasons associated with climate change (Amjad, 2021). Furthermore, it has been estimated that by 2050, Bangladesh will lose about 11% of its land and one in every seven people will be displaced by climate change (Rojas, 2021) and about 18 million people might have to relocate because of rising sea level alone (Amjad, 2020). This displacement also led to non-economic losses such as disruption of social networks, loss of cultural heritage and psychological impact to the affected communities. In 2016 alone it is estimated that about 23.5 million people were displaced because of extreme weather events (Environmental justice foundation, 2016). Furthermore, Bangladesh is at the forefront of slow-onset environmental degradation including droughts, sea level rise and melting permafrost (EJF, 2020).

Bangladesh is trapped in a poverty cycle marked by widespread unemployment and underemployment, low productivity, and market imperfection (Hossain, 2006). According to a survey released by the Daily Star in 2017, the city has approximately 3,400 slums which shelter more than 40% of the population. The adverse communities of the low-income populations, coupled with a densely populated community, resulting in a slew of social, economic, health, and environmental problems. While migration can help mitigate climate crises, it also generates physical, mental and wellbeing issues and other risks including the risk to both migrants and families left behind (Bharadwaj et al.,2022). The trauma of losing one's land and way of life can lead to increased insecurities, anxiety, depression or post-traumatic stress disorder (PTSD). It is

found out that many of the migrants experience a sense of helplessness and uncertainty about their future. A study by the International Centre for Climate Change and Development (ICCCD) points out that many migrants in Dhaka experience high levels of anxiety and insecurities (Amjad,2019). Besides, the influx of climate migration in cities undermines the existing social structures and community unity. Traditional practices, rituals and community gatherings are essential for maintaining social relationships in rural places, which is the reason why displacement leads to social disintegration and identity losses. (Mahmud, 2022).

Despite severe climate impact, Bangladesh has made tremendous progress in addressing climate problems. This includes implementation of adaptation and mitigation strategies. Bangladesh has invested in developing comprehensive disaster management systems including disaster resilient infrastructure all part of mitigation strategies. This includes, early warning systems, cyclone shelters and flood management systems. The government has also emphasized on climate resilient agricultural practices including salinity tolerant crops and vegetables (Nadiruzzaman et al.,2019). However, despite all these efforts a large gap remains especially in addressing non-economic loss and damage in both the countries. For migrants, the government and various NGOs have aided them by providing essential services including flood, shelter, healthcare and various skill and vocational training to improve the living conditions and to integrate them into urban communities. Despite this the densely populated slum of Dhaka faces slew of social, economic, health and environmental problems (Hossain, 2006).

2.4. Gaps in Research

Although many researchers have begun to investigate the impact of climate change including climate induced migration, there is still a lot to contribute to ensure informed decisions for future

mitigation and adaptation policies and action plans (Heritage, et. al, 2020). Often most post disaster reports and databases have failed to adequately address non-economic loss and damage and low attention on non-economic loss and damage can result in underestimation of the actual loss of disasters, leading to limited or insufficient investment in policy, recovery and mitigation plans for future disasters (Chiba et al., 2019). Despite the contextual complexities, many have shown distinction between direct and indirect loss of climate change. For instance, increased salinity and frequent cyclones in Bangladesh, not only erodes traditional arable land or fisheries grounds but also traditional landscape and practices. While the communities may be relocated and may learn to generate greater income, survive and develop new cultures, old ways of knowing and relating to the environment are lost and often, it is found that adaptation to new realities can cause stress, a sense of loss and disorientation for the community (Hirsch et, al).

Migration caused by climate changes, especially forced migration, is very costly for migrants, especially when they are forced to leave their ancestral home. In the Korail Slum's condition, numerous in-migrants come from agricultural areas, which are closely bound with their land, source of income and culture. Upon relocating to slums following environmental disasters like riverbank erosion or floods, these individuals lose their previous identities and ancestral way of life. For example, they no longer practice agriculture, fishery, or engage in any other land or nature-based activities. This shift takes toll on the non-material aspects of their lives, posing additional challenges with regards to loss of a way of life in a new urban environment. Among the migrants, it is the older generations that endure the most distress, as they are disconnected from what once was their ecosystem and way of life, and this complication increases their alienation and marginalization in the city.

In their research on non-economic loss and damage in the context of climate change: understanding the challenges, Serdeczny et al. (2016) ask the question `` When a community of fishermen and farmers is dislocated from the sea and their lands, what happens to their identity?``. This question is not fully addressed and not in terms of the climate induced migration population in the slums of Dhaka city. Addressing and recognizing NELD not only minimize the cultural vulnerabilities of climate change but also bring climate justice to people most affected by climate change (Hirsch, et al, 2017). Studies by Chiba et al., (2017) emphasizes the importance of incorporating cultural heritage, psychological wellbeing and social cohesiveness in climate policies. They advocate for a more holistic approach to address the full spectrum of climate impacts and to ensure all vulnerabilities are fully acknowledged and addressed to support communities most affected by climate change.

The climate migrants living in the Korail Slum do not only struggle economically due to the prevalence of menial jobs and harsh environments, but also lose the bonds of community, indigenous knowledge, and cultural practices. The urban landscape also cuts them off from the spaces in which they previously lived and the social networks that existed within it. In the process of settling down in urban areas, migrants also experience difficulties in fast-keeping their individual and group identity. Such a cultural and psychological upheaval is perhaps the most notable of the many non-economic consequences of climate-induced migration, and it has far-reaching social and emotional effects on migrants in the long run.

The existing evidence indicates that while there are growing indications in recognizing NELD, there is still a lack of systematic integration and recognition of Non-economic Loss and Damage in national and international policy and practice. This calls for a comprehensive assessment and indication of variables in terms of non-economic loss and damage of climate change in both

national and international levels. This becomes especially important for developing countries like Bhutan whose relationship with climate change is at alarming risk. By examining Impact of Climate-Induced Migration in Korali slum in Dhaka, the research will be capturing the multifaceted nature of climate change impact including NELD. This will also enhance the existing knowledge gap in conceptualizing non-economic loss and damage of climate change, highlighting the importance of conceptualizing from a local perspective often the country most affected by climate change.

One such place is the Korali Slum located at the heart of Dhaka city. Korali slums is one of the largest slums in Bangladesh with a population of more than 50 thousand located on about 100 acres of land. It is near Gulshan Lake with houses built with CGI sheets, with only one room and a minimum of six-packs in the household. The residents depend on free labor, garment industries, rickshaw pullers, sellers, and solid waste collectors for their basic income and their livelihood. All of which benefit the more urban areas as well as the nearby commercial and industrial estates. The majority of the individuals that live in Korali came from some of Bangladesh's poorest areas, where they were left without a means of earning their bread and butter. Natural calamities like erosion have rendered them landless, and this is one of the main reasons they came to the city in pursuit of a better method to make a living. Nevertheless, the residents not only get into poverty but also work in extremely low-wage jobs. As a result, such slums growth has local and regional implications, affecting areas like health, politics, and social exclusion, among others.

Chapter Three Research Methodology

3.1. Introduction

This chapter outlines the techniques and approaches used in the thesis to examine the non-economic loss and damage (NELD) experienced by climate displaced communities living in Korail Slum, Dhaka, Bangladesh. Given the multi-dimensional nature of the topic the study is qualitative in nature, employing the use of secondary data analysis and examining various climate impacts sources on cultural, identity, heritage and mental health. This especially involves review of pre-existing research works, reports and other literature to understand the non-economic dynamics of climate induced migration in Korali slum. Through robust review and analysis of the secondary data, this methodology aims to present a detailed analysis of the Non-Economic Loss and Damage (NELD) in the context of the Korail migrant community.

3.2. Methodology

This study uses the secondary data analysis approach to determine the non-economic loss and damage (NELD) in the Korail slum in Dhaka, Bangladesh. By reviewing existing literature, reports and other related studies of climate change, the thesis aims to highlight the impact of climate change on cultural identity, heritage and mental health of the affected communities. The research uses a method of qualitative thematic analysis in interpreting and integrating secondary data, making it best appropriate for addressing the issue of climate-related displacement with its sociocultural repercussions.

3.3. Research Approach

This research employs a desk-based research method as its main approach, relying solely on the examination of pre-existing materials such as books and journal articles, government papers, NGO activities, and news channels. This method is best suited for the study of complex and subjective phenomena such as cultural losses, degeneration of local knowledge, and mental well-being of the affected communities. For the research Korail Slum was selected as the focus of this study because of the many climate migrants who reside in the area, and its relevance in understanding the importance of addressing environmental displacement within the context of Bangladesh.

3.4. Data Analysis Techniques

A thematic qualitative data analysis was adopted to process the data and in identification of key themes and patterns of NELD in the climate affected community in Korali. Thematic analysis provides an interpretive view highlighting how migration affects individual identity, culture and lifestyle of the affected community. These themes were categorized into several sub themes as:

1. **Loss of Identity and Cultural Heritage** This theme aims to explore how climate migration results in loss of community culture, tradition, and people's identity with a focus on Korail Slum.
2. **Psychological and Emotional Impact:** The theme aims to cover the health implication of the climate displacement including mental wellbeing of the affected communities.

3. **Loss of Social Cohesion and Community Support:** This theme explores climate migration as a disruptive factor to the migrant communities affecting community support and social network.
4. **Governance and Institutional Failures:** The theme analyzes the gaps and failure of governmental and environmental institutions in addressing climate change and provides policy recommendations for future directives.

3.4. Initial Fieldwork Plan

In order to collect primary information on the Non-economic Loss and Damage (NELD) experienced by the migrant communities, the initial design of this thesis included conducting on-site fieldwork in Khulna District, a climate-exposed area in Bangladesh. The fieldwork was planned with the focus on understanding the cultural and social impacts of migration from climate-affected areas. The research method included Focus Group Discussions (FGDs) and conducting in-depth interviews with the local communities to understand communal and individual non-economic loss and damage.

3.5. Shift in Fieldwork Focus and Location

Although every effort was made in formulating the strategy of data collection, I had to change my plans on the basis of several logistical and contextual factors. After an exhaustive discussion with Ms. Khanum about the time and resources available for the fieldwork, I decided to make amendments to my initial fieldwork and concentrate on Dhaka's Korail Slum, a locality that comprises a high proportion of internal migrants displaced by various climate-related

vulnerabilities in Bangladesh. This change of research area enabled me to focus on a particular group of displaced communities, thus going from general conceptualizing the non-economic loss and damage to a more defined community of Korail Slum.

3.6. Final Adaptation to Secondary Data Collection

As the last arrangements were being made to commence fieldwork in Korail Slum, the Bangladesh quota reform movement reached its peak with national lockdown and students protesting throughout the nation, which posed much risk for the field researchers. Owing to this unexpected hindrance, I made a choice to go back to my country (Bhutan) for protection and pursued my thesis through online means. However, due to time barriers, and needing to complete my thesis in the given time frame, I changed my approach to the research and adopted only secondary data for the study. This shift allowed me to still continue looking into the non-economic impacts of climate change on migrants, especially in terms of ‘loss’ of identity and cultural heritage, using available literature, NGO and government reports.

3.7. Limitations

The study is purely descriptive in the sense that it relies on secondary sources of data only, which might restrict the richness of personal accounts and testimonies of the people affected. All secondary data give a general overview of NELD but do not express the complex experiences of climate migrants. Nevertheless, the research intends to develop an extensive approximation of cultural and psychological aspects of climate-induced migration through integrating a large number of already existing sources. Moreover, relying on secondary data to study Non-Economic

Loss and Damage (NELD) posed unique challenges as NELD is a relative and evolving concept in the climate discourse. NELD, which includes losses not tied to direct economic metrics such as environmental degradation, psychological impact, impact on social harmony, and loss of cultural heritage remains an abstraction with little available literature. Below are the key barriers in obtaining the secondary data on Non-Economic Loss and Damage in the context of climate induced migration in Bangladesh:

1. Scarcity Specialized Studies: As a relatively new concept there was very little academic literature on the subject considering non-economic loss and damage. Most of the research on climate change tends to be geared on economic losses like the loss of assets, for example.
2. Fragmented Data Sources: Often relevant information on NELD is dispersed across various sources like governmental reports, NGO reports and international publications. This fragmentation of sources required a lot of cross referencing to piece together a comprehensive idea for NELD. This process was time-consuming and added a layer of complexity in data collection.
3. Limited Recognition in Policy and Research Frameworks: As the concept of NELD remains relatively new in climate discourse, this has resulted in fewer governmental and academic reports focused exclusively on NELD. And it was even more challenging to get data focused primarily on Bangladesh. Moreover, the data available in terms of secondary sources often tend to overlook NELD, concentrating on the more traditional and economic dimension of losses.
4. Challenges in Defining and Measuring NELD: The abstract nature of the subject further makes it difficult in the use of standard measurement approaches and locating relevant

data. Unlike economic losses, the non-economic losses consist of abstract, subjective and less tangible experiences making it challenging for the researchers in using conventional research techniques. The primary proponent of NELD such as loss of cultural heritage, loss of ecosystem services and impact on mental health lacks standard indicators making it exclusively difficult to indicate NELD.

Relevant Literature of the study

Source	Type	Description
Adamczak-Retecka, M. (2016)	Article	Examines the Warsaw International Mechanism for Loss and Damage
Afsana, K., & Wahid, S. S. (2013)	Article	Focuses on healthcare access for the poor in Bangladesh's urban slums.
Amjad, K. (2021)	Article	Analyzes climate migration among Dhaka's slum dwellers.
Bharadwaj, R., & Huq, S. (2022)	Report	Studies health impacts of climate-induced migration.
Chiba, Y., Shaw, R., & Prabhakar, S. (2017)	Article	Discusses non-economic loss and damage in Bangladesh and Japan.
Hackenbroch, K., et al. (2008)	Article	Investigates adaptation strategies of evicted slum dwellers in Dhaka.
Serdeczny, O., Waters, E., & Chan, S. (2016)	Paper	Explores challenges of non-economic loss and damage.
Sinthia, S. A. (2020)	Article	Examines conditions in Korail Slum, focusing on urban slum dynamics.

Chapter Four Findings

4.1. Introduction to the Findings

Restating the Research Objective:

The research aims to examine the Non-Economic Loss and Damage of climate change with particular focus on the climate induced migration in Bangladesh. The research explores the impact of climate change on vulnerable communities of Korali slum in Dhaka such as loss of identity, social ties and psychological wellbeing which are all affected by climate change induced migration. Hence, by examining the impact of climate change the research seeks to bring forth the dimension of the non-economic loss of climate change and how it disproportionately affects the marginalized communities.

4.2. Summary of Key Theory

The proposed study is based on Climate Justice Theory which contends that people suffer from climate change disproportionately and there is a need to care for those who are more at risk. Climate justice asserts that the most marginalized communities like the impoverished people of Bangladesh, who contribute the least to climate change, unfortunately are the most affected by it. In regard to climate justice, the meaning of NELD incorporates the broad losses that are often taken for granted and are not necessarily material losses, for instance, loss of architecture, wellbeing, and community. Thus, the research illustrates the unfairness, which is particularly directed

towards climate refugees, the unfairness that relates to recovery from losses that cannot be measured in monetary terms.

4.3. Overview of the Structure of the findings

The findings are presented in sections of key themes that emerged from the study and analysis of secondary data. The themes provide an overview of the various aspects of climate-induced migration that have affected the lives of those people who have been relocated to the Korail Slum. The first theme discusses the loss of identities and culture practices showing how climate displacement erodes traditional customs and emotional identity tied to land. The second theme of displacement and loss of social cohesion brings forth the disruption of social bonds which exacerbates social isolation and poses migrants to vulnerability and higher risk. The third theme discusses the socio psychological effects of migration, particularly, the issues of health posed by emotions and mental health of displaced individuals. The fourth theme discusses the educative and generational aspects with the particular concern of the disruption of children's education and transfer of knowledge along generations because of migration. Lastly, the research explores the governance and institutional capacity and failure, bringing how inadequate policy support exacerbates the already existing non-economic losses experienced by climate migrants. All together, these themes present a holistic understanding of how the NELD takes shape among climate-displaced populations in Bangladesh, as well as offering border insight on the issues of justice, resilience and recovery in the face of climate change.

Theme 1: Loss of Identity and Cultural Heritage

Discussion of Findings:

The climate induced migration has dramatically affected the identity and cultural heritage of those who have been uprooted from coastal and rural parts of Bangladesh and settled in urban slums such as the Korali. The majority of the displaced populations found in Korali come from regions like the Sundarbans and the coastal regions of Khulna and Barisal, where they had been engaged in agriculture, fishing, and other related traditional activities (Hossain, 2019). The migrants upon moving to the slum, they not only have to adjust to a completely different urban setting but also finds themselves uprooted from the traditional activities that were a primary feature of their daily lives (Prova, 2023).

Many interviews with displaced migrants reveal a deep sense of cultural dislocation. In an interview with the displaced people in the urban slum of Dhaka Hackenbroch et al., 2008 discusses the experience of identity loss and cultural dislocation by the slum dwellers. This sense of loss is compounded by the geographic space as the seasonal and land based cultural practices such as harvest, fishing, religion, arts, the practices that were once central to their communal life.

The migrants also express the loss of communal support systems that were intrinsic to their way of life, where communal relationship and kinship bound was presented through shared cultural practices. Mohammad's 2015 work focuses on how migration disrupts social networks and support systems, particularly among climate-affected populations. His research provides insights into the weakening of communal bonds when migrants are displaced to urban slums, such as Korali, where traditional support systems are often lost or weakened.

Again, qualitative data from focus groups discussion underscore the erosion of local dialect and social norms amongst the displaced people. Many of the respondents referred to the challenges of maintaining their local dialects and culture in the urban setup, especially in the presence of a broken community (Serdeczny, 2016). For example, many children of migrants based in Dhaka still find it difficult to speak their mother tongues as they learn in schools, which have Bengali as the language of instruction. In Korali, displaced families also do not enjoy many of the bonding social activities, e.g. extended family associated group functions and festivals, because of a depressed economy and lack of enough space for gathering (Prova, 2023).

Implications for Non-Economic Loss:

The cultural loss, which is often the result of climate change and climate induced displacements, cannot be restored making it a significant component of Non-Economic Loss and Damage (NELD). Unlike economic losses which are often measured and compensated, the erosion of identity which includes the language and cultural practice cannot be quantified or restored through compensation. Such loss is very disruptive within the social structures of people, it makes the people lose the connections that they have with their history, land, and ancestors. Moreover, displaced individuals struggle to adapt to their new surroundings. As a result, a slow but sure process of disintegration of enculturation sets in to leave them with a lost sense of identity and indeed dislocation making them more susceptible to isolation.

Such losses from a Climate Justice perspective are further aggravated by the fact that it is the marginalized communities that are already facing the worst adverse effects of climate change. These people are not only economically disadvantaged but also culturally vulnerable as they lack institutional support needed to preserve their heritage in the face of climate change and

displacement. The loss of cultural identity to the climate migrants are not just any loss but a broader injustice faced, where least contributors are forced to not only give their home and way of life. This underscores the need to tackle NELD within the framework of climate justice as failing to do so overlooks the full scope of the damages inflicted on these communities. Thus, recognizing and addressing the loss of cultural heritage enables a wider and comprehensive understanding of the realities of climate change, particularly the slum dwellers of Korali and similar communities in Bangladesh and worldwide.

Theme 2: Displacement and Social Cohesion

Discussion of Findings:

Climate induced migration has a profound impact on the societal structures of the migrants often leading to the erosion of the social cohesion amongst climate refugees settled in the urban slums. In Korali, many of the displaced immigrants came from tight-knit rural communities where social bonds were strong, with kins providing social, emotional and economic support to each other (Borgström, 2012). These families who have been displaced however, find themselves in a new environment where they are separated and alone, struggling to recreate the social networks they relied upon in their previous homes.

Interviews conducted with displaced migrants in Korali reveals that the gradual fermentation of communities in the slum affects social harmony and weakens social cohesion (Mohammad, 2015). Many interviewees describe themselves finding themselves alone when they landed in Korali with no hopes of rekindling the kinship and interdependence that they used to enjoy with friends and relatives back in their home village (Siddiqui, 2010).

In a study by Afsar (2003), a respondent from Bhola District stated that, "Back home, we knew everyone. if someone was in need, the whole village used to stand. Here, there -no one knows, and no one does but everyone does - suffers. Here, we are all struggling, and there's no one to lean on." This disintegration of family ties and social networks has put many displaced households at risk as they contend with urban life without the support systems they once depended on. Moreover, focus group discussions with women who had been displaced reveal a noticeable change in the social customs that used to help hold communities together (Chaity, 1870). Customs such as farming, fishing, and providing assurance in cases of emergencies, which all emphasized working together, have been oversimplified into slum lives by more individualistic living where constrained resources and economic hardship hinder formation of stable communal relationships. It has been observed that the urban environment of Korali lacks communal spaces and cultural practices that once strengthened relationships in rural areas (Amjad, 2021). Furthermore, with families settling in different areas within the slum, the family unit is often broken as families are unable to live close to their relatives. In a study by Hari, J. (2018) one woman lamented, "We've lost the connections that made us strong. Now, we are on our own," one woman said. These findings indicate the heavy cost that displacement inflicts on the social structure of the communities. Previously, there was a sense of belongness, solidarity and trust, but the trust that once existed is heavily weakened or lost entirely, making it difficult for the migrants to navigate to this new often hostile urban environment without the cushion of their original social structures (Mohammad, 2015).

Implications for Non-Economic Loss

The disintegration of social cohesion and the kinship network is an important aspect of the Non-Economic Loss and Damage (NELD). Loss of a sense of community and belonging as a whole

cannot be compensated for or addressed through economic measures. The results show that social dislocation discloses the interruption of the common life of the migrants that they once experienced. Likewise, the displaced individuals are engaged in forming new social ties, however, their long-term vulnerability increases as they cut off the networks of support.

This elevates the existing inconsistency among the climate migrants.

In light of this, it is mandatory to understand that the disintegration of social bonds is not just a misfortune on an individual or community level, but it is an injustice on larger provisions of social justice. The lesser fortunate section of the society due to economic constraints, lack of education or lack of access to resources suffer more. In addition, they suffer as they are excluded from the webs of social relations, which is essential for wellbeing, livelihood and communal harmony. Incompetence to restore social ties in the urban slums like Korail, for instance, leaves the migrants unable to break free from the sadistic cycle of isolation and the amplifying the hardship of urban poverty. Furthermore, the absence of social ties adds to the long-term social sensitivity of these communities, as it diminishes the collective capacity to aid and function. Mostly, in the countryside, extreme interpersonal relationships unite communities to come together and help one another during such challenging times of need. On the contrary, in Korail, due to disintegration within communities, displaced people have less means to summon for the rights, which further marginalize them from the spectrum of urban systems. Overall, the downfall of social ties due to climate migration is one of the significant losses for the displaced migrants of Korail Slum. Thus, addressing this form of loss is essential for creating more just and equitable climate adaptation policies, as it underscores the need to support not only the economic recovery of climate migrants but also the rebuilding of their social and community lives.

Theme 3: Psychological and Emotional Well-being

Discussion of Findings:

The climate-induced migration has extensively impacted the psychological and emotional health of the migrant populations especially in Korali Slum. The migrants who are forced from their homes by rising sea levels, floods, and cyclones, not only experiences physical loss of their property but are also faced with emotional and mental health problems that are often not in the public domain and therefore not addressed by policy concerns (Chowdhury, et al., 2020). Many studies found these migrants experiencing chronic anxiety, trauma, and sorrow faced with uncertainty for the future in a new environment and urban place. Focused group discussion and Interview with the displaced migrants revealed significant emotional toll of displacement. For instance, a middle-aged woman from a seaside village of Patuakhali expressed soreness as she described emotional attachment with her old house, the field and the river and their old way of life (Chowdhury, et al., 2020). The trauma of abandoning home, community and the source of income weigh heavily on migrants as many of them expressed the feeling of depression and hopelessness as they weighed themselves against the existing urban settings that they were now expected to fit in. Specifically, such emotional pain is acute among the youth. In focus groups, many of the displaced adolescents and young adults assessed experienced emotions of disorientation and purposelessness after migration (Luetz, 2018). A 19-year-old male recounted his feelings of loss and despair regarding his future. He dreamed of prospering as a fisherman just like his father however, now living in a new and unfair environment he felt his long passion is attainable (Sultan, 2021). The loss of the ability to practice traditional means of earning one's living has adverse effects on the economic outcomes of migrants, while at the same time, has even more serious emotional impact due to the altercation of the self and identity. Additionally, a great number of

migrants living in Korali do not have the opportunity to receive mental health services, hence their emotional needs remain unaddressed (Afsana, & Wahid, 2013). Furthermore, many studies found the lack of psychological support services available in the slum, and in the case of most displaced people, mental health problems are not discussed in conversations because of a cultural taboo. There is a significant concern about the fact that without proper mental health strategies in place, the migrants are forced to confront their trauma in solitude, which furthers their emotional strain (Afsana, & Wahid, 2013). The absence of formal structures to address these invisible losses contributes to the neglect of the psychological dimensions of climate-induced migration.

Implications for Non-Economic Loss:

Climate migration is not only associated with physical movement, but also psychological and emotional disturbances, which is another aspect of Non-Economic Loss and Damage (NELD). Emotional wellbeing unlike physical or financial cannot be recuperated once it has been compromised hence, making emotional resources a significant aspect of Non-Economic Loss and Damage (NELD). The trauma of displacement is already taunting and when combined with uncertain life in urban environments, it takes a bigger toll on the mental wellbeing of the migrants. The loss of home and insecure future highlights the crucial aspect of impact of climate change on these migrants all of which are crucial to human prosperity and wellbeing.

In discussions surrounding climate change, particularly those that relate to loss and damage or economic compensation, the dimension of NELD tends to get overlooked. However, displacement also has emotional and psychological impacts which migrants undergo. Migrants that have experienced home and community loss do not only have financial challenges but a deeper sorrow

and uncertainty regarding the future. These emotional wounds are often lifelong and intergenerational with evidence of emotional experiences by their children and grandchildren.

From a Climate Justice perspective, the failure to address the psychological and emotional well-being of climate migrants is an ethical concern. With that aspect climate change is now understood to be not just an environmental problem but a holistic phenomenon encompassing human welfare including the emotional wellbeing of people who have been forced to migrate due to climate changes. This emotional distress disproportionately weighs heavy on the shoulders of the poor, the marginalized who do not have adequate access to mental care and support systems. Therefore, emotional wellbeing should be considered as an essential component of NELD. This inequality reflects the greater dimension of climate injustice where those least responsible for climate change suffers the blunt effects of climate change both physically and mentally. Global climate change and variability has aggravated internal strife that has led to the displacement of people. For these reasons, the emotional health of individuals and the community as a whole should be placed as one of the importance of NELD. In addition, policies concerning climate migrants must consider the non-economic impacts resulting from climate migration.

The ongoing response to climate induced migration mostly deals in pursuing the problem of climate-induced migration, with the majority inclined to expect economic rehabilitation and infrastructural reconstruction only. There is more to loss compared to gain. By stressing more on psychological and emotional aspects of NELD can assist policy makers and humanitarian organizations in advancing complete recovery of countries suffering from climate-induced displacement. This rehabilitation includes mental health, community-based support systems, and interventions focused on emotional aspects of migration, targeting vulnerable populations especially women and children likely experiencing it.

Theme 4: Educational and Generational Impact

Discussion of Findings:

Climate migration has a far-reaching consequence on the education of children in affected communities. In many cases families of the affected communities ought to invest on the immediate survival over long term educational investment of their children leading to series distribution to child's schooling (Kabir, et al, 2016). The economic burden such as the need for every member of the family including children to contribute to household income coupled with lack of accessible and affordable schooling in urban places hinders many children from going to school or continuing schooling after migration (Prova, 2023). A study by Sinthia, 2020 found that the majority (50.6%) of the urban poor is illiterate, 31.3% only attending primary and secondary school and never completed the school degree certificate. Furthermore, interviews conducted with the displaced families resulted in disruption of children's education due to migration. For instance, a mother, whose family originally comes from a coastal village located in Satkhira, showed distress with regards to the future of her children: "Before my son went to school, and now we need him to work so that we can eat. We cannot afford to send him to school here and the school is so far away" (Hari, 2018). This was the case with many parents, who find it hard to give education a healthy priority with issues like shelter, food, and even subsistence in the urban setting. Because of the poor economic status of many families, a majority of the children are compelled to work in low paying informal jobs that are aimed at supplementing the family's earnings, further reducing their chances to go to school (Sultan, 2021).

Prior to migration, many of these children were coming from rural regions where their form of education was shaped by the local traditions and cultures present in the area. In most cases, living

in the countryside meant more commutes and children's education were intertwined with practical knowledge of their community and livelihood. In such a setting schooling went beyond just formal schooling as children learned traditional farming skills, fishing techniques and inherited traditional cultural practices. However, after migration displaced children tend to have a hard time adjusting to new school settings (Islam, 2019). Most of the children are from rural or coastal areas with a different curriculum and language of instruction compared to urban schools the children are now going to. Therefore, the great challenge of adaptation emerges (Kabir, et al, 2016). Children talked in focus groups about how they experienced being different and how it was hard to go to school and try to be like the rest. A 12-year-old boy once said, “In the school I used to attend, we had our own language, but here, it’s all Bengali, which is difficult for me to comprehend. I don’t think I will be able to catch up.” This feeling of being behind is prevalent among all the displaced children, leading to the high rates of dropouts in the slums. (Cameron, 2010).

Educational deprivation has more serious consequences beyond the simple loss of opportunities. It has been noticed that in many rural, and littoral societies, culture that has previously been practiced for generations is revolving around certain economic activities like growing crops, catching fish, making artistic items from the readily available materials, and so forth. Displacement disturbs this continuity of knowledge because children in Korali are separated from their ancestors’ way of life (Cameron, 2010). One father put it like this, “We come from a very long line of farmers, but we no longer teach our children such skills. We cannot connect with the land anymore, and they will never learn how to live as we did” (Ahmed, 2024). This intergenerational knowledge loss undermines cultural and practical resources which sustain these people in their homelands.

Implications for Non-Economic Loss:

The interruption of educational processes and the erosion of existing knowledge systems poses a long-term, non-economic effect of climate-induced migration. Before displacement, children's education was an important aspect of the community's legacy passing ancestral values and practices. Thereby ensuring continuity of traditions that are deeply rooted within the community. However, migration has disrupted the continuity of these knowledge and practices, fundamentally altering the life of a new generation.

Unlike the physical losses that can be rebuilt after a certain period of time, educational losses have a lasting impact on people and communities. This consequently affects their ability to regenerate which in turn hampers their future. The young people's future opportunities in their career are limited. The community's potential to adapt to the possible future effects of climate change is also impacted by this disruption of schooling. This will be the consequences of the younger generation's lack of opportunities to get access to learn and study productively.

Therefore, the educational disruption is a major factor of Non-Economic Loss and Damage (NELD), as its adverse impacts are not only confined to individuals but the entire generations. Prior to migration societies, the education system in rural communities served as transmitting knowledge and safeguarding unique cultural characteristics. This type of loss is especially dangerous because it will eventually lead societies to poverty and vulnerability.

From a Climate Justice perspective, the educational impact of displacement highlights the intergenerational injustice that climate change imposes on vulnerable populations. These people who are least responsible for climate change bear the greatest burden of climate change inheriting the legacy of disadvantage and loss. Moreover, the loss of intergenerational knowledge deepens

this injustice. Displacement disrupts the knowledge systems which are essential for navigating environmental threats. This does not only interfere with the present generation but robs any of the future generations the ability to withstand change brought about by climate. This loss, however, illustrates a bigger failure in most climate change responses. Most climate mitigation efforts focus on helping mitigate the losses and change for a quick recovery rather than addressing the sustainability of the cultural and educational systems in the long run. By neglecting the education of the children of the displaced population, society fails to protect the very people who will bear the brunt of climate change in the years to come.

In conclusion, one cannot ignore the educational and generational challenges posed by climate-induced migration if one is to address climate change in a fair and just manner. Coverage policies should not only limit themselves to economic compensation but also avail quality education and skill building to children displaced by such policies. In addition, there are programs and other cultural activities that relate to the community that can be utilized in storing the knowledge of the elderly in that community, ensuring the displaced community's resilience and their sense of belonging to their heritage.

Theme 5: Governance and Institutional Failures

Discussion of Findings:

The failure to prioritize and address Non-Economic Loss and Damage (NELD) within the climate realm marks the failure of institution and government. All factors combined including weak government and institutional failure lead to an exacerbating the Non-Economic Loss and Damage (NELD) experienced by climate migrants in Bangladesh, particularly in urban areas like Korali Slum (Luetz, 2018). Even though climate-induced migration is increasingly recognized, the

present policies and governing systems largely ignore the non-economic implication of such displacement thereby exposing the affected communities to a lot of losses that are invisible (Dmitrievna, 2020). This indifference of systems to provide supporting institutional and legal frameworks for non-economic losses tends to even further alienate climate migrants and predispose them to more vulnerabilities.

The findings through research and policy assessment reveal a lack of a systematic structure that would respond to the needs of climate migrants. A number of migrants remarked that the state has left them outcast because existing policies are mostly geared towards restoring economic functions such as housing and employment, and ignoring non-material concerns, for example, loss of cultural identity, psychological factors, and social networks (Chiba, et al., 2017). One participant in the study was very scathing of the local governance: “We had to evacuate our place of dwelling, but no assistance was provided to us in this regard (Afsar, 2003). They are concerned with the infrastructure and employment, but not with the fact that we have lost our sense of belonging and our homes.” In addition, there are considerable deficiencies in governance at the national and the local levels, especially related to the coordination and execution of the climate adaptation plans (Fatemi, et al., 2020). Local governments in slum areas, such as Korali, remain under-staffed and overwhelmed and are incapable of even the most basic service provision and even more so of rendering services to the displaced people. Focus group discussions indicated that migrants face difficulties seeking any legal or institutional assistance; one participant stated, “We don’t know where to go for help. There is no office or person to talk to about our problems. We are invisible here” (Luetz, 2018).

The inability of governance structures to identify and resolve NELD issues presents wider challenges of injustice and inequity in the climate change adaptation strategies (Sarwar, 2004). In

Bangladesh, national climate change governance policies, for instance, the Bangladesh Climate Change Strategy and Action Plan (BCCSAP), tend to prioritize structural durability and restoration of the economy after a disaster, rather than the impact of climate change on people. This neglect is likely to have a more adverse impact on the already oppressed social groups than the rest of the population, as the adverse effects that they incur which are non-economic in nature, for instance loss of cultural or ethnic identity, loss of sanity or community integration, are deliberately omitted from the adaptation policies.

Implications for Non-Economic Loss:

The institutional negligence of NELD by government and policy makers exacerbates the vulnerabilities of climate migrants as there is no legal framework that recognizes such losses which leaves most displaced people without proper assistance and support. There are no formal processes, for example, that can help deal with the loss of culture or even society that occurs when people are displaced by climate-related factors, without recognition of such losses. The burden of being uprooted from their homes and being displaced in unfamiliar environments without support, and even the disintegration of families and communities further enhancing their marginalization.

From a climate Justice perspective, the failure to acknowledge NELDs underscores the persistent structural inequalities manifest in the prevailing climate adaptation policy. Climate-induced displacement, especially the poor rural communities, is exacerbated by governance failures, as these communities lack legal and political representation to advocate their rights. These structural disparities demonstrate a typical 'layering of injustices' whereby populations who suffer the worst effects of climate change are also those who receive the least support in terms of recovery and adaptation measures.

Many studies highlight the importance of adopting a climate adaptation strategy that is all embracing and goes beyond economic reconstruction to deal with the full spectrum of climate change including non-economic losses. There is also a need for change in the governance system to recognize NELD and initiate activities aimed at compensation for NELD. This may entail designing policy on community-based adaptation strategies that prioritize the social, cultural, and psychological contexts of the communities which shall have been displaced by climate change as well as ensuring that climate change policies at all levels include the voices of the affected climate migrants.

In conclusion the governance and institutional failures are a great impediment in tackling NELD and the impact is more pronounced among the marginalized communities in Bangladesh. Current policies are perpetuating dynamics of vulnerability and inequality through their inability to recognize the non-economic losses of climate migrants. To accomplish social justice in climate change, consideration must be given to changing governance frameworks so that all losses, including non-economic losses, due recognition and provisions are made, hence enabling the affected communities not only to recover economically but also socially and emotionally.

Chapter Five Discussion

5.1. Discussion of Key Patterns and Linkages

Cross-Theme Analysis:

The various thematic findings of this thesis highlight the interconnectedness of various Non-Economic Loss and Damage (NELD) types experienced by climate migrants in Bangladesh. The loss of identity and cultural heritage, mental health, social disintegration, and interruption of education does not exist in isolation, rather they combine to create a layered vulnerability that almost all climate migrants have to navigate with.

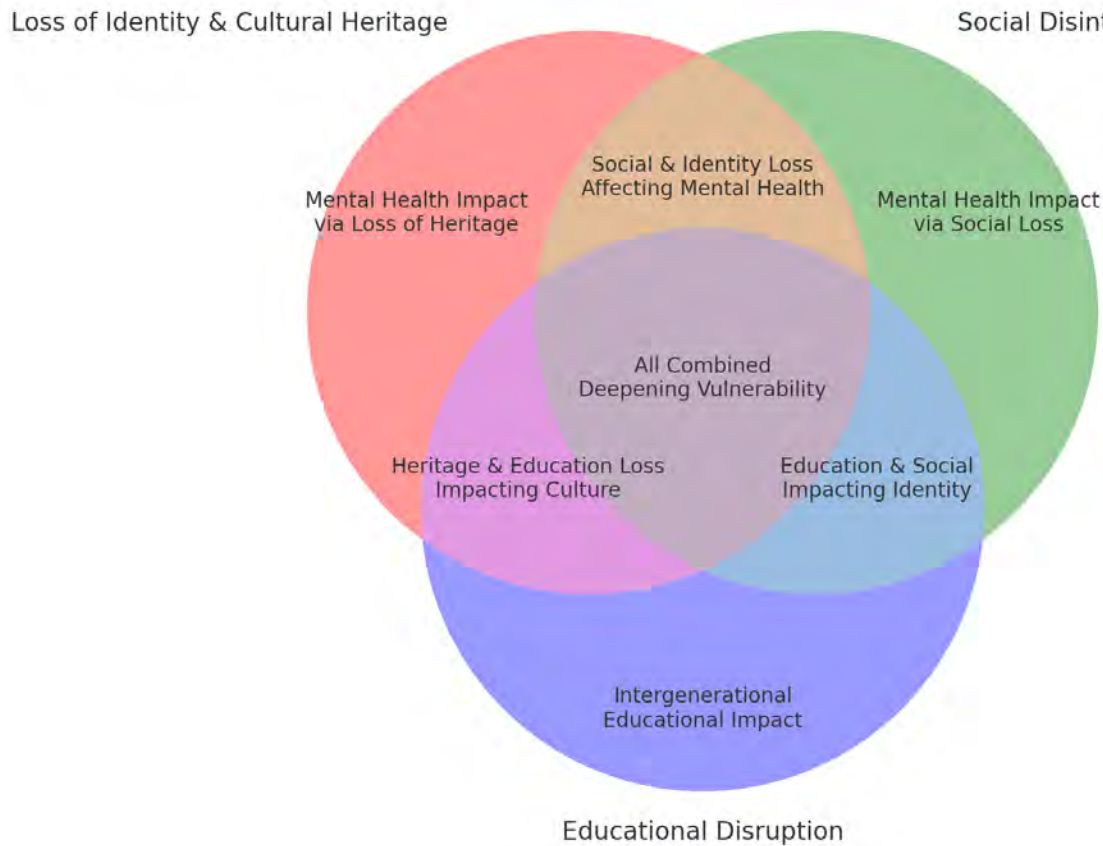
To illustrate, a decline in cultural identity and practices can further aggravate the psychological state of the displaced community. When one is removed from their surroundings and way of living, the feelings of loss and trauma can be immense. Such loss itself, leads to emotional disturbance which worsens isolation and anxiety in the already urban slum where building new relationships is already difficult. In their interviews with migrants, it has been found that many of them feel the sense of loss that permeates all spheres of their lives, and this felt loss breeds emotional suffering and social disconnection on a constant basis.

In the same manner, within the displaced groups, the weakening of social relationships contributes to mental health issues. As the extended family and the network of support begin to wane, individuals start to feel more exposed and cut-off from society.

Similarly, within displaced groups, the weakening of social relationships increases mental health issues. With the ebbing of extended family and support systems, people feel increasingly vulnerable and isolated. This disconnection exacerbates anxiety and depression while also influencing children's schooling as parents run the risk of prioritizing on the day's survival rather than sending children to school. The loss of community support in education further hinders children's access to schooling, which has adverse consequences that cuts across the ages.

In addition to this, the decline in access to education also reinforces the erosion of cultural identity and social integration. When a child's education is interrupted, they not only fail to develop important capabilities, but also become disconnected from their cultural traditions. Skills and customs that are learned over time start to become a thing of the past, contributing towards the fragmentation of communities as there are shared cultural practices that play a significant role towards keeping people together.

Simplified Venn Diagram of NELD Themes and Interconnections



Synthesis with Climate Justice Theory:

These different forms of NELD and their relations to one another, reflect the deep-seated disparities regarding climate change among the population of Bangladesh, especially the people forced to live in urban slums such as Korali. The Climate Justice Theory advocates for moral imperatives for addressing the inequalities that have been further worsened by climate change, particularly focusing on the fact that these communities suffered the most despite their least contribution to its cause -the climate change. These injustices are seen much more vividly in urban slums, where the displaced populations often grapple with challenges in meeting even the most basic needs on a daily basis while on the other hand, NELD imposes multiple layers of other

challenges including loss of one's identity, mental stress and loss of cultural practices. Such communities become the climate victims from the climate justice perspective showing how such climate changes add on to the already existing discriminations along the class, gender and political spectrums.

In this scope, the results indicate that climate change migration is not always an economic or physical displacement but also a psychological and cultural one to both people and communities. Such a sense of emotional and cultural loss can be as devastating as the loss of a home or livelihood. For example, the inability to transmit knowledge from one generation to the next, which often involves practical skills or cultural practices, is particularly significant for these peoples as it represents a break in the continuity of life for these displaced populations. The dislocation of geographical roots and traditions to an urban environment creates difficulties for such communities and most of them undergo losses typified by a sense of disconnection from their way of life and fear of isolation.

While looking into the experience of NELD by various groups of people affected by displacement, it becomes evident that those who are least prepared for the impact and certainly least contributor to climate change are the most at risk and vulnerable. Not only do these communities lack financial means to cope with sudden displacement, but also have limited social and institutional support to help them recover from the non-economic losses. This absence of resources makes it impossible for them to completely reconstruct their lives after being displaced, thereby trapping them in states of vulnerability. Additionally, such forms of NELD are rarely recognized by the current economic recovery paradigms, which are mainly concerned with replacement of tangible losses. As a result, there is minimal to no provision for assistance to people undergoing acute emotional, social and cultural loss, which subsequently affects individual and societal recovery at risk in the long run.

In addition, the absence of support and full recognition of NELD by institutions fundamentally intensifies these disparities. The inability of governing bodies both at local and national levels to effectively tackle the emotional, sociocultural and even psychological aspects of climate induced displacement exposes a fundamental flaw in current climate response strategies. Most governmental and institutional efforts prioritize economic recovery, such as building houses and rehabilitating people socially. As a result, displaced communities face prolonged psychological trauma, loss of identity and social ties, which further decimates their abilities to recover.

This institutional failure highlights the persisting equity in the aspect of climate change, as the focus on the recovery of assets overshadows the efforts to meet the overall needs of the uprooted communities thereby leaving the vulnerable without the essential conditions for the complete rehabilitation of their lives and economic activities. Thus, the cycle of disadvantage and vulnerability not only exist but are compounded by the very systems that are supposed to mitigate the effects of displacement leaving these marginalized groups without the enabling conditions crucial for fully restoring their lives and livelihoods. Policymakers must understand that loss of identity affects not only mental well-being but goes well beyond the psychological aspects. It also covers the collapse of social systems, the decline of culture and traditions, and the denial of education to generations that are to come. Failing to acknowledge these deeper losses hinders the full scope of recovery and leaves displaced communities to further marginalization.

To conclude, the similarities and interconnectedness between the different types of NELD, whether it be emotional trauma, loss of social networks, disruption of cultural continuity, or educational deprivation underscores the need to address climate adaptation policy from the perspective of Climate Justice. In turn, the understanding by the policymakers that the loss of one's identity goes beyond mental health and the breakdown of the social structure and even includes

loss of education will allow them to come up with better solutions to the climate change-induced population. Their approach must find a climate justice nexus, which can essentially be described as the need to put the inclusion of the most susceptible groups at the core of the climate action efforts including recognizing non-economic loss and damage.

Chapter Six Conclusion

Conclusion

This thesis is focused on the often-overlooked non-economic loss and damage (NELD) experienced by the climate migrants with a particular emphasis on Korail Slum in Dhaka, Bangladesh. The findings indicate that climate change is not limited to putting people at risk through natural calamities such as flood, river erosion, salinity and so forth, but also its effects include loss in cultural landscapes, interruption of education, mental health deterioration, and breakdown of social ties among individuals. These non-economic losses are profound and have a far-reaching impact to both present and future generations.

Through a Climate Justice framework, this study highlights that those who contribute the least to the current build-up of climate change are also the most affected, underlining the critical moral imperative for equitable climate policies. The findings highlight that displacement of climate migrants to Korail slum does not only entitle the fight for economic reconstruction, but also reconstitute itself as a struggle over the intangible losses of resilience, identity and hope. The loss of cultural heritage and loss of identity disrupts the linkages with its anistorial history while interruption of education limits opportunities for younger generations to practice and sustain the very custom and practice that defines the community, thereby igniting intergenerational impact and permanent loss of unique and indigenous practices. Additionally, mental health caused by displacement and fragmentation of society adds up the societal barrier further breaking the already fragmented community.

In order to deal with these losses, the thesis underscores the need for the integration of climate justice and NELD into the policies that address climate migration. The experiences of the Korail

migrants showcase the moral obligation to protect the marginal and most affected communities from its catastrophic effects. As climate induced migration becomes a major global problem, it shall be understood that adaptation strategies must go beyond achieving economic recovery but also include the maintenance of identity and cultural and social ties. Thus, it becomes imperative that the climate action to adopt a holistic approach that integrates climate justice principles which ensure all the climate migrant communities including the Korali slum have the necessary resources and support to address the full spectrum of climate impact including both economic (ELD) and non-economic loss and damage (NELD). By including NELD as a fundamental part of climate adaptation policies both nationally and internationally, addressing climate change would become inclusive, resilient, and just, ultimately empowering all affected communities to fully recover both economically and non-economically.

References

- Adamczak-Retecka, M. (2016). Warsaw International Mechanism for Loss and Damage associated with climate change impacts. *Polish Law Review*, 2(1), 127–0. <https://doi.org/10.5604/24509841.1232094>
- Afsana, K., & Wahid, S. S. (2013). Health care for poor people in the urban slums of Bangladesh. *The Lancet*, 382(9910), 2049-2051.
- Ahmed, A.I.M.U., 2005. Weber's Perspective on the City and Culture, Contemporary Urbanization and Bangladesh. *Bangladesh e-Journal of Sociology* 1 (1), 1-13.
- Ahmed, R. (2024). Major Current Problems Faced by Students in Dhaka: Causes, Implications, and Citizen Solutions. *JOURNAL OF DIGITAL LEARNING AND DISTANCE EDUCATION*, 3(3), 1015-1023.
- Amjad, K. (2021). Factors of climate migration of poor slum dwellers in Dhaka City. *International Journal of Earth Sciences Knowledge and Applications*, 3(3), 273-288.
- Bharadwaj, R., & Huq, S. (2022). Climate-induced migration and health issues. Retrieved July 30, 2024 from <https://www.iied.org/sites/default/files/pdfs/2022-12/21256IIED.pdf>
- Borgström, E. (2012). ESCAPING, CLIMBING & SURVIVING.
- Cameron, S. (2010). *Access to and Exclusion from Primary Education in Slums of Dhaka, Bangladesh. CREATE Pathways to Access. Research Monograph No. 45.*
- Chaity, H. B. S., & BSS, M. (1870). Women Headed Entrepreneurs in the Slum Area: A Study on Korail Slum in Dhaka.

- Chiba, Y., Shaw, R., & Prabhakar, S. (2017). Climate change-related non-economic loss and damage in Bangladesh and Japan. *International Journal of Climate Change Strategies and Management*, 9(2), 166–183. <https://doi.org/10.1108/ijccsm-05-2016-0065>
- Chowdhury, M. A., Hasan, M. K., Hasan, M. R., & Younos, T. B. (2020). Climate change impacts and adaptations on health of Internally Displaced People (IDP): An exploratory study on coastal areas of Bangladesh. *Heliyon*, 6(9).
- Development –ACD: Rajshshi. Retrieved December 11, 2019 from <http://www.lawrights.asn.au/docs/sarwar2005.pdf>.
- Dmitrievna, K. O. (2020). CLIMATE JUSTICE. *Бизнес-образование в экономике знаний*, (3 (17)), 138-147.
- EJF, 2020. Retrieved December 11, 2019 from <https://ejfoundation.org/reports/climate-displacement-in-bangladesh>
- Fatemi, M. N., Okyere, S. A., Diko, S. K., & Kita, M. (2020). Multi-level climate governance in Bangladesh via climate change mainstreaming: lessons for local climate action in Dhaka city. *Urban Science*, 4(2), 24.
- German Institute of Development and Sustainability (IDOS). (n.d.). *Non-economic loss and damage: addressing the forgotten side of climate change impacts*. <https://www.idos-research.de/en/briefing-paper/article/non-economic-loss-and-damage-addressing-the-forgotten-side-of-climate-change-impacts>

- Hackenbroch, K., Hossain, M. S., & Rahman, M. A. (2008). Coping with forced evictions: adaptation processes of evicted slum dwellers in Dhaka. *Trialog*, 98(3), 17-23.
- Hari, J. (2018). *Lost connections: Uncovering the real causes of depression-and the unexpected solutions*. London: Bloomsbury Circus.
- Harris, P.G., Symons, J. (2010) Justice in adaptation to climate change: cosmopolitan implications for implications for international institutions. *Environmental Politics*, 19:4, 617-636
- Islam, M. (2019). *Education for hard-to-reach children: strategies used by NGO Surovi to provide primary education to children living in urban slums* (Doctoral dissertation, Brac University).
- Islam, N., Sultan, S., & Afroz. (2009). Climate change and South Asia: What makes the region most vulnerable? *ResearchGate*.
https://www.researchgate.net/publication/46444606_Climate_Change_and_South_Asia_What_Makes_the_Region_Most_Vulnerable
- Kabir, M. I., Rahman, M. B., Smith, W., Lusha, M. A. F., Azim, S., & Milton, A. H. (2016). Knowledge and perception about climate change and human health: findings from a baseline survey among vulnerable communities in Bangladesh. *BMC public health*, 16, 1-1
- Luetz, J. (2018). Climate change and migration in Bangladesh: Empirically derived lessons and opportunities for policy makers and practitioners. *Limits to climate change adaptation*, 59-105.

- Mahmud, M. A. (2022). Climate Migration and the Future of Immigration Policy in the United States. *Center for Migration Studies*
- Prova, N. N. (2023). *Korail Informal Settlement in Dhaka: Design Scenarios for Well-being of Community* (Master's thesis, Norwegian University of Life Sciences).
- Sinthia, S. A. (2020). Analysis of urban slum: case study of Korail slum, Dhaka. *International Journal of Urban and Civil Engineering*, 14(11), 416-430.
- Sarwar, S., Rahman, S., 2004. Urbanization, Rural to Urban Migration and the Street Children in Hazardous Condition: A Case Study in Rajshahi City. Association for Community
- Serdeczny, O., Waters, E., & Chan, S. (2016). *Non-economic loss and damage in the context of climate change: understanding the challenges* (No. 3/2016). discussion paper.
- Silina M. (2015). European Environmental Bureau & European ECO Forum, Is Everything Right with Public Participation in Climate Related Decisions? Presentation for the Fifth Meeting of the Task Force on Public Participation in Decision-making, Geneva, February 23 – 24, (2015).
- SIWI. (2023, March 13). *What is “loss and damage” in climate action and what does it mean for water?* | SIWI - Leading expert in water governance. SIWI - Leading Expert in Water Governance. <https://siwi.org/latest/what-is-loss-and-damage-in-climate-action/>
- Sultan, M., Seager, J., Rashid, S. F., Haque, M. A., & Khondaker, S. (2021). ‘Do Poor People’s Dreams Ever Come True?’ Educational Aspirations and Lived Realities in Urban Slums in Dhaka, Bangladesh. *The European Journal of Development Research*, 33(5), 1409-1428.

Understanding Forests Beyond Forest Cover: Bhutan's REDD+ journey. (n.d.). UNREDD Programme. <https://www.un-redd.org/news/understanding-forests-beyond-forest-cover-bhutans-redd-journey>

What is Climate Loss and Damage? (2023, October 6). Union of Concerned Scientists. <https://www.ucsusa.org/resources/what-climate-loss-and-damage>