

Climate Change Induced Displacement and Migration in Bangladesh: The Need for Rights-Based Solutions

By

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Introduction

Human displacement as a result of environmental change is not a new phenomenon. The link between climate change caused by human interferences with the world and environmental vulnerability has now been well-established.¹ The causes of climate change and its potential impact on many different natural and social systems have been documented in recent scientific reports and studies.² The individual or combined effects of climate change are likely to trigger mass human movement both within and across the international borders. Thus the human impact on the environment is creating a new kind of global casualty for the twenty-first century,³ an emergent class of environmental migrants.⁴ The Intergovernmental Panel on Climate Change (“IPCC”) has already indicated that one of the greatest effects of climate change may be on human migration.⁵ The United Nations High Commissioner for Refugees (“UNHCR”) predicts that between 50 and 200 million people may be displaced by 2050 “either within their countries or across borders.”⁶

Due to the unique geography of the country, Bangladesh suffers from regular natural hazards, including floods, tropical cyclones, storm surges and droughts. These natural hazards lead to loss of life, damage to infrastructure and adversely impact on livelihoods.⁷ They are also leading to the displacements of individuals and communities from their homes and lands. As a result of climate change, it is expected that all of these natural

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hazards that are already causing displacements will increase in frequency and intensity in the coming years.⁸

Till now, no internationally accepted term exists for persons moving for environmental reasons.⁹ There is currently no consensus on a definition for the climate/environment displacees, and a multitude of terms such as "climate refugees", "environmental refugees", "environmental migrants", "climate change induced migration" etc. are being randomly used.¹⁰

They are not yet recognized in international law as an identifiable group whose rights are clearly articulated,¹¹ or as a formal legal category of people in need of special protection.¹²

The International Organization for Migration (IOM) has developed a working definition of 'environmental migrants' as "persons or groups of persons who, for reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions are obliged to leave their habitual homes, or choose to do so, either temporarily or permanently, and who move either within their country or abroad", which is possibly the most comprehensive one to be found. This definition includes possible situations of forced and voluntary, short and long term, and internal and international migration. Definitions by themselves will not resolve the issue of identifying the exact reasons for migration, but may provide a framework to place the issue of protection and the needs of this vulnerable population.¹³

In many cases, the existing national policies and institutional frameworks are not sufficient to protect the rights of the climate displacees in Bangladesh. Therefore, there is an urgent need to review the existing policies, laws and institutional frameworks for protecting the environmental migrants.

First, this article examines the possible link between climate change and consequent human displacement. It shows how the major impacts of climate change play a substantial role in triggering human displacement in Bangladesh. The article further analyses international normative legal framework and existing Government policies and programme intended to provide solutions to climate displacement and relief to climate induced displaced persons and highlights that rights-based solutions must be utilised as the basis for solving this crisis.

Conceptualizing Climate Change

"Climate change" means a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.¹⁴ However, IPCC (2007) refers it as 'a change in the state of the climate over time, whether due to natural variability or

as a result of human activity'.¹⁵ United Nations Framework Convention on Climate Change (UNFCCC) has defined climate change as “a change of climate which is attributed directly or indirectly to human activity”.¹⁶ So it's evident that human activities do have major impacts on the climate.

Climate Displacement in Bangladesh: The Current Situation

Climate change is expected to affect the movement of people in at least four ways: (i) the intensification of natural disasters both sudden and slow-onset leading to increased displacement and migration; (ii) the adverse consequences of increased warming, climate variability and of other effects of climate change on livelihoods, public health, food security and water availability; (iii) rising sea levels that make coastal areas uninhabitable; and (iv) competition over scarce natural resources potentially leading to growing tensions and even conflict and, in turn, displacement.¹⁷

Bangladesh's vulnerability to natural hazards leads to climate displacement the forced displacement of individuals and communities from their homes and lands. This is a result of both “sudden onset events” such as floods, cyclones and river bank erosion as well as “slow onset processes” such as coastal erosion, sea-level rise, salt water intrusion, changing rainfall pattern and drought.¹⁸

The primary causes of climate displacement in Bangladesh are tidal height increases in the coastal areas (leading to tidal flooding) and riverbank erosion in the mainland areas.¹⁹ The key secondary causes of displacement are tropical cyclones and storm surges in the coastal regions and river flooding in the mainland.²⁰ The primary sites of displacement have been in the coastal regions and in the river delta regions in the mainland. Of Bangladesh's 64 districts,²¹ 24 coastal and mainland districts are already producing climate displaced people:²²

It is estimated that six million people have already been displaced by the effects of climate hazards in Bangladesh.²³

However, Migration is a multi-causal phenomenon: even in cases where climate change is a predominant driver of migration it is usually compounded by social, economic, political and other factors. Resource, social network, cultural ability to cope with change, individual's attitude, position in family decision making and gender contributes to decision to migrate or not.²⁴

Sudden-onset Events

Floods

In the last 25 years, Bangladesh has experienced six severe floods, with the 1988 and 1998 floods alone causing 2000-6,500 and 1,100 deaths respectively and displacing as many as 45 and 30 million people. Further, in

addition to the existing flood risk, there is an increasing problem of protracted water-logging in many areas due to sedimentation in drainage channels and rivers, particularly in the South-West coastal region of Khulna Division. Periodic severe floods in Bangladesh cause displacement on a very significant scale. In the most recent severe floods of 2007, around 32,000 Km² were inundated, affecting almost 16 million people in around 3 million households. Around 85,000 houses were severely damaged, with 1.12 million hectares of cropland affected and an estimated loss of BDT 5.8 million in livestock. Damage to embankments and other critical infrastructure are also a major problem and often prevent the early return of affected communities. An International Organization for Migration (IOM) study reveals that 28 per cent of households in flood affected regions had at least one migrant and 83 per cent reported that unemployment due to frequent floods was the main reason for family members to leave. Importantly, only 6 per cent of migrants went to another village, and these were all from the poorest income quartile, while 89 per cent went to the nearby city (70 per cent of whom were from the middle quartiles economically). The remaining 5 per cent of households with overseas migrants were all from the richest quartile.²⁵

Cyclones and Storm Surges

On an average, a severe tropical cyclone hits Bangladesh after every 3 years.²⁶ These storms generally form in the months just before and after the monsoon and intensify as they move north over the warm waters of the Bay of Bengal. They are accompanied by high winds of over 150 kmph and can result in storm surges up to seven metres high. The tropical cyclones in 1970 and 1991 are estimated to have killed 500,000 and 140,000 people, respectively.²⁷ The enormous, forceful and devastating cyclone *Sidr* struck the coast of Bangladesh on November 15, 2007. It killed over 10,000 people and devastated the lives and livelihoods of over 30 million people. The next devastating cyclone *Nargis* though spared Bangladesh, severely hit the Myanmar coast on May 4, 2008, killing more than 100,000 people. Most recently, cyclone *Aila* hit the coasts of Bangladesh and India on April 25, killing over 300 people and displacing thousands. Many people of coastal districts were made homeless for weeks and suffered from serious food and water insecurity. Thousands of them were thrown into extreme poverty. Water borne diseases spread amongst many affected communities.²⁸

The storm surges are higher in Bangladesh than neighboring countries because the Bay of Bengal narrows towards the north, where Bangladesh is located. Tropical cyclones and storm surges in coastal areas have led to high loss of life; extensive damage to houses, property and infrastructure; loss of livestock; and disruption to agriculture and livelihoods.²⁹

River Erosion

River-bank erosion is a constant threat to people living alongside Bangladesh's major rivers and on river islands ('chars').³⁰

Riverbank erosion is caused because the course of rivers tends to shift over time.³¹ The Government estimates that annually several thousand hectares of floodplain are lost due to river bank erosion and that this leads to thousands of people becoming landless and homeless every year.³² Along with the floodplain, Bangladesh loses several kilometers of roads, railways and flood embankments every year. A number of cities and towns such as Chandpur, Rajshahi and Faridpur are also threatened by erosion. According to a recent study, "about one million people are directly affected by riverbank erosion each year and landlessness in these areas could be as high as 70 per cent".³³

One study on north-west Bangladesh found that on an average households have been displaced 4.46 times. Majority moves essentially within localized areas, some households migrated to greater distances. Another study found that 80 to 95 per cent of char households of north-west Bangladesh are migrant households.³⁴ Migrations from chars are mostly temporary, seasonal and circular. 5500 of 30,000 slum dwellers in Sirajganj were found to be riverbank erosion affected displacees.³⁵

Slow-onset Processes

Coastal Erosion

Coastal erosion can be a slow-onset process with one study identifying rates of erosion on Bhola Island for instance as between 0.31 to 0.43cm a day - as well as a sudden-onset event, for instance when high spring tides or storm surges result in much faster rates of change. Climate change is expected to exacerbate coastal erosion primarily through rising sea-levels, but also through changes to river flow and other hydrological dynamics.³⁶

During the last 40 years, Bhola Island has been squeezed to 3400 km from 6400 sq. km from 1960 suffering net loss of 3000 sq. km. A research work of 2004 reveals that 3332 families lost their houses from river erosion. 21 schools were affected, 7 were abolished completely and 14 were under constant risk of being eroded. There was no available resources like land, construction materials etc to rebuild the school elsewhere in the community. Kutubdia and Moheshkhali an outreach island situated in the south-eastern part of the Bay of the Bengal, has been eroding fast due to strong tidal action, as well as by cyclonic action and storm surges. This island, once which was 250 sq km in size, 100 sq km in size lost around its 65% during last 100 years respectively.³⁷

Sea-Level Rise (SLR)

Being a low lying deltaic country, Bangladesh is bound to face the serious consequences of sea level rise (SLR) including permanent inundation of huge land masses along the coast line. Over the last 100 years Bangladesh has already been warmed up by about 0.5^o and 0.5^o m SLR in the Bay of Bengal. World Bank's study on the impact of SLR in Bangladesh reveals that, 100 cm sea level rise within next 100 years will inundate 15 to 17 per cent of country's land area which will make 20 million people environmental refugee and a country like Bangladesh might not be able to accommodate such huge uprooted people.³⁸ For this reason, Bangladesh has been ranked as the 3rd most vulnerable in the world to SLR in terms of the number of people and in the top ten in terms of percentage of population living in the low elevation coastal zone. Therefore the threat of the communities being pushed away due to the effects of climate change is one of the most severe on earth.³⁹ Sea level Rise significantly increases coastal erosion, saline intrusion, flooding and water logging and storm surge.⁴⁰

Salt-Water Intrusion

Saline intrusion is already a major problem in the South-West of Bangladesh, where diminished flow in the dry season enables salt water to penetrate far inland through the estuarine river system, severely limiting the potential for supplemental irrigation and potentially damaging crops during very high tides. Access to groundwater is also limited, with coastal wells required to penetrate as deep as 250m or more to reach fresh water and increasing water usage in 'recharge' areas further north threatening to exacerbate the issue still further. As a result of climate change, rising sea-levels and, potentially, decreased winter rainfall are expected to aggravate the situation by increasing salt water intrusion up coastal rivers and into groundwater aquifers and reducing the availability of freshwater in the coastal regions, particularly in the South-West. Increased salinity has severe consequences on agricultural productivity, with the multiple effects on surface water, groundwater and soil quality change combining to reduce crop yields.⁴¹

The Future of Climate Displacement in Bangladesh

It is projected that the effects of climate change will exacerbate many of the natural hazards faced by Bangladesh, including all of the natural hazards currently leading to climate displacement –flooding, tropical cyclones, storm surges, salinity intrusion and river-bank and coastal erosion and SLR.⁴² IPCC has stated that climate change and global warming are likely to lead to an intensification of rainfall; increase in the frequency of flash floods and large-area floods; earlier melting of snowpacks and melting of glaciers; frequent and intense droughts; intense tropical cyclones; rising

sea levels; frequent and intense storm surges; and intense inland rainfall and stronger winds:⁴³

Sea level rise from climate change is anticipated to worsen many of these processes and to subsume up to 13 per cent of Bangladesh's coastal land by 2080.⁴⁴

Heavier and more erratic rainfall in the Ganges-Brahmaputra-Meghna system is likely to lead to further riverbank erosion resulting in mass displacement in the mainland areas of Bangladesh. Besides, erratic rainfall is also likely to lead to over-topping and breaching of embankments resulting in widespread flooding in both urban and rural areas.⁴⁵ In addition, it is likely to lead to increasing droughts, especially in the drier northern and western regions of Bangladesh which record significantly less rainfall causing the destruction of crop yields and severe disruption to livelihoods.⁴⁶ Erratic rainfall is likely to lead to increasingly frequent and severe landslides in the hill regions of Bangladesh triggering human exodus. As the Himalayan glaciers continue to melt, it is likely that there will be higher river flows in the warmer months of the year, followed by lower river flows and increased saline intrusion after the glaciers have shrunk or disappeared.⁴⁷

The difficulty inherent in predicting the future impact of climate change on displacement in Bangladesh means that any attempt to quantify the exact number of climate displacees should be treated with some caution. However, as all of the key current drivers of displacement are expected to increase in both frequency and intensity due to climate change, it is highly likely that the number of climate induced displaced people will continue to increase in the future in Bangladesh. In addition, the number is likely to rise even higher due to secondary and as yet unforeseen effects of climate change.⁴⁸

Additional Concerns Resulting from Climate Change in Bangladesh

In addition to exacerbating the natural hazards that are already leading to displacement in Bangladesh, the effects of climate change may also lead to additional concerns that will impact on climate displacement in Bangladesh.

Displaced populations who are unable to return to their residences or unable to resume their traditional livelihoods are usually forced to head to the urban centres in search of employment and a better life. Such rural-urban migrants end up in the city's slums, earning the bare minimum in the informal-sector. These people in general face insecurity of land tenure and shelter, with women especially vulnerable to exploitation and abusive practices. The conditions under which most of the rural-urban migrants live violate their most basic, human rights including lack of shelter, lack of secure tenure, and lack of access to basic services such as clean drinking

water, healthcare and education. Rapid and unplanned urbanization does not only have implications for the environmental migrants and the urban poor but the society at large. There are serious, far reaching human security impacts arising from such conditions. Firstly, environmental and other rural-urban migrants tend to live in overcrowded slums, and consequently end up contributing to the environmental degradation of the surrounding area. Absence of proper drainage and garbage disposal systems also compound the effects. Secondly, competition over already scarce basic resources such as clean water, electricity, etc, leads to increased social tension within the slum population but also among the urban residents at large, which could eventually result in outbreaks of conflict. Thirdly, the arrival of displaced persons in large numbers to a city also jeopardizes the city's ability to plan for the future, as overcrowding and overuse of existing amenities and services disrupt urban planning. Finally, overcrowding and overpopulation of urban centres pose an incredible risk in terms of disasters such as floods and earthquakes, as well as a public health challenge. Given the current state of Bangladesh's cities, a mass exodus of environmental migrants from rural areas would no doubt be a cause for alarm.⁴⁹

Environmental Migrants and Displaced Persons: International Legal Framework

Environmental migrants and displaced persons are entitled to enjoy, equally and without discrimination, the same rights and freedoms under international and national laws, as do other persons in their country. The existing international legal framework does afford a degree of protection for certain segments of environmental migrants. Protection is not limited to merely securing the survival and physical security of those displaced, but encompasses civil and political, and economic, social and cultural rights as attributed by international human rights and international humanitarian law. The principles of equality and non-discrimination are central to all international human rights law and humanitarian principles.⁵⁰

Under the broader framework of the international human rights regime, the rights which are particularly relevant for persons displaced by environmental and climatic factors include the right to adequate healthcare; the right to life and dignity; the right to adequate housing; the right to security of tenure: the right not to be arbitrarily evicted; the right to land and the rights in land; the right to property and the peaceful enjoyment of possessions; the right to privacy and respect for the home; the right to security of the person, freedom of movement and the choice of residence; and housing, land and property restitution and/or compensation following displacement.⁵¹

While these rights for all are well established in the key international human rights instruments such as the Universal Declaration of Human

Rights, the International Covenant on Economic, Social and Cultural Rights, there are certain human rights instruments which can be applied more specifically for the protection of displaced persons, such as the International Convention on the Protection of the Rights of All Migrant Workers and their Families 1990, the Convention on the Reduction of Statelessness 1961, the Convention on Status of Stateless People 1954, the Convention on the Elimination of All Forms of Racial Discrimination 1969, the Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children 2000, the Convention on the Rights of the Child 1989, the Convention on the Elimination of All Forms of Discrimination against Women 1981, and the ILO Convention on the Rights of Indigenous People 1989.⁵²

Bangladesh has signed many key international human rights treaties that provide protection for the climate displaced persons, including the International Covenant on Economic, Social and Cultural Rights 1966, the International Covenant on Civil and Political Rights Convention on the Elimination of All Forms of Discrimination against Women 1981, the Convention on the Rights of the Child 1989 and the International Convention on the Protection of the Rights of All Migrant Workers and their Families 1990. This means that the international human rights standards contained in these international instruments apply to all climate induced displaced people in Bangladesh and that they must be applied without discrimination.⁵³

It is often assumed that refugee law is the category of international protection most relevant to the climate induced displaced people. In that case, many of these people will become “climate refugees” and will be able to travel to other countries and seek protection there. However, the picture under international law is far from that straightforward. Under the 1951 Refugee Convention, a refugee is a person who “...owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality, and is unable to, or owing to such fear, is unwilling to avail himself of the protection of that country”.⁵⁴ This means that, at a minimum, a displaced person because of climate causes from Bangladesh must be outside Bangladesh before they can claim the protection of the Refugee Convention. Further, they would then need to demonstrate that if they returned to Bangladesh they would face a well-founded risk of “being persecuted” and that the persecution would be for one of the enumerated reasons (race, religion, nationality and membership of a particular social group or political opinion) under the Refugee Convention. They would then need to show that Bangladesh Government was either unable or unwilling to protect them from that persecution. Under the Refugee Convention, as it currently stands, it may be possible that some of the climate induced displaced persons could construct a claim of eligibility for protection as a refugee; however, it is clear that the Refugee

Convention would not apply to the circumstances of the vast majority of this category of displaced people of Bangladesh.⁵⁵

Additionally, a number of international bodies, guidelines and standards also exist which specifically protect the rights of the displaced persons. These include the Guiding Principles on Internal Displacement, the Pinheiro Principles, the UN Inter-Agency Standing Committee's Guidelines on Human Rights and Natural Disasters, the Human Rights Council Resolution 7/23 and 10/4 on Human Rights and Climate Change, the 1951 Geneva Convention, the Code of Conduct for the International Federation of the Red Cross and Red Crescent Societies and NGOs in Disaster Response Programme, the Responsibility to Protect of the International Commission on Intervention and State Sovereignty and the Humanitarian Charter of the Sphere Project.⁵⁶

The *Guiding Principles on Internal Displacement*⁵⁷ establishes that internally displaced persons shall enjoy in full equality, the same rights and freedoms under international and domestic laws. It further states that every human being shall have the right to be protected against being arbitrarily displaced from his or her home or place of habitual residence. It specifies that internally displaced persons shall have the right to seek safety in another part of the country, the right to leave their country, the right to seek asylum in another country and the right to be protected against forcible return or resettlement to any place where their life, safety, liberty and/or health would be compromised.

The *United Nations Principles on Housing and Property Restitution for Refugees and Displaced Persons (The Pinheiro Principles)*⁵⁸ outline the right to be protected from displacement peaceful enjoyment of possessions, right to voluntary return and safety.

The *UN Inter-Agency Standing Committee's Guidelines on Human Rights and Natural Disasters*⁵⁹ ensures that displaced persons or those otherwise affected by natural disasters do not lose the rights of the population at large, and at the same time they have particular needs which call for greater protection and assistance measures. It also states that protection is not only limited to securing survival and physical security, but encompasses all aspects of civil, political, economic, social and cultural rights as afforded by international standards.

The *Human Rights Council Resolution 7/23*⁶⁰ and *10/4*⁶¹ on *Human Rights and Climate Change*, recognize the linkage between human rights and climate change, and also climate change induced displacement. As such, the Human Rights Council has taken the decision to hold panel discussions on the relationship between climate change and human rights in order to contribute to the realization of the goals set out in the Bali Action Plan.

The *1951 Geneva Convention* while not providing protection for persons fleeing environmental harm, could be useful in narrow circumstances whereby victims are entitled to protection under the principle

of *non-refoulement*. This would prevent a government's return of a person from their country regardless of legal status, where the person's life or integrity are at risk or where return would subject the person to cruel, unusual or degrading treatment.⁶²

The *Code of Conduct for the International Federation of the Red Cross and Red Crescent Societies and NGOs in Disaster Response Programme*⁶³ affirms that the humanitarian imperative comes first and without any discrimination, and that disaster affected victims will be recognized and treated as dignified humans.

*Report of the International Commission on Intervention and State Sovereignty on the Responsibility to Protect*⁶⁴ reaffirms the primary responsibility for the protection of its displaced people, but that in situations where this is not possible or not being done, the international community will intervene which includes scenarios of overwhelming natural or environmental catastrophes.

The *Humanitarian Charter and Minimum Standards of the Sphere Project*⁶⁵ is structured around the three core principles of right to life with dignity, the right to protection and security and the right to receive humanitarian assistance. The minimum standards ensure that affected persons have access to at least the minimum requirements of water, sanitation, food, nutrition, shelter and healthcare in order to satisfy their basic right to life with dignity. These guidelines and instruments, though not legally binding provide a "*soft law*" approach to deal with the issue of displaced persons. It should be noted however, that most of these instruments only cover displacement caused by natural disasters and do not take into account displacement caused by environmental degradation such as desertification or movement caused indirectly by climate change. It is predicted that the majority of climate change induced displacement be caused indirectly, and therefore there is an urgent need to formulate a framework for the protection of their rights.⁶⁶

Existing National Policies and Institutional Frameworks in Bangladesh

Bangladesh, being one of the most vulnerable countries, has adopted a number of policies and institutional frameworks over recent years. These measures have been undertaken to combat frequent natural disasters and the adverse effects of climate change.

Policies and Institutional Framework on Environment

Bangladesh National Environmental Policy 1992 and the Coastal Zone Policy 2005 deal with the adverse effects of disasters and environmental problems.⁶⁷

In terms of guiding strategies on the environment, among the key document is the National Environmental Management Action Plan 1996, the more recent National Capacity Self-Assessment (NCSA) for Global Environmental Management 2007 and sector specific environmental policies such as the National Water Policy 1999 and the Guidelines for Participatory Water Management. All of these documents are understandably focused on meeting Bangladesh's current environmental challenges and make few specific references to the migration effects of environmental change and degradation (although the NSCA refers to the problems of displacement by river bank erosion, rural-urban migration and the potential for out-migration from coastal zones). In contrast, policies on disaster management such as the Draft National Plan for Disaster Management 2008 do make reference to displacement and specific vulnerabilities related to migration, such as problems facing families left behind when men out-migrate following an event.⁶⁸

The institutional framework of Bangladesh consists of different disaster management committees at different levels comprising government, non-government, voluntary, and other relevant stakeholders. The National Disaster Management Council (NDMC) headed by the Prime Minister is the highest-level forum for the formulation and review of disaster management policies. The Inter-Ministerial Disaster Management Coordination Committee is responsible for implementing disaster management policies and the decisions of the NDMC, and is assisted by the National Disaster Management Advisory Committee.⁶⁹ The Ministry of Food and Disaster Management is the focal ministry for disaster management in Bangladesh. Its Disaster Management Bureau (DMB) is mainly responsible for coordinating national disaster management interventions across all agencies. In 2000, the government published 'Standing Orders on Disaster', which provides a detailed institutional framework for disaster risk reduction and emergency management, and defines the roles and responsibilities of different agencies and committees.⁷⁰

Policies and Institutional Framework on Climate Change

The Government of Bangladesh has signalled its clear intention in the area of adaptation:

“It is essential that Bangladesh prepares now to adapt to climate change and safeguard the future well-being of its citizens...[the] Government is unequivocal in its commitment to protect the people from the ravages of climate change...”⁷¹

The Government has taken many steps to address adaptation to climate change including the establishment of a 45 million dollar Climate Change Fund, development of *The Bangladesh National Adaptation Programme of Action 2005 (NAPA)* and *The Bangladesh Climate Change Strategy and Action Plan 2009(BCCSAP)*⁷².

In 2005, Bangladesh completed and published *The Bangladesh National Adaptation Programme of Action (NAPA)* prepared by the Ministry of Environment and Forests. The 2005 NAPA recognizes that Bangladesh will be one of the most adversely affected countries due to climate change especially because of Bangladesh's "low economic strength, inadequate infrastructure, low level of social development, lack of institutional capacity and a higher dependency on the natural resource base"⁷³

The NAPA identified that some of the effects of climate change have links with migration; however, these links were not expressed in concrete terms. For example, the report stated that the long term consequences of the project to "promote adaptation to coastal crop agriculture to combat Stalinitization" was that the "affected community would not migrate to cities for job and livelihood" and that the "social consequences of mass scale migration to cities would to some extent be halted".⁷⁴

The document also stated that a potential long term consequence of the "adaptation to agriculture systems in areas prone to enhanced flash flooding" project would be that "people might get a means to continue with farming, instead of migrating to cities after the flood".⁷⁵

Bangladesh NAPA has moved from the urgent needs to wider adaptation requirement to address medium and long-term climate issues. It gave emphasis on four basic national security issues of Bangladesh i.e. a) food security; b) energy security; c) water security; and d) livelihood security (including right to health) and respect for local community on resource management.⁷⁶

The Government formulated *the Bangladesh Climate Change Strategy and Action Plan (BCCSAP)* in 2008, and revised it in 2009. The 2009 BCCSAP is a 10 year programme (2009 – 2018) designed to "build the capacity and reliance of the country to climate change".⁷⁷

The BCCSAP recognizes that "Bangladesh is one of the most climate vulnerable countries on earth and will become even more so as a result of climate change".⁷⁸ And highlights the risk of many of the effects of climate change that have led to displacement, including: floods, tropical cyclones, storm surges and droughts.⁷⁹

Importantly and in contrast with the 2005 NAPA, the 2009 BCCSAP draws direct links between climate change and displacement in Bangladesh.

It states that increased river bank erosion and saline water intrusion in coastal areas "are likely to displace hundreds of thousands of people" and that if sea level rise is higher than currently expected and coastal polders are not strengthened and/or new ones built, "six to eight million people could be displaced by 2050 and would have to be resettled".⁸⁰

Specifically, the BCCSAP states that “it is now evident that population in many parts of the country will be so adversely affected [by climate change] that they will have to move out...The process of migration of climate change-affected people, both inside and outside the country, need[s] to be monitored closely...and adequate institutional support should be provided for their proper resettlement”.⁸¹ Secondly, the BCCSAP suggests that increased river bank erosion and saline water intrusion in coastal areas “are likely to displace hundreds of thousands of people”. However, surveys undertaken by the Association of Climate Refugees suggest that this number is likely to be more accurately in the millions of people displaced, rather than the hundreds of thousands.⁸²

Thirdly, the BCCSAP suggests that six to eight million people could be displaced if “sea level rise is higher than currently expected”. Again, sea level is already leading to displacement from coastal areas in Bangladesh.⁸³

The BCCSAP does however, importantly, highlight that the role of monitoring climate displacement and ensuring institutional support for “proper resettlement” lies with the Ministry of Environment and Forests, the Ministry of Home Affairs and the Ministry of Local Government, Rural Development and Cooperative. Importantly, the BCCSAP highlights that “climate change is likely to impact most severely on the poorest and most vulnerable in society...[and that] every effort will be made to ensure that they are protected and that all programme focus on the needs of this group for food security, safe housing, employment and access to basic services, including health”. This statement acknowledges the increased vulnerability of the poorest in society to the effects of climate change as well as the need to ensure safe housing as part of the Government’s adaptation strategy.⁸⁴

The Ministry of Environment and Forests (MOEF) is responsible for addressing climate change challenges, including international negotiations. The National Steering Committee on Climate Change (NSCCC), chaired by the Minister of MOEF is composed by secretaries of all climate-affected ministries, divisions, and representatives of civil society and business community. The National Environment Committee under the Ministry is expected to mainstream climate change into national development planning. Climate Change Focal Points (CCFP) in various ministries are expected to provide collaboration. Five technical working groups have been constituted for adaptation, mitigation, technology transfer, financing and public awareness.⁸⁵

The Gaps and Challenges Regarding Policies and Institutional Frameworks

The national policies and institutional frameworks of Bangladesh are not sufficient to protect climate induced migrants.⁸⁶ There are no clear indications of how population displacement problems will be addressed in

these policies. In addition, there are no detailed action plans with a timeframe to tackle these problems.⁸⁷ The national legal framework does not even include provisions to address the protection of the rights of environmental migrants or internally displaced persons.⁸⁸

The 2005 NAPA neither articulated any concrete links between climate change and displacement nor prescribed any adaptation programme or policies specifically related to the issue of such displacement. In not identifying displacement as an adverse effect of climate change, the instrument unfortunately fails to address the need of developing rights-based solutions for the millions of current and future climate induced displaced persons across Bangladesh.⁸⁹

Further, the 2009 BCCSAP does not accurately portray the full extent of climate induced displacement in Bangladesh. First, such displacement in the BCCSAP is characterised as a potential future event, though, climate induced displacement is already occurring in Bangladesh. Perhaps more critical than the mischaracterisation of the seriousness and urgency of climate displacement in Bangladesh, is the fact that the BCCSAP itself does not propose any policies, programme or actions designed to address climate displacement. The instrument explicitly states that six to eight million people could be displaced by sea level rise and that they “would have to be resettled”. However, the BCCSAP does not propose any policies or strategies for these millions of people, let alone any rights-based housing, land and property solutions for these affected communities. Instead the BCCSAP merely proposes that the process of migration of climate-change-affected people needs to be “monitored closely” and that “adequate institutional support should be provided for their proper resettlement”. There is no indication of where or how this “institutional support” will be provided.⁹⁰

Furthermore, migration issues are not effectively mainstreamed with environmental, disaster management, or climate change policy at present. Besides, in existing migration discourses, the tendency to concentrate on its negative dimensions –such as forced displacement or migration as a 'failure of adaptation' – is a barrier to introducing more proactive policy measure that maximize the benefits of migration from and between environmentally vulnerable regions.⁹¹

Experiences from the 2009 Cyclone ‘Aila’ indicate that weaknesses and inefficiency exist in managing natural disasters. The concerned authorities were not able to repair the damaged embankments caused by the cyclone for a long time. There was no proper and adequate rehabilitation programme for the displaced people. In addition, there was a lack of accountability and a lack of transparency in implementation of emergency responses and rehabilitation programme.

In many cases, negligence and corruption of the local disaster management authorities and the local leaders were reported in relief and emergency management programme.⁹²

Various studies show that the existing United Nations and international policies for protecting internally displaced persons are insufficient.⁹³ As per the normative frameworks under the 1998 UN Guiding Principles on Internal Displacement, the respective states have the primary responsibility to help internally displaced persons. However, there are challenges on the ground to ensuring the protection of internally displaced persons. This is because the affected countries are sometimes unable to protect the displaced people, and in some cases even deny the entry of international protection and assistance agencies, referring to the principle of national sovereignty and non-interference. The international migration policies do not adequately support the protection of environmental or climate migrants. As the numbers of climate or environmental migrants are expected to rise in coming years due to climate change and sea level rise, developed countries may face demands to accept climate displacees from vulnerable and affected countries. Accepting climate displacees already faces opposition in some countries. For example, India has been fencing off Bangladesh-India border by erecting a 2,500 mile long barbed wire barrier to prevent the entry of terrorists and illegal immigrants.⁹⁴ A gap between disaster research and practice exists. Disaster management strategies are often not adopted on the basis of intensive and in-depth disaster research and analysis. The lack of proper vulnerability assessment to climate change impacts in vulnerable communities is a major drawback. Additionally, there are the challenges of raising necessary funds and implementing adaptation programme for the most vulnerable countries.⁹⁵

Concluding Remarks

Despite the unwelcoming forecast for the climate vulnerability of Bangladesh and the millions of current and future victims who will be displaced as a result of climate change, it is essential to emphasize that rights-based solutions are not only required, but that they are also very achievable and that early hour successes are already in place. The majority of climate displaced people in Bangladesh will be displaced internally and will not flee across international borders. Thus, the primary responsibility for protecting the rights of climate displaced people in Bangladesh falls on the Government of Bangladesh. All climate displaced people are entitled to the full range of human rights protections under both the international instruments that Bangladesh is party to as well as the protections in the domestic law of Bangladesh. It is within Bangladesh that solutions, based on the Government's obligations to respect, protect and fulfill the human rights of all Bangladeshis, must be focused. Bangladesh has a vibrant and dynamic

civil society and it is these organizations, alongside the Government, affected communities and the regional and international community, who can and must work together to resolve the current and future climate related displacement crisis. It will require the coordinated efforts of these and other stakeholders to ensure that the millions of climate-displaced people can live in security and dignity with full respect for their human rights. It is obvious that a range of co-ordinated measures, backed by sufficient resources, can go a long way towards finding climate related displacement solutions.⁹⁶

Recommendations

With an eye for adopting a rights-based approach in tackling climate displacement in Bangladesh, the following coordinated initiatives can be fruitful:

- i) The Government should immediately begin to encourage communication and coordination between relevant Government departments, affected communities and civil society on climate-displacement issues. The knowledge, experience and resources of affected communities themselves will be essential in developing and implementing effective policies and programme to solve climate displacement in Bangladesh. Civil society, due to their unique access and expertise, must play an important role in ensuring effective coordination, consultation and participation between the affected communities and the Government. Bangladesh Government should clearly identify a Ministry or institution on which primary responsibility for the success of this liaison will lie.
- ii) It is crucial that the regional and international communities become aware of the climate related displacement crisis in Bangladesh and support the efforts of the Government to protect the rights of all climate-displaced people as Bangladesh is a developing country with limited resources. This support can come in many different forms and does not necessarily need to include the international resettlement of such people. Types of support could include financial aid, technical cooperation and the capacity building of relevant institutions.

Recent developments at the international level have been encouraging in this regard. The outcome of the COP16 summit was an agreement that called for a “Green Climate Fund”. The Fund, proposed to be valued at 100 billion a year by 2020, is designed to assist poorer countries in financing emissions reductions and adaptation. Although there are concerns with the Fund, especially as to how the money will be raised,⁹⁷ that have continued through the COP17 negotiations in Durban,⁹⁸ it is essential that Bangladesh captures the momentum of this process and contributes to the development of this institution in a way that will best protect the rights

of climate-displaced people across this country. Bangladesh should clearly identify a Government Ministry or Agency for whom the regional and international community can engage with on a technical level in the development and implementation of solutions to climate displacement across Bangladesh.⁹⁹

iii) A rights-based national plan should be developed by Bangladesh Government to resolve climate induced displacement. This national plan can be incorporated as part of the 2009 BCCSAP, thus avoiding duplication of resources and fragmentation of the Government's response.

This plan should include an effective national mechanism for monitoring climate related displacement and keeping statistics on the scope and causes of climate displacement. Providing technical assistance and expertise, the international and regional communities should assist Bangladesh in developing an effective monitoring mechanism. Government should disseminate necessary information through concerned agencies so that climate-displacees can have clear understanding of which institutions are able to provide social, financial and resettlement assistance and which institutions are entrusted with enforcing, respecting and protecting housing, land and property rights.

International Human rights law provides an important framework for the development of a rights-based national plan to resolve climate displacement. Under human rights law, the Government must provide effective protection to the most vulnerable individuals and communities across Bangladesh.

As with the development of the NAPA and the BCCSAP, the responsibility for developing a rights-based plan to resolve climate displacement could be guided by a Project Steering Committee, headed by the Ministry of Environment and Forests as well as members from other key ministries, departments and agencies including the Bangladesh Ministry of Finance and Planning. The preparation process should include consultations with a wide variety of stakeholders, including the policy makers, the local representatives of the Government, the members of the scientific community and various research institutes, researchers, academics and importantly, the civil society representatives and the representatives from the affected communities themselves.

iv) Continued investment should be made to achieve sustainable development and reduce vulnerability in environmentally vulnerable regions. The project should focus on infrastructure development, providing basic services (education, health etc.), conducting awareness raising campaigns, strengthening livelihood and better management of existing environmental migration.

v) Continued investment should be made to implement Disaster Risk Reduction (DRR) programme in disaster prone regions. The endeavour should highlight areas vulnerable to cyclones and storm surges, floods, river and coastal erosion and droughts. This is even more important in areas experiencing recurring disasters or a combination of extreme events and gradual environmental degradation, which generate cumulative vulnerabilities.

vi) Synergies among disaster risk reduction, climate change adaptation and development should be developed ensuring representation, participation, and coordination of different stakeholders in the community.

vii) Specific policies on river and coastal erosion including the feasibility of assistance and protection measures for affected people should be developed.

viii) Contingency plans and funds for immediate repair of the breached embankments that do not rely on standard funding and tendering processes should be introduced (including a potential role for the army in addition to civil protection entities where/if needed).

ix) Contingency planning for relocation of communities threatened by coastal erosion should be made. Unused government-owned 'khas' land and/or newly accreted land in coastal areas should be allocated to displaced households and regulatory mechanisms for resolving land disputes should be improved.

In the past, a number of Village cluster projects such as 'Adarsha Gram' and 'Ashrayan' have been undertaken by the Government of Bangladesh to relocate landless individuals and families. The use of community land trusts together with the village cluster model may be explored as a possible domestic relocation solution to climate displacement within Bangladesh. International expertise and experience with community land trusts should be drawn on in designing effective models that best protect the rights of climate displaced persons.¹⁰⁰

x) Instead of viewing migration as threat the Government of Bangladesh should incorporate migration as an important adaptation strategy. The Government of Bangladesh should mainstream migration into adaptation strategies.

In facing the challenges of climate change, organized internal and international migration can play a significant role. Internal migration linked to formal sector employment, and international migration particularly in short term nature mostly takes place from certain pockets of Bangladesh. Climate change affected regions do not belong to those pockets. The existing institutional frameworks to govern migration do not cover

environmentally vulnerable regions. The ministry which manages migration should be linked with the ministries who are in charge of managing environment so that the vulnerable groups can benefit from a planned migration programme. Through this the population movement threat related to climate change, can be transformed into a sources of opportunity in the adaptation process of the climate induced displaced.¹⁰¹

Finally, there is currently a concern that existing climate change adaptation policies and programme are being affected by a lack of transparency and corruption. These issues should be resolved immediately. The regional and the international communities, the donor countries and the civil society in Bangladesh should play an essential watchdog role in this regard to eliminate corruption and to improve transparency.

Notes and References

¹ See Intergovernmental Panel on Climate Change, *Climate Change 2007: The Physical Science Basis, Summary for Policymakers, Contribution of Working Group I to The Fourth Assessment Report of the Intergovernmental Panel on Climate Change* 2-16 (2007), available at <http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-spm.pdf>, last accessed on August 30, 2012

² See Boano, Camillo, *Forced Migration Online, FMO Research Guide on Climate Change and Displacement* 3 (2008), available at <http://www.forcedmigration.org/research-resources/expert-guides/climate-change-and-displacement/fmo046.pdf> Last accessed on August 20, 2012

³ Myers, Norman, *Environmental Refugees*, *Population & Environment*, 19, 1997, pp.167, 175

⁴ Conisbee, Molly & Simms, Andrew, (2003) *Environmental Refugees: The Case for Recognition*, pp. 17-18, available at http://files.uniteddiversity.com/More_Books_and_Reports/Environmental_Refugees-The_Case_for_Recognition.pdf.

⁵ See *Intergovernmental Panel on Climate Change, Climate Change: The IPCC Impacts Assessment* 3, 2-22, 5-6 to 5-8 (WJ. McG. Tegart et al. eds., 1990), available at http://www.ipcc.ch/ipccreports/far/wg_II/ipcc_far_wg_II_full_report.pdf;

Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2007: Impacts, Adaptation and Vulnerability* (2008) New York: Cambridge University Press; N. Stern, *The Economics of Climate Change: The Stern Review* (2007), Cambridge: Cambridge University Press, vi-ix.

⁶ United Nations High Commissioner on Refugees (UNHCR), *Forced Displacement in the Context of Climate Change: Challenges for States under International Law* 3, 2009 see, <http://unfccc.int/resource/docs/2009/smsn/igo/049.pdf>, last accessed on 20 August, 2012

⁷ See: *Government of the People's Republic of Bangladesh, Ministry of Environment and Forests, Bangladesh Climate Change Strategy and Action Plan*, Dhaka, 2008, p4.

⁸ It is not simply the unique geographic position of Bangladesh that makes it especially vulnerable to climate hazards and displacement, the socio-economic situation of the country and high population density also forces many people to live in climate vulnerable parts of the country.

- ⁹ See About IOM, INT'L ORG. FOR MIGRATION, <http://www.iom.int/jahia/Jahia/about-iom/lang/en> (last visited Mar. 16, 2012) (“Established in 1951, IOM is the leading Intergovernmental organization in the field of migration and works closely with governmental, Intergovernmental and non-governmental partners.”).
- ¹⁰ Fatima, Rabab, Wadud, Anita J, ‘Human Rights, Climate Change, Environmental Degradation and Displacement: A new paradigm’, *Human Rights and Sovereignty Over Natural Resources*, in Mizanur Rahman (ed), (2010) *Empowerment Through Law of the Common People*, ELCOP & Palal Prokashoni, , p.192
- ¹¹ Laczko & Aghazarm, *supra note 3*, p. 1.
- ¹² *ibid.*
- ¹³ Fatima & Wadud, *supra note 11*, p. 192
- ¹⁴ Haque, Mahfuzul, ‘Climate Change: Issues for the Policy Makers of Bangladesh’, *Environment and Development Alliance*, Dhaka , 1996, P. 13-14.
- ¹⁵ Patwary, Obayedul Hoque , ‘The Security Dimensions of Climate Change’, *Peace and Security Review*, Vol.2, No.2, Second Quarter, 2009, pp.54-55
- ¹⁶ Climate Change (IPCC Third Assessment Report), (2001), available at http://www.grida.no/publications/other/ipcc_tar/, last accessed on 20 August, 2012
- ¹⁷ Migration, Environment and Climate Change: Assessing the evidence ,IOM, 2009, p.15
- ¹⁸ Siddiqui, Tasneem ,(2011), Climate change induced displacement: Migration as an adaptation strategy, *The Daily Star*, available at <http://www.thedailystar.net/newDesign/news-details.php?nid=210113>, accessed on 20 August, 2012
- ¹⁹ Association for Climate Refugees, Climate “Refugees” in Bangladesh – Answering the Basics: The Where, How, Who and How Many? available at <http://displacementsolutions.org/?p=547>, accessed on 20 August, 2012
- ²⁰ Climate Displacement in Bangladesh: The Need for Urgent Housing, Land and Property Rights Solutions, ,Displacement Solutions Climate Displacement in Bangladesh Report, May 2012, p.4, available at <http://displacementsolutions.org/wp-content/uploads/DS-Climate-Displacement-in-Bangladesh-Report-LOW-RES-FOR-WEB.pdf>, accessed on 20 August, 2012
- ²¹ *ibid*
- ²² *supra note 20*
- ²³ *supra note 21*, p 4
- ²⁴ Walsham, Matthew, (2010) *Assessing the Evidence: Environment, Climate Change and Migration in Bangladesh*, ,International Organization for Migration, available at http://publications.iom.int/bookstore/free/environment_climate_change_bangladesh.pdf, p.3, last accessed on 20 August, 2012
- ²⁵ *Ibid*, pp.9-11
- ²⁶ Bangladesh Climate Change Strategy and Action Plan 2009, September 2009, p11.
- ²⁷ *Ibid.*
- ²⁸ Rahman, Atiq, (2009), ‘Climate change and human rights’, *The Daily Star*, available at http://www.thedailystar.net/newDesign/print_news.php?nid=97199, last accessed on 20 August, 2012.
- ²⁹ *supra note 27*
- ³⁰ *supra note 25* at p.13

³¹ Human Security in Bangladesh, *supra note 8*

³² “The major rivers such as the Jamuna, Ganges and Padma annually consume several thousand hectares of floodplain making thousands of people landless and homeless every year”, see: Bangladesh Water Development Board, webpage on Erosion:

http://www.bwdb.gov.bd/index.php?option=com_content&view=article&id=179&Itemid=148, last accessed on 20 August, 2012

³³ Human Security in Bangladesh, *supra note 8*

³⁴ Abrar, CR & Azad, SN, ‘Coping with Displacement: Riverbank Erosion in Northwest Bangladesh’, RMMRU, RDRS, *North Bengal Institute*, 2003

³⁵ Haque, C.E. and M.Q. Zaman, ‘Coping With Riverbank Erosion Hazard and Displacement in Bangladesh: Survival Strategies and Adjustments’ Disaster’, *The Journal of Disaster Studies and Management*, vol.13, no. 4, 1989, pp 301-314.

³⁶ *supra note 25*, pp.15-16

³⁷ Shamsuddoha, Md., & Chowdhury. Rezaul Karim (2007), *Climate Change Impact and Disaster Vulnerabilities in the Coastal Areas of Bangladesh*. COAST Trust and EJWG, Dhaka, pp.22-23

³⁸ *ibid*, p12

³⁹ Pender, J.S. (2010) *Climate Change, its Impacts and Possible Community-Based Responses in Bangladesh*, Church of Bangladesh, 2nd ed. Dhaka, p.48, available at http://www.churchofscotland.org.uk/__data/assets/pdf_file/0008/3977/climate_change_bangladesh_2010.pdf, accessed on 20 August 2012

⁴⁰ *supra note 19*

⁴¹ *supra note 25*, pp.18-19

⁴² *supra note 27*, p14.

⁴³ See Intergovernmental Panel on Climate Change, Working Group II: Impacts, Adaption and Vulnerability, Fourth Assessment Report: Climate Change 2007, *supra note 6*.

⁴⁴ Pender, James, ‘Community-led Adaptation in Bangladesh’, *Forced Migration Review 31*, 2008, p54, citing research by the UK Institute of Development Studies, available at: <http://www.ids.ac.uk/climatechange/orchid>, last accessed on 20 August, 2012

⁴⁵ *supra note 21* pp.11-12

⁴⁶ *supra note 27* p13

⁴⁷ *supra note 21* p.12

⁴⁸ *ibid* p.11

⁴⁹ Fatima & Wadud, *supra note 11*, p.197

⁵⁰ *ibid* p.193

⁵¹ Leckie, Scott. ‘Human Rights Implications’, *Forced Migration Review*, Issue 31, Refugee Studies Centre: October 2008, p. 18

⁵² Fatima & Wadud, *supra note 11*, p.194

⁵³ *supra note 21*, p.23

⁵⁴ Convention Relating to the Status of Refugees, 1951, article 1A(2)

⁵⁵ *supra note 21*, p.21

⁵⁶ Fatima & Wadud, *supra note 11*, p.194

⁵⁷ Guiding Principles on Internal Displacement, 22 July 1998,

E/CN.4/1998/53/Add.2, available at:

<http://www.unhcr.org/refworld/docid/3c3da07f7.html>, last accessed on 13

August, 2012

⁵⁸ UN Sub-Commission on the Promotion and Protection of Human Rights, Principles on Housing and Property Restitution for Refugees and Displaced Persons, 28 June 2005, UN Doc. E/CN.4/Sub.2/2005/17.

⁵⁹ The Inter-Agency Standing Committee (IASC) Operational Guidelines on Human Rights and Natural Disasters 2006 available at <http://www.humanitarianinfo.org/iasc/pageloader.aspx?page=content-products-products&sel=1>, Last accessed on 30 August 2012

⁶⁰ The Human Rights Council Resolution 7/23 on Human Rights and Climate Change available at http://ap.ohchr.org/documents/E/HRC/resolutions/A_HRC_RES_7_23.pdf, last accessed on 30 August 2012

⁶¹ The Human Rights Council Resolution 10/4 on Human Rights and Climate Change available at http://ap.ohchr.org/documents/E/HRC/resolutions/A_HRC_RES_10_4.pdf, last accessed on 30 August 2012

⁶² Fatima & Wadud, *supra note* 11, pp.194-195

⁶³ The Code of Conduct for the International Federation of the Red Cross and Red Crescent Societies and NGOs available at <http://www.ifrc.org/en/publications-and-reports/code-of-conduct/> accessed on 30 August 2012

⁶⁴ Report of the International Commission on Intervention and State Sovereignty on the Responsibility to Protect available at <http://responsibilitytoprotect.org/ICISS%20Report.pdf>, accessed on 30 August 2012

⁶⁵ The Humanitarian Charter and Minimum Standards of the Sphere Project available at <http://ocw.jhsph.edu/courses/refugeehealthcare/PDFs/SphereProjectHandbook.pdf>, accessed on 30 August 2012

⁶⁶ Fatima & Wadud, *supra note* 11, p.195

⁶⁷ Roy, Dulal, 'Chandra Vulnerability and Population Displacements due to Climate-induced Disasters in Coastal Bangladesh', in Michelle Leighton, Xiaomeng Shen, and Koko Warner(ed.) *Climate Change and Migration: Rethinking Policies for Adaptation and Disaster Risk Reduction*, 'Studies of the University: Research, Counsel, Education'(SOURCE), no. 15/2011, publication series of UNU-EHS, 2011, p. 30 available at <http://www.ehs.unu.edu/file/get/8468>, accessed on 30 August 2012

⁶⁸ Walsham, *supra note* 25 p.33

⁶⁹ Roy, *Supra note* 68, p.29

⁷⁰ BCCSAP 2008, *supra note* 8

⁷¹ BCCSAP 2009, *supra note* 27, pXVII.

⁷² Fatima & Wadud, *supra note* 11, p.198

⁷³ Government of the People's Republic of Bangladesh, National Adaptation Programme of Action, Executive Summary, 2005

⁷⁴ *ibid*, pp.35-36

⁷⁵ *ibid*, p36

- ⁷⁶ Haque, Mahfuzul, 'Challenges of Climate Change: Rights of Vulnerable Countries', *Human Rights and Environment*, in. Mizanur Rahman (2011) ,(ed), *Empowerment Through Law of the Common People*, ELCOP& Palal Prokashoni, , p.160
- ⁷⁷ BCCSAP 2009, *supra note 27*
- ⁷⁸ *ibid*, pXVII.
- ⁷⁹ *ibid*.
- ⁸⁰ *ibid*, p 1.
- ⁸¹ *ibid*, p59.
- ⁸² *supranote 21* p. 17
- ⁸³ *ibid*
- ⁸⁴ *ibid*
- ⁸⁵ Country Summary Report , Bangladesh, 2010,Project for Increasing Stakeholder Utilization of GAR 11,Preparation Study for Asia,Compiled by Practical Action for UNISDR ,p.12 available at <http://www.undp.org.bd/info/pub/Country%20Summary%20Report.pdf>, p.12
- ⁸⁶ Akter, T. (2009): 'Climate Change and Flow of Environmental Displacement in Bangladesh'. *Unnayan Anneshan – The innovators*. Report, Dhaka, Bangladesh.
- ⁸⁷ *supra note 85*, pp.30-31
- ⁸⁸ Fatima & Wadud, *supra note 11*, p.198
- ⁸⁹ *supra note 21*,pp. 15-16
- ⁹⁰ *ibid*, pp. 17-18
- ⁹¹ Walsham ,*supra note 25* at p. xiv
- ⁹² Ahmed, N. (2010): *Bangladesh Cyclone Victims Struggle for Survival*. Reuters-Alert Net. available at <http://www.reliefweb.int/rw/rwb.nsf/db-900sid/ASAZ-5HC6F?OpenDocument>, accessed on 15 November 2010.
- ⁹³ NRC (2009): 'Climate change: people displaced'.in *Reports: A Thematic Report From The Norwegian Refugee Council*. available at http://www.nrcfadder.no/arch/img.aspx?file_id=9913616, accessed on 15 April 2010
- ⁹⁴ Chhabara, R. (2008), 'Policy: Climate change refugees seek a new international deal'. In *ClimateChangeCorp-Climate News forBusiness*. available at <http://www.climatechangeCorp.com/content.asp?ContentID=5871>, accessed on 2April 2010.
- ⁹⁵ Roy ,*supra note 68* ,pp.30-31
- ⁹⁶ *supra note 21* at P.28
- ⁹⁷ See BBC News, Climate Talks End With Late Deal, 11 December 2011.
- ⁹⁸ On the Green Climate Fund, Helen Clark, Administrator of the UN Development Programme, stated: "Very little money so far has gone to low income countries because they have no capacity and no plans. There needs to be capacity supplementation to ensure developing countries are ready", see Sunday Tribune, COP17: Agreement may not be Reached, December 8, 2011, available at <http://www.sundaytribune.co.za/cop17-agreement-may-not-be-reached-1.1194576>. accessed on 2 April 2012
- ⁹⁹ *supra note 21* P.29
- ¹⁰⁰ *ibid* pp.31-32
- ¹⁰¹ Siddiqui, *supra note 19*