SECURITIZATION OF CLIMATE CHANGE IN BANGLADESH:
THE REPERCUSSIONS OF RISING SEA-LEVELS FOR HUMAN SECURITY

by

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Abstract

Scholars tend to frame environmental problems and climate change as either a separate issue from national security or as loosely embedded in an overarching framework of human security. Since Barry Buzan’s seminal 1991 work, *People, States and Fear*, which argues that the traditional concept of security is too narrowly defined and is out of touch with reality, scholarship on human security has proliferated. Within the human security literature, environmental issues have received less attention due to their very broad and complex nature, which requires an integrated, horizontal response on the part of both state and non-state actors. This MA thesis seeks to contribute to the small, albeit growing, study of climate change as part of the broader scholarship on human security. Through the case studies of the largest mangrove forest and two major islands in Bangladesh, I argue that Bangladesh’s attempt to securitize climate change has failed on two levels. First, the state has been unable to convince the public at large that rising sea-levels is a long-term threat to national security. Second, the state has failed to incorporate into the securitization process, the communities most vulnerable to sea-level rise. There are at least two important implications of this failure to securitize climate change: it is contributing to shortcomings in short- and long-term adaptation and mitigation strategies, and it is creating new threats to human security. As a result, only minor changes are occurring on the ground to address with impacts of climate change on Bangladeshi’s most vulnerable populations. The inundation of the Sundarbans’s mangrove forest and Sandeep and Kutubdia islands, vividly illustrates the way in which climate change is adversely affecting both the livelihood and security of the people as well as the state of Bangladesh. To respond more effectively to the escalating crisis of climate change, the Bangladeshi government needs to do more to securitize climate
change and raise it to the level of a national security threat. By doing so, the state would have a better chance of not only preventing future loss of livelihood, but also manage future security threats brought on by climate change.
Preface

This Master of Arts thesis is original, independent, and unpublished work by the author, R. Monzur.
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To the Brave People
of Bangladesh
Chapter 1: Introduction

In recent years states have increasingly come to recognize that the impacts of climate change on social and ecological systems present a security threat to nations.\textsuperscript{1} Very few experts dispute the overwhelming scientific evidence indicating that climate change is a serious global threat, which demands an urgent global response, particularly from states. The year 2007 was a watershed for the development of climate change in the global political discourse. During the UN Security Council debate, most countries accepted the link between climate change and security, even if they could not agree on consensus language on either specific threats or conflicts.\textsuperscript{2} The 13th Conference of Parties to the UN Framework Convention on Climate Change (UNFCCC) launched the \textit{Bali Action Plan}, which identified a set of actions essential to achieve a stable climate future. States like Bangladesh emphasized the importance of state interventions to manage and mitigate the impacts of climate change on people and livelihoods.

Since then, the “climate security” debate has been developing along two fronts. First, the general debate on climate security flows from the recognition that climate change is a serious, collective security challenge to all countries. This “global focus” on climate change is intended for politicians, the public, climate experts, and security actors. The debate is focused on how climate change threatens the foundations of human security, as it undermines livelihoods of people: water security, energy security, food security, etc. The second, narrower, debate focuses on the challenges climate change poses to the interests and objectives of the broadly defined “security community,” and addresses how this community must change to respond to them. This debate

\textsuperscript{1} Campbell, 1992; Dabelko & Simmons, 1997; Dalby, 1994; Barnett, 2001; IPCC, 2007, & Stern, 2007

targets a diverse range of actors, such as diplomats, military, intelligensia, development and humanitarian actors, and seeks to address their need to incorporate climate change into their already complex and challenging agendas.

This MA thesis examines a key security actor – the state – in dealing with the challenges of climate change. Empirical data in this study is drawn from the period between 2000 and 2013. Given this evolving dialogue about climate change as a “security” problem for states and the international community as a whole, a question emerges as to the way in which states perceive the nature of threats that climate change pose and what states can do about such threats. Two central questions of this research are: 1) Why should a developing country securitize an existential threat? 2) And how can a developing country securitize an issue which is not posing an imminent threat?

This thesis focuses in particular on the linkages between climate change, sea-level rise, and human security threats in Bangladesh. The case studies target the largest mangrove forest (Sundarbans) and two major islands in Bangladesh. The overall argument is that the securitization of climate change in Bangladesh as relating to sea-level rise is incomplete and thus failed. Complete securitization only occurs when a securitizing actor can successfully convince the audience that a referent object will pose an existential threat. The audience is usually not homogenous, differing in education levels, social status, and access to power. The state has to develop different techniques to convince different types of audiences. In the case of Bangladesh, to achieve “complete securitization” it is vital to inform and educate the most vulnerable group to raise awareness of the threat of climate change. One important finding of this thesis is that the
relationship between the securitizing actor and the audience, which is not clearly defined in the theory of securitization, needs to be elaborated and clarified to allow the securitization process to fulfill its objectives. Without complete and successful securitization of the issue, a big gap will exist between political commitment and actual policy implementation.

1.1 Outline of the Thesis

I divide the thesis into four main sections. First, I discuss the literature on human security, climate change, and the process of securitization. The second section introduces readers to the case of Bangladesh. It justifies the case selection and briefly discusses the issue of rising sea-levels in the mangrove ecology, and two major islands in southeast Bangladesh in the Bay of Bengal. It then provides background on climate change in Bangladesh more generally, before turning to analyze case studies as examples of incomplete and failed securitization. The final section draws out policy recommendations from the analysis, and discusses the importance of developing a process for successful and complete securitization of climate change.
Chapter 2: Review of Literature

This section discusses two theoretical literatures: human security and securitization. The main argument advanced here is that climate change is an integral part of the human security framework, but that does not necessitate it being securitized by the state.

2.1 Defining Human Security

Security remains a contested concept not only in its definition, but also in its application. The space here does not permit a full analysis of the debate over this concept, but several major points will help clarify the argument in this thesis. First, scholars have devoted much energy in the past few decades in re-defining and re-conceptualizing the general concept of “security.”

This cottage industry has spun out of the concern that the notion of security – understood as limited to military threats to the state only – may not capture the reality of what individuals or groups face in their daily lives. The efforts of scholars to refine the term fall into three schools of thought.

The first school seeks to widen the scope of security beyond military security to encompass political, economic, and ecological concerns. The second school opposes any widening of the notion of security to prevent watering it down. Daniel Deudney contends, “if we begin to speak about all the forces and events that threaten life, property and wellbeing as threats to our national security, we shall soon drain the term of any meaning.”

The third school views the concept of

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security as relating to human emancipation.\(^6\) Many proponents of the “human security” paradigm can be said to fall into this category for they emphasize the individual as a reference point of security. Kenneth Booth (1995) argues that the freeing of people from the physical and human constraints is the other side of the security coin.\(^7\)

The contestation of the word security has a spillover effect on the concept of human security, which also remains a highly controversial concept. In Asia, in particular, the concept met with initial opposition because, as Paul Evans (1994) argues, these states are resistant to:

> concepts of security that, in normative terms, have potential to erode the traditional concepts of sovereignty and, in policy terms, demand a new allocation of resources to manage an array of non-traditional security challenges well beyond military threats to territorial integrity.\(^8\)

Among the most problematic aspects of human security is the shifting of the reference object from the state to individuals or groups. Traditionally, ‘security’ is associated with the survival of the state. By re-locating the reference point to individuals, human security raises a host of concerns for the state in philosophical, political, and economic spheres. Yet, human security has found its way in the regional discourses of governments and policy communities. Specifically in South and South-East Asia, the growing activism of civil society organizations (track-two diplomacy) has increasingly brought prominence to the issue of human security.

As a result, since the UN Development Program (UNDP) 1994 Human Security Report, many countries, including those in Asia, have become more receptive to the new thinking

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\(^6\) Booth, 1995  
\(^7\) Booth, 1995  
\(^8\) Evans, 2004
on the concept of security. More importantly, this global effort to redefine security marks a shift in focus in viewing security as a rights-based concept, rather than a needs-based one. The answer to the question: ‘security for whom?’ is no longer ‘the state,’ but rather ‘the people.’ As Barry Buzan writes in *People, States and Fear*, individual security must be the basis for national security. In other words, security cannot be achieved at the international and national levels if it is not realized at the individual level. Thus, for the UN, human security comes to mean protecting fundamental freedoms – freedoms that are the essence of life – and protecting people from threats from these situations.

Human rights, a much more entrenched concept in the international arena, are seen as an indistinguishable part of the human security framework. Bertrand Ramcharan purports that respect for human rights and fundamental freedoms is crucial to the attainment of individual security that is a basis for national security. Similarly, Amartya Sen has argued strongly for the fundamental linkages between development and human rights. For many scholars and non-governmental organizations (NGOs), human rights are central to the implementation and policy-making of the human security framework. This means that human rights are inseparable from human security, which is in turn indispensable to national security. No statesmen should oppress their own people or neglect their well-being in the name of national security.

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9 Buzan, 1983
10 Commission on Human Security, 2003
11 Ramcharand, 2002
12 Sen, 2008
2.2 Climate Change as Human Security Threat

The consequences of climate change are multidimensional and, as mentioned earlier, it affects people at every level. Analyzing the broader definition of security, climate change is a security issue for most nation-states, communities, and individuals. It is complex in origin and has uncertain impacts. The impact of climate change is not homogenous across even similar social and ecological systems - the way climate change affects patterns of migration depends on the political, economic, and social factors in that particular community. The situation gets worse in countries with a weak and flawed institutional capacity, poor economic performance, an unmanageable population and resource constraint.

Scholars have argued that climate change is a security issue for states, communities, and individuals. In countries that are vulnerable to rising sea-levels, such as the Maldives, Seychelles, and Kiribati, climate change has direct impacts on the security of the nation-state as a whole as well as the basic needs of individuals. For these island states, climate change is a serious, if not the most serious, threat to sovereignty. Other states, such as Bangladesh and Myanmar, some of whose population live on low-lying deltas, are increasingly prone to flooding and tropical storm surges. Proponents of climate change as a security paradigm argue that environmental change can affect basic life-support systems and call into question the survival of humans. Smil (1997) argues further that “environmental security has replaced the threat of global nuclear warfare.” An explosion of scholarship on effects of climate change on security is a testament to this recognition of its impact on human lives.

13 Barnett, 2003
14 Barnett, 2003
15 Barnett, 2003
16 Wilson, 1983; Brown, 1989; Dalby, 1992; Edwards, 1996; Page, 2000, & Barnett, 2001
2.2.1 Securitization

Securitization is the theory this thesis revolves around. It is very important to identify the fundamental elements, and different conceptualizations of it. To begin, this section further defines the concept of securitization. Next, it examines the importance of, and potential problems with, the audience. The section concludes by discussing how securitization can give rise to conflicts within the society.

Even though the security literature is split into two main camps – traditional and nontraditional security – there seems to be a consensus on the overall understanding of securitization. Conceptually, securitization refers to “the classification of and consensus about certain phenomena, persons or entities as existential threats requiring emergency measures”17. By naming certain issues as a security problem, the state basically claims a special right to intervene. Weaver refers to this process as “speech act.” Scott explains securitization as “[t]he process through which members of a community come to accept the juxtaposition of a particular phenomenon or issue with ‘security’.”18 The process of securitization is not simply a framing of an objective or material condition, but rather a “speech act” enunciated by elites in order to securitize issues. Therefore, much of the agenda of redefining security is a process of bringing into the field of security those things that perhaps should remain outside.

Securitization extends the scope of the issue; it prioritizes in such a way to go beyond arena of domestic politics.19 When the issue is not solely limited to the political arena, it reaches a broader spectrum of people from different levels and areas. Securitization raises awareness even among

17 Anthony & Emmers, 2006
18 Scott, 2008
19 Buzan et al, 1998
people at the grassroots level; and it may also capture the attention of international organizations.

Even though securitization is an elite-driven process, it is a two-way communication between elites and the public who serve as the audience. For securitization to take place, securitizing actors have to persuade a particular audience such as the general public, military, or intelligentsia, that issues at stake (often referred as the referent object) are facing an existential threat.20 “The act of securitization is only successful and complete once the securitizing actor succeeds in convincing a specific audience (public opinion, politicians, military officers, or other elites) that a referent object is existentially threatened.”21

The socioeconomic and cultural background of the audience of the securitization process may differ widely. Some parts of the audience may not understand the seriousness of the threat, or may be reluctant to accept its gravity for it may pose a threat to their power and position. Some may also have their own explanations based on their own expertise. Therefore, it is very difficult to convince people with different perceptions about the issue at stake.

Securitization, sometimes, may also give rise to societal grievances. If premises of securitization contradict the identity of a society, or its tradition or values, it is likely going to create instability. “A society that loses its identity fears that it will no longer be able to live as itself.”22 “If the state has a homogenizing ‘national’ program, its security will by definition be in conflict with the societal security of ‘national’ projects of sub communities inside the state.”23 Therefore, the task of the state becomes difficult and it is often argued that it is easier to secure a state from an

20 Anthony & Emmers, 2006
21 Anthony & Emmers, 2006
22 Waever, 1995
23 Waever, 1995
external threat than from an internal threat. It is also easier to securitize an imminent threat rather than a threat which has long-term and uncertain implications.
Chapter 3: Bangladesh and Climate Change

Bangladesh is one of the world’s most vulnerable countries to climate risks. Two thirds of the nation is less than 5 meters above sea-level and is susceptible to river and rainwater flooding, particularly during monsoon season. Over the last 30 years, rising sea-levels have submerged 7,500 hectares of Bangladeshi land. Nearly 80% of the country's annual precipitation occurs during the summer monsoon season, when major rivers (Figure 2) have the second highest combined peak flow in the world.\textsuperscript{24} Rising sea-levels will cause southern Bangladesh to lose agricultural land as saline builds up. Scientists estimate that a 1 meter sea-level rise would inundate 10% of Bangladesh’s land mass affecting at least 11% of its total population.

Ecosystems and livelihoods in the coastal areas will face enormous survival challenges. Food shortages will develop as agricultural production declines: severe health hazards will emerge; transportation and infrastructure will be destroyed; and millions of people will need to relocate, creating country-wide social and economic instability.

The societal exposure to such risks is further enhanced by Bangladesh's very high population, population density, and poverty. Natural causes such as melting of the Himalayan glaciers and excessive rainfall during the monsoon will further contribute to flooding. Moreover, past development projects have already disrupted the eco-system balance. In particular, unplanned coastal dykes and the construction of the Farakka dam by neighboring India have hindered the flow of the Ganges during the dry season.

\textsuperscript{24} EACC Bangladesh
Already, partly because of Bangladesh’s high population density, it does not have sufficient grazing fields for its cattle, and farmers use fodder from the agricultural fields to feed cattle. A decline in agricultural production will lead to a decline in fodder production that will ultimately result in a decline in livestock (disastrous in a country that still depends on traditional methods of agriculture).

<table>
<thead>
<tr>
<th>CYCLONES</th>
<th>FLOODS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>Death/100,000 people exposed</td>
</tr>
<tr>
<td>1. Venezuela</td>
<td>4.9</td>
</tr>
<tr>
<td>2. Afghanistan</td>
<td>4.3</td>
</tr>
<tr>
<td>3. Pakistan</td>
<td>2.2</td>
</tr>
<tr>
<td>5. India</td>
<td>1.2</td>
</tr>
<tr>
<td>6. Bangladesh</td>
<td>1.1</td>
</tr>
</tbody>
</table>

**Figure 1: Most vulnerable countries to floods and cyclones, UNDP (2004)**


As Figure 1 suggests, Bangladesh is highly vulnerable to cyclones and floods because of its geographic location, flat and low-lying topography, and other socioeconomic difficulties. Many of the anticipated adverse effects of climate change, such as sea-level rise, higher temperatures, enhanced monsoon precipitation, and an increase in cyclone intensity, will aggravate the existing stresses that already impede development in Bangladesh, particularly by reducing water and food security and damaging essential infrastructure. Such impacts will harm the economy, natural
ecosystems, national development, and the people of Bangladesh. The government of Bangladesh acknowledges that the projected climate change impacts that the country is facing will result in: 25

1. Increased flooding, both in terms of extent and frequency, associated with sea-level rise, greater monsoon precipitation and increased glacial melt;
2. Increased vulnerability to cyclone and storm surges;
3. Increased moisture stresses during dry periods leading to increased drought;
4. Increased salinity intrusion,
5. Greater temperature extremes.

This list is not exhaustive and only outlines the direct impacts that the country is likely to face due to climate change. Much of the human security concerns refer to indirect impacts of climate change, which will include issues such as food security, energy security, housing, water shortages, and other basic needs for people.

Lower and more erratic rainfall will increase drought conditions in northern Bangladesh. Drainage problems in coastal areas will also seriously affect agricultural production in those areas, as will saline intrusion in groundwater (also a critical source of freshwater). Only 20% of the country’s gross domestic product (GDP) depends on agricultural production, however, 60% of people depend directly on agriculture for their livelihood.

The Intergovernmental Panel on Climate Change (IPCC) estimates that, by 2050, in Bangladesh, the rice production will decline by 8% and wheat production will decline by 32% (IPCC, 2007). It also predicts that rising sea-levels will internally displace 30 million people by the year 2050 in Bangladesh. Therefore, massive relocation and resettlement will take place that could

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destabilize the social and economic structure of the major cities and adjacent areas. Climate change poses different kinds of challenges in different parts of Bangladesh. The south faces fear of inundation and saline intrusion, the north faces longer periods of droughts, the central part faces extreme rainfall during the monsoon, and the east faces a shortage of rainfall (which will devastate agriculture).

Figure 2: Major river basins
Source: Relief Web [http://reliefweb.int/map/bangladesh/bangladesh-major-river-basin](http://reliefweb.int/map/bangladesh/bangladesh-major-river-basin)

A blend of frequent natural disasters, high population density, extreme poverty, poor infrastructure, low resilience to economic shocks, and high dependence on agriculture and natural resources make Bangladesh extremely vulnerable to the adverse effects of future sea-level rise. It is clear that climate change poses a grave risk to the whole of Bangladesh. To illustrate some of the effects, this thesis highlights the effects done so far, on two islands (Sandeep and Kutubdia) and the largest mangrove forest (the Sundarbans). These two islands are selected because they are historically significant and because parts are already under water as a consequence of rising sea-levels. Their size is shrinking and they are clearly facing an existential
threat. These islands shed light on the potential future of coastal Bangladesh, and they serve as a harbinger of what will happen unless precautionary measures are taken. The next section first provides some background on the mangrove forest and the islands, before then analyzing the ecological and security effects (including risks and vulnerabilities) of rising sea-levels.

3.1 Mangrove Forest (the Sundarbans)

Mangrove is a type of forest growing along tidal mudflats and along shallow water, coastal areas extending inland along rivers, streams, and their tributaries where the water is generally brackish. The Sundarbans is located in the southwest coast of Bangladesh (old Ganges delta region), and parts of it are in the West Bengal province of India. The total land area of the Sundarbans is approximately 10,000 square kilometers. The mangrove ecosystem is dominated by mangrove trees. About 587,380 hectares of natural mangroves and 100,000 planted mangroves are supported by the coastal areas of Bangladesh. It is rich in flora and fauna species, with at least 69 species of flora, 300 species of birds, 35 species of reptiles (one of which is endangered), 8 amphibian, and 2 very significant but endangered mammal species. The dominant floral specie is Sundari (the major type of tree) from which the forest took its name.\textsuperscript{26} UNESCO recognizes the forest as a world heritage site.

Mangrove forest absorbs carbon and thus, like all forests, helps to stabilize the carbon component in the atmosphere. The crown and the stem of the mangrove protect against wind. Furthermore, mangrove forests in the coastal areas are capable of absorbing 30\% to 40\% of the total force of tsunamis and typhoons. The root system of the mangrove helps in the siltation and

\textsuperscript{26} Extinction of 2 species from the area (the rhinoceros and the water buffalo). The most renowned animal in that area is the royal Bengal Tiger and it is on the verge of extinction.
sedimentation processes that protect soil from erosion and help to sustain land mass. The process of storing and accumulating sediment helps to ameliorate the effect of rising sea-level. During floods, the mangrove forest reduces the velocity of excess water. In short, the mangrove forest plays a vital role in balancing the coastal ecosystem.

Major economic activities in the mangrove forest areas are shrimp farming, salt production, fuel wood collection, cattle grazing, and honey collection. Local people use mangrove twigs as firewood, and fishers use mollusk shells to prepare fishing lines. Moreover, the mangrove trees are used as timber for their durability. One of the major trees in the mangrove forest is used as a raw material in paper mill and mangrove extracts are used to prepare medicine and beverages.

The mangrove forest in southwest Bangladesh is the major source of livelihood for many people: 3.5 million people directly or indirectly depend on this forest. The mangrove forest works as a natural shield against any kinds of storm surges, cyclones, and floods. It also reduces wave speed or energy, soil erosion, and stabilizes sedimentation. The lives of the people dependent on the mangrove forest relate closely to the mangrove ecosystems. Freshwater supply depends on the two distributaries of the river Ganges: Gorai and Madhumoti. The creeks and canals maintain the balance of saline and fresh water. The salinity increases during the dry season.

3.2 Two Major Islands: Sandeep and Kutubdia

Sandeep island is in southeast Bangladesh near the Chittagong division. Sandeep is a sub-district (Upazilla) and sits in the estuary of the Meghna River. It has a population of nearly 350,000 people. The island is nearly 50 kilometres long and 5-15 kilometres wide, and is one of the
ancient islands in the Bay of Bengal. The major economic activities in the Sandeep island are shipping, agriculture, service, business, fishing, among others. Agriculture is a major economic activity for most people. As Sandeep is created by silt deposits, it is extremely fertile and farmers have been exploiting this fertile land for generations.

Kutubdia island is in southeastern Bangladesh in the Bay of Bengal, under the Cox’s Bazar district. It is an Upazilla and has a land area of 215.8 square kilometres. These two islands sit along the southeast coast where the soil is fertile and is in use throughout the whole year unlike seasonal islands, which are used only during the dry season and where the soil mixes with sand. These islands were also known for being naturally protected against cyclones and floods because they are at a higher elevation, and their size is considerably larger. Therefore they survived many phases of natural disasters, and the infrastructure of these islands was not totally washed away unlike in other seasonal islands. Seen as a secure habitat for both people and animals, these islands attracted many people and became heavily populated.
Chapter 4: Vulnerabilities & Risks

The major consequences of climate change will be intense crisis with the systemic breakdown of Bangladesh’s economy and social system. Some of the specific fundamental impacts of climate change pertain to migration, resource shortages, and societal stress, which are interconnected. Resource and economic problems will produce internal instability and violence. All these denote threats towards human security where the lives of millions will be affected. In this section, the focus is on the consequences of rising sea-levels, and how this will threaten human security in the cases of the Sundarbans and the islands of Sandeep and Kutubdia.

4.1 The Mangrove Forest

The Sundarbans is highly sensitive towards climate change. The major threats facing the Sundarbans as a consequence of rising sea-levels are inundation and saline intrusion. The major tree of the Sundarbans, the Sundari, depends on fresh water availability. Some parts of the roots of the Sundari are above the surface to enable the tree to breathe. Hence, the roots of the Sundari will be obstructed if salinity increases, and eventually this will cause the death of these trees, and the existence of the Sundari will be at risk. It is not only a risk to the Sundari tree, the transformed soil structure will be detrimental for the entire forest. Therefore, any change in soil conditions is pernicious for the survival of the mangrove forest. Loss of the Sundarbans means loss of heritage, loss of a very highly productive ecosystem, loss of natural habitat, loss of biodiversity and loss of a biophysical shield, loss of life and livelihood.

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Scott, 2008
Freshwater shortages due to rising seas will also damage the ability of people to cultivate. The changing structure will decrease fertility of the cultivable lands in and around the forest. It might benefit shrimp cultivation for a short time, but in the long run it will destroy the ecological balance of that area. The people who cannot cultivate anymore will lose their livelihoods. Millions of people who depend on the forest will be forced to migrate. Indeed, many have already been displaced from their homes in recent decades. Rising sea-levels will ultimately destroy the forest and enhance insecurities on many different levels.

4.2 Islands

Gradually, rising sea-levels have already taken away many of the living advantages of the two islands mentioned above. They are no longer as highly elevated, their size has shrunk, and their soil structure has changed. Cyclones and floods have also been causing many hardships for island inhabitants. Recent research shows that one third of these islands are already inundated due to rising sea-levels. People who are already impoverished have lost their lands, and these landless farmers had to relocate. It is difficult to find alternative means of subsistence for the farmers and fisherman who are, in the first place, uneducated and whose primary work experience is in agriculture or fishing.

One of the major implications of rising sea-levels is migration, both internal and external. In most cases, it is the men who leave while the women, children, and the elderly stay behind and would thus be even more vulnerable to natural disasters. Men tend to migrate internally to cities, where they try, often unsuccessfully, to earn money to support families back home. Sometimes
they migrate to neighboring countries, where they often end up as illegal immigrants. All of this contributes towards insecurities on multiple levels.

Farmers have been facing especially grave difficulties (to some extent fishermen can still go to sea). Many try to find work on other people’s lands as farmers. Yet, with so many landless farmers, jobs in the agricultural sector are scarce and highly competitive. Men migrating to cities have not fared much better, with the quality of life for all displaced farmers far worse than in the recent past. Even those lucky enough to find a job on the mainland still face many difficulties. Some families have not been able to enroll their children in schools because nearby schools are full and they cannot afford to send their children to distant schools. Neither can most of these families afford healthcare. Frustration and stress have lowered life expectancy.

They are further encountering social exclusion and discrimination in the new settlement areas. They are perceived as competitors for scarce resources. They have not been welcomed and integrated into the new communities. Insecurity persists even after many years pass. Governments can ask them to relocate again for a host of reasons, and most still live in constant fear of “removal.” Unemployment and social exclusion have caused law and order to deteriorate, crime rates have increased, and physical security has diminished.

In the future internal displacement and migration from inundated and eroded regions will increasingly destabilize the internal political, economic, social, cultural, and environmental conditions of Bangladesh. Massive external displacement beyond borders, on the other hand, could well destabilize the entire region by increasing tension between neighboring countries and
Bangladesh. Without a doubt climate change is a threat to the future of regional peace and security in South Asia.

4.3 Reasons for Complete Securitization of Climate Change in Bangladesh

For Bangladesh, broadly speaking, the negative effects of climate change are not limited to the environment as these can also be felt in social, economic, and political life. Climate change may reduce GDP, aggravate income disparity, and undermine individual and societal well-being. It may also threaten human health by shrinking freshwater supplies and food resources, and increasing vulnerability to diseases that are becoming more widespread due to worsening conditions. All these social and economic changes might further increase corruption and crime, worsen law and order, and destroy the social fabric of a society. The mentioned changes may generate political instability, decrease state wealth, and weaken military capability. Some may argue that securitization of climate change may make already marginalized communities worse off. However, the state should take the lead in prioritizing climate change issues in order to both strengthen existing efforts and encourage new ones within society.

The intensity of the following effects could vary from country to country: strength of the state; institutional capacity, and economic stability matters. Indeed, a weak state and/or underdeveloped institutions may be the reasons behind the destructive effects of climate change on society, economy, and politics. Also, the response of a country to climate change will be highly dependent on these factors. For instance, the way that the Netherlands is dealing with rising sea-levels is very different from Bangladesh due to differences in their economic power and technological capability. In the Netherlands, they are building floating houses, and people

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Barnett, 2003
can travel by boat because the water is safe and clean, and they can use the water as a freshwater source and means of transport. Also they are not dependent on land. However, this solution is not viable in Bangladesh in the first place because the water is polluted (and there are no water purification plants), and they cannot protect the surface water from contamination.

Climate change, due to Bangladesh’s low state capacity and underdeveloped infrastructure, poses an existential threat to the country. If the domestic situation is unstable (if it has negative impacts on all those aspects), Bangladesh does not have the institutional capacity to deal with such a problem. It will be very vulnerable, it will fail to sustain as a state, and it will not be able to protect its sovereignty in the face of the aforementioned challenges.

Securitizing an issue which poses an existential threat is necessary for several reasons. When you define an issue as a security issue, it is easier to coordinate and mobilize popular support for policies, and get the attention of international organizations. Allocating more resources and legitimizing the use of military and security forces to resolve the issues, is possible. It induces prompt decision-making and implementation without going into bureaucratic complexities, which is crucial when encountering climate change challenges.  

Another reason is that security, as a concept, underscores and encloses a sense of danger far better than other concepts, such as sustainability or vulnerability. It perceives and conveys danger as a risk to welfare and sovereignty. Furthermore, it integrates human security, national, and international security in the face of climate change.  

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29 Anthony & Emmers, 2006
30 Barnett, 2003
change is such an issue where the entire country needs to coordinate support, efforts, and the mobilization of resources. Therefore, to prioritize the issue, securitization needs to take place within a formal structure that will help the people of Bangladesh to mount a coordinated effort. Labeling climate change a threat to international peace and security brings up the possibility of the UNSC (United Nations Security Council) taking a lead role in addressing the causes and consequences of climate change, and drawing on its Chapter VII powers to require states to take action. Then it will be easier for Bangladesh to negotiate with the developed countries to try to attract funds to fight future climate change challenges.

“Climate change may have many other indirect negative effects that can undermine the legitimacy of governments, it may: undermine individual and collective economic livelihood; affect human health through reduced availability of freshwater and food, and by exposing people to new disease vectors; undermine state wealth and military capability; and exacerbate inequalities between people.” It is, therefore, understandable why it should be considered to be a threat not only in the human security paradigm but also in the traditional security paradigm.

The precautionary principle of economics suggests that when more information becomes available, more investment in damage prevention will take place. The essence of the precautionary principle is a positive relationship between information acquisition and precaution. That means, states, often do not risk taking any action or formulating any policy on the basis of partial information; they wait until they see the result. However, in this case it is not possible to wait to see the consequences. If the climate of an area has changed, it is not possible

31 Scott, 2008
32 Barnett, 2003
33 Heal & Kristrom, 2002
to restore the original one or regain the previous one. Therefore, it is detrimental for an agricultural country like Bangladesh to wait to see more. It will reduce agricultural production, increase resource scarcity, displace large numbers of people, and create pressures in other regions that undermine economic and social stability. Therefore, to prevent future intra-state conflict, this issue needs to be securitized.
Chapter 5: Bangladesh Climate Change Policy

In 2005, the Government of Bangladesh developed the National Adoption Program of Action (NAPA) following extensive discussion with various groups, including members of civil society. In 2007, the Bangladeshi government adopted the Bangladesh Climate Change Strategic Action Plan (BCCSAP), which laid a foundation for the government’s efforts to combat climate change for the next ten years. The government frankly admits that it is unclear about its own understanding of the “timing and exact magnitude of many of the likely impacts of climate change.” The BCCSAP is built on six pillars: 1) food security; 2) comprehensive disaster management; 3) infrastructure; 4) research and knowledge management; 5) mitigation and low carbon development; 6) capacity building and institutional strengthening. There are a total of 37 programs under these 6 pillars, covering issues from developing climate resilient crops to managing urban waste and mainstreaming climate change in the media.

The government of Bangladesh acknowledges the potential devastating impacts of climate change. Although the government is acutely aware that climate change has huge impacts on poverty and vice-versa, by establishing national agendas on climate change, the government has treated it as a separate policy domain. The government indicates that climate change will have negative consequences for 1) natural disasters; 2) agricultural sector (crops, livestock and fisheries), 3) shortage of drinking water; 4) livelihood of people (food security, disease, basic housing, poverty). Figure 3 illustrates all the key state agencies tasked with climate change policymaking.

34 Government Report, 2008
35 Government Report, 2008
The government is integrating climate change into sectoral plans and national policies, as evidenced by the number of state agencies involved in the policymaking process. The government's vision is to establish “pro-poor, climate resilient and low-carbon development strategy” based on the building blocks of the Bali Action Plan which focus on: adaptation to climate change; mitigation; technology transfer, and adequate and timely flow of funds for investment within the frameworks of food, energy, water, and livelihoods security. Bangladesh is a signatory to the UNFCCC, which is coordinated by the Ministry of Environment and Forest, and a National Climate Change Committee, which is comprised of all members of all relevant

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Figure 3: Key State Agencies and Responsibilities to Climate Change Policy, Bangladesh

Source: Author

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36 Government Report, 2008
government and non-government organizations to oversee the implementation and obligations under the UNFCCC process. In addition to Climate Change Cell, other government agencies that are relevant to climate change policy include: an inter-ministerial committee on climate change, headed by the Minister for Environment and Forests, a National Environment Committee to determine environmental policies chaired by the Prime Minister with representation from MPs as well as government and civil society.37

| 1. Food Security, Social Protection & Health | Target the poor and the vulnerable: safe housing, employment and access to basic services, inc. health |
| 2. Comprehensive Disaster Management | Strengthen capacity to deal with more severe natural calamities |
| 3. Infrastructure | Cyclone shelters, urban drainage, maintenance of existing infrastructure |
| 4. Research and Knowledge Management | Predict future climate change impacts |
| 5. Mitigation and Lower Carbon Development | Low carbon options for future |
| 6. Capacity Building and Institutional Strengthening | Enhance government capacity, civil society, private sector to deal with climate change |

**Figure 4: Bangladesh's Pillars of Climate Action Plan**

Source: Bangladesh Climate Change Strategy and Action Plan (2009)

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37 EU Parliament Report, 2007
Bangladesh also receives around 1 billion dollars of aid annually. The OECD estimates that between 22-53% of developmental assistance, or 22-37% of donor projects, are in sectors potentially affected by climate risks.\textsuperscript{38} It also receives funding from the UNFCCC through the Least Developed Countries Fund to help prepare the country for adapting to climate change impacts. In 2010, Bangladesh established the Bangladesh Climate Change Resilience Fund (BCCRF) that channeled foreign funds received from donor agencies into its national strategic action plan.

The Bangladesh government adopted an integrated approach to fight climate change challenges in the short term involving different government ministries and agencies, donor agencies, development partners, NGOs, the business sectors, and civil society. As shown in Figure 3 the different ministries that are involved are the ministries of environment and forest, agriculture, water resources, local government, rural development and cooperatives, livestock and fisheries, energy, and health. The department under these ministries are: forest, food and disaster management that includes the disaster management bureau and a comprehensive disaster management program; the Bangladesh water development board and other research forecasting organizations; the local government engineering department and the department of public health engineering, and the national agricultural research system that develops new crops and practices suited to different climatic conditions and saline intrusion.

In the last United Nations conferences on climate change held in Doha 2012, Bangladesh discussed its adaptation and climate resilience where Bangladesh highlighted how it prioritized climate change by integrating adaptation strategies into national development programs.

\textsuperscript{38} OECD Report, 2003
Bangladesh emphasized the need to lower carbon emissions into the atmosphere to avoid creating a warmer planet. Experiences and lessons learned by Bangladesh from facing climate change challenges helped it become a forerunner to build resilience against climate change. Along with its adaptation strategy Bangladesh found an innovative financial mechanism to channel funding from its development partners towards building resilience. The World Bank in this case will ensure accountability and transparency where the Bangladesh government is put in the driving seat. The innovative financial mechanism involves establishment of a Bangladesh climate change trust fund in 2009 and the Bangladesh climate change resilience fund (BCCRF) in 2010 (as mentioned earlier). The first one draws funding from the national budget (thus, internal sources) while the latter acquires funding from the international community, such as from donor agencies and development partners.

In its adaptation and mitigation strategy, Bangladesh promised low carbon devolvement programs. However, Bangladesh is not even close to the amount emitted by the developed countries. Therefore it is a question whether Bangladesh’s commitment to low carbon growth will make any difference in the long run. Problems created by global warming can only be lessened if emission of greenhouse gases can be reduced. Therefore Bangladesh needs to pursue an effective environmental negotiation for the sake of its survival.

5.1 Factors behind Incomplete Securitization

Despite imminent threats from climate change, and despite all the strong reasons for complete securitization as discussed above, the Bangladeshi government did not take any serious action
until two cyclones devastated the coastal regions in 2007 and 2009. Starting with these disasters, the government has made a serious attempt to securitize the issue of climate change, but the securitization process is far from being complete. The very core idea of securitization on the basis of speech act is very limited in its application in the real world. In this section, six factors will be unfolded to explain incomplete securitization in Bangladesh: limitations of the securitization act; limitations of the strategy adapted by Bangladesh; lack of inclusion of the audience; time-inconsistency problems, and fear of losing authority and power.

5.2 Limitations of the Securitization Act

Bangladesh tried to securitize climate change. Even though it was a fair attempt, there is no guarantee that successful implementation will ensure this attempt at securitization. Securitization takes place in a particular period of time but implementation needs a longer span of time. Implementation is a process requiring assistance from several different actors for a longer period of time. Furthermore, resource allocation and technical expertise are needed as well. That’s why, if there is a gap between the actors and the concerned agencies, the entire implementation process can break down, and securitization becomes a failed attempt.

One of the major characteristics of post-colonial societies is weak institutions. It is difficult to coordinate in the post-colonial countries because of the lack of coordination between state agencies, between the central and local government, between policy planning and implementation, and last but not the least the domestic political situation that is characterized by institutionalized corruption. Even though officials recognize environmental impact assessments

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39 Cyclone Cedar in 2007 attacked the Mangrove forest that destroyed animals, trees, and the ecology of the Mangrove forest. Thousands of people died. Cyclone Aila in 2009 struck the islands and the coastal regions. It washed away agricultural fields, crops and households.
as an integral part of assessing development projects, officials implementing projects often overlook this part, and massive corruption at the cost of environment and local communities is common. Since there is no scrutiny over authorities, there is no sanction that they need to take into account, thus they are not prompted to correct their behavior. Government is embedded into the corrupt acts of officials. These realities can make the implementation of climate change strategic action plans more complicated and problematic.

Another reason why securitization became problematic lies in the division of opinions among the experts. The experts in Bangladesh are divided into three major groups of opinions. One group is expecting that even though rising sea-levels is a problem, sedimentation and siltation will take place, which will help to regain the land that will be lost. Nature will protect Bangladesh through its own healing powers. A second group believes that, with funding, they can build dams to push the coastline further into the sea (reclamation of land), and acquire more land (although this cannot save the islands). A third group denies that a rising sea-level is an existential threat. According to them the real threat in Bangladesh comes from poverty and a weak and unstable economy. They contend that poverty alleviation and economic development are the major goals for Bangladesh. By achieving the development goals, the country will gain a high resilience, which will enable it to face any kind of challenges and insecurity arising from environmental change. These camps also exist in the government itself, which prevented the government from taking any effective action plan until the Bangladesh Climate Change Strategic Action Plan.
5.3 Limitations of Bangladesh’s Strategy

The Bangladesh government included the climate change factor into their national development program with a belief that poverty alleviation will help Bangladesh to develop a high resilience to climate change. However, it recognized climate change as a separate issue from social and economic issues in the BCCSAP. If that is the case, then integrating climate change with the national development program and ultimately to economic growth, will lessen its priority. The BCCSAP is criticized for failing to be a comprehensive program of action and for failing to properly delineate and integrate itself into the ministries of agriculture, industry and infrastructure, and for failing to integrate itself into the broader arena of fiscal and monetary policies. Thus the Bangladesh government failed to prioritize BCCSAP into its political and macroeconomic agenda.

The bottom up and top down approaches all suggested that Bangladesh should construct barrages with sluice gates as a protection from rising seas. However, these massive constructions along the coastlines will require a large amount of money and technical expertise and assistance. Innovating and replicating saline- tolerant crops and fish are also recognized in the BCCSAP as possible solutions. However, it remains a question of how innovation and replication of saline tolerant crops and fisheries will take place. Is it realistic at all to expect it to happen in the context of one of the least developed countries like Bangladesh?

5.3.1 Lack of Inclusiveness

The BCCSAP also failed to include the voices of the communities mostly affected by climate change and thus, lacks the participatory element that is essential to any comprehensive human
development action and formulation plan. These groups are also the most vulnerable groups and therefore, they should be informed about possible changes. They need to be informed in advance, and they should be a part of the whole process.

It is an established fact that any form of efficient and successful development needs an in-built participatory approach where inputs from the different stakeholders are taken into consideration. The people in the coastal areas in Bangladesh have been fighting natural disasters for generations. They developed a know-how, and have immense experience with dealing with natural disasters. They survived these natural disasters through their own adaptation methods, and built their own communal resilience. No outsider can supplant their knowledge. They know their habitat, how to cultivate it, how to protect it best. The political actors can utilize deep-rooted knowledge and expertise of these communities. Even though these communities are not aware of the problem of “climate change” per se, they can feel it by being cognizant of the differences in their natural surroundings. Thus, the representatives of these communities should be included in the act of securitization to make it complete. These representations can help the securitization actors by supplying valuable feedback to make the project successful. Inclusion of these audiences will ultimately be highly time- and cost-effective and efficient.

However, none of these communities are included in the act of securitization in Bangladesh. It may be the case that the government fears the uncontrollable and unmanageable migration if these communities are informed about the potential risks and adverse effects of climate change. Migration has already started to take place, and it is continuing. Another reason may be that the elite may be underestimating or undervaluing the potential contribution of the masses in the
process. They may be considering the inclusion of the masses in the process as a threat to their authority and power.

5.3.2 Time-Inconsistency Problem

Even if climate change is accepted as a serious problem in Bangladesh, there is still uncertainty about the magnitude and the timing of the actual devastation. Lack of research, analysis, and data are the primary reasons for the uncertainty. It is a gradual process and it shows its effects incrementally, so it is difficult to predict a definite time. For a country that depends on foreign aid and natural resources, with lots of other priorities, it is difficult to allocate resources and mobilize funding to fight something that the effects of which, are not very evident yet. Even though the environment is giving clues, and there are indeed very salient clues, people tend to perceive them as temporary rather than as a precursor of a permanent disaster. Instead of finding a long-term solution, they are trying to adapt the changing situation to meet the short-term needs, which aggravates the problem.

There are two major parties, and power alternates between these two parties. Since independence in 1971, in each election, the power switched from one party to another. There has not been any instance where the same party has been re-elected for a second term. So, when a party is in power, they focus on short-term goals, they are not seeking to find long-term solutions. During office ruling parties, issues requiring farsighted solutions such as rising sea-levels, generally go unaddressed. They prefer to deal with more urgent development priorities. Also, policies that

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40 Heal & Kristrom, 2002
could yield immediate results benefit parties more, and help them fulfill their political objectives.\textsuperscript{41}

Environmental policies have long-term effects, and given the time-inconsistency problem, they keep getting postponed. But, there is a striking fact that is concomitant to the loss of agricultural lands and the destruction of entire ecology, which calls for serious environmental action. Human lives and livelihoods are also at stake. Yet, in a country like Bangladesh, which has a huge population, human lives are not perceived as valuable. Universal concepts like human rights are interpreted differently in Bangladesh: human rights are devalued. Bangladeshi government considers the lives of people as expendable. Thus, even potential loss of a significant portion of a population is not an enough of a motivator for government to take action.

\subsection*{5.3.3 Fear of Losing Political Power}

Another reason pertains to the fear of losing authority and control. It seems that the responsibilities that come with securitization of climate change are too much for the policy makers to handle, and they think it will be a threat towards their existing power, status, and position. It is because national and local authorities are in the best position to integrate climate change challenges and the mobilization of resources to face the challenges. Therefore, securitizing climate change means making it a priority, decentralization of power, and mobilization of resources. The people in power, therefore, fear losing control. Lack of clear, precise, and sufficient assessment on impacts and adaptation gave the policy makers the chance to take advantage of the loopholes inherent in the concept, and get away with it. It became easier

\textsuperscript{41} Burton, 1997
for them as the implications of climate change are not drastic and visible like natural calamities and therefore gain less priority.
Chapter 6: Policy Recommendations

Bangladesh’s attempt to securitize climate change is admirable and praiseworthy. However, the attempt is incomplete on the grounds of the reasons discussed above. Bangladesh should prioritize climate change as one of the most important security issues, take actions accordingly, and complete the securitization process. This section suggests policy recommendations to achieve these goals. When climate change is securitized, it is projected that implementation of action plans to save Bangladesh from short-term and long-term challenges will be easier and go smoother.

Bangladesh recognized climate changes as a separate issue from its political, social, and economic issues in its strategic action plan. Bangladesh also established a fund from its own resources for the successful implementation of this plan. Several successful strategies are proposed as part of the adaptation strategy. However, the ground reality in Bangladesh is extreme poverty, economic underdevelopment, and technological backwardness. In this situation, whenever policy makers are trying to securitize climate change, it automatically becomes a part of several other economic and social issues, like poverty alleviation and economic development. Therefore developing countries like Bangladesh cannot separate and prioritize climate change without considering its social, institutional, and economic priorities. There is also a tendency for policy makers in Bangladesh to deal with challenges that have short-term implications. In this special case of climate change, Bangladesh needs to focus on the long-term implications as well.
Bangladesh emits less than 0.1% of global greenhouse gases but it is still suffering the consequences of global warming. Rising sea-levels make Bangladesh’s future uncertain. The highly sensitive traditional agricultural system could completely breakdown. A global temperature rise of one degree Celsius would cause a huge decline in rice and wheat production, and could ultimately lead to a 10% decline in GDP. In this situation it will not be unfair for Bangladesh to demand compensation from the countries that are responsible for this damage. However, it has to pursue an effective environmental diplomacy and negotiation in respect to rising sea-levels, which is not present at this point. It is not clear if Bangladesh thinks it will be more successful if it pursues the negotiation in a regional setting (i.e., in collaboration with its other South Asian partners). If this is the case, then Bangladesh needs to learn from the initiatives taken by the small island state of the Maldives, which has been quite successful in pursuing the international community about the disastrous consequences of sea-level rise on small island states. It is important to make the international community aware of what is going to happen if they do not come forward with financial help and technological assistance. No one else will do this for Bangladesh. The responsibility lies on the shoulders of the government and policy makers of Bangladesh.

Bangladesh is trying to focus on alternative sources of energy, especially solar energy. This is indeed a very commendable initiative by the government and people of Bangladesh. This type of attempt should be encouraged and pursued further. Also Bangladesh’s attempt to go for clean technology and clean development is very admirable. In this way, if it continues to show the international community its effort to fight climate change challenges, the developed countries
may become convinced and provide the necessary support (i.e., finances, technological assistance, and expertise that Bangladesh needs to fight its uncertain future).

As already mentioned in this thesis, another implication that has been triggered by rising sea-levels and will become worse in the future, is massive internal and external migration. It will be wise for Bangladesh to focus on building the infrastructure of its major cities. By doing this, Bangladesh can increase the capacity of its major cities so that they can accommodate and support more population. Rising sea-levels will bring more adverse results for Bangladesh where 35% of the population lives in poverty, earning less than 1 US dollar per day. It really is a difficult task for Bangladesh to accommodate and support these huge migrated communities who are extremely poor and are without an alternative means of livelihood.

Inundation of the land means less food production, shrinking of economic opportunities and loss of habitat in Bangladesh. This cannot be the expected future for a densely populated country like Bangladesh. As rising sea-level is a gradual process, its implication is gradual as well. Therefore, the number of environmental refugees will increase in the future. So the policy makers in Bangladesh should remember that they cannot afford to lose valuable land. Though some experts are predicting that Bangladesh will regain some of its land by sedimentation, it will not be wise to wait for that and do nothing at present to save its land.

Bangladesh needs an integrated approach to cope with the long-term challenges posed by rising sea-levels. The two case studies that are discussed in this thesis are important for Bangladeshi security for the reasons mentioned. Therefore, it is important for Bangladesh to sketch plans to
save its rich mangrove ecology and its islands. To save the mangrove ecology Bangladesh needs to implement the land reclamation strategy that will further extend its coastline. By reclaiming land in the sea, Bangladesh can implement mangrove afforestation that will act as a natural shield and will save valuable agricultural land. For this to happen, Bangladesh needs technology and knowledge from developed countries.

As mentioned above, Bangladesh came up with an innovative financial mechanism to channel funds towards financing its climate change strategic action plan. In the same way, Bangladesh needs to come up with another innovative mechanism to avoid bureaucratic complication and corruption while implementing its strategic plan to fight short and long-term climate change challenges.

To build its climate resilience, Bangladesh focused on adaptation and mitigation as its survival strategy. For successful and complete securitization of climate change, Bangladesh needs to negotiate with developed countries and at the same time include the people who are most vulnerable. People who are experiencing difficulties are in the best situation to find solutions. Policy makers need to realize this fact. The elderly people in the affected and vulnerable regions can feel something is wrong though they are not experts. It is the knowledge and experience they share for generations that enable them to understand the situation. Therefore any successful and long-term strategy to face climate change challenges must adapt a participatory approach that involves sharing local expertise and knowledge.
Moreover another important aspect of effective and successful implementation of any strategy depends on its context. Before implementing any project, Bangladesh needs to take into account the cultural and traditional values of that particular region. In the past, whenever any development project contradicted or hurt the local cultural and traditional values, they were unsuccessful. If any project that is implemented by outsiders contradicts long nurtured values of a particular group or community, there is always a tendency for project failure. In this case of implementing the strategic adaptation and mitigation action plan in the effected regions, Bangladesh cannot afford to take that chance. Fighting climate change challenges is a question of survival for Bangladesh. With its resource constraints, weak infrastructure, poor administrative systems, poor economic management and distribution mechanisms, it is a great challenge for Bangladesh to build a climate resilient future all by itself. Therefore Bangladesh needs to be very careful and take into account local contexts and realities while designing or planning a survival strategy.

It will be beneficial for Bangladesh to think of alternative means of livelihood in the areas where agricultural lands have lost their fertility as a result of saline intrusion. The largest NGO in Bangladesh, Bangladesh Rural Advancement Committee (BRAC), has come up with an alternative means of livelihood – crab farming for people who can no longer produce crops as a result of a saline intrusion. This type of effort should be encouraged by the government. Saline tolerant crops and wet paddy farming are considered to be alternative ways to fight food insecurity. However, Bangladesh needs to secure land before it can actually apply these alternative strategies. If Bangladesh loses its land, it will not be able to implement the alternative mechanisms to fight food insecurity. Again, as suggested by experts, if Bangladesh gains some
of its land by sedimentation, the acquired land will not be capable of cultivation. Again, the land
acquired by reclamation will not be fertile enough to turn it into agricultural land.

The people of Bangladesh have always survived the challenges posed by natural disasters
throughout history. But now, it is beyond their capacity to fight the frequent natural disasters.
The magnitude of the short- and long-term challenges posed by climate change will be
enormous. For this reason, policy makers need to focus on creating adequate signals that climate
change will be an important and continuing factor in government policies for the foreseeable
future, and the only way the government can prioritize climate change is by ensuring complete
securitization of climate change.

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42 Miller, 2008
Chapter 7: Conclusion

Bangladesh is projected to be among the worst affected by climate change. While recognizing this dire predicament, the government has not succeeded in integrating its climate change policies into its national security agenda. This research has shown, through the in-depth case studies of the largest mangrove forest in the world – Sundarbans – and the islands, Sandeep and Kutubdia, the short- and long-term impacts of this policy failure. Firstly, the short-term adaptation strategy that the state focuses on will be severely limited in its outcome because of the lack of inclusion of the most vulnerable groups. This failure will indeed create new human security threats to the immediate communities as well as the public at large.

Second, failing to securitize climate change will be detrimental for the country’s social and economic health as rising sea-levels will ultimately disrupt the lives of millions of people living in the coastal areas and islands in southern Bangladesh. It is true that “While staying away from naive predictions, we maintain that any interpretation of current trends tell us that unpleasant prospects lie ahead on the current social pathways.” However, hope is still there because “If we can determine our envelope of predictability going forward, we have a much better chance of creating a future to our liking.”

To survive, Bangladesh needs skills, equipment, regulatory frameworks, procedures, financial assistance, and leading citizens with innovative minds. In this situation, securitizing climate change would be a major breakthrough for Bangladesh. Although this thesis argues that complete

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43 Cornell et al., 2010
44 Cornell et al., 2010
securitization has not taken place, it is still a question as to whether incomplete securitization can bring sufficient results in Bangladesh. For complete securitization, the role of audience in this particular situation in Bangladesh is very important. How the securitizing actor should communicate with the audience should be clearly defined to make the process more efficient and successful. There are different types and categories of audience, therefore the securitization process should adopt different mechanisms and techniques for different audiences. There is no one-for-all technique to convince all different kinds of audiences.

This thesis provides recommendations to policymakers in Bangladesh in dealing with long-term impacts of climate change. First and foremost, climate change issues must be prioritized and completely securitized by focusing on the long-term implications and being inclusive of all stakeholders. Second, policymakers must separate climate change policy from other political, and socio-economic ones to better channel public resources and to avoid bureaucratic complications. Third, the government should strengthen the capacity of major cities, such as improving the infrastructure, sanitation, and basic needs, to better prepare for climate change-induced migration. Fourth, policymakers should provide skill development and training as well as creating alternative means of livelihood that are independent of agriculture. This is particularly important because future migration caused by climate change is likely to adversely affect those dependent on the agricultural sector. Lastly, to save the mangrove ecology and safeguard agricultural land from the threats of increased salinity, the government ought to have a land reclamation strategy as well as an alternative energy policy.
The current Bangladeshi government’s approach to dealing with climate change is commendable in many respects. However if complete securitization does not materialize, in the long-run all the successes gained in the short-term will be futile.
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