

# **PROTECTING CLIMATE CHANGE INDUCED DISPLACEMENT IN BANGLADESH: LEGAL AND POLICY RESPONSES**

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*Dedicated with love to my parents*



## ABSTRACT

Climate change and human migration are two cross-cutting issues that demand immediate and appropriate responses from both international and national authorities. As a result of climate change, in the decades to come, large numbers of people may face the loss of homes, land and livelihoods due to environmental degradations such as rising sea levels, floods, droughts, famine and hurricanes. In Bangladesh alone, it is forecast that around 30 million people will be displaced by 2050. Despite staggering predictions and likely violations of human rights stemming from such displacement, the protection of persons displaced by climate change has remained largely beneath the domestic and international policy radar.

In this milieu, this thesis focuses on the matrix of human dimensions of climate change and population dynamics in Bangladesh. In doing so, it addresses the question of how, and to what extent, a legal and policy apparatus can be developed to address the existing protection gaps and legal vacuum in dealing with persons who are likely to be displaced by climatic effects. To this end, it reviews existing laws and policies to understand the status of this emergent migrants group, and it identifies the protection gaps in both national and international legal frameworks. It suggests integrating international human rights norms, principles and best practices in national laws and policies related to the protection of climate change induced displacement. The thesis closely examines the wide spectrum of adaptive strategies and their feasibility and effectiveness in addressing climate change induced migration. It sets out a roadmap showing how the policy interventions could contribute to better integrating the full spectrum of migration issues and concerns into overall environmental and developmental policy and vice-versa within Bangladesh. Finally, it offers certain pragmatic rights-based law and policy responses to address this issue in Bangladesh.

This thesis deals with a number of complex issues under international environmental law, human rights law, and migration and refugee law, which have important ramifications for the protection of climate change induced displacement at national, regional and international levels. The development of ‘soft guidelines’ suggested in this study would establish an international framework for the specific recognition, treatment and protection of climate change displaced persons and fill the legal gap with the specificity required by states and communities. Negating a ‘one-size-fits-all’ approach, a range of legal and policy options are suggested in this thesis, such as providing humanitarian assistance to forced

climate migrants, pre-emptively managing migration with safety and dignity for climate-motivated migrants, and strengthening adaptation so that climate victims do not need to rely on migration for alternative livelihoods. These measures will capacitate Bangladesh to respond proactively to minimise the risks and maximise the benefits for climate change induced migrants. The suggested national legal and policy responses, although designed in the context of Bangladesh, could be used as a model or guideline for the protection of people who are at risk of displacement due to the effects of climate change in other developing countries and small island countries with similar socio-economic and environmental conditions.

## **THESIS DECLARATION**

I certify that the work in this thesis entitled “Protecting Climate Change Induced Displacement in Bangladesh: Legal and Policy Responses” has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree to any other university or institution other than Macquarie University.

I also certify that the thesis is an original piece of research and it has been written by me. Any help and assistance that I have received in my research work and the preparation of the thesis itself have been appropriately acknowledged.

In addition, I certify that all information sources and literature used are indicated in the thesis.

Mostafa Mahmud Naser (41641647)

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## LIST OF PUBLICATIONS AND CONFERENCE PRESENTATIONS RELATED TO THIS THESIS

The following papers, which have arisen from this thesis, have been presented and published.

### Journal articles

1. MM Naser, 'Climate Change, Environment and Migration: A Complex Nexus' (2012) 36(3) *William and Mary Environmental Law and Policy Review* 713–768.
2. MM Naser, 'Climate Change Induced Displacement: Definitional Issues and Concerns' (2012) 2(1) *Chicago-Kent Journal of Environmental and Energy Law*.
3. MM Naser, 'Climate Change and Forced Displacement: Obligation of States under International Human Rights Law' (2010) 22(2) *Sri Lanka Journal of International Law*.
4. MM Naser, 'Climate Change and Forced Migration: An Overview' (2011) *Refugee Watch Online* <<http://refugeewatchonline.blogspot.com/2011/04/climate-change-and-forced-migration.html>>.

### Book chapters

MM Naser, 'Conceptualising Climate Change Induced Displacement in Bangladesh' Angus Francis and Rowena Maguire (eds.) in *Shifting Powers: Refugee Protection in the Asia Pacific Region* (Ashgate, 2013) (forthcoming).

### Working papers

1. MM Naser, 'Global Governance and Forced Migration: In Search of Recognition in International Law', Environmental Policy Research Centre, Freie Universitat Berlin, Germany (2010).

### Conference/workshop presentations

1. MM Naser, 'Climate Change and Migration: Legal and Policy Considerations', paper presented at the the Researchers' Workshop on Climate Change and Migration in the Asia and the Pacific, Asian Development Bank Headquarters, Manilla, Philippines, 14 September 2011.
2. MM Naser, 'Global Governance to Climate Change Migration: In Search of Recognition in International Law', paper presented at the 2010 Marie Curie Training Course on the 'Human Dimension of Global Environmental Change', Environmental Policy Research Centre, Freie Universitat Berlin, Germany, 4–13 October 2010.
3. MM Naser, 'Climate Change and Forced Migration: In Search of Recognition in International Law', paper presented at the 18<sup>th</sup> Annual ANZSIL Conference, Australian National University, Canberra, 24–26 June 2010.
4. MM Naser, 'Human Rights Implications for Climate Change Induced Displacement: Challenges and Responses', paper presented at the Amsterdam Conference on the Human Dimensions of Global Environmental Change, Amsterdam, 2–4 December 2009.

5. MM Naser, 'Climate Change Displacement and Human Rights Implications', paper presented at the 'Climate Change and Migration Workshop', Australian National University, Canberra, 25 August 2009.
6. MM Naser, 'Climate Induced Displacement in Bangladesh: Human Rights Implications *vis a vis* Challenges and Responses', paper presented at the National Graduate Research Workshop on Interdisciplinary Methods in European and International Studies, National Europe Centre, Australian National University, 27–28 August 2009.

### **Newspaper articles**

1. MM Naser, 'Climate Change Refugee: A Misnomer?', *The Daily Star* (2012) <<http://www.thedailystar.net/law/2012/03/01/human.htm>>.
2. MM Naser, 'Person "on Move" Due to Climate Change: Refugee, Migrant, or Displaced?', *The Daily Star* (2012) <<http://www.thedailystar.net/law/2012/08/02/monitor.htm>>.

## LIST OF ABBREVIATIONS

ACHR	African Charter on Human and Peoples' Rights
ADB	Asian Development Bank
ADPC	Asian Disaster Preparedness Centre
AfCHPR	African Charter on Human and Peoples' Rights
ANZSIL	Australian and New Zealand Society of International Law
ASEAN	Association of South East Asian Nations
AU	African Union
BCCSAP	Bangladesh Climate Change Strategies and Action Plan
BISS	Bangladesh Institute of International and Strategic Studies
BMET	Bureau of Manpower, Employment and Training
CAT	Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment
CBDR	Common But Differentiated Responsibility
CCC	Climate Change Cell
CDM	Clean Development Mechanism
CDMP	Comprehensive Disaster Management Plan
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CEGIS	Centre for Environment and Geographic Information Services
CERD	Convention on the Elimination of All Forms of Racial Discrimination
CESCR	Committee on Economic, Social and Cultural Rights
CHT	Chittagong Hill Tracts
COP	Conferences of Parties
CRC	Convention on Rights of Child
CRPD	Convention on the Rights of Persons with Disabilities
DFID	Department for International Development (UK) Discrimination
DRR	Disaster Risk Reduction
EACH-FOR	Environmental Change and Forced Migration Scenarios
ECA	Ecologically Critical Area

ECHR	European Convention of Human Rights and Fundamental Freedoms
ECtHR	European Court of Human Rights
ECtHR	European Court of Human Rights
ECZ	Environmentally Critical Zone
EDP	Environmentally Displaced Person
ESC	Economic, Social and Cultural
EU	European Union
EVC	Environmentally Vulnerable Communities
FAO	Food and Agriculture Organization
FAR	Fourth Assessment Report
FMO	Forced Migration Online
GATS	General Agreement on Trade in Services
GCM	General Circulation Model
GEF	Global Environment Facility
GHG	Greenhouse Gas
GMG	Global Migration Group
GNI	Gross National Income
GOB	Government of Bangladesh
HDI	Human Development Index
HRC	Human Rights Committee
IASC	Inter-Agency Standing Committee
ICCPR	International Covenant on Civil and Political Rights
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICJ	International Court of Justice
ICRC	International Committee of the Red Cross
IDMC	Internal Displacement Monitoring Centre
IDP	Internally Displaced Person
IDRL	International Disaster Response Laws, Rules and Principles
IFRC	International Federation of Red Cross and Red Crescent
IGO	Intergovernmental Organization
ILC	International Law Commission

ILO	International Labor Organization
INGO	International Non-governmental Organization
IOM	International Organization for Migration
IPCC	Intergovernmental Panel on Climate Change
ISDR	International Strategy for Disaster Reduction
LCA	Long-term Cooperative Action
LDC	Least Developed Countries
LDCF	Least Developed Countries Fund
MDG	Millennium Development Goals
MEAs	Multilateral Environmental Agreements
NAPA	National Plan of Action
NASA	National Aeronautics and Space Administration
NGO	Non-Governmental Organization
NHRC	National Human Rights Commission
NHRI	National Human Rights Institution
NRC	Norwegian Refugee Council
NSCA	National Capacity Self-Assessment
OAS	Organization of American States
OAU	Organization of African Unity
OCHA	Office for the Coordination of Humanitarian Affairs
ODA	Official Development Assistance
OECD	Organization for Economic Cooperation and Development
OHCHR	Office of the United Nations High Commissioner for Human Rights
PRSP	Poverty Reduction Strategy Paper
R2P	Responsibility to Protect
RBE	River-Bank Erosion
RMMRU	Refugee and Migratory Movements Research Unit
RSC	Refugee Studies Centre
RSG	Representative of the UN Secretary-General on the Human
SAARC	South Asian Association for Regional Cooperation
SCCF	Special Climate Change Fund

SD	Sustainable development
SPA	Strategic Priority on Adaptation
UDHR	United Nations Universal Declaration of Human Rights
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNFP	United Nations Population Fund
UNGA	United Nations General Assembly
UNHCR	United Nations High Commissioner for Refugees
UNU-EHS	UNU Institute for Environment and Human Security
USA	United States of America
VGD	Vulnerable Group Development
VGF	Vulnerable Group Feeding
WB	World Bank
WCED	World Commission on Environment and Development
WHO	World Health Organization
WMO	World Meteorological Organization
WSSD	World Summit on Sustainable Development
WTO	World Trade Organization

## LIST OF INTERNATIONAL INSTRUMENTS

- African Charter on Human and Peoples' Rights (AfCHR), 1981 (entered into force 1986)
- American Convention on Human Rights (ACHR), 1969
- Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT), 1984 (entered into force 1987)
- Convention on Access to Information, Public Participation in Decision-Making, and Access to Justice in Environmental Matters (Aarhus Convention), 1998
- Convention on the Rights of the Child (CRC), 1989 (entered into force 1990)
- Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), 1979 (entered into force 1981)
- Convention on the Rights of Persons with Disabilities, 2006 (entered into force 2008)
- Convention relating to the Status of Refugees, 1951
- Declaration on Territorial Asylum, 1967
- European Convention on Human Rights (ECHR), 1950
- First Additional Protocol to the Geneva Conventions, 1977
- Geneva Conventions, 1949
- International Convention on the Elimination of All Forms of Racial Discrimination (ICERD), 1965 (entered into force 1969)
- International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families (ICRMW), 1990 (entered into force 2003)
- International Covenant on Civil and Political Rights (ICCPR), 1966 (entered into force 1976)
- International Covenant on Economic, Social and Cultural Rights (ICESCR), 1966 (entered into force 1976)
- Protocol relating to the Status of Refugees, 1967
- Second Additional Protocol to the Geneva Conventions, 1977
- UNHCR Guidelines on Policies and Procedures in Dealing with Unaccompanied Children Seeking Asylum, 1997
- United Nations Declaration on the Rights of Indigenous Peoples, 2007
- United Nations Framework Convention on Climate Change (UNFCCC), 1992 (entered into force 1994)
- Universal Declaration of Human Rights, 1948



## **LIST OF NATIONAL LAWS AND POLICIES**

Bangladesh Climate Change Strategy and Action Plan, 2009

Bangladesh Environment Conservation Act, 1995

Climate Change Trust Act, 2010 (Law No. VII of 2010)

Coastal Zone Policy, 2005

Disturbed Persons (Rehabilitation) Ordinance, 1964

Energy Policy, 1995

Environmental Conservation Rules, 1997

Environmental Policy, 1992

Fisheries Policy, 1998

Forest Policy, 1994

Land Management Manual, 1990

New Agriculture Extension Policy, 1995

The Alienation of Land (Distressed Circumstances) (Restoration) Ordinance, 1976

The Land Reform Ordinance, 1984

Water Policy, 1998



## LIST OF CASES

*Abdel-Masieh v. U.S. I.N.S.*, 73 F.3d 579, 583 (5<sup>th</sup> Cir. 1996)

*AJ (Liberia) v. Secretary of State for the Home Department* [2006] EWCA Civ 1736, para. 12

*Borca v. I.N.S.*, 77 F.3d 210 (7<sup>th</sup> Cir. 1996)

*D. v. United Kingdom* (1997) 24 EHRR 423

*HLR v. France* (1997) 20 EHRR 29, para. 42

*Kbarak Singh v State of UP* [1964] 1 SCR 322

*Lopez Burgos v. Uruguay*, Communication No. R.12/52 (1981)

*Matter of Acosta*, 19 I. & N. Dec. 211 (BIA 1985)

*Mullin v Administrator Union Territory of Dehli* AIR (1981) Supreme Court 746, 753

*N. v. Secretary of State for the Home Department* [2004] 1 WLR 1182 (EWCA) paras 37, 46

*N. v. Secretary of State for the Home Department* [2005] UKHL

*Olga Tellis v Bombay Municipal Corporation* AI (1986) Supreme Court 18.

*R. v. Special Adjudicator ex parte Ullah* [2004] UKHL 26

*Soobramoney v. Minister of Health KwaZulu Natal* 1998 (1) SA



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# CHAPTER 1

## PROTECTION OF CLIMATE CHANGE INDUCED DISPLACEMENT IN BANGLADESH: AN OVERVIEW

### *1.1 Research Question*

This thesis focuses on the matrix of human dimensions of climate change and population dynamics in Bangladesh. In doing so, it addresses the question of how, and to what extent, a legal and policy apparatus can be developed to address the existing protection gaps and legal vacuum in dealing with persons who are likely to be displaced due to the direct effects of climate change. To this end, it reviews existing laws and policies to understand the status of this emergent migrants group, and it identifies the protection gaps in both national and international legal frameworks. It suggests integrating international human rights norms, principles and best practices in national laws and policies related to the protection of climate change induced displacement. The thesis closely examines the wide spectrum of adaptive strategies and their feasibility and effectiveness in addressing climate change induced migration. Finally, it offers certain pragmatic rights-based law and policy responses to address this issue at national, regional and international levels.

### *1.2 Conceptual Framework and Scope of the Study*

#### *1.2.1 Human Dimensions of Climate Change and Population Dynamics*

Climate change, in particular anthropogenic climate change, is real and constitutes a current and looming threat to the planet. There is increasing scientific evidence that climate change will aggravate both the sudden (for example, storms, cyclones and flooding) and slow (for example, sea-level rise, coastal erosion, desertification and declining soil fertility) onset of environmental events and processes.<sup>1</sup> The individual and combined effects of these environmental disasters will likely result in many different ‘immense human consequences’, some of which are potentially very serious.<sup>2</sup> Climate change induced droughts, floods, soil degradation, effects of shoreline erosion on water and forest

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<sup>1</sup> Philippe Boncour and Bruce Burson, ‘Climate Change and Migration in the South Pacific Region: Policy Perspectives’ in Bruce Burson (ed.), *Climate Change and Migration South Pacific Perspective* (Institute of Policy Studies, 2010) 5, 9.

<sup>2</sup> Mary Robinson, ‘Forward to Climate Change and Human Rights: A Rough Guide’ (International Council on Human Rights Policy, 2008) iii.

resources, coastal flooding, mounting salinity and increased severe weather events have a significant effect on agricultural viability and vital infrastructure and services.<sup>3</sup> These effects are likely to further intensify pre-existing stresses in vulnerable regions around the world. Consequently, there are concerns regarding food insecurity, water scarcity, reduced agricultural production, population pressures, unequal access to resources, poverty, epidemics and the spreading of diseases.<sup>4</sup>

Thus, the climatic changes are likely to diminish the carrying capacity of a particular area through the serious and rapid alteration of ecosystems. In such situations, people who are fearful of a threat to their lives, livelihoods and shelters react by leaving their homes in search of alternative livelihoods. Academics, scientists, experts and intergovernmental organisations such as the Intergovernmental Panel on Climate Change (IPCC), the International Organization for Migration (IOM) and the United Nations High Commissioner for Refugees (UNHCR) unequivocally confirm that climate change induced environmental degradations are likely to trigger mass human displacement around the world, both within and across borders.<sup>5</sup>

The persons likely to be displaced due to climate change are entitled to enjoy the full range of civil, political, economic, social and cultural rights that are enunciated in international and regional human rights treaties and customary international law. Kyung-wha Kang, the UN Deputy High Commissioner for Human Rights, stated that ‘global warming and extreme weather conditions may have calamitous consequences for the human rights of millions of people...ultimately climate change may affect the very right to life of countless individuals’.<sup>6</sup> The international community has an obligation to prevent and address some of the direst consequences that climate change may have on human rights.<sup>7</sup>

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<sup>3</sup> UN Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2007: Synthesis Report 72* (2007) (hereinafter IPCC Synthesis Report), <[http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4\\_syr.pdf](http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf)>. The Synthesis Report is the fourth element of the IPCC Fourth Assessment Report; Nicholas Stern, *The Economics of Climate Change: The Stern Review* (2007) vi–ix.

<sup>4</sup> Jane McAdam and Ben Saul, ‘An Insecure Climate for Human Security? Climate-Induced Displacement and International Law’ (Sydney Centre Working Paper No. 4, Sydney Centre for International Law, 2008) 1.

<sup>5</sup> See Chapter 2 of this thesis for a discussion of predicted climate change induced human displacement.

<sup>6</sup> Kyung-wha Kang, ‘Climate Change, Migration and Human Rights’ (Speech delivered at the Conference on Climate Change and Migration: Addressing Vulnerabilities and Harnessing Opportunities, Geneva, 19 February 2008), <<http://www.unhcr.ch/hurricane/hurricane.nsf/0/BA5B630BFFAD7FC1C12573F600386398?opendocument>>

<sup>7</sup> Ibid.

### ***1.2.2 Bangladesh: The Quintessential Example of Climate Change Induced Displacement***

Various international publications recurrently label Bangladesh as the most vulnerable country due to the effects of climate change. The geographic location and geomorphological conditions of Bangladesh have made the country more susceptible to environmental change and natural disasters. The country is one of the most densely populated in the world and is therefore highly dependent on natural resources for subsistence, making Bangladeshis particularly vulnerable to climate shifts. Over the coming decade, a considerable number of Bangladeshis could be affected by intensifying hydrological and meteorological hazards, thus coming under substantial pressure to migrate temporarily or permanently, and internally or across borders.

In Bangladesh, there are predictions that sea-level rises and other climate change effects, such as flooding and drought, will inundate one-fifth of the total area of the country. As a result, low-lying and rural livelihoods may be less tenable, resulting in increased climate change induced migration. However, most empirical research suggests that such migration will be predominantly internal.<sup>8</sup> In the early stages of environmental degradation, individuals adapt to changed circumstances with temporary or circular forms of migration, such as seasonal rural–urban migration. However, more severe, persistent and irreversible environmental degradation may necessitate the permanent relocation of affected populations to safer places.<sup>9</sup>

Currently, there are no reliable assessments or statistics regarding displacement because no organisations collect such information. There is a lack of capacity to gather this type of data. Therefore, the existence and scope of the issue of climate change induced displacement are often established by a reference to the likely numbers of displaced people. Based on a plausible range-of-emissions scenario, the estimates of worldwide climate change induced displacement generally range from 200 to 250 million by 2050. Scholars predict that around 30 to 40 million people will be displaced in Bangladesh by 2050, either within the country or across borders, and on a permanent or temporary basis. Thus, the number of people affected by future climate migration is larger than the current number of traditional refugees managed by UNHCR worldwide.

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<sup>8</sup> Matthew Walsham, ‘Assessing the Evidence: Environment, Climate Change and Migration in Bangladesh’ (IOM, 2010) 1.

<sup>9</sup> Boncour and Burson, above n 1, 13.

### ***1.2.3 Climate Change Induced Displacement: Recognition and Protection in International Law***

Although the numbers of climate change induced displacement are growing exponentially around the world, there is ‘inherent difficulty in conceptualising and accurately describing the phenomenon’.<sup>10</sup> The available estimates are frequently challenged and ‘numerous fundamental questions about numbers are being asked in scientific, policy and academic circles’.<sup>11</sup> The key issue raised by the debates is ‘whether it is possible to predict with any degree of certainty the likely numbers and distribution of persons displaced by climate change’<sup>12</sup> because such estimates have a ‘large margin of error’ and mostly depend on underlying assumptions about population growth, economic development, temperature increases or the degree and timing of climate change effects such as rising sea levels.<sup>13</sup> Critics also argue that the direct influence of environmental change in triggering mass human displacement has not been established with substantial evidence.<sup>14</sup> Migration researcher Richard Black criticises numerous authors’ repeated presentation of the numbers of environmental refugees as ‘without independent verification of its accuracy’.<sup>15</sup> Thus, these underlying debates make it difficult to predict the numbers of persons displaced by the environmental or climate change.<sup>16</sup> The debates are further fuelled by the fact that scientists cannot predict with certainty how quickly sea levels will rise and where and how the effects of climate change will manifest.<sup>17</sup>

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<sup>10</sup> Jane McAdam, ‘How to Address the Protection Gaps—Ways Forward’ (Paper presented at the Nansen Conference on Climate Change and Displacement in the 21<sup>st</sup> Century, Oslo, Norway, 5–7 June 2011) 1, <<http://d2530919.hosted213.servetheworld.no/expose/global/download.asp?id=2267&fk=1626&thumb=>>.

<sup>11</sup> Camillo Boano, ‘FMO Research Guide on Climate Change and Displacement’ (FMO Research Guide, Forced Migration Online (FMO) 2008) 13. For debates and criticisms of estimates of climate change induced displacement, see A Suhrke, ‘Environmental Degradation and Population Flows’ (1994) 47(2) *Journal of International Affairs*, 478; Stephen Castles, ‘Environmental Change and Forced Migration: Making Sense of the Debate’ (New Issues in Refugee Research Working Paper No. 70, UNHCR, 2002) 2–3; Richard Black, ‘Environmental Refugees: Myth or Reality?’ (New Issues in Refugee Research Working Paper No. 34, UNHCR, 2002) 2–8.

<sup>12</sup> Tess Burton and David Hodgkinson, *Climate Change Migrants and Unicorns: A Discussion Note on Conceptualising Climate Change Displaced People*, The Hodgkinson Group—Climate Change and Aviation Advisors (Publications) 3,

<<http://www.hodgkinsongroup.com/documents/PeopleDisplacedByClimateChange.pdf>>, 23 July 2009.

<sup>13</sup> Frank Biermann and Ingrid Boas, ‘Preparing for a Warmer World: Towards a Global Governance System to Protect Climate Refugees’ (2010) 10(1) *Global Environmental Politics*, 61, 72.

<sup>14</sup> Castles, above n 11, 2.

<sup>15</sup> Black, above n 11, 1.

<sup>16</sup> Biermann and Boas, above n 13, 67–69.

<sup>17</sup> McAdam and Saul, above n 4, 4.

However, the calculation of the predicted numbers of climate change induced displacement largely ‘depends upon how the scope of the phenomenon is defined’.<sup>18</sup> The use of different terminology and definitions in reports and studies produce a wide variety of numbers and estimates because no internationally accepted term currently exists for persons who move for environmental reasons.<sup>19</sup> Terms and concepts such as ‘environmental migration’, ‘climate change induced migration’, ‘ecological refugees’, ‘environmental refugees’, ‘climate refugees’, ‘climate change migrants’ and ‘environmentally induced forced migrants’ are scattered throughout the emerging literature. Some scholars and international organisations, including the UN Environment Programme (UNEP), use terms such as ‘environmental refugee’ and ‘climate change refugee’. However, intergovernmental agencies such as UNHCR and IOM have strong reservations regarding these terms because the word ‘refugee’ has a specific legal meaning in the context of the 1951 Geneva Convention Relating to the Status of Refugees (hereafter, Refugee Convention).<sup>20</sup> Instead, they suggest alternatives such as ‘environmental migrants’, ‘climate change migrants’ or ‘environmentally displaced persons’.<sup>21</sup>

However, these terms do not provide environmentally displaced persons with a legal status that confers obligations on states, except for describing the nature and phenomenon of environmental/climate change migrants.<sup>22</sup> The international legal framework—including its laws and institutions—does not offer any concrete protection for these persons. They are not yet ‘recognised in international law as an identifiable group whose rights and protections are expressly articulated’.<sup>23</sup> Comparing the protection framework available internationally for other groups of forced migration (for example, refugees, internally

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<sup>18</sup> Ibid.

<sup>19</sup> Biermann and Boas, above n 13, 67; Suhrke, above n 11, 478.

<sup>20</sup> UNHCR, ‘Climate Change, Natural Disasters and Human Displacement: A UNHCR Perspective’ (2008) 7, <<http://www.unhcr.org/refworld/docid/492bb6b92.html>>; IOM, *Migration, Climate Change and the Environment* (IOM Policy Brief, 2009) 4–5; Koko Warner, ‘In Search of Shelter: Mapping the Effects of Climate Change on Human Migration and Displacement’ (Report, Cooperative for Assistance and Relief Everywhere (CARE), 2009) 2; Castles, above n 11, 10; Olivia Dun and Francois Gemenne, ‘Defining Environmental Migration’ (2008) 31 *Forced Migration Review*, 10–11.

<sup>21</sup> UNHCR, above n 20, 7; IOM, above n 20, 4–5.

<sup>22</sup> Camillo Boano, Roger Zetter and Tim Morris, ‘Environmentally Displaced People: Understanding the Linkages between Environmental Change, Livelihoods and Forced Migration’ (Forced Migration Policy Briefing No. 1, Refugee Studies Centre, 2008), 4.

<sup>23</sup> McAdam and Saul, above n 4, 2.

displaced persons (IDPs), stateless persons and indigenous people), the group of people likely to be displaced for environmental reasons receives insignificant protection.<sup>24</sup>

Thus, the disagreement surrounding the conceptualisation of climate change induced displacement has important ramifications for assigning responsibility to appropriate domestic and international institutions and agencies, as well as the development of protection mechanisms to address the rights and duties concerned.<sup>25</sup>

#### **1.2.4 Protection Gaps in Bangladesh**

While the focus of attention in the global discussion on climate change and migration has been on international migration, many reports have confirmed that most climate migrants will be displaced within their own countries because money, education and resources are required to cross an international border.<sup>26</sup> However, internal migrants are entitled to the full range of human rights guarantees by a given state. Their rights are principally protected by the normative framework of human rights law and the UN Guiding Principles on IDPs.<sup>27</sup> The principles identify the rights and guarantees that are relevant to the protections of displaced persons, including protection against arbitrary or forced displacement and rights related to housing and property restitution.<sup>28</sup> The principles confer the primary duty and responsibility for protection and assistance on national authorities.<sup>29</sup> Thus, the national legal system is crucial in implementing the principles for the protection of climate change induced displacement.

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<sup>24</sup> Roger Zetter, 'Protecting Environmentally Displaced People: Developing the Capacity of Legal and Normative Frameworks' (Research Report, Refugee Studies Centre, 2011) 13.

<sup>25</sup> Displacement Solutions, Climate Change Human Rights and Forced Human Displacement: Case Studies as Indicators of Durable Solutions (Meeting Paper) 6, <[http://www.displacementsolutions.org/files/documents/Climate\\_Change\\_Displacement\\_Meeting\\_Paper.pdf](http://www.displacementsolutions.org/files/documents/Climate_Change_Displacement_Meeting_Paper.pdf)>; Jessica Lehman, 'Environmental Refugees: The Construction of a Crisis' (Prepared for the UHU-EHS Summer Academy, 15 October 2009) 2, <<http://www.ehs.unu.edu/file.php?id=662>>; Dun and Gemenne, above n 20, 10–11; Warner, above n 20, 2.

<sup>26</sup> Walsham, above n 8, 28.

<sup>27</sup> United Nations Guiding Principles on Internally Displaced Persons (IDPs), GA Res. 60/1, UN Doc. A/RES/60/1. Although not a binding legal source, the Guidelines have been recognised by the UN General Assembly as 'an important international framework for the protection of internally displaced persons'.

<sup>28</sup> Principle 8.2, Principles on Housing and Property Restitution for Refugees and Displaced Persons (endorsed by the Sub-Commission on the Promotion and Protection of Human Rights in resolution 2005/2); FAO/IDMC/NRC/OCHA/OHCHR/UN-Habitat/UNHCR: *Housing and Property Restitution for Refugees and Displaced Persons: Implementing the 'Pinheiro Principles'*, 2007. Cited in *Report of the Office of the United Nations High Commissioner for Human Rights on the relationship between climate change and human rights*, UN Doc. A/HRC/10/61 (2009), 19, para. 57.

<sup>29</sup> UN Guiding Principles on IDPs, above n 27.

However, concerning Bangladesh's protection of climate change induced displacement, although the Bangladesh Climate Change Strategies and Action Plan (BCCSAP) and the National Plan of Action (NAPA) for climate change cover the migration issue, there is no effective national legal and policy framework that specifically targets climate change induced displacement. Although climate change induced migration will affect development processes in Bangladesh, migration issues have not yet been mainstreamed into development policies or environmental governance. It appears that Bangladesh has invested a considerable amount of its resources into adaptation programmes that are sometimes ill-equipped to deal with migration issues. Significant challenges remain to mainstream migration issues into adaptation policies.

The multifarious challenges posed by climate change induced displacement and the protection of human rights require protective laws, responsive policies, viable planning and pragmatic institutional frameworks. The most effective means of facilitating these is to adopt a 'rights-based approach', which is normatively based on international human rights standards and is practically directed towards promoting and protecting human rights while responding to climate change induced displacement.

### ***1.3 Statement of the Problem***

Climate change and migration are two cross-cutting issues that demand immediate and appropriate responses from both international and national authorities. In the absence of a nationally and internationally recognised uniform definition and legal and moral recognition as a separate category requiring protection, people's protection needs are largely unaddressed in legal and policy responses. While the rights of persons displaced by war, persecution or conflict are protected by a number of international, regional and national legal instruments, norms and covenants, no international framework has been developed to date for the protection of persons displaced for environmental reasons.<sup>30</sup> Despite the predictions of significant displacements due to the effects of climate change, the formulation of a legal framework and policy at the national and international levels has been slow to date.

Traditionally, researchers and policy-makers have mainly focused on the ecological and economic consequences of climate change. The human dimensions of climate change—more specifically, the effects of climate change on population displacement—are largely

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<sup>30</sup> Roger Zetter, 'Legal and Normative Framework' (2008) 31 *Forced Migration Review*, 62.

neglected by migration experts and policy-makers.<sup>31</sup> There is confusion and debate surrounding whether the climate-related movement is ‘a refugee issue, a human rights issue, an environmental issue, a security issue, a migration issue or a humanitarian issue’.<sup>32</sup> While some researchers deny the existence of environmental migration, many scholars characterise it as a security issue.<sup>33</sup> The ‘alarmist’ scholars continuously warn that, if immediate actions are not taken to address the mass human migration arising from climate change, there may be a significant security threat to international peace and harmony.<sup>34</sup> The result was that states started to tighten the security of borders by building fences in order to avert the impending threat of so-called ‘climate refugees’.<sup>35</sup> Rather than a mechanism by which the problems and vulnerabilities of people would be taken into account, there is a risk of using the ‘climate change refugee’ as a scapegoat.

Until recently, the social and human rights dimensions of climate change displacement were completely ignored.<sup>36</sup> Although there have been some recent studies on the human and social dimensions of climate change,<sup>37</sup> no studies have been conducted on the human

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<sup>31</sup> Frank Laczko and Christine Aghazarm, ‘Introduction and Overview: Enhancing the Knowledge Base’ in Frank Laczko and Christine Aghazarm (eds), *Migration, Environment and Climate Change: Assessing the Evidence* (2009) 14.

<sup>32</sup> McAdam, above n 10, 1.

<sup>33</sup> Norman Myers, ‘Environmental Refugees in a Globally Warmed World’ (1993) 43(11) *BioScience* 752; Norman Myers, ‘Environmental Refugees: An Emergent Security Issue’, 13<sup>th</sup> Economic Forum, Prague, 23–27 May 2005; Castles, above n 11, 2–3; Black, above n 11, 2–8.

<sup>34</sup> Susan Martin (Speech delivered at the Conversations about Climate Change Adaptation: Displacement, Migration and Planned Relocation, The Brookings Institution, Washington DC, 7 October 2011) 4.

<sup>35</sup> *Ibid.*

<sup>36</sup> Maria Stavropoulou, ‘The Right Not to be Displaced’ (1994) 9 *The American University Journal of International Law & Policy* 689; John Von Doussa QC, Allison Corkery and Renee Chartres, ‘Human Rights and Climate Change, Background Paper, Human Rights: Everyone, Everywhere, Everyday’ (Human Rights and Equal Opportunity Commission (HREOC), 2008) 1; Sara Aminzadeh, ‘A Moral Imperative: The Human Rights Implications of Climate Change’ (2007) 30 *Hastings International and Comparative Law Journal* 231.

<sup>37</sup> The UN Human Rights Council initiated the United Nations Human Rights Council Resolution 7/23 on ‘Human Rights and Climate Change’. This is the first official UN resolution adopted by consensus that explicitly stated that climate change ‘poses an immediate and far-reaching threat to people and communities around the world and has implications for the full enjoyment of human rights’ UN Human Rights Council, *Human Rights and Climate Change*, Res. 7/23, 7<sup>th</sup> Sess., UN Doc. A/HRC/7/78, 14 July 2008). The resolution asked the Office of the High Commissioner for Human Rights (OHCHR) to prepare a study on these implications ahead of a full Human Rights Council debate on the subject in March 2009. The Resolution further requires the Study and a summary of the Council debate to be sent to States Parties to the UNFCCC ahead of COP15 in Copenhagen, in order to inform negotiations. In March 2009, the Human Rights Council adopted Resolution 10/4 (UN Human Rights Council, *Draft Report of the Human Rights Council*, Res. 10/4, 10 Sess., UN Doc. A/HRC/10/L.11 (31 March 2009). The Report notes the effects of climate change on the enjoyment of human rights, and reaffirmed the potential of human rights obligations and commitments to inform and strengthen international and national policy-making. In that resolution, the Council announced its decision to hold a panel discussion on the relationship between climate change and human rights, welcomed the exchange of information between the OHCHR and the UN Framework

rights implications of climate change induced displacement.<sup>38</sup> As Kälin said, ‘while mitigation and adaptation are on the agenda of the regular conferences of States Parties to the UNFCCC, the protection dimension and with it displacement triggered by the effects of climate change have been largely neglected in international discussions thus far’.<sup>39</sup>

Although population displacement resulting from climate change presents serious challenges to Bangladesh, the government has not sufficiently addressed displacement and resettlement in its national legal frameworks. While the issue of climate change induced displacement has been included in existing climate change laws and policies, it is not articulated properly. The current laws, policies and institutional arrangements are inadequate to deal with complex movements of people in response to climatic effects. It needs to identify the existing legal and operational gaps and to develop and strengthen legislative and policy frameworks for managing climate change induced displacement.

Thus, when considered from a human rights perspective, the current and predicted effects of climate change on human displacement raise a number of issues that require serious consideration. The key policy challenges include: understanding the potential scale and patterns of climate change induced displacement, understanding the complexity and multi-causality, finding workable definitions and solutions under international law, and implementing suitable legal and policy apparatuses at the national level to manage human displacement.

#### ***1.4 Aims and Objectives***

This thesis aims to provide a systematic review of the legal aspects of climate change induced displacement, to deduce the adequacy of current laws and policies in responding to climate change induced displacement, and to determine how the legal frameworks could

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Convention on Climate Change (UNFCCC) Secretariat, and encouraged the High Commissioner to participate in the 15<sup>th</sup> UNFCCC Conference of the Parties.

<sup>38</sup> A report prepared by the Special Rapporteur on human rights of migrants François Crépeau, with a thematic section dedicated to the impacts of climate change and some of its consequences for migration has recently been published. The report will be presented to the UN General Assembly on 25 October. The Special Rapporteur first analyses some of the technical aspects of climate-change-induced migration, including questions of definitions, identifying the places and persons most affected and considering where climate-change-induced migrants are moving towards. It then considers how international law approaches the matter of climate-induced migration, including some deficiencies in the currently existing categories. Finally, the Special Rapporteur takes note of the political engagement that will be required on the issue by a range of actors, including from governments, the international community and civil society. He provides some conclusions and recommendations to help guide States in developing appropriate responses to this complex issue. (Report of the Special Rapporteur on Human Rights of Migrants, UN Doc A/67/299 67<sup>th</sup> Sess Item 70 (b) of the Provisional Agenda)

<sup>39</sup> Walter Kälin, ‘Climate Change Induced Displacement—A Challenge for International Law’ (Distinguished Lecture Series 3, Mahanirban Calcutta Research Group (MCRG), 2011) 9.

evolve in order to provide an improved response to the phenomenon of human displacement. Thus, this thesis deals with a number of complex issues under international environmental law, international human rights law, and migration and refugee law.

First, in the discourse of environmental migration, many scholars challenge the concept of ‘environmental refugee’; that is, environment as a primary cause of forced displacement. Some authors refute the existence of environmental migration because it is associated with multi-causality. They claim that the decision to move usually depends on a combination of other complex socio-economic factors. In this context, this study deals with the question of whether environmental degradation resulting from climate change can play a key role in migration. More specifically, it examines the possibility of migration according to climate change effects.

Second, given that no typology and authoritative definition of climate change induced displacement in Bangladesh is found in academic literature and policy documents, this thesis seeks to conceptualise and define it by analysing the typology of displacement based on the causes and extent of movement. This thesis suggests a definition of climate change induced displacement based on the causal factors driving migration in Bangladesh.

Third, given the human rights implications of the large number of people likely to be displaced due to climatic effects, this study seeks to review how Bangladesh’s government responds to its human rights obligations. It also examines the need for adequate domestic legal and institutional frameworks to protect the rights of displaced people.

Fourth, the current international legal framework disregards the correlation between environmental degradation and human migration.<sup>40</sup> The status of these people is still unclear in international law and, as a result, they are currently falling outside the scope of international protection.<sup>41</sup> This thesis examines the possibility of treating climate change induced displacement as a formal category of persons requiring special protection. It also reviews the potential of existing international law norms and standards to gear for the protection of climate change induced displacement.

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<sup>40</sup> Jane McAdam, ‘Climate Change “Refugees” and International Law’, NSW Bar Association, 24 October 2007; David Keane, ‘Graduate Note: The Environmental Causes and Consequences of Migration: A Search for the Meaning of “Environmental Refugees”’ (2003–2004) 16 *Georgetown International Environmental Law Review* 209; Diane Bates, ‘Environmental Refugees? Classifying Human Migrations Caused by Environmental Change’ (2002) 23(5) *Population and Environment* 465; Aurelie Lopez, ‘The Protection of Environmentally-Displaced Persons in International Law’ (2007) 37(365) *Environmental Law* 365, 367.

<sup>41</sup> McAdam and Saul, above n 4, 2; UNHCR, above n 20, 9.

Lastly, this thesis reviews national laws and policies that are relevant to climate change and migration in Bangladesh to examine how far these laws and policies protect climate change induced displacement. It also deals with the question of how legal apparatuses can be employed for the protection of climate change induced displacement, and it analyses possible policy implications and responses related to climate change displacement.

### **1.5 Significance of the Study**

The global discourse on the effects of climate change often approaches the issue from a scientific, ecological, environmental, political or sociological perspective.<sup>42</sup> The majority of researchers are now engaged in ‘developing the empirical base for understanding these migration and displacement scenarios, processes and impacts; developing predictive tools based on typologies of forced displacement, in identifying ‘tipping points’ and mapping potential environmental ‘hotspots’; and in exploring adaptation and resilience responses. These are mostly related to the “who”, “how many”, “when” and “where to” questions’.<sup>43</sup>

However, climate change and consequent human displacement is not just a scientific or social issue; it has many legal implications. The individuals likely to be displaced due to the effects of climate change require protection through legal and policy apparatuses. However, little systematic academic research has been conducted on the ‘rigorous legal analysis’ of the causal relationship between climate change and migration and the protection framework of climate change induced displacement.<sup>44</sup> As McAdam and Saul said, ‘[t]he few relevant legal articles that have addressed the issue have typically done so through a narrow refugee law lens, focusing on environmental displacement generally rather than climate change induced displacement in particular’.<sup>45</sup> The authors generally illustrate the concept based on the notion of the Refugee Convention framework.<sup>46</sup> Their research discusses climate change induced displacement issues in a fragmented and piecemeal manner without providing a concrete solution. In particular, no research has

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<sup>42</sup> Myers, above n 33, 752; Myers, above n 33; Castles, above n 11, 2–3; Black, above n 11, 2–8.

<sup>43</sup> Zetter, above n 24, 11.

<sup>44</sup> McAdam and Saul, above n 4, 3.

<sup>45</sup> Ibid.

<sup>46</sup> Convention relating to the Status of Refugees (adopted 28 July 1951, entered into force 22 April 1954) 189 UNTS 137, read in conjunction with Protocol relating to the Status of Refugees (adopted 31 January 1967, entered into force 4 October 1967) 606 UNTS 267. For example, JB Cooper, ‘Environmental Refugees: Meeting the Requirements of the Refugee Definition’ (1998) 6 *New York University Environmental Law Journal*, 480; Keane, above n 39, 209; CM Kozoll, ‘Poisoning the Well: Persecution, the Environment, and Refugee Status’ (2004) 15 *Colorado Journal of International Environmental Law and Policy*, 271.

exclusively focused on a national legal and policy framework for climate change displacement in Bangladesh.

In this context, this thesis pursues the legal analysis of the protection mechanisms of climate change induced displacement. It establishes a legal causal relationship between climate change and consequent human displacement. It also discusses the legal and moral responsibilities of developed countries for the protection of climate change induced displaced persons in Bangladesh under international law. This thesis has important ramifications for the protection of climate change induced displacement in Bangladesh. It will closely examine the wide spectrum of adaptive strategies and their feasibility and effectiveness in addressing climate change induced migration.

### ***1.6 Methodology***

This thesis is an analytical appreciation and critical appraisal of the current protection mechanisms of climate change induced displacement around the world and in Bangladesh in particular. The primarily desk-based research depends on secondary sources of information. The methodology comprises a literature review, comparative analyses and a synthesis of findings. The first step is to investigate the sources available on the topic. Analytical methods are mostly employed to generate ideas on the research theme. The literature search and data collection are an integral part of the study because they help to understand the effects of climate change on people's lives, as well as their vulnerability, migration trends, courses of action undertaken. In addition, they identify the gaps that exist in the policies and strategies. For this, the study has consulted both primary and secondary materials that have been explicitly written on climate change, migration law and human rights law.

The wide variety of national and international sources includes normative instruments (e.g., statutes, guidelines relating to human rights, protection of IDPs, environmental migration, temporary protection measures), policy reports and documents dealing with environmental issues (e.g., climate and environmental change, and internal and international migration), and relevant development issues. In addition, it includes country-based studies and local research publications, government documents (e.g., statistics, legislations and policy documents), academic research (e.g., books, monographs and journal articles), working papers and other publications, and research carried out by national, bilateral and multilateral organisations, non-government organisations (NGOs) and research institutions, as well as website searches of relevant literature.

The policies and strategies of other jurisdictions towards climate change induced displacement are examined using a comparative analysis in order to formulate practical and sustainable policy recommendations for the thesis. Obtaining information and insights from the policies practiced in other countries strengthened the practicality of the findings.

### **1.6.1 Terminology**

A number of terms are used interchangeably throughout the thesis to refer to persons who are displaced for environmental/climate change reasons. These terms include migration, forced migration, displacement, human mobility, population dynamics, environmental/climate change migrants, environmental refugee, climate refugee and climate change induced migration or displacement.

### **1.6.2 Limited Extent of Environmental Migration: Climate Change Induced Migration**

While migration resulting from environmental change has long been part of academic and policy discourses on migration, it is only relatively recently that climate change induced migration *per se* has received concern and attention from researchers. Migration relating to climate change needs to be studied in isolation to understand a number of key issues, including the drivers of migration resulting from climate change, the independent role of climate change as a catalyst for migration and the patterns of migration.

This thesis recognises the necessity of protection for all forms of environmental migration, including migration due to industrial accidents and development projects. However, it exclusively focuses on climate change related displacement in order to establish climate change as a major cause of displacement, to identify the broader responsibility for displacement, to mitigate its effects and to fund the work needed for the mitigation. In Bangladesh, there are climate change related action plans and strategies and multiple channels of funding for issues relating to climate change. More importantly, if impending climate change induced migration management is integrated with climate change policies and strategies and premised on climate change adaptation strategies, it will have strong and established structures and may seek international cooperation, such as funding based on the historical and current responsibilities of developed countries for anthropogenic climate change.

To develop laws and policies in this thesis, climate change induced displacement will be defined in a strict sense. Therefore, this thesis deals with climate migration only—not environmental migration. Climate migrants are people who are only moving because of

global climate change as opposed to any ‘changes in the environment’. This difference has important consequences when dealing with the role of the international community, as it will be argued that developed countries are responsible for causing climate change. The term ‘climate change induced displacement’ encompasses all people who are forced, motivated or likely to be motivated by the effects of climate change.

### ***1.6.3 Focus on Legal and Policy Issues***

As this thesis is designed to focus on legal and policy issues, it does not prioritise the effects of climate change on human migration, the migration patterns or their socio-economic aspects. Therefore, it does not have any empirical research on these issues. Rather, for a deeper understanding of the human rights implications for people who are, or may be, displaced due to climate change, this study mainly relies on the authoritative works of other scholars, government bodies, international organisations and intergovernmental organisations such as the IPCC, IOM and UNHCR for data regarding climate change effects in Bangladesh. To understand Bangladesh’s migration patterns, this study relies on the works of eminent geographers, social scientists and the IOM. It acknowledges the uncertainty and debates associated with the identification of environmental migration flows, as there is no internationally agreed definition to characterise these migration flows. It is difficult to estimate how many people may move, or to determine their likely origins or destinations. Information on international migration is particularly poor, and current information does not provide a basis for the realistic projections of future international mobility levels.

### ***1.6.4 Climate Change Induced Displacement in Bangladesh: A Case Study***

While all countries will eventually be affected by climate change, some are more immediately and particularly vulnerable. The thesis selects Bangladesh as a case study for developing a national legal framework for climate change induced displacement for several reasons. With its extremely dense population and its exposure to cyclones and floods, Bangladesh is the quintessential example of climate change induced displacement. It features prominently in global discussions of climate change because millions of poor Bangladeshis live in the deltaic region and are at a high risk of severe or catastrophic environmental hazards, with flood risk from sea surges, river flows and local rainfall events, as well as coastal and river-bank erosion.

In Bangladesh, nearly 30 per cent of the land is two metres below the contour sea level, and 17 million Bangladeshis live less than one metre above sea level.<sup>47</sup> According to an IPCC estimate, the sea level in the coastal areas of Bangladesh will rise by one metre by 2050 and two metres by 2100. As a result, the sea will submerge almost one-fifth of the total area of Bangladesh, which is home to 150 million people. Therefore, Bangladesh is expected to face massive environmental displacement, which is calculated to be about 49 million, 63 million and 78 million people in 2010, 2015 and 2020 respectively.

Thus, Bangladesh's environmental vulnerability, geographical location, poor socio-economic conditions and potential large-scale environmental displacement, which make it susceptible to climate change effects, were the main motivating factors for its selection as the case study.

### ***1.7 Structure of the Thesis***

For organisational purposes, this thesis is divided into 10 chapters.

**Chapter 1:** The introductory chapter provides an overview of the project. Setting the research question at the outset, this chapter depicts the conceptual background of the study. It discusses how the climate change induced displaced persons fall outside the legal protection at the national and international levels. It then describes how this research fits into this problem statement and the gaps that it fulfils. It also provides the methodology and structure of the thesis.

**Chapter 2:** This chapter examines whether environmental degradation resulting from climate change can play a key role in migration. More specifically, it is an enquiry on the possibility of migration by the climate change effects. Thus, it deals with the following foundational issues relating to climate change induced displacement:

- i. overview of the effects of climate change on various aspects of human lives, leading to mass migration
- ii. interconnection between climate change and eventual migratory movements
- iii. review of the current state of knowledge existing debates on the potential number of people displacement
- iv. causes and types of migration, including the multi-causality of migration

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<sup>47</sup> Boano, Zetter and Morris, above n 22, 15.

- v. debates on environmental/climate change migration and the problem of multi-causality to show the diverse and complex issues related to environmental migration
- vi. issue of recognition and protection for migrants forced to move to safer places due to certain direct effects of climate change, notwithstanding the existence of multi-causality.

**Chapter 3:** This chapter conceptualises climate change induced displacement in Bangladesh. It provides a short overview of socio-economic conditions in Bangladesh and discusses how certain types of climatic effects interact with human mobility. Second, it analyses the typology of climate change induced displacement based on the causes and extent of movements. The chapter concludes by creating a definition of persons moving due to climate change induced displacement based on the causal factors driving migration in Bangladesh.

**Chapter 4:** This chapter examines the appropriateness of existing international legal frameworks in regulating climate change induced displacement. It specifically scrutinises the existing refugee norms and structure available to persons displaced by environmental disasters. In doing so, it highlights the gaps and limitations in the relevant regimes of international refugee law. To curb the current inadequacy of legal responses, it discusses the methods used to develop the capacity of international legal apparatuses to support the needs of persons vulnerable to displacement induced by climate change.

This chapter examines how the principle developed in international law provides the ethical backdrop against which various human rights concerns arise. It also proposes to develop ‘soft guidelines’ that recognise the plight of climate change induced displacement and would establish an international regime for the status, treatment and protection of climate change displaced persons. It then examines whether complementary protection, international cooperation, distributive justice and the flexible provisions of the UNFCCC, such as equity and ‘common but differentiated responsibilities’ (CBDR), can provide a framework for addressing human rights violations stemming from climate change induced displacement. These guidelines would also reflect the underlying issues raised by climate change displacement and fill the legal gap with the specificity required by states and communities. This instrument should ensure that climate change displaced persons receive adequate assistance in the form of human rights protection and humanitarian aid. It also

outlines a legal and institutional framework based on equity, justice and human rights principles to respond to climate change induced human migration.

**Chapter 5:** As displaced persons remain citizens of Bangladesh and are therefore entitled to protection, they will likely be treated as a domestic concern and not within the purview of international attention. This chapter considers the human rights dimensions of climate change induced displacements. Specifically, it examines how the rights contained in the key international instruments are threatened by the consequences of climate change. These include the full spectrum of civil, cultural, economic, political and social rights. The study then considers the obligations that are imposed on Bangladesh, in both international and domestic laws, to respond to these threats. To do so, it illustrates the relevant provisions of international instruments and the concerned domestic laws and policies to relate them with the protection of climate change induced displacement. This chapter also argues for a rights-based legal framework and examines the potential benefits of the human rights-based approach in tackling challenges posed by climate change displacement. It also analyses how human rights standards can provide principled guidance to find solutions for displaced persons.

**Chapter 6:** This chapter examines the existing domestic laws and policies regarding climate change induced displacement in Bangladesh. It also emphasises developing a range of legal and policy options to deal with multifarious challenges posed by climate change induced displacement. By examining domestic laws regarding environmental displacement in different countries, the required laws and policies are suggested in this chapter using a comparative analysis.

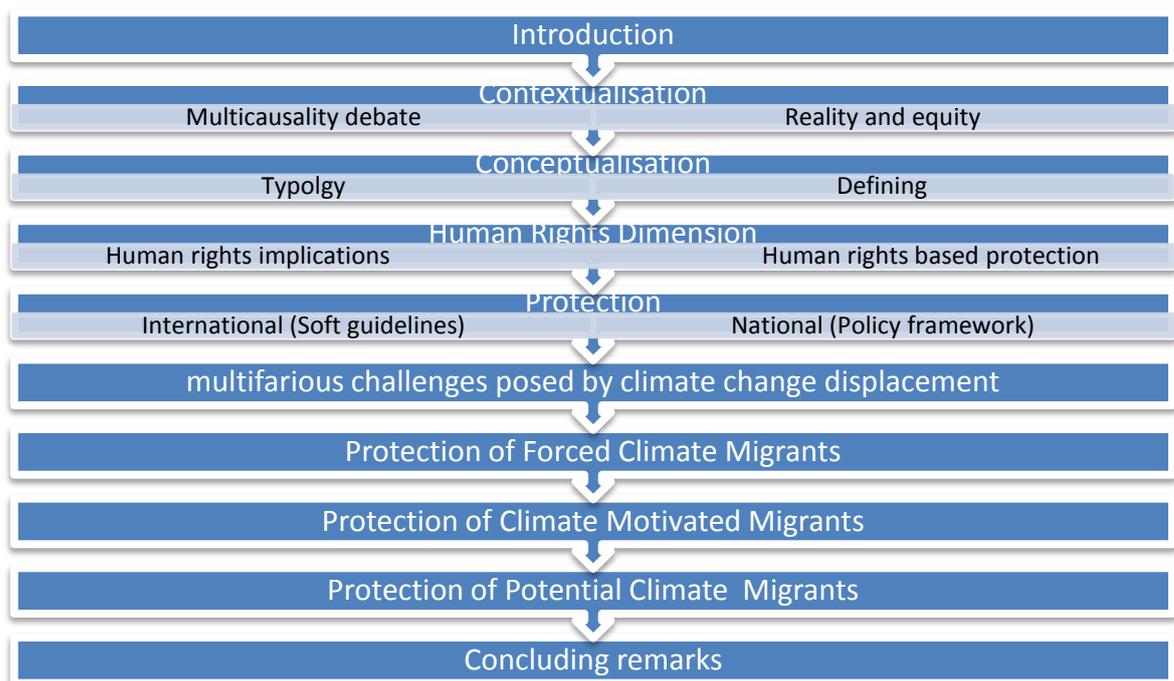
**Chapter 7:** This chapter proposes the enactment of ‘guiding principles for forced climate migrants’ that require immediate humanitarian assistance. The contents of the guiding principles are heavily drawn from the binding international human rights law and soft laws such as the UN Guiding Principles on IDPs, the Operational Guidelines and the Hyogo Framework. This chapter tailors these principles in the context of climate change induced displacement in Bangladesh, and it provides a draft national legal framework for the protection of forced climate migrants.

**Chapter 8:** This chapter highlights the possibility of considering migration part of the portfolio of adaptation strategies mobilised by migrants themselves; it does not necessarily signal a failure to adapt. In many cases, migration is a way of coping with climate change as well as a mechanism to reduce poverty and increase resilience in affected areas. Thus,

this chapter discusses how people who migrate pre-emptively from climate-affected areas can receive support so they can adopt migration as a coping strategy for alternative livelihoods in the face of impending climatic disasters.

**Chapter 9:** This chapter discusses the importance of adaptation strategies to prevent displacement. It suggests alternative adaptation measures and strategies that may have a positive effect in increasing resilience to environmental changes.

**Chapter 10:** This chapter concludes the thesis with policy recommendations. It demonstrates how the thesis deals with debates and protection gaps in relation to climate change induced displacement at the national and international levels. It also identifies issues for future research and policy development as a way forward for the protection of climate change displacement. Premised on human rights implications of climate change induced displacement, it urges the international community to shoulder the responsibility and address the protection of the human rights of this emerging category of migrants.



**Box 1: Flow chart of the progression of the thesis**

## CHAPTER 2

# CONTEXTUALISING CLIMATE CHANGE AS A CAUSE OF MIGRATION\*

### 2.1 Introduction

The potential effects of anthropogenic climate change<sup>1</sup> on many different natural and social systems have been documented in recent scientific reports and studies that irrefutably establish the obvious link between climate change and environmental vulnerability.<sup>2</sup> The increasing individual or combined effects of climate change are posing challenges to human lives and livelihoods, which are likely to trigger mass human movements within and across borders around the world.<sup>3</sup> Various intergovernmental agencies, such as the IPCC,<sup>4</sup> UNHCR<sup>5</sup> and IOM,<sup>6</sup> as well as a number of research reports and academic papers, anticipate potential large-scale migratory movements due to the effects of climate change and warn that this potential catastrophe will exceed all instances of refugee crises in terms

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\* An earlier version of this chapter has been published in a refereed journal. The citation of this article is MM Naser, 'Climate Change, Environment and Migration: A Complex Nexus' (2012) 36(3) *William and Mary Environmental Law and Policy Review* 713–768.

<sup>1</sup> Climate change caused by human interferences with the world: 'a change of climate that is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and that is in addition to natural climate variability observed over comparable time periods' (UN Framework Convention on Climate Change (1992: Art. 1 (2))

<sup>2</sup> IPCC, *Climate Change 2007: The Physical Science Basis, Summary for Policy Makers, Contribution of Working Group II to the Fourth Assessment Report of the IPCC 2-16 (2007)* (hereinafter IPCC, Summary for Policy Makers), <<http://www.ipcc.ch/pdf/assessment-report/ar4/wg2/ar4-wg1-spm.pdf>>; Camillo Boano, 'FMO Research Guide on Climate Change and Displacement' (Forced Migration Online (FMO) Research Guide, 2008) 3.

<sup>3</sup> Frank Lazcko, 'Migration, the Environment and Climate Change: Assessing the Evidence' (Background Paper, The German Marshall Fund of the United States, June 2010) 1, <[http://www.gmfus.org/galleries/default-file/Lazcko\\_MAH\\_EditsV2.pdf](http://www.gmfus.org/galleries/default-file/Lazcko_MAH_EditsV2.pdf)>.

<sup>4</sup> The IPCC was set up jointly by the World Metrological Organization (WMO) and the UNEP in 1988 to 'assess on a comprehensive, objective, open and transparent basis the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts and options for adaptation and mitigation'. The IPCC is open to all members of the WMO and UNEP and meets annually at the plenary level of government representatives at sessions attended by officials and experts from relevant ministries, agencies and research institutions from member countries and participating organisations. Its first assessment, released in 1990, was the impetus for the creation of the UNFCCC in 1994, which serves as an overall framework for intergovernmental efforts to tackle the challenges posed by climate change.

<sup>5</sup> The Office of the UNHCR was established on 14 December 1950 by the UN General Assembly. The agency is mandated to lead and coordinate international action to protect refugees and resolve refugee problems worldwide.

<sup>6</sup> Established in 1951, the IOM is the leading intergovernmental organisation in the field of migration. It works closely with governmental, intergovernmental and non-governmental partners.

of the number of people affected.<sup>7</sup> While the IPCC indicated as early as 1990 that one of the greatest effects of climate change may be on human migration,<sup>8</sup> the UNHCR estimates that between 50 and 200 million people may be displaced by 2050, either within their country or across borders.<sup>9</sup> The available estimates of displacement range between 200 million and 1 billion people by 2050 because the predictions vary ‘depending on underlying methods, scenarios, timeframes and assumptions’.<sup>10</sup> However, authors have challenged these alarming figures due to ‘methodological problems and caveats’.<sup>11</sup>

With these staggering predictions by scientists, the issue of possible environment-related human movement has rarely received attention from policy-makers.<sup>12</sup> The indifference arises, according to Laczko, partly due to a lack of consensus among migration researchers and experts on issues related to the nexus between environment and migration and the conceptualisation of environmental displacement.<sup>13</sup> Many authors have challenged the conceptualisation of environment/climate change as a primary cause of forced displacement.<sup>14</sup> Some scholars have even refuted the existence of ‘environmental/climate

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<sup>7</sup> In 1992, the IOM published a report on ‘Migration and Environment’ in which it stated that:

Large numbers of people are moving as a result of environmental degradation that has increased dramatically in recent years. The number of such migrants could rise substantially as larger areas of the earth become uninhabitable as a result of climate change (IOM and the Refugee Policy Group (RPG), ‘Migration and the Environment’, 1992).

<sup>8</sup> IPCC, Climate Change, ‘The IPCC Impacts Assessment’, Report prepared for IPCC by Working Group II (IPCC, 1990) 2–22, <[http://www.ipcc.ch/ipccreports/far/wg\\_II/ipcc\\_far\\_wg\\_II\\_full\\_report.pdf](http://www.ipcc.ch/ipccreports/far/wg_II/ipcc_far_wg_II_full_report.pdf)>; IPCC, Climate Change 2007: Impacts, Adaptation and Vulnerability, Contribution of Working Group II to the Fourth Assessment Report of the IPCC (IPCC, 2007) 488 (hereinafter IPCC, Impacts, Adaptation and Vulnerability), <[http://www.ipcc.ch/ipcc\\_reports/ar4-wg2.htm](http://www.ipcc.ch/ipcc_reports/ar4-wg2.htm)>; Her Majesty’s Treasury, Stern Review Report on the Economics of Climate Change (2006) 111 (hereinafter Stern Review).

<sup>9</sup> UNHCR, ‘Forced Migration in the Context of Climate Change: Challenges for States under International Law’ (2009) 3.

<sup>10</sup> Frank Biermann and Ingrid Boas, ‘Preparing for a Warmer World: Towards a Global Governance System to Protect Climate Refugees’ (2010) 10(1) *Global Environmental Politics* 61. For the predictions and estimates in detail, see Christian Aid, ‘The Human Face of Climate Change’ (A Christian Aid Report, Christian Aid, 2007) 13; Friends of the Earth, ‘A Citizen’s Guide to Climate Refugees’ (Friends of the Earth, 2007) 1; IOM, *Migration, Climate Change and the Environment* (IOM Policy Brief, IOM, 2009) 7; James S Pender, ‘What is Climate Change? And How it will Effect Bangladesh’ (Briefing Paper (Final Draft), Church of Bangladesh Social Development Programme, 2008) 55; Norman Myers and Jennifer Kent, ‘Environmental Exodus: An Emergent Crisis in the Global Arena’ (Research Report, Climate Institute, June 1995) 17; UNHCR, ‘Climate Change, Natural Disasters and Human Displacement: A UNHCR Perspective’ (UNHCR, 2008) 7.

<sup>11</sup> Biermann and Boas, above n 10, 61, 67.

<sup>12</sup> Laczko, above n 3, 1.

<sup>13</sup> Ibid.

<sup>14</sup> Ibid 2.

change migration’ based on the problem of multi-causality associated with the issue.<sup>15</sup> They claim that the decision to move usually depends on a combination of other complex socio-economic factors, and it is difficult to segregate ‘environment’ as a causal factor from those motivations.<sup>16</sup> More importantly, there is no agreed definition to identify this category of human displacement; thus, it remains difficult to estimate future trends.<sup>17</sup> There is also a serious dearth of empirical research on the nexus between migration and climate change.<sup>18</sup> Combined, these factors make the available predicted figures and numbers of ‘environmental migration’ or ‘climate migration’ diverse and debatable. Thus, this category of people fails to receive recognition and protection in international law as a separate category and is beneath the policy radar at the national and international levels.

In this context, this chapter deals with the question of whether environmental degradation resulting from climate change can play a key role in migration. More specifically, it is an enquiry on the possibility of migration due to climate change effects. Before climate change can be considered a major cause of population movements, it is essential to develop an understanding of how, and what types of, environmental effects play a substantial role in triggering human migration. First, this section correlates the possible link between environmental change and consequent human migration. Second, it provides an overview of the predicted numbers and figures of environmental migration globally and in Bangladesh. Third, it exposes the debates on environmental/climate change migration and the problem of multi-causality to show the diverse and complex issues related to environmental migration. Fourth, it argues for the recognition and protection of climate change induced displacement, notwithstanding the existence of multi-causality.

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<sup>15</sup> See Richard Black, ‘Environmental Refugees: Myth or Reality?’ (Working Paper No. 34, UNHCR, 2001) 14; Stephen Castles, ‘Environmental Change and Forced Migration: Making Sense of the Debate’ (Working Paper No. 70, UNHCR, 2002) 10.

<sup>16</sup> Ibid.

<sup>17</sup> Biermann and Boas, above n 10, 67; Susana B Adamo, ‘Addressing Environmentally Induced Population Displacements: A Delicate Task’ (Background Paper for the Population–Environment Research Network Cyberseminar on ‘Environmentally Induced Population Displacements, 2008) 5.

<sup>18</sup> Refugee Studies Centre, ‘Forced Migration Research and Policy: Overview of Current Trends and Future Directions’ (Report, Refugee Studies Centre, 2010) 12.

## 2.2 Climate Change and Environmental Vulnerability

Although a range of factors generally motivates people to move from one place to another, including economics, nationality, religion, war, ethnic hatred and political turmoil, the environment has been a unique triggering factor for human mobility throughout history.<sup>19</sup> However, in the twenty-first century, the nature and extent of environmental migration changed substantially due to environmental degradation resulting from global climate change.<sup>20</sup> From its inception, the IPCC continuously warned the international community that climate change, which alters the atmosphere and the global environment through anthropogenic greenhouse gas emissions, is changing the physical environment in ways that make human populations more vulnerable to environmental stress.<sup>21</sup> Since the mid 1990, after the publication of the First Assessment Report of the IPCC, apart from the ‘tentative and theoretical’ scientific reports on the cause and effects of climate change, a growing international consensus has developed on this issue.<sup>22</sup> In the Fourth Assessment Report (4AR) in 2007, the IPCC called human-induced climate change ‘unequivocal’ and authoritatively established that it is accelerating the severe effects on the environment and the deterioration of living conditions in many parts of the world, resulting in significant stress on ecosystems, socio-economic systems and human welfare.<sup>23</sup>

Manifestations of climate change are numerous and include rising sea levels, increasing global warming and glaciers melting, as well as the multiplication of extreme weather

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<sup>19</sup> See Arthur H Westing, ‘Environmental Refugees: A Growing Category of Displaced Persons’ (1992) 19 *Environmental Conservation* 201; Dana Zartner Falstrom, ‘Stemming the Flow of Environmental Displacement: Creating a Convention to Protect Persons and Preserve the Environment’ (2001) 1 *Colorado Journal of International Law and Policy* 3; Frank Laczko and Christine Aghazarm, *Migration, Environment and Climate Change: Assessing the Evidence* (IOM, 2009) 13.

<sup>20</sup> Since the beginning of the industrial revolution around 1750, one of the greenhouse gases, carbon dioxide, has increased by over 30% and is now at a higher concentration in the atmosphere than it has been for many thousands of years. Chemical analysis of the carbon demonstrates that this increase is due largely to the burning of fossil fuels - coal, oil and gas. These are consumed mainly through industry and transportation and along with other greenhouse gases such as nitrous oxide and methane that are also produced by human activity are thickening the natural greenhouse layer. This therefore leads to a warming of the earth, commonly known as ‘Global Warming’ that may also cause more evaporation and a further increase in the greenhouse layer due to increased water vapour.

<sup>21</sup> See IPCC: Summary for Policymakers (WG-I), above n 2, 2–16; IPCC: Summary for Policymakers (WG-II), above n 8, 9.

<sup>22</sup> Sara C Aminzadeh, ‘A Moral Imperative: The Human Rights Implications of Climate Change’ (2007) 30 *Hastings International and Comparative Law Review* 231, 233; Walter Kälin, ‘The Climate Change—Displacement Nexus’ (Speech delivered to the ECOSOC Panel on Disaster Risk Reduction and Preparedness: Addressing the Humanitarian Consequences of Natural Disasters, 16 July 2008) 1. See IPCC: Summary for Policymakers (WG-I), above n 1, 2–16; IPCC: Summary for Policymakers (WG-II), above n 8, 9.

<sup>23</sup> Boano, above n 2, 3; Marcos A Orellana, ‘Practical Approaches to Integrating Human Rights and Climate Change Law and Policy’ (Center for International Environmental Law, 2009) 8; IPCC: Summary for Policymakers (WG-I), above n 2, 9.

events such as storms, cyclones, droughts, desertification, scarcity of water resources and depletion of natural resources due to more frequent and severe climatic disasters.<sup>24</sup> Natural disasters<sup>25</sup> and calamities around the world have increased in terms of frequency, intensity and severity, which is unprecedented in human history.<sup>26</sup> According to the IOM report on migration, environment and climate change, the number of recorded natural disasters, including storms, floods and droughts, has increased threefold over the past 30 years.<sup>27</sup> For example, the reporting of natural disasters has drastically been increased from 100 in 1974 to 400 in 2003.<sup>28</sup> Along with higher frequency, the intensity and severity of climate-related disasters has also increased.<sup>29</sup>

Global warming, which is primary evidence for worldwide climate change, is one of the important factors contributing to environmental degradation and natural disasters.<sup>30</sup> Evidence indicates that the Earth's climate system is warming in a way that is unprecedented in the history of human civilisation.<sup>31</sup> The continuing temperature acceleration 'might break the balance of human ecosystem that has been long established at a lower temperature'.<sup>32</sup> The latest report of the IPCC estimates a rise in the global

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<sup>24</sup> See IPCC: Summary for Policymakers (WG-II), above n 2; James Morrissey, 'Environmental Change and Forced Migration' (RSC Background Paper, Refugee Studies Centre (RSC), 2009) 2; Robert Stojanov, 'Environmental Refugees—Introduction' (2004) 38 *Geographica* 77, 79; Orellana, above n 23, 8.

<sup>25</sup> The International Disaster Response Law Guidelines put forward by the International Federation of Red Cross and Red Crescent Societies (IFRC) defines a disaster as 'a serious disruption of the functioning of society, which poses a significant, widespread threat to human life, health, property or the environment, whether arising from accident, nature or human activity, whether developing suddenly or as the result of long-term processes, but excluding armed conflict' (IFRC, *International Disaster Response Law Guidelines*, 2011) 14 <[http://www.ifrc.org/PageFiles/41203/1205600-IDRL%20Guidelines-EN-LR%20\(2\).pdf](http://www.ifrc.org/PageFiles/41203/1205600-IDRL%20Guidelines-EN-LR%20(2).pdf)>.

<sup>26</sup> Falstrom, above n 19, 3; Vikram Kolmannskog, 'Climate Change, Disaster, Displacement and Migration: Initial Evidence from Africa' (UNHCR, 2009) 2. [Now natural disasters are 'more intense and frequent and the human impacts are more devastating' (António Guterres, 'Climate Change Could Become the Biggest Driver of Displacement' (Speech delivered at the press conference at the United Nations Climate Change Conference 2009, Copenhagen, Denmark, 16 December 2009) <<http://www.unhcr.org/4b2910239.html> at 02 March 2009>.

<sup>27</sup> Laczko and Aghazarm, above n 21, 259.

<sup>28</sup> Ibid.

<sup>29</sup> Kolmannskog, above n 26, 2. See *Climate Change Could Become the Biggest Driver of Displacement: UNHCR Chief* (UNHCR, 16 December 2009) <<http://www.unhcr.org/4b2910239.html>> (hereinafter *Climate Change Could Become the Biggest Driver of Displacement*), quoting UNHCR António Guterres's remarks at a press conference at the United Nations Climate Change Conference in Copenhagen, Denmark.

<sup>30</sup> See IPCC: Summary for Policymakers (WG-I), above n 2. Droughts, desertification, water scarcity, precipitation, melting glaciers, cyclones and risk, magnitude and frequency of floods are likely to increase due to global warming. See Nathaniel L Bindoff et al. (IPCC), 'Observations: Oceanic Climate Change and Sea Level' in S Solomon et al. (eds) *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (2007) 387.

<sup>31</sup> Ibid; Stern Review, above n 8, 11.

<sup>32</sup> David D Zhang et al., 'Global Climate Change, War, and Population Decline in Recent Human History' (2007) 104 *Proceedings of the National Academy of Sciences of the United States of America* 19214, 19219.

average surface temperature of 1.8° C to 4° C between 1990 and 2100, although it could be as high as 6.4° C.<sup>33</sup> In Bangladesh, the General Circulation Model (GCM) results predict an average temperature increase of 1.0° C by 2030 and 1.4° C by 2050.<sup>34</sup> As evidence of global warming, global sea levels will rise by at least 18 cm, and up to 59 cm, by 2100.<sup>35</sup> Recent scientific analysis indicates that this figure could be closer to 150 cm within the same timeframe.<sup>36</sup>

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<sup>33</sup> IPCC: Summary for Policymakers (WG-I), above n 2, 13.

<sup>34</sup> R Selvaraju et al., 'Livelihood Adaptation to Climate Variability and Change in Drought-Prone Areas of Bangladesh: Developing Institutions and Options' (Institution for Rural Development 5, Asian Disaster Preparedness Centre and Food and Agricultural Organization of the United Nations, 2006) iii.

<sup>35</sup> IPCC: Summary for Policymakers (WG-I), above n 2, 13.

<sup>36</sup> Richard Black, *Forecast for Big Sea Level Rise* (2008), <<http://news.bbc.co.uk/2/hi/7349236.stm>>.

The Garnaut Review noted that 'some of the recent scientific work suggests that future sea-level rise could be much worse than the sea-level rise outcomes projected in the IPCC's 4AR' (Ross Garnaut, *The Garnaut Climate Change Review: Final Report 94*, 2008).

### **Observations of changes in climate**

- Widespread changes in extreme temperatures have been observed over the last 50 years (IPCC WG I, section 3.2.2.1).
- Reductions in the number of frost days in mid-latitude regions, increases in the number of warm extremes and a reduction in the number of daily cold extremes (IPCC WG I, section 3.8.2.1).
- Heat waves have increased in duration beginning in the latter half of the 20<sup>th</sup> century (IPCC WG I, section 3.8.2.1).
- Significant increased precipitation in the eastern parts of North and South America, northern Europe and northern and central Asia (IPCC WG I, section 3.3.2.2).
- Drying has been observed in the Sahel, the Mediterranean, southern Africa and parts of southern Asia (IPCC WG I, section 3.3.2.2).
- Substantial increases in heavy precipitation events has been observed (IPCC WG I, section 3.8.2.2).
- Increase of intense tropical cyclone activity in the North Atlantic since about 1970, correlated with increases in tropical sea surface temperatures. There is also suggestion of increased intense tropical cyclone activity in some other regions where concerns over data quality are greater (IPCC WG I, section 3.8.3.2).
- More intense and longer droughts have been observed over wider areas, particularly in the tropics and subtropics since the 1970s (IPCC WG I, section 3.3.4).
- Altered distribution of some infectious disease vectors (IPCC WG II, section 8.2.8).

### **Future climate change projections**

- Increased warming with the greatest temperature increases in high northern latitudes, with less warming over the southern oceans and North Atlantic (IPCC WG I, section 10.3.2.1).
- More frequent, intense and longer lasting heat waves (IPCC WG I, section 10.3.6.2).
- An intensification and expansion of wildfires is likely globally (IPCC WG II, section 4.4.2-5).
- Fewer, shorter, less intense cold spells/cold extremes in winter (IPCC WG I, 11.3.3.2).
- Increased precipitation in high latitudes, and decreases in most subtropical land regions (IPCC WG I, 10.3.2.3).
- More heavy precipitation events (IPCC WG I, section 10.3.6.1).
- Increased risk of flooding (intense and heavy rainfall coupled with high runoff) (IPCC WG I, section 10.3.6.1).
- Increases in areas affected by droughts (IPCC WG I, section 10.3.6.1).
- Sea level is expected to continue to rise over the next several decades (IPCC WG I, sec. 10.6. 1).
- More severe tropical cyclones, with greater wind speeds and more intense precipitation (IPCC WGI, section 10.3.6.3).
- Widespread increase in thaw depth in most permafrost regions (IPCC WG I, section 10.3.3.2).

## **Box 2: Findings from the 2007 IPCC Fourth Assessment Report—**

### **The link between climate change and extreme events**

#### ***2.3 Climate Change Induced Displacement: Myth or Reality?***

As the Earth's climate is changing rapidly, a growing number of authors are putting forward estimates of both the existing number of climate change induced displaced persons and of potential future migration flows around the world.<sup>37</sup> The number of future environmental migration is a ten-fold increase on today's entire population of documented

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<sup>37</sup> Morrissey, above n 24, 4.

political refugees and IDPs.<sup>38</sup> While current displacement figures are alarming, the predictions for 2050 or 2100 provide estimates that are more staggering.

Based on a plausible range-of-emissions scenario, current estimates typically range from 25 million to 1 billion, but are usually estimated to be around 200–250 million people by 2050, either within their country or across borders, and on a permanent or temporary basis, owing to the direct effects of climate change.<sup>39</sup> Thus, by 2050, one in 45 people in the world may be displaced by climate change (from a predicted global population of nine billion by 2050).<sup>40</sup>

Authors/reports	Timeframe	Global (M)	Bangladesh (M)	Terminology
IPCC (FAR)	2050	150		Climate change related movement
Myers	2050	200		Environmental refugees
Myers	2002	25		Environmental refugees
UNHCR	2008	36		Climate change displacement
UNU-EHS	2010	50		Environmental migration
Friends of Earth, Australia	2050	200		Climate refugees
UNFCCC	2010	50		Environmental refugees
Christian Aid	2050	1,000		
Nicholls	2080	50–200		Climate change displacement
Ponder	2080		51–97	
IPCC	2050		15–20	
IOM	2050		13–40	Environmental migration
Bangladeshi PM	2050		30	Climate refugees

**Box 3: Predicted numbers and figures of climate change induced displacement**

<sup>38</sup> Oli Brown, 'The Numbers Game' (2008) 31 *Forced Migration Review* 8, 8.

<sup>39</sup> See Bonnie Docherty and Tyler Giannini, 'Confronting a Rising Tide: A Proposal for a Convention on Climate Change Refugees' (2009) 33 *Harvard Environmental Law Review*, 349, 353; Biermann and Boas, above n 10, 67–72; Angela Williams, 'Turning the Tide: Recognizing Climate Change Refugees in International Law' (2008) 30(4) *Law & Policy*, 502, 506; Fabrice Renaud et al., 'Control, Adapt or Flee: How to Face Environmental Migration?' (Intersections No. 5/2007, UN University–Institute for Environment and Human Security (UNU–EHS), 2007) 17; Norman Myers, *Environmental Refugees: An Emergent Security Issue*, 13<sup>th</sup> Economic Forum, Prague, 23–27 May 2005; Intergovernmental Panel on Climate Change, *Third Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge: Cambridge University Press, 2001); Stern Review, above n 8, 56, 77; Christian Aid, above n 11, 50; Norman Myers, 'Environmental Refugees in a Globally Warmed World' (1993) 43 *BioScience* 752; Robert J Nicholls, 'Coastal Flooding and Wetland Loss in the 21<sup>st</sup> Century: Changes Under the SRES Climate and Socio-Economic Scenarios' (2004) 14 *Global Environmental Change* 69–86; Black, above n 16, 7.

<sup>40</sup> Brown, above n 38, 8. From a predicted global population of 9.075 billion in 2050, increased from 6.54 billion, at an annual growth rate of 1.1 per cent.

More alarmingly, one in every seven people is likely to be displaced in Bangladesh.<sup>41</sup> Scientists predict that rising sea levels may engulf more than 20 per cent of Bangladesh's land, displacing around 30 million people by 2050.<sup>42</sup> However, comprehensive surveys conducted in 2010 by the Association of Climate Refugees, along with over 200 community-based organisations, revealed that around 6.5 million people (1.3 million households) have already been displaced in Bangladesh due to the effects of climate change.<sup>43</sup>

The available estimates of the potential magnitude of climate change related displacement vary depending on the sources and methods used,<sup>44</sup> and the consideration of different timeframes makes predictions complicated.<sup>45</sup> While some researchers predict current numbers of displacements, others provide potential displacement numbers within the timeframe of 2050 or 2100. However, the available predictions and figures have been extensively debated in the migration literature, and many fundamental questions about the numbers, nature and extent of movements are raised in scientific, policy and academic circles.<sup>46</sup> The key issue raised by the debate around the numbers of climate change displaced persons is whether it is possible to predict with any degree of certainty the likely numbers and distribution of displaced persons.<sup>47</sup> Moreover, the existing predictions, as the IOM objects, are based on 'long-term projections with a wide geographical scale and little recognition of the ability of individuals, communities and nations to implement both

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<sup>41</sup> In September 2010, the Bangladeshi Prime Minister, Sheikh Hasina, warned that the mass movement of up to 30 million people in Bangladesh could lead to 'formidable social and even cross-border problems'. See 'PM Warns of Climate Refugee Crisis', *The Daily Star*, 22 September 2010, <[http://www.thedailystar.net/newDesign/latest\\_news.php?nid=26005](http://www.thedailystar.net/newDesign/latest_news.php?nid=26005)> (accessed 24 September 2010); 'Hasina Highlights Unfortunate Plight of Climate Migrants', *The New Nation*, 25 September 2010, <<http://nation.ittefaq.com/issues/2010/09/25/news0170.htm>>.

<sup>42</sup> Biermann and Boas, above n 10, 70; Docherty and Giannini, above n 39, 356.

<sup>43</sup> Scott Leckie, Zeke Simperingham and Jordan Bakker, 'Bangladesh's Climate Displacement Nightmare', *The Ecologist*, 18 April 2011 <[http://www.theecologist.org/blogs\\_and\\_comments/commentators/other\\_comments/854868/bangladeshs\\_climate\\_displacement\\_nightmare.html](http://www.theecologist.org/blogs_and_comments/commentators/other_comments/854868/bangladeshs_climate_displacement_nightmare.html)>.

<sup>44</sup> Docherty and Giannini, above n 39, 353; Kolmannskog, above n 26, 9; Williams, above n 39, 504; Renaud et al., above n 39, 17; Black, above n 15, 2–7; Castles, above n 15.

<sup>45</sup> Adamo, above n 17, 5; Tracey King, 'Environmental Displacement: Coordinating Efforts to Find Solutions' (2005) 18 *Georgetown International Environmental Law Review* 543, 544.

<sup>46</sup> Dominic Kniveton et al., 'Climate Change and Migration: Improving Methodologies to Estimate Flows' (International Organization for Migration Research Series, Geneva, Switzerland, 2008) 5; Black, above n 15; Castles, above n 15; Adamo, above n 17, 5; Boano, above n 2, 13.

<sup>47</sup> Tess Burton and David Hodgkinson, 'Towards a Convention for Persons Displaced by Climate Change: A Discussion Note on the Relationship between Adaptation and Displacement' (unpublished manuscript) (on file with The Hodgkinson Group—Climate Change and Aviation Advisors) 3 <<http://www.hodgkinsongroup.com/documents/Draft%20Discussion%20Note%20Adaptation%20and%20Displacement.pdf>>.

spontaneous and planned adaptations to reduce vulnerability to environmental change'.<sup>48</sup> In this respect, the migration and environment literatures tend to fall into two broad and extreme categories.<sup>49</sup>

The maximalists, or alarmists, propose that the environment can be a distinct factor that forces people to leave their homes. They often estimate that hundreds of millions of people will be forced to migrate due to the effects of climate change.<sup>50</sup> In contrast, the minimalists, or sceptics, raise questions about the methodology used to predict environmental/climate change related migration.<sup>51</sup> They argue that the environment plays a relative and nominal role in migration decisions and that 'pull factors in destination countries are often more important than push factors at home in determining whether, where, and in what volume people will migrate'.<sup>52</sup> The claim that environmental change leads directly to mass human displacement is not established with substantial evidence.<sup>53</sup> They also believe that such estimates have a large margin of error and mostly depend on underlying assumptions about population growth, economic development, temperature increases or the degree and timing of climate change effects such as rising sea levels.<sup>54</sup>

Moreover, the estimates of climate change displacement depend on 'different methods of projecting displacement ... [and] unknowable human variables such as strategies to mitigate, adapt to, and cope with the effects of climate change in particular localities'.<sup>55</sup> Black has criticised estimates of 'environmental refugees' by numerous authors as being 'without independent verification of [their] accuracy'.<sup>56</sup> There is strong advocacy from scholars, including Black and Castle, for the recognition of the multi-causality of environmental displacement.<sup>57</sup> They criticise the uncritical acceptance of a direct causal

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<sup>48</sup> Matthew Walsham, 'Assessing the Evidence: Environment, Climate Change and Migration in Bangladesh' (IOM, 2010) x.

<sup>49</sup> See Susan Martin, 'Climate Change, Migration, and Governance' (2010) 16 *Global Governance* 397, 397. Gemmenne divides the groups into 'sceptics' and 'alarmists'. (Presentation in the Conference of Climate Related Migration in Asia and Pacific: Legal and Policy Responses (10–11 November 2011, Parliament House, NSW).

<sup>50</sup> Laczko, above n 3, 2; Martin, above n 49, 397.

<sup>51</sup> Martin, above n 49, 397.

<sup>52</sup> Ibid.

<sup>53</sup> Castles, above n 15, 2.

<sup>54</sup> For criticisms of such estimates, see A Suhrke, 'Environmental Degradation and Population Flows' (1994) 47 *Journal of International Affairs* 478; Castles, above n 15, 2–3; Black, above n 15, 2–8.

<sup>55</sup> Jane McAdam and Ben Saul, 'An Insecure Climate for Human Security? Climate-Induced Displacement and International Law' (Sydney Centre for International Law, Sydney Centre, Working Paper No. 4, 2008) 4.

<sup>56</sup> Black, above n 15, 1.

<sup>57</sup> Suhrke, above n 54, 478; Castles, above n 15, 2–3; Black, above n 15, 2–8.

link between environmental stress and human displacement.<sup>58</sup> However, several issues encompass the debates on the estimated numbers, nature and extent of environmental migration.

## ***2.4 Challenges in Integrating Human Migration in the Climate Change Debate***

### ***2.4.1 Scientific Uncertainty***

Scientists cannot accurately predict the effects of climate change. The available predictions of climate change induced displacement remain controversial because many, if not all, effects of climate change will not be evident for a few decades.<sup>59</sup> It is similarly difficult to measure the frequency and immediacy of climatic events, the degrees of effects on human lives, the effects of individual choice and the variability of future emissions and meteorological scenarios.<sup>60</sup>

However, although science cannot specifically determine if climate change is the cause of a particular environmental event, the latest IPCC Report in 2007 enumerated a list of natural events that it described as ‘consistent with’ anthropogenic climate change, including warmer temperatures, more frequent droughts, more intense storms and rising sea levels.<sup>61</sup> The IPCC described the occurrence of higher temperatures as ‘virtually certain’, and it described other changes, such as increased incidences of extreme high sea levels (excluding tsunamis), increased intense tropical cyclone activity and areas affected by drought increases, as ‘likely’; that is, with more than 66 per cent probability.<sup>62</sup> Climate change science continues to evolve in order to determine more accurately the effects of climate changes on human lives.<sup>63</sup>

### ***2.4.2 Rudimentary Methodology***

Current predictions are often challenged as being ‘fraught with numerous methodological problems and caveats’.<sup>64</sup> In many cases, researchers calculate the number of environmental

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<sup>58</sup> Steve Lonergan, ‘The Role of Environmental Degradation in Population Displacement’ (Woodrow Wilson International Centre for Scholars, 1998) 8.

<sup>59</sup> Laczko, above n 3, 3; Suhrke, above n 54, 4.

<sup>60</sup> Laczko, above n 3, 3; Suhrke, above n 54, 4.

<sup>61</sup> IPCC: Summary for Policymakers (WG-II), above n 2, 18.

<sup>62</sup> Ibid 18, 21. ‘Virtually certain’ means a probability greater than 99 per cent; ‘extremely likely’ means a probability greater than 95 per cent and ‘very likely’ means a probability greater than 90 per cent.

<sup>63</sup> The IPCC is writing the Fifth Assessment Report, <<http://www.ipcc.ch/>>.

<sup>64</sup> Biermann and Boas, above n 10, 67.

migrants by considering the predicted environmental changes and the number of current or predicted populations in the affected areas without any acceptable methodology.<sup>65</sup> Their assumptions are based on ‘common sense’—that these people will eventually decide to flee in the face of environmental disasters. These generalised assumptions often fail to consider the diversity of human reactions, the possibility of changes in human behaviour and the adoption of different adaptive practices in response to environmental change.<sup>66</sup> People may adapt and become resilient to changed circumstances by building dikes, inventing new agricultural processes and improving relocation systems.<sup>67</sup> The Stern Review is clear in this respect and states that ‘the exact number of people who will actually be displaced or forced to migrate will depend on the level of investment, planning and resources ...’.<sup>68</sup>

Scholars including Kniveton, Black and Castles criticise the available estimates of climate change induced displacement as ‘stemming from a very rudimentary methodology’.<sup>69</sup> These scholars argue that ‘the different methodologies applied by academics in this area have led to very different conclusions about the existence of environmental refugees’.<sup>70</sup> Sir Nicholas Stern, in his authoritative review of climate change in the Stern Review on the Economics of Climate Change (2007), maintains that Myers’ and Kent’s earlier estimate of 150–200 million ‘has not been rigorously tested’ and the estimate of 200 million is ‘problematic’ and ‘conservative’.<sup>71</sup>

Questioning the authenticity of the data, the IOM report on environmental migration in Bangladesh argues that the estimated wide-ranging figures of 13–40 million ‘do not take into account of land accretion as well as loss, but, perhaps, more crucially, they are based on the assumption that no significant adaptation measures are undertaken’ to reduce vulnerability.<sup>72</sup>

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<sup>65</sup> Biermann and Boas, above n 10, 68.

<sup>66</sup> Lonergan, above n 58, 11; Biermann and Boas, above n 10, 68.

<sup>67</sup> Biermann and Boas, above n 10, 68.

<sup>68</sup> Stern Review, above n 8, 112.

<sup>69</sup> Dominic Kniveton is critical of the crude counting method that Myers used to reach this estimate. Dominic Kniveton, ‘Climate Change and Migration: Developing Methodologies’, Environment, Forced Migration and Social Vulnerability conference presentation (Bonn, 9 October 2008); Kniveton et al., above n 46, 29.

<sup>70</sup> Castles, above n 15, 6.

<sup>71</sup> Stern Review, above n 8, 77. However, echoing the concern that climate change will lead to hundreds of millions of ‘climate change migrants’, the Stern Review estimates that the scale of migration will reach 200 million by 2050 (Stern Review, above n 8, 56).

<sup>72</sup> Walsham, above n 48, 35.

### 2.4.3 Multi-causality of Environmental Migration

Migration is often the result of an intricate matrix of factors.<sup>73</sup> The conditions under which people leave their homes and migrate generally do little to illuminate the structural or root causes of their movement.<sup>74</sup> In reality, ‘people make decisions over time to leave their communities for a complex interplay of reasons’.<sup>75</sup> Factors that play a significant role in this type of migration include the availability of sufficient resources to move, networks (family and friends at home and at potential points of destination) and the level of information and knowledge of the destination.<sup>76</sup> Environmental degradation resulting from climate change may be one of the many triggering factors for migration; however, as expounded by Black, Castles and others, ‘it is hardly the only and often not even the most important cause’.<sup>77</sup> Thus, it is often observed that most authors who provide a definition of ‘environmental refugee’ fail to recognise the multi-causality aspects of environmental migration.<sup>78</sup>

Implicit in the idea of environmental migration is the belief that environmental degradation as a possible cause of population displacement can be separated from other social, economic or political causes.<sup>79</sup> However, environmental hardships are often aggravated by issues such as economic hardship, military conflict, insecurity, social upheaval, exclusion, injustice and political instability.<sup>80</sup> Thus, when environmental deteriorations cause displacements, they are often the by-products of economic, demographic or political factors.<sup>81</sup> Lonergan suggested that environmental factors cannot be easily separated from other socio-economic and political factors and processes triggering migration.<sup>82</sup> Some people leave voluntarily for economic benefits, job opportunities, family reunion and other socio-economic factors others flee because there is no other choice and some flee pre-

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<sup>73</sup> King, above n 45, 545.

<sup>74</sup> Hermen J Ketel, ‘Global Warming and Human Migration’ in Antoaneta Yotova, *Climate Change, Human Systems and Policy* (2004) 1.

<sup>75</sup> Elizabeth Ferris, Co-Director, Brookings–Bern Project on Internal Displacement, Speech (17 October 2008), <[http://www.brookings.edu/speeches/2008/1017\\_natural\\_disasters\\_ferris.aspx](http://www.brookings.edu/speeches/2008/1017_natural_disasters_ferris.aspx)>.

<sup>76</sup> King, above n 47, 545.

<sup>77</sup> Ibid.

<sup>78</sup> Black, above n 15, 12–14.

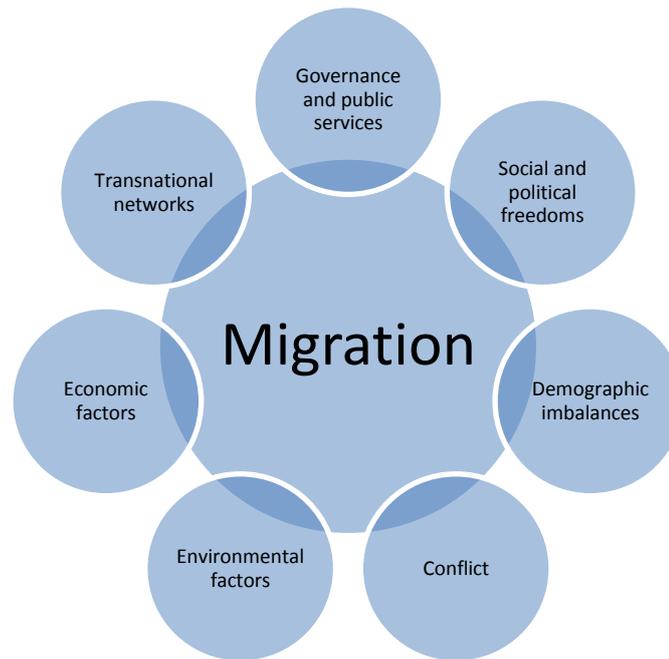
<sup>79</sup> Lonergan, above n 58, 8.

<sup>80</sup> Ketel, above n 74, 2.

<sup>81</sup> Graeme Hugo, ‘Environmental Concerns and International Migration’ (1996) 30 *International Migration Review* 105, 113–115.

<sup>82</sup> Lonergan, above n 58, 10.

emptively before the arrival of the compelling situation.<sup>83</sup> Each factor has the potential to trigger population movements.<sup>84</sup> It is difficult to point to a single factor responsible for migration due to environmental reasons, as the causes are inter-mixed in most cases.<sup>85</sup> Thus, it is difficult to study environmental migration because of ‘the different degrees of force and the complex set of influencing factors’.<sup>86</sup> The conflict in Darfur, for example, has been recognised as stemming from an ecological crisis in the region that, at least in part, was caused by climate change.<sup>87</sup>



**Box 4: Range of external factors that affect an individual’s motivation to move**

After reviewing a wide range of studies on environmental degradation-induced migration, Richard Black claimed that there is no convincing evidence that it leads to large-scale displacement.<sup>88</sup> He also pointed out that the links postulated in the literature between environment and migration are not explicitly demonstrated.<sup>89</sup> Black recognised that

<sup>83</sup> Ketel, above n 74, 2.

<sup>84</sup> German Advisory Council on Global Change, *World in Transition: Climate Change as a Security Risk: Summary for Policy Makers* (Berlin, WBGU Secretariat, 2007) 1.

<sup>85</sup> Brooke Havard, ‘Seeking Protection: Recognition of Environmentally Displaced Persons under International Human Rights Law’ (2007) 18 *Villanova Environmental Law Journal*, 65, 67.

<sup>86</sup> Tina Acketoft, ‘Environmentally Induced Migration and Displacement: A 21<sup>st</sup> Century Challenge’ (Report of Committee on Migration, Refugees and Population, Parliamentary Assembly, Council of Europe, 2008) 2 <<http://assembly.coe.int/Documents/WorkingDocs/Doc08/EDOC11785.pdf>>.

<sup>87</sup> Dan Smith and Janani Vivekananda, ‘A Climate of Conflict: The Links between Climate Change, Peace and War’ (International Alert, 2007) 12 (quoting UN Secretary General Ban Ki-Moon).

<sup>88</sup> Black, above n 15, 3–5.

<sup>89</sup> Ibid 5.

environmental degradations and catastrophes such as rising sea levels, flood, cyclones and declining water supplies are important factors in the decision to migrate.<sup>90</sup> However, he found little evidence of actual permanent large-scale displacement directly caused by these factors.<sup>91</sup> Castles takes a more nuanced view, noting that migration involves ‘complex patterns of multiple causality, in which natural and environmental factors are closely linked to economic, social, and political ones’.<sup>92</sup> Many other interrelated issues, such as conflicts, human rights, gender, levels of development, public health and governance, question decisions to migrate for environmental reasons.<sup>93</sup> For this reason, Black considers the ‘conceptualization [of environment] as a primary cause of forced displacement’ as ‘unhelpful and unsound intellectually, and unnecessary in practical terms’.<sup>94</sup>

However, Kniveton et al. accept the idea of multiple factors influencing migration decisions,<sup>95</sup> stating that:

[i]t has become evident ... that the assumption that climate variability leads to migration in a linear way is not supported by empirical investigation. In short, these studies have found that many other factors play into the nexus between climatic factors and migration.<sup>96</sup>

Thus, there is fierce debate among academia and policy-makers that stems from confusion regarding the multi-causality of environmental migration. Summarising the debate, the IOM stated that:

[P]art of the controversy stems from the fact that those who migrate partly or wholly for environmental reasons span a large continuum—from those who are suddenly displaced by an extreme environmental event to those who pre-emptively migrate due to deteriorating environmental conditions. While most of these migrants remain within their countries of origin, some cross international borders. Similarly, some migrate temporarily and others permanently.<sup>97</sup>

However, trying to isolate specific reasons why people migrate and focusing too much on the problem of multi-causality risks denying the rights of forced climate migrants. The policy-makers, relying on this excuse, may fragment the issue and responsibility for it, which will ultimately lead to the denial of migrants’ rights.<sup>98</sup>

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<sup>90</sup> Ibid 14.

<sup>91</sup> Ibid.

<sup>92</sup> Castles, above n 15, 5.

<sup>93</sup> IOM, above n 11, 2.

<sup>94</sup> Black, above n 15, 1.

<sup>95</sup> Kniveton et al, above n 46, 37.

<sup>96</sup> Ibid 6.

<sup>97</sup> IOM, ‘Expert Seminar: Migration and the Environment’ (International Dialogue on Migration No. 10, IOM, 2008) 21.

<sup>98</sup> Merit Hietanen, Summary of Professor Roger Zetter’s Comments at the Environmental Change and Displacement Workshop: Assessing the Evidence and Developing Norms for Response (8–9 January 2009).

#### ***2.4.4 Migration as a Coping Strategy***

Refuting the existence of environmental migration, some scholars regard migration as one of a variety of important survival strategies used by people in the face of natural or man-made disasters since the dawn of civilisation.<sup>99</sup> For example, Black considers environmental migration as a ‘customary coping strategy’.<sup>100</sup> Migration in the Sahel zone and similar regions is a coping strategy that has been used by people for centuries, and it is cyclical rather than permanent.<sup>101</sup> Migration is thus considered ‘an essential part of the economic and social structure of the region, rather than a response to environmental decline’.<sup>102</sup>

Rafael Reuveny also views environmental migration as an adaptive strategy to confront environmental change.<sup>103</sup> Reuveny’s premise is that individuals have agency in their decisions to migrate, and they will prefer to move if they consider the net benefit of moving larger than that of remaining in their current locations.<sup>104</sup> Among the possible options of destinations within and across their home countries’ borders, their decision-making comes through ‘the largest net benefit’ criteria; they choose the option that is ultimately beneficial for them.<sup>105</sup> Thus, migration may be a probable coping strategy in response to the effects of climate change that ‘reduce risk to lives, livelihoods and ecosystems, contribute to income diversification and enhance overall capacity of households and communities’, building resilience to the adverse effects of environmental degradation and change.<sup>106</sup> For example, in Bangladesh, a victim of river erosion who is poor and dependant on agriculture might move to the city from a rural area as a livelihood coping strategy.<sup>107</sup>

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<sup>99</sup> Hugo, above n 81, 105.

<sup>100</sup> Black, above n 15, 6.

<sup>101</sup> *Ibid* 6–7.

<sup>102</sup> Richard Black, *Refugees, Environment and Development* (Longman, 1998) 28.

<sup>103</sup> Rafael Reuveny, ‘Climate Change-Induced Migration and Violent Conflict’ (2007) 26 *Political Geography* 656, 658.

<sup>104</sup> *Ibid*.

<sup>105</sup> *Ibid*.

<sup>106</sup> Walsham, above n 48, 4.

<sup>107</sup> MZ Hossain, ‘Rural–Urban Migration in Bangladesh: A Micro-Level Study’ IUSSP 2 <[http://www.iussp.org/Brazil2001/s20/S28\\_P02\\_Hossain.pdf](http://www.iussp.org/Brazil2001/s20/S28_P02_Hossain.pdf)>.

### ***2.4.5 Lack of Clear Definition of Environmental/Climate Change Migration \****

Although the numbers of people moved for environmental reasons are mounting rapidly, the questions of proper characterisation and appropriate terminology to be applied to such persons are still unresolved.<sup>108</sup> The available predictions of environment/climate change induced displacement vary widely because a broad range of definitions has been provided by the migration experts and international organisations, and no internationally accepted definition exists to date for persons moving for environmental reasons.<sup>109</sup> A wide variety of terminology such as ‘environmental migration’, ‘climate change induced migration’, ‘ecological or environmental refugees’, ‘climate refugees’, ‘climate change migrants’ and ‘environmentally induced forced migrants’ has been used in the existing literature by the researchers to refer to persons fleeing environmental degradation including climatic changes.<sup>110</sup>

#### ***2.4.5.1 Existing Definitions of Environmental/Climate Refugees***

##### ***2.4.5.1.1 Environmental Refugees***

The term ‘environmental refugee’ is the most popular definition used to describe the plight of persons displaced due to environmental change. Although it is not recognised in international law, the term ‘environmental refugee’ has received unprecedented support and attention from the international community, which has significant implications for the protection of displaced persons.<sup>111</sup> Lester Brown of the World Watch Institute first used the

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\* An earlier draft of this section forms part of an article published in a refereed journal. The citation of this article is MM Naser, ‘Climate Change Induced Displacement: Definitional Issues and Concerns’ (2012) 2(1) *Chicago-Kent Journal of Environmental and Energy Law*.

<sup>108</sup> IOM, above n 97, 21; Displacement Solutions, Climate Change Human Rights and Forced Human Displacement: Case Studies as Indicators of Durable Solutions (Meeting Paper) 6 <[http://www.displacementsolutions.org/files/documents/Climate\\_Change\\_Displacement\\_Meeting\\_Paper.pdf](http://www.displacementsolutions.org/files/documents/Climate_Change_Displacement_Meeting_Paper.pdf)>.

<sup>109</sup> IOM, above n 10, 4; Koko Warner, ‘Global Environmental Change and Migration: Governance Challenges’ (2010) 20 *Global Environmental Change* 402, 403.

<sup>110</sup> Etienne Piguet, ‘Climate Change and Forced Migration’ (UNHCR, 2008) 4. Generally, persons forcibly displaced across borders for environmental reasons are referred to as ‘environmental refugees’ or ‘climate refugees’. No existing legal instrument explicitly protects people who flee environmental threats. Therefore, for a definition of that group, one must turn to academic literature, in which there is a lively theoretical debate. Most people who study environmental migration discuss the broader class of environmental refugees rather than the more specific subset of climate change refugees. They use a variety of terms to refer to this group of people and its subcategories.

<sup>111</sup> Camillo Boano, Roger Zetter and Tim Morris, ‘Environmentally Displaced People: Understanding the Linkages between Environmental Change, Livelihoods and Forced Migration’ (Refugee Studies Centre, Forced Migration Policy Briefing No. 1, 2008) 1.

term in 1970,<sup>112</sup> and it was subsequently used in a 1984 briefing document published by the London-based International Institute for Environment and Development. Finally, UNEP researcher Essam El-Hinnawi formally defined the term for the first time in 1985 in a UNEP policy paper entitled ‘Environmental Refugees’.<sup>113</sup> The UNEP is an intergovernmental agency that coordinates UN environmental activities by assisting developing countries to implement environmentally sound policies and practices. Thus, the definition of ‘environmental refugees’ provided by the UNEP appeared to be ‘consistent with the humanitarian mission of their agency rather than using more analytic criteria’.<sup>114</sup> El-Hinnawi defined environmental refugees as:

... those people who have been forced to leave their traditional habitat, temporarily or permanently, because of a marked environmental disruption (natural and/or triggered by people) that jeopardized their existence and/or seriously affected the quality of their life.<sup>115</sup>

In this definition, ‘environmental disruption’ refers to ‘any physical, chemical, and/or biological changes in the ecosystem (or resource base) that render it, temporarily or permanently, unsuitable to support human life’.<sup>116</sup>

In this definition, El-Hinnawi identified three major types of environmental refugees: (1) those who are temporarily displaced due to natural or man-made disasters; (2) those who are permanently displaced due to drastic environmental changes such as the construction of dams; and (3) those who migrate due to the gradual environmental degradations.<sup>117</sup> He also included a sub-category of people who were displaced by the destruction of their environment due to warfare.<sup>118</sup>

While El-Hinnawi deserves credit for providing the first formal definition of environmental refugee, critics question the usefulness of the concept. As noted environmental sociologist Diane Bates comments, ‘El-Hinnawi did not provide generic criteria distinguishing environmental refugees from other types of migrants, nor did he specify differences between types of environmental refugees’.<sup>119</sup> This definition is

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<sup>112</sup> Morrissey, above n 26, 3.

<sup>113</sup> Biermann and Boas, above n 10, 66; Morrissey, above n 24, 3.

<sup>114</sup> Diane C Bates, ‘Environmental Refugees? Classifying Human Migrations Caused by Environmental Change’ (2002) 23 *Population and Environment* 465, 466.

<sup>115</sup> Essam El-Hinnawi, *Environmental Refugees* (1985) 4.

<sup>116</sup> *Ibid.*

<sup>117</sup> *Ibid.*

<sup>118</sup> *Ibid.*

<sup>119</sup> Bates, above n 114, 466.

therefore broad enough to encompass many people under the umbrella of environmental refugee.

Although it faced much criticism, El-Hinnawi's work is often taken as the starting point for work on environmental migration.<sup>120</sup> Authors began to elaborate on the relationship between environmental change and human mobility based on El-Hinnawi's literature and to provide new definitions that further contribute to the current environmental migration discourse.<sup>121</sup> El-Hinnawi's broad definition contains many elements that are used by other authors. For example, Jodi Jacobson, researcher at the Worldwatch Institute, identified different types of environmental refugees as:

... those displaced temporarily due to local disruption such as an avalanche or earthquake; those who migrate because environmental degradation has undermined their livelihood or poses unacceptable risks to health; and those who resettle because land degradation has resulted in desertification or because of other permanent and untenable changes in their habitat.<sup>122</sup>

El-Hinnawi's paper and Jacobson's later report have popularised the term 'environmental refugee', which has subsequently become a 'catch-all' term that is endorsed by many academics and scholars.<sup>123</sup> British environmentalists Norman Myers and Jennifer Kent conceptualised environmental refugees as persons:

... who can no longer gain a secure livelihood in their traditional homelands because of environmental factors of unusual scope, notably drought, desertification, deforestation, soil erosion, water shortages and climate change, also natural disasters such as cyclones, storm surges and floods. In face of these environmental threats, people feel they have no alternative but to seek sustenance elsewhere, whether within their own countries or beyond and whether on a semi-permanent or permanent basis.<sup>124</sup>

In line with El-Hinnawi, Jacobson and Myers, Bates suggested categorising environmental refugees based on 'criteria related to the origins of the environmental disruption (natural or technological), its duration (acute or gradual), and whether migration was a planned outcome of the (environmental) disruption (intentional or not)'.<sup>125</sup> Bates defined, in part,

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<sup>120</sup> For example, Myer, Bates and others authors started to give definitions based on El-Hinnawi's definition.

<sup>121</sup> Morrissey, above n 24, 3.

<sup>122</sup> Jodi L Jacobson, *Environmental Refugees: A Yardstick of Habitability* (1988) 37–38.

<sup>123</sup> British environmentalist Norman Myers, who provided a similarly broad definition of environmental refugees in the mid 1990s, argued that 'the term "environmental refugee", has gained widespread acceptance from U.S. diplomats former-President Bill Clinton, former-Vice-President Al Gore, Warren Christopher and Wirth; John Major, Boutros Boutros-Ghali, Gus Speth, Nafis Sadik, Richard Jolly and other UN leaders; top officials at the World Bank; and departmental heads the OECD and the European Commission' (Norman Myers, *Environmentally-Induced Displacements: The State of the Art*, Paper for International Symposium on Environmentally-Induced Population and Environmental Impacts Resulting from Mass Migration, UNHCR/IOM/RPG, 21–24 April 1996, Geneva).

<sup>124</sup> Myers and Kent, above n 10, 18–19.

<sup>125</sup> Hinnawi, above n 115, 4; Jacobson, above n 122, 37–38; Bates, above n 114, 469.

environmental refugees as ‘people who migrate from their usual residence due to changes in their ambient non-human environment’.<sup>126</sup> She argued that migration flows resulting from unintended outcomes or disruptions could be divided into three categories: disasters, expropriations and deterioration.<sup>127</sup>

More recently, Renaud et al. identified three different categories of ‘environment-related mass movement of people’: ‘environmentally motivated migrants’, ‘environmentally forced migrants’ and ‘environmental refugees’.<sup>128</sup> They conjoined these categories to the nature of an environmental trigger, as well as to the type of assistance available to affected communities.<sup>129</sup>

#### ***2.4.5.1.2 Climate Change Refugees***

With the growing concern of the effects of climate change on human lives, the more precise term of ‘climate refugee’ has become popular in recent years.<sup>130</sup> Academics, scholars, world leaders and policy-makers frequently use the term to identify people that move for climatic reasons, such as rising sea levels, melting glaciers, floods, cyclones and scarcity of water resources. Although Myers indicated that the notion of environmental refugees includes climate refugees,<sup>131</sup> Professor Frank Biermann and Ingrid Boas, and scholars Bonnie Docherty and Tyler Giannini from Harvard Law School, identified the need to address climate change refugees in particular.<sup>132</sup> Biermann and Boas argued that the broad definitions of environmental refugee given to date failed to ‘specify or quantify

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<sup>126</sup> Bates, above n 114, 469.

<sup>127</sup> Bates stated that:

Disaster refugees originate in acute events that are not designed to produce migration. These may be divided between those events caused by natural events and those caused by technological accidents; expropriation refugees result from acute anthropogenic disruptions in the environment that intentionally dislocate target populations. These may be further divided into two groups based on whether the disruptive event was caused by economic development or warfare; deterioration refugees migrate as a result of gradual, anthropogenic changes in their environments that were not intended to produce migrants. Deterioration refugees tend to come from ecosystems that have gradually degraded to a point where people cannot survive on the local resource base. This type of refugee may be analytically separated into sub-groups by the source of the degradation in terms of pollution and depletion’ (Bates, above n 114, 469).

<sup>128</sup> Renaud et al., above n 39, 29.

<sup>129</sup> Ibid.

<sup>130</sup> Piguet, above n 110, 1. Recently, President Barack Obama used the term ‘climate refugee’ in his remarks to the UN Climate Change Summit (Barack Obama, Remarks by the President at UN Secretary General Ban Ki-Moon’s Climate Change Summit, UN Headquarters, New York, 22 September 2009).

<sup>131</sup> Myers and Kent, above n 10; Norman Myers, ‘Environmental Refugees: A Growing Phenomenon of the 21<sup>st</sup> Century’ (2002) 357 *Philosophical Transactions: Biological Sciences* 609, 611.

<sup>132</sup> Docherty and Giannini, above n 39, 367; Biermann and Boas, above n 10, 62–63.

climate-related migration’.<sup>133</sup> Without providing a clear definition of ‘climate refugee’, the term is, at times, simply substituted in the definitions of ‘environmental refugee’ without any detailed specifications.<sup>134</sup> Rather than broadly addressing environmental migration as most definitions do, the definitions of climate refugee provided by Docherty and Giannini, and Biermann and Boas, were tailored to climate change and included only the environmental events as triggering factors for human movement that were consistent with climate change and that encompassed all those who flee the direct effects of climate change.<sup>135</sup> For example, in devising the definition of climate refugee, Docherty and Giannini although borrowed concepts from the existing definition of refugee under the Refugee Convention and the definitions of environmental refugee provided by scholars, their definition of climate refugee is tailored to the particularities of climate change.<sup>136</sup>

Docherty and Giannini defined a climate refugee, which is distinct from an environmental refugee, as:

... an individual who is forced to flee his or her home and to relocate temporarily or permanently across a national boundary as the result of sudden or gradual environmental disruption that is consistent with climate change and to which humans more likely than not contributed.<sup>137</sup>

Their proposed definition covers both temporary and permanent relocation.<sup>138</sup> The greatest limitation of this definition is that it addresses people who move across national borders but excludes the majority of people who are forced to move within their country because of climatic events.

Unlike Docherty and Giannini, Biermann and Boas’s definition of a climate refugee made no distinction between internal and cross-border migrations. For them, it is irrelevant whether relocation is permanent or temporary.<sup>139</sup> Biermann and Boas defined climate refugees as:

... people who have to leave their habitats, immediately or in the near future, because of sudden or gradual alterations in their natural environment related to at least one of three impacts of climate change: sea-level rise, extreme weather events, and drought and water scarcity.<sup>140</sup>

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<sup>133</sup> Biermann and Boas, above n 10, 62.

<sup>134</sup> Morrissey, above n 24, 8; Friends of the Earth, *A Citizen’s Guide to Climate Refugees* 1 (Friends of the Earth, 2007).

<sup>135</sup> Biermann and Boas, above n 10, 67, 75–83; Docherty and Giannini, above n 39, 370.

<sup>136</sup> Docherty and Giannini, above n 39, 361.

<sup>137</sup> Ibid.

<sup>138</sup> Ibid 369.

<sup>139</sup> Ibid 65, 66.

<sup>140</sup> Biermann and Boas, above n 10, 67.

To ensure this definition covers only climate change induced migration, they limited the types of environmental disruptions that qualify refugees for assistance to three ‘direct, largely undisputed climate change impacts’.<sup>141</sup> They did not cover events that they viewed as peripherally related to climate change.<sup>142</sup>

However, Docherty and Giannini criticised Biermann and Boas’s definition because it has both ‘legal and scientific shortcomings’.<sup>143</sup> First, their definition includes both refugees and IDPs, and their ‘climate refugees’ need not be forced to leave their homes.<sup>144</sup> Such a notion conflicts with the legal precedent associated with the traditional notions of refugees.<sup>145</sup> Second, Biermann and Boas’s focus on enumerated climate change effects ‘seems too restrictive’.<sup>146</sup> Biermann and Boas identified three particular effects of climate change (sea-level rises, extreme weather events, and drought and water scarcity), but they ignored ‘the possibility that advances in science could enable a more accurate determination of which events are caused by anthropogenic climate change’.<sup>147</sup>

While the scholars who propose to use the term ‘environmental refugee’ appear to be less concerned with the issue of protection and place more stress on the social and political implications, the proponents of the ‘climate refugee’ definition provide protection mechanisms for persons displaced due to the direct effects of climate change.<sup>148</sup> For example, Docherty and Giannini proposed an independent treaty for climate refugees, and Biermann and Boas advocated a global governance system to protect this category of migrants within the existing UNFCCC framework.<sup>149</sup> For the purpose of an effective protection framework, unlike definitions of ‘environmental refugee’, both Docherty and Giannini’s and Biermann and Boas’s definitions of ‘climate refugee’ explain ‘environment’ narrowly and include only those ‘environmental events’ that are ‘consistent with climate change’.<sup>150</sup> This helps to establish a link between the environmental change

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<sup>141</sup> Ibid.

<sup>142</sup> Ibid 63–64.

<sup>143</sup> Docherty and Giannini, above n 39, 368.

<sup>144</sup> Ibid.

<sup>145</sup> Ibid.

<sup>146</sup> Ibid.

<sup>147</sup> Ibid.

<sup>148</sup> David Corlett, *Stormy Weather: The Challenge of Climate Change and Displacement* (University of New South Wales Press Ltd, 2008) 46.

<sup>149</sup> Biermann and Boas, above n 10, 67, 75–83; Docherty and Giannini, above n 39, 370.

<sup>150</sup> Ibid.

and human action.<sup>151</sup> This acknowledgment of human contribution justifies the claim that industrialised countries should bear responsibility for harm; that is, climate change resulting from past carbon emissions. This responsibility is extended to the people displaced due to the direct effects of climate change.

#### ***2.4.5.1.3 Other Definitions of Climate Change Induced Displacement***

The above discussion shows that there is no consensus on the definition of environmental refugees or climate refugees.<sup>152</sup> Some scholars, taking into consideration the legal concern regarding the term ‘refugee’ as argued by some intergovernmental agencies, prefer the terms ‘environmental migrants’, ‘environmentally displaced persons’ or ‘climate change migrants’ rather than ‘environmental refugee’ or ‘climate refugee’. For example, by avoiding the term ‘refugee’, the UNHCR defines environmentally displaced persons as those ‘who are displaced from or who feel obliged to leave their usual place of residence, because their lives, livelihoods and welfare have been placed at serious risk as a result of adverse environmental, ecological or climatic processes and events’.<sup>153</sup>

The IOM used the working definition of environmental migrants in an effort to capture the complexity of the issue. According to the IOM, environmental migrants are:

persons or groups of persons who, predominantly for reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are obliged to leave their homes or choose to do so, either temporarily or permanently, and who move either within their country or abroad.<sup>154</sup>

This working definition identifies the nature of environmental events, types of movement and the extent of human movement resulting from environmental change.<sup>155</sup> The definition does not identify any particular events as triggering factors for migration; rather, it includes both sudden and gradual environmental events and degradations that have ‘predominantly’

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<sup>151</sup> Docherty and Giannini, above n 39, 370–371.

<sup>152</sup> Biermann and Boas, above n 10, 67.

<sup>153</sup> Brian Gorlick, *Environmentally-Displaced Persons: A UNHCR Perspective* (2007) <[www.ony.unu.edu/seminars/2007/16May2007/presentation\\_gorlick.ppt](http://www.ony.unu.edu/seminars/2007/16May2007/presentation_gorlick.ppt)>.

<sup>154</sup> This definition was put forward at the 94<sup>th</sup> IOM Council. See Background Paper MC/INF/288, <[http://www.iom.int/jahia/webdav/site/myjahiasite/shared/shared/mainsite/microsites/IDM/workshops/evolving\\_global\\_economy\\_2728112007/MC\\_INF\\_288\\_EN.pdf](http://www.iom.int/jahia/webdav/site/myjahiasite/shared/shared/mainsite/microsites/IDM/workshops/evolving_global_economy_2728112007/MC_INF_288_EN.pdf)>. It also appeared in World Migration (2008): Managing Labour Mobility in the Evolving Global Economy, IOM, Geneva <<http://www.iom.int/jahia/Jahia/cache/offonce/pid/1674?entryId=20275>>, p. 399, and in various other publications. IOM, *Definitional Issues* (IOM, 2009), <<http://www.iom.ch/jahia/Jahia/pid/2071>>; Kniveton et al., above n 46, 5.

<sup>155</sup> Susana B Adamo, ‘Environmentally Induced Population Displacements’ (2009) 1 *International Human Dimensions Programme on Global Environmental Change Update* 13, 13.

adverse effects on human lives and livelihoods, thus motivating migration.<sup>156</sup> As the definition does not address the circumstances under which people tend to migrate, population movements triggered by environmental factors can be forced as well as voluntary.<sup>157</sup> While international law maintains a sharp distinction between internal and cross-border movements under the frameworks of the Refugee Convention and the UN Guiding Principles on IDPs, the definition includes both internal and trans-boundary human movements for international protection. However, to make the definition applicable to climate change, a subset of environmental migrants produced by the IOM in its Migration Research Series No. 33 (2008), provided a revised definition of ‘climate change migrants’:

persons or groups of persons who, predominantly for reasons of sudden or progressive changes in the environment as a result of climate change that adversely affect their lives or living conditions, are obliged to leave their homes or choose to do so, either temporarily or permanently, and who move either within their country or abroad.<sup>158</sup>

A recent paper from the UNU–EHS defined a ‘forced environmental migrant’ as someone who has to leave his or her place of normal residence because of an environmental stressor, as opposed to an ‘environmentally motivated migrant’ who may decide to move because of an environmental stressor.<sup>159</sup> According to Robert Bronen, ‘climigration’ occurs when a community is ‘no longer sustainable for ecological reasons’.<sup>160</sup> The U.S. State Department Geographer William B. Wood suggested the term ‘eco-migrant’ as a broad concept to include anyone whose need to migrate is influenced by environmental factors.<sup>161</sup> It also includes people ‘who move voluntarily to new areas to exploit natural resources’.<sup>162</sup> The Displacement Solutions, Geneva-based NGO has advocated the term ‘forced climate migrant’.<sup>163</sup>

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<sup>156</sup> IOM, above n 154.

<sup>157</sup> Warner, above n 109, 403; Ibid.

<sup>158</sup> IOM (2009), above n 10, 5; Kniveton et al., above n 46, 31.

<sup>159</sup> Renaud et al., above n 39, 29–30.

<sup>160</sup> Robin Bronen, *Forced Migration of Alaskan Indigenous Communities due to Climate Change: Creating a Human Rights Response*, 2

<<http://www.iom.int/jahia/webdav/site/myjahiasite/shared/shared/mainsite/events/docs/abstract.pdf>>.

<sup>161</sup> William B Wood, ‘Eco-immigration: Linkages between Environmental Change and Migration’ in Aristide R Zolberg and Peter M Benda (eds) *Global Migrants, Global Refugees: Problems and Solutions* (2001) 42, 46–47.

<sup>162</sup> Ibid.

<sup>163</sup> Displacement Solutions, above n 108, 11.

Thus, it is apparent that disagreements surround the conceptualisation of climate change induced human movements.<sup>164</sup> The authors interpret these terms haphazardly based on their own concepts and protection mechanisms. The variety of terms interchangeably used by researchers and policy-makers thwarts the ‘progress on the recognition and legal protection of environmental displacement’.<sup>165</sup> Warner identified two substantial points that are primarily responsible for not establishing clear definitions of concepts and terms related to climate change induced displacement.<sup>166</sup> First, the conceptualisation of the issue is made complex by the inherent difficulties in segregating environmental factors from other migration drivers.<sup>167</sup> Second, defining climate change displacement obligates the international community to adopt appropriate institutional and governance measures to address the problem.<sup>168</sup> The international community, and in particular developed countries, have yet to reach a consensus on recognising this category of people.<sup>169</sup> They have strong reservations against ‘environmental migrants’ because they fear it would open the floodgate for migrants to move from developing and least developed countries (LDC) countries to developed countries in the guise of ‘environmental refugees’.<sup>170</sup>

However, the absence of a formal legal definition may perpetuate uncertainty about the parameters of the phenomenon and complicate questions of state and institutional

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<sup>164</sup> Lehman, above n 12, 2; Dun and Gemenne, above n 17, 10–11; Warner, above n 17, 2.

<sup>165</sup> Acketoft, above n 24, 3.

<sup>166</sup> Warner, above n 109, 403.

<sup>167</sup> *Ibid.*

<sup>168</sup> *Ibid.*

<sup>169</sup> Even though the IPCC highlighted migration and displacement in 1990, the terms ‘migrant’, ‘migration’, ‘refugee’ and ‘displacement’ are not mentioned anywhere in the UNFCCC or the more recent Bali Action Plan of December 2007. In recent times, with repeated claims from affected countries including LDCs and Small Island Developing States (SIDS), developed countries did not reach a consensus to include the issue in the ‘Accord’, which was the only outcome of the Copenhagen summit in 2009. However, the Copenhagen Long-term Cooperative Action (LCA) Negotiating Text included a bracketed paragraph on ‘environmental refugees’ in the context of economic and social consequences of response measures. Although this proposed commitment to compensate developing countries for the losses associated with environmental migration and displacement may have been worthy of support, the unclear basis for granting and calculating compensation, and the political controversies arising therefrom, made its eventual adoption by the Conference of the Parties highly unlikely. In particular, the refusal by many states, including those states that adopted the current definition of refugees in 1951, to recognise the category of ‘environmental refugee’ may have sealed this paragraph’s fate.

In its place, the Cancun LCA Text included an invitation to the parties to enhance action on adaptation by undertaking, among other things, ‘(f) [m]easures to enhance understanding, coordination and cooperation with regard to climate change induced displacement, migration and planned relocation, where appropriate, at national, regional and international levels’. This paragraph may be the first step towards effectively addressing the complicated problem of environmental migration and displacement.

<sup>170</sup> William, above n 6, 510.

responsibility for displaced people.<sup>171</sup> The nature and patterns of environmental migration are apprehended through its definition.<sup>172</sup> Without a definition, one cannot identify the populations that require assistance or accurately estimate the number of people displaced or prompted to migrate because of environmental factors.<sup>173</sup>

Thus, the lack of conceptual clarity and consensus is a key problem that has left large numbers of displaced people unprotected by international law. The disagreement surrounding the issue has important ramifications for assigning responsibility to appropriate domestic and international institutions and agencies to address the rights and duties concerned.<sup>174</sup>

## ***2.5 Climate Change, Environmental Degradation and Migration Nexus: Complexity, Reality and Equity***

### ***2.5.1 Climate Change, Environmental Degradation and Migration: A Complex Nexus***

There is growing scientific certainty of exacerbating vulnerability and risks resulting from projected climate change, and now there is no doubt that the rise in sea levels or the salinisation of coastal areas as climatic processes, or hydro-meteorological natural catastrophes as climatic events, have significant implications on human lives and livelihoods around the world, as well as in Bangladesh.<sup>175</sup> Nevertheless, there is considerable debate about the influence of environmental change on migration. The sceptics group opines that sudden or slow-onset changes in environmental conditions can be indirect factors in decisions to move, but social processes that create poverty and marginality are more important factors than environmental changes *per se*.<sup>176</sup> Within this complex and dynamic situation, environmental factors are increasingly recognised as an important component of people's migration decisions, notwithstanding the fact that there

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<sup>171</sup> Jane McAdam, 'Swimming against the Tide: Why a Climate Change Displacement Treaty is not the Answer' (2011) 23(1) *International Journal of Refugee Law* 2, 7.

<sup>172</sup> Asian Development Bank (ADB), 'Climate Change and Migration in Asia and the Pacific' (ADB, 2011) 4.

<sup>173</sup> *Ibid.*

<sup>174</sup> Displacement Solutions, above n 108, 6.

<sup>175</sup> Raworth, Kate, 'Climate Wrongs and Human Rights- Putting People at the Heart of Climate-Change Policy' (Oxfam Briefing Paper No. 117, Oxfam International, 2008) 2; Meinhard Doelle, 'Climate Change and Human Rights: The Role of the International Human Rights in Motivating States to Tackle Climate Change Seriously' (2004) 1 *Macquarie Journal of International Comparative Environmental Law* 179; Piguet, above n 110, 8.

<sup>176</sup> Jon Barnett and Natasha Chamberlain, 'Migration as Climate Change Adaptation: Implications for the Pacific' in Bruce Burson (ed.), *Climate Change and Migration South Pacific Perspective* (Institute of Policy Studies, 2010) 51.

are also non-climatic migration factors to consider, as migration is not necessarily going to occur for reasons of climatic events alone.<sup>177</sup>

Most of the arguments that refute the existence of environmental migration are based on the notion that it is difficult to distinguish between migrants driven by environmental factors and those forced by political and socio-economic problems.<sup>178</sup> They argue that a matrix of factors, including environmental, social, economic and political, influences people to move. Environmental degradation resulting from climate change is one of the many triggering factors, and not even a significant one.<sup>179</sup> It is difficult to segregate the environmental cause from other factors. However, there are some locales and communities, especially in rural areas, where people are exclusively dependent on natural resources for their sustenance.<sup>180</sup> For these people, ecology is indistinguishable from economy,<sup>181</sup> and they are often identified as among the most vulnerable to climate changes.<sup>182</sup> The interrelationship between environment and livelihood is so intricate that the depletion of natural resources due to environmental degradation is bound to result in forced displacement due to loss of land, resources or infrastructure. In this type of displacement, push factors relating to people's homes are more important than pull factors such as social and economic conditions.<sup>183</sup>

Thus, '[e]nvironmental degradation and resource depletion play a contributing role in affecting population movement, as they are often filtered through contexts of poverty, food deficiency, social inequity and personal insecurity'.<sup>184</sup> The result is that people can be forced to leave their traditional habitats, temporarily or permanently, because of a lack of access to natural resources and/or an environmental disruption that jeopardises their existence and seriously affects the quality of their lives.<sup>185</sup>

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<sup>177</sup> Walsham, above n 48, 9; Thomas Hummitzsch, 'Climate Change and Migration: The Debate on Causality and the Legal Position of Affected Persons' (Policy Brief No. 15, Focus Migration, 2009) 3. Both climatic and non-climatic factors that affect human migration in Bangladesh are discussed in detail in Chapter 3.

<sup>178</sup> For example, Lackzo and Aghazarm, above n 19, 17.

<sup>179</sup> Black, above n 15, 12–14; Castles, above n 15, 2–3.

<sup>180</sup> Robert Stojanov, 'Environmental Migration—How Can be Estimated and Predicted' in *Globalization and its Impact to Society, Region and States* (2006) 302–311, <[http://www.vos.cz/imdr/documents/EM-How\\_can\\_be\\_predicted.pdf](http://www.vos.cz/imdr/documents/EM-How_can_be_predicted.pdf)>; Burton and Hodgkinson, above n 50, 6.

<sup>181</sup> Myers, above n 41, 752.

<sup>182</sup> Burton and Hodgkinson, above n 47, 6.

<sup>183</sup> Adamo, above n 17, 14.

<sup>184</sup> Government of the People's Republic of Bangladesh, *Bangladesh Economic Review 2011*, 302 <[http://www.mof.gov.bd/en/budget/12\\_13/ber/en/chapter-7\\_en.pdf](http://www.mof.gov.bd/en/budget/12_13/ber/en/chapter-7_en.pdf)>.

<sup>185</sup> *Ibid* 302.

There are two important features of this type of environmental displacement: first, the environment in a particular area has been degraded in such a way that human life is impossible; second, environmental degradation is directly responsible for human movements.<sup>186</sup> For example, droughts, rising sea levels and salinity, which are the prominent effects of climate change, make it impossible for farmers to sustain their livelihoods.<sup>187</sup> Consequently, the affected people are compelled to move elsewhere because they can no longer continue lives in their original homes due to forces beyond their control.<sup>188</sup> They do not freely make the choice to leave their communities for better livelihood and standard of life like economic migrants.<sup>189</sup> Rather, they leave because life becomes impossible in their home communities.<sup>190</sup>

According to Myers, ‘people who migrate because they suffer outright poverty are also frequently driven by root factors of environmental destitution’.<sup>191</sup> In any case, environmental degradation and the depletion of natural resources play a significant role in determining economic development or vulnerability, and in making migration decisions.<sup>192</sup> Myers’ estimates of ‘environmental refugees’ are driven by three major sources: ‘population growth, sea-level rise and an increase in extreme weather events’.<sup>193</sup> Developing countries suffer from the effects of climate change because population growth is very high and they are already vulnerable to environmental change due to a lack of good governance and prevailing developmental inequality.<sup>194</sup> People living in densely populated, low-lying regions are likely to face forced displacement due to the combined effects of sea-level rises, increased extreme weather events, flooding and the salination of soil.<sup>195</sup>

Of course, Myers recognises the multiplicity of factors working behind environmental migration.<sup>196</sup> Two types of displacement populations exist at opposite ends of the

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<sup>186</sup> Bates, above n 114, 468–469.

<sup>187</sup> Ferris, above n 75.

<sup>188</sup> Ibid.

<sup>189</sup> Ibid.

<sup>190</sup> Ibid.

<sup>191</sup> Norman Myers, ‘Environmental Refugees: An Emergent Security Issue’ (2005) 2.

<sup>192</sup> Stojanov, above n 26, 82.

<sup>193</sup> Norman Myers, ‘Environmental Refugees: A Growing Phenomenon of the 21<sup>st</sup> Century’ (2002) 357 *Philosophical Transactions: Biological Sciences* 609, 609.

<sup>194</sup> Morrissey, above n 24, 4.

<sup>195</sup> Ibid.

<sup>196</sup> Myers, above n 193, 610.

spectrum.<sup>197</sup> One is driven mainly by environmental problems, while the other, although affected by the environment, is mainly moved by economic reasons, for better opportunities or lifestyles.<sup>198</sup> Indeed, ‘migration always involves a multiplicity of causation’, and it is the outcome of the complex interactions of many environmental and other socio-economic factors.<sup>199</sup> The decisions of traditional refugees who flee due to persecution also depend on other factors. The ‘fear of persecution’ in traditional refugee law may arise from socio-economic factors such as poverty, impoverishment, lack of good governance, and social and political instability.<sup>200</sup> A refugee can invoke protection even though the chance of ‘well-founded fear of persecution’ is less than 50 per cent.<sup>201</sup> The UNHCR Handbook states that:

In general, the applicant’s fear should be considered well founded if he can establish, to a reasonable degree, that his continued stay in his country of origin has become intolerable to him for the reasons stated in the definition, or would for the same reasons be intolerable if he returned there.<sup>202</sup>

Environmental migration should not be treated in a different and exceptional way.<sup>203</sup> A single environmental factor does not motivate people to migrate;<sup>204</sup> rather, myriad factors can work simultaneously to inspire movements.<sup>205</sup> Thus, it is difficult to distinguish between migrants driven by environmental factors and migrants driven by other socio-economic problems.<sup>206</sup> The protection of environmental migration cannot be ignored due to the existence of the problem of multi-causality.<sup>207</sup>

### ***2.5.2 The Direct Effects of Climate Change on Human Migration: A Reality***

On the basis of the available scientific predictions of climate change to date, there is a wide consensus on the points that climate change is real and that it bears the potential to increase

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<sup>197</sup> Ibid.

<sup>198</sup> Ibid.

<sup>199</sup> Gregory S McCue, ‘Environmental Refugees: Applying International Environmental Law to Involuntary Migration’ (1993) 6 *Georgetown International Environmental Law Review* 151, 157.

<sup>200</sup> For example, *INS v. Cardoza-Fonseca*, 480 U.S. 421, 431 (1987); *Chan v. Minister for Immigration & Ethnic Affairs* (1989) 169 CLR 379, 397 (Australia).

<sup>201</sup> *Cardoza-Fonseca*, 480 U.S. 431; *Chan v. Minister for Immigration & Ethnic Affairs* (1989) 169 CLR 379, 397 (Australia).

<sup>202</sup> UNHCR, *Handbook on Procedures and Criteria for Determining Refugee Status under the 1951 Convention and the 1967 Protocol Relating to the Status of Refugees*, para. 42 (1992).

<sup>203</sup> Myers and Kent, above n 10, 29.

<sup>204</sup> Ibid

<sup>205</sup> Ibid

<sup>206</sup> Ibid 17.

<sup>207</sup> Stephen Castles, *Afterword: What Now: Climate-Induced Displacement After Copenhagen*, in Jane McAdam (ed.) *Climate Change and Displacement: Multidisciplinary Perspectives* (2010) 244.

the severity and frequency of extreme weather events, which could drive mass human displacement.<sup>208</sup> According to an IOM report on migration, the environment and climate change, the number of recorded natural disasters such as storms, floods and droughts have increased more than threefold over the past 30 years.<sup>209</sup> For example, the reporting of natural disasters has considerably been increased from 100 in 1974 to 400 in 2003.<sup>210</sup> Along with the higher frequency, the intensity and severity of climate-related disasters have also increased.<sup>211</sup> Increasing trends of natural disasters have been observed in Bangladesh in the past few decades. In 2007, Bangladesh faced two devastating disasters: consecutive monsoon floods in July and a category 4 super cyclone, Cyclone Sidr, in November. The decision of many Bangladeshis to migrate is generally not a matter of choice; it is brought forth by the need for survival.<sup>212</sup>

Despite the interrelatedness of economic, social and political factors with climate change displacement, certain cases exist where, as Zetter describes:

environmental change will be so dramatic and so all-encompassing of livelihoods that, regardless of livelihood strategy or socially constructed differences in wealth, most or all inhabitants of an impacted area will be forced to migrate. Such people would be easily identifiable because of the direct link between severe environmental change and migration generated by the scale of the impact.<sup>213</sup>

### ***2.5.3 Assumption of Responsibility for Climate Change Induced Displacement***

This thesis argues for the protection of climate migrants for whom the environment is the primary cause of movement. Generally, the concept of ‘environmental disruption’ is defined widely by El-Hinnawi, Jacobson and Myers.<sup>214</sup> Many scholars argue that the concept of environmental refugees fails to explain in which ways environmental factors

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<sup>208</sup> Asmita Naik, ‘Migration and Natural Disasters’ in Frank Laczko and Christine Aghazarm (eds) *Migration, Environment and Climate Change: Assessing the Evidence* (2009) 248; M Rafiqul Islam, ‘The Right to the Environment as a Human Right’ in Mizanur Rahman (ed.) *Human Rights and Environment* (ELCOP, 2011) 5, 22.

<sup>209</sup> Laczko and Aghazarm, above n 19, 259.

<sup>210</sup> Ibid.

<sup>211</sup> Kolmannskog, above n 26, 2; António Guterres, ‘Climate Change Could Become the Biggest Driver of Displacement’ (Speech delivered at the press conference at the UN Climate Change Conference 2009, Copenhagen, Denmark, 16 December 2009), <<http://www.unhcr.org/4b2910239.html>>.

<sup>212</sup> M Islam, ‘Ecological Catastrophes and Refugees in Bangladesh’ (Presentation at the Conference on Worldwide Refugee Movements, Development Politics and Human Rights, New York, 8–9 November 1991) 4.

<sup>213</sup> Roger Zetter, ‘The Role of Legal and Normative Frameworks for the Protection of Environmentally Displaced People’ in Frank Laczko and Christine Aghazarm (eds), *Migration, Environment and Climate Change: Assessing the Evidence* (2009) 387, 396.

<sup>214</sup> For example, El-Hinnawi, above n 115, 4; Myers, above n 39, 752.

force people to migrate.<sup>215</sup> Other scholars have limited the environmental factors to certain environmental degradations that directly displace people. For example, Biermann and Boas proposed a restrictive notion of environmental degradations resulting from climate change to arrive at a conceptualisation of ‘climate refugee’, which is ‘analytically valuable and politically acceptable and meaningful for a global governance regime’.<sup>216</sup> They excluded certain types of environmental displacement from their definition of ‘climate refugee’:<sup>217</sup> (1) migrants who have no, or only marginal, credible cause for forced migration (such as heat waves and the spread of tropical diseases); (2) people who are displaced due to factors related to the mitigation of, or adaptation to, climate change; (3) migration related to other types of environmental degradation (such as industrial accidents or disasters unrelated to human activities, such as volcano eruptions); and (4) secondary, or indirect, effects of climate change (such as conflicts over diminishing natural resources).<sup>218</sup> Astri Suhrke divided her own discussion into migration stimulated by ‘deforestation, rising sea levels, desertification and drought, land degradation, and ... water and air degradation’.<sup>219</sup>

The most important issue underlying the legitimisation of environmentally displaced people is the acceptance of international responsibility for the localised effects of environmental/climate change. Environmental change may occur due to natural causes without any anthropogenic factors. In these cases, the international community is not directly responsible for the protection of people displaced by ‘environmental change’ (apart from moral obligation). Conversely, since 1970, there has been a consensus among 97 per cent of scientific experts that global warming and climate change is mostly anthropogenic and that developed nations are responsible for this, as evidenced by the IPCC Report.<sup>220</sup> According to IPCC 4AR, ‘most of the observed increase in the global average temperature since the mid-20<sup>th</sup> century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations’.<sup>221</sup> According to National Aeronautics

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<sup>215</sup> Sabine L Perch-Nielsen et al., ‘Exploring the Link between Climate Change and Migration’ (2008) 91 *Climatic Change* 375, 376.

<sup>216</sup> Biermann and Boas, above n 10, 4.

<sup>217</sup> *Ibid.*

<sup>218</sup> *Ibid.*

<sup>219</sup> Astri Suhrke, *Pressure Points: Environmental Degradation, Migration and Conflict*, Cambridge, Mass.: American Academy of Arts and Sciences (1993) 11–13.

<sup>220</sup> IPCC Report (1990), above n 8; Elizabeth Ferris, ‘Making Sense of Climate Change, Natural Disasters, and Displacement: A Work in Progress’ (Speech delivered at the Calcutta Research Group Winter Course, Calcutta, 14 December 2007) 2; Jane McAdam, *Climate Change, Forced Migration, and International Law* (Oxford University Press, 2012) 2.

<sup>221</sup> Summary for Policymakers, Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change; Intergovernmental Panel on Climate Change, Fourth

and Space Administration (NASA) scientists, the global average surface temperature in 2011 was the ninth warmest since 1880.<sup>222</sup> While there is uncertainty about the severity of climate change, '[t]here is no doubt that the Earth is warming and the climate is changing', and that a 'consensus exists among scientists that these changes are human induced, or anthropogenic'.<sup>223</sup> One of the effects of the changing climate will be large-scale human displacement.<sup>224</sup> The gradual degradation of the atmosphere by additional carbon dioxide and other greenhouse gasses may cause sea levels to rise by as much as one metre by the middle of the next century,<sup>225</sup> thus displacing people in low-lying coastal areas.

Although science cannot specifically determine if climate change is the cause of a particular environmental event, the latest IPCC Report enumerated a list of natural events that it describes as 'consistent with' anthropogenic climate change, including warmer temperatures, more frequent droughts, more intense storms and rising sea levels.<sup>226</sup> The IPCC described the occurrence of higher temperatures as 'virtually certain', and the other changes listed above as 'very likely' or 'likely'.<sup>227</sup> The IPCC identified the (a) increased incidence of extreme high sea level (excluding tsunamis), (b) intense tropical cyclone activity increases and (c) areas affected by drought increases as 'likely'; that is, with more than 66 per cent probability.<sup>228</sup> Climate change science continues to evolve to determine more accurately the effects of climate change on human lives.<sup>229</sup> The obvious link between these effects and human movements has been established by various reports and studies.

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Assessment, April 2007, Cambridge University Press, UK, 9, <<http://www.ipcc.ch/pdf/assessment-report/ar4/wg2/ar4-wg2-spm.pdf>>, accessed 13 April 2010. These results are based on over 29,000 observational data series from the 75 studies used by the IPCC in their Fourth Assessment and show a 'significant change in many physical and biological systems, more than 89% are consistent with the direction of change expected as a response to warming').

<sup>222</sup> NASA, NASA Finds 2011 Ninth-Warmest Year on Record, <<http://www.nasa.gov/topics/earth/features/2011-temps.html>>.

<sup>223</sup> Jeffrey D Sachs, *Common Wealth: Economics for a Crowded Planet* (Penguin Press, 2008) 83.

<sup>224</sup> David Hodgkinson et al., 'Copenhagen, Climate Change 'Refugees' and the Need for a Global Agreement' (2009) 4(2) *Public Policy*, 155,169.

<sup>225</sup> Myers, above n 39, 752–761; Norman Myers, *Ultimate Security: The Environmental Basis of Political Stability*, (1993) New York: WW Norton and Company; Myers and Kent, above n 10; Myers, above n 4, 182.

<sup>226</sup> IPCC: Summary for Policymakers (WG-II), above n 2, 18.

<sup>227</sup> Ibid. According to IPCC standards, 'virtually certain' means more than a 99 per cent probability, 'very likely' means more than 90 per cent probability and 'likely' means more than 66 per cent probability. Ibid 21.

<sup>228</sup> Ibid.

<sup>229</sup> The IPCC is writing its fifth assessment report. *Home*, IPCC, <<http://www.ipcc.ch/>>, accessed 16 March 2012.

## 2.6 Concluding Remarks

The environment, climate change and migration nexus is complex,<sup>230</sup> but emerging scientific studies confirm that climate change plays a substantial role in human displacement.<sup>231</sup> However, climate change does not *ipso facto* trigger human displacement, rather it generates certain environmental events that make it difficult or impossible for people to sustain their livelihoods.<sup>232</sup> Sea-level rises caused by melting glaciers is likely to cause the flooding of coastal areas.<sup>233</sup> People may be compelled to move, as the low-lying coastal areas may be contaminated with saline water and thus affect human habitats.<sup>234</sup> A scarcity of water resources due to droughts and desertification may motivate people to migrate from unproductive and water-scarce areas to safer places.<sup>235</sup> The changed and variable weather patterns may result dramatic climate events such as hurricanes, typhoons, and flooding, which may affect human habitats.<sup>236</sup>

Indeed, it is not possible to predict with certainty the impacts of climate change on population dynamics.<sup>237</sup> Environmental migration cannot be estimated with accuracy due to several factors. Laczko and Aghazarm identified four important reasons for this uncertainty.<sup>238</sup>

First, there is limited reliable data that confirms the exact number of people to be displaced due to climate change in developing countries which are the worst victims of climate change.<sup>239</sup>

Second, a variety of factors often guide the decision to migrate, of which environmental change is only one.<sup>240</sup> It is difficult to disaggregate the role of climate change from other

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<sup>230</sup> For example, Laczko and Aghazarm, above n 19, 13.

<sup>231</sup> For example, Warner, above n 109, 402.

<sup>232</sup> Laczko and Aghazarm, above n 19, 248; Ferris, above n 75.

<sup>233</sup> Nils Petter Gleditsch et al., *Climate Change and Conflict: The Migration Link 4–5* (Coping with Crisis Working Paper Series, International Peace Academy, 2007), available at <[http://www.undp.org/cpr/iasc/content/docs/Jan08\\_Links/Doc\\_3.pdf](http://www.undp.org/cpr/iasc/content/docs/Jan08_Links/Doc_3.pdf)>.

<sup>234</sup> *Ibid* 4.

<sup>235</sup> *Ibid*.

<sup>236</sup> *Ibid*.

<sup>237</sup> Oli Brown, 'Human Development Report: Climate Change and Forced Migration: Observations, Projections and Implications' (2007) 6 <[http://hdr.undp.org/en/reports/global/hdr2007-2008/papers/brown\\_oli.pdf](http://hdr.undp.org/en/reports/global/hdr2007-2008/papers/brown_oli.pdf)>.

<sup>238</sup> Laczko and Aghazarm, above n 19, 20.

<sup>239</sup> *Ibid*.

<sup>240</sup> *Ibid* 20; Boano, above n 2, 15.

economic, political and social factors that also contribute to triggering migration.<sup>241</sup> The uncertainty arises partly due to disagreements among experts on the role of the environment in inducing migration.<sup>242</sup> The wide variety of estimates of the number of displaced persons offers an ‘inadequate basis for formulating policies’.<sup>243</sup>

Third, there is no adequate definition for what constitutes a climate change refugee in international law.<sup>244</sup> The disagreement on the role of the environment in inducing migration leads to a further disagreement over terminology;<sup>245</sup> thus, there is still no consensus among researchers on the definition of climate or environmental migration.<sup>246</sup> When people who choose to move based fully or partially on environmental reasons are characterised ‘as economic migrants, migrant workers, de facto refugees, or as some hybrid’, it carries implications for estimates.<sup>247</sup> Researchers use different terminologies and definitions in their studies, which leads to inconsistencies in results.<sup>248</sup> Many researchers interpret the concepts of climate or environmental refugees widely; as Suhrke observes, this ‘invite[s] large numbers’.<sup>249</sup>

Fourth, no one can predict the effects of environmental change with certainty.<sup>250</sup> Moreover, it is difficult to ascertain exactly the frequency and intensity of climate effects and where and how the effects of climate change will manifest.<sup>251</sup> Moreover, apart from climatic changes, the calculation of numbers depends on ‘different methods of projecting displacement; ... [and] unknowable human variables such as strategies to mitigate, adapt to, and cope with the effects of climate change in particular localities’.<sup>252</sup> Still, climate change science has not developed to reach the capacity to measure the ‘impact of

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<sup>241</sup> Laczko and Aghazarm, above n 19, 20.

<sup>242</sup> Ibid 19.

<sup>243</sup> Camillo Boano et al., ‘Environmentally Displaced People: Understanding the Linkages between Environmental Change, Livelihoods and Forced Migration (2008) 1.

<sup>244</sup> Laczko and Aghazarm, above n 19, 20.

<sup>245</sup> Ibid 19.

<sup>246</sup> Biermann and Boas, above n 10, 9.

<sup>247</sup> Suhrke, above n 219, 4.

<sup>248</sup> Biermann and Boas, above n 10, 9.

<sup>249</sup> Suhrke, above n 54, 478.

<sup>250</sup> Laczko and Aghazarm, above n 19, 20.

<sup>251</sup> McAdam and Saul, above n 55, 4.

<sup>252</sup> Ibid.

individual choice, the potential for international action, and the variability of future emissions and meteorological scenarios'.<sup>253</sup>

However, regardless of the lack of precise estimates and questions of geographic distribution, there is widespread acceptance that environmental degradation and stresses resulting from global climate change play an increasingly significant role in causing or intensifying 'major forced displacements' over time.<sup>254</sup> The scope and scale of such flows, both internally and across national boundaries, is expected to increase drastically in coming years.<sup>255</sup> Thus, as reported in many studies and scientific reports, environmental displacement has rapidly been emerging as a delicate problem involving international peace and security, which deserves the attention of the international community.<sup>256</sup> Once this widely agreed-upon point is accepted, the role of climate change in population movements should not be ignored.<sup>257</sup> Academic and political discourses on the issue of environmental refugees should not be exclusively limited to the highly contentious debate over the potential numbers of climate change displaced persons.<sup>258</sup>

It is true that the interrelationship between climate change and human migration is not linear and straightforward.<sup>259</sup> Nonetheless, the existence of a clear link between anthropogenic climate change and consequent displacement has been increasingly recognised.<sup>260</sup> However, the tools of analysis are insufficiently sophisticated to determine who will migrate, when and why.<sup>261</sup> Moreover, there is no accepted form of methodology for calculating the number of climate migrants due to the problem of multi-causality.<sup>262</sup> This debate and confusion ultimately raises a question regarding to what extent it is

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<sup>253</sup> Laczko and Aghazarm, above n 19, 20.

<sup>254</sup> Piguet, above n 110, 8; Nurit Kliot, 'Environmentally Induced Population Movements: Their Complex Sources and Consequences: A Critical Review' in Jon D Unruh et al. (eds) *Environmental Change and Implications for Population Migration* (2004) 75.

<sup>255</sup> Koko Warner, 'In Search of Shelter: Mapping the Effects of Climate Change on Human Migration and Displacement' (Report, Cooperative for Assistance and Relief Everywhere (CARE), 2009) iv.

<sup>256</sup> Williams, above n 39, 506.

<sup>257</sup> Steve Lonergan and Ashok Swain, *Environmental Degradation and Population Displacement* AVISO (published by Global Environmental Change and Human Security Project (GECHS) (1999) 2 <<http://www.gechs.org/aviso/02/>>.

<sup>258</sup> Burton and Hodgkinson, above n 47, 3.

<sup>259</sup> Inter-Agency Standing Committee, *Climate Change, Migration and Displacement: Who Will be Affected?* (Working Paper, 2008) 1, <<http://unfccc.int/resource/docs/2008/smsn/igo/022.pdf>>; Kolmannskog, above n 26, 15.

<sup>260</sup> Kolmannskog, above n 26, 5.

<sup>261</sup> Burton and Hodgkinson, above n 47, 6.

<sup>262</sup> For example, Boano et al., above n 243, 12.

possible to consider specific forms of protection for a migratory process that does not have a clearly established cause.

However, the problem of multi-causality should not be an excuse to ignore the necessity of developing a protection framework for climate change induced displacement.<sup>263</sup> Even the existing refugee structure ‘is not immune from this causal complexity’.<sup>264</sup> Indeed, it is impractical to assess each individual against the Refugee Convention’s definition of a refugee, especially in cases involving massive numbers of forced migrants.<sup>265</sup> Instead, the current refugee framework, including the UNHCR and other international organisations, treats a large number of people who flee their homes because of persecution, war and famine as ‘persons of concern’ and extends protection and assistance.<sup>266</sup>

Given the uncertainty in predicting the exact numbers of climate change displacement and the problem of multi-causality of environmental displacement, national governments and the international community should develop norms and a framework for the protection of the rights of the environmental migrants.<sup>267</sup> Such norms and a framework will help to reach a consensus on a specific causal relationship as well as a uniform definition.<sup>268</sup> The framework should also establish a sophisticated institutional architecture to integrate complex issues of causality and evolve science into decision-making with respect to climate change migration based on objective criteria rather than subjective criteria.<sup>269</sup> More crucially, the international community should employ all possible efforts to assess the capacity of institutions and normative frameworks to respond to the needs of vulnerable people.

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<sup>263</sup> Castles, above n 207, 244.

<sup>264</sup> Corlett, above n 148, 48.

<sup>265</sup> Ibid 48–49.

<sup>266</sup> Ibid 49.

<sup>267</sup> Zetter, above n 213, 395.

<sup>268</sup> Ibid.

<sup>269</sup> For example, David Hodgkinson et al., ‘Copenhagen, Climate Change “Refugees” and the Need for a Global Agreement’ (2009) 4 *Public Policy* 155,163.

# CHAPTER 3

## CONCEPTUALISING CLIMATE CHANGE INDUCED DISPLACEMENT IN BANGLADESH\*

### 3.1 Introduction

Bangladesh is recurrently projected as one of the most vulnerable countries to climate change.<sup>1</sup> According to the Germanwatch Global Climate Risk Index 2012, Bangladesh was the country most affected by climate change in the past 20 years (1990–2010).<sup>2</sup> The country's geographic location, flat and low-lying topography, high population density, poverty incidence and dependence on natural resources and services render the country particularly vulnerable to climatic changes. Over the next decade, climate change will accelerate in terms of the frequency and intensity of natural disasters.

As a result, a considerable number of people affected by these intensifying hazards will be under substantial pressure to migrate due to a perceived threat to their lives and livelihoods. As the effects of climate change are different, people respond to these effects in diverse ways. Therefore, the policy responses towards climate change induced displacement need to be based on a clear understanding of the likely effects of different types of environmental factors on patterns of human movements.<sup>3</sup> This understanding will help to disentangle migration due to the direct effects of climate change from different dimensions of the phenomenon of environmental change and form a sound typology of climate change induced displacement.

In this context, this chapter conceptualises climate change induced displacement in Bangladesh. Providing a short overview of the socio-economic conditions of Bangladesh, this chapter first discusses how certain types of climatic effects interact with human

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<sup>1</sup> Bangladesh Climate Change Strategy and Action Plan 2009 (BCCSAP 2009), Ministry of Environment and Forests, Government of the People's Republic of Bangladesh (2009) 4, <[http://www.moef.gov.bd/climate\\_change\\_strategy2009.pdf](http://www.moef.gov.bd/climate_change_strategy2009.pdf)>

<sup>2</sup> Sven Harmeling, 'Global Climate Risk Index 2012: Who Suffers Most from Extreme Weather Events? Weather Related Loss Events in 2010 and 1991 to 2010' (Briefing Paper, Germanwatch, 2011) 6.

<sup>3</sup> Albert Kraler, Tatiana Cernei and Marion Noack, "'Climate Refugees" Legal and Policy Responses to Environmentally Induced Migration (European Parliament, 2011) 14.

mobility. Second, it analyses the typology of climate change induced displacement based on the causes and extent of movements. The chapter concludes by creating a definition of persons who move because of climate change induced displacement based on the causal factors driving migration in Bangladesh.

### ***3.2 Bangladesh and Susceptibility to Climate Change***

Bangladesh is vulnerable to a multitude of climatic effects. However, the current socio-economic and demographic condition has further aggravated the said vulnerabilities arising from adverse effects of climate change. The vulnerability of people is exacerbated because they rely exclusively on agriculture and natural systems for their livelihoods. Thus, the heavy toll of climate change on natural resources is likely to aggravate the existing socio-economic stresses. Therefore, environmental vulnerability coupled with other socio-economic stresses will likely result in the mass migration of large populations in Bangladesh.

#### ***3.2.1 Vulnerability to Climate Change***

Bangladesh is susceptible to a multitude of adverse effects of climate change, including floods, tropical cyclones, storm surges and droughts, because of its geographical location in the tropics and its flat, low-lying deltaic topography.<sup>4</sup> About 10 per cent of the country is barely one metre above the mean sea level (MSL) and one-third is under tidal excursions. Sea-level rises that are caused by global warming and accelerated by melting Himalayan glaciers are likely to cause flooding of highly populated coastal areas in Bangladesh. People may be compelled to move because the low-lying coastal areas are likely to be contaminated with saline water.<sup>5</sup> The scarcity of water resources due to droughts and desertification may motivate people to migrate from unproductive and water-scarce areas to safer places.<sup>6</sup> The changed and variable weather patterns will lead to dramatic climate events such as hurricanes, typhoons and flooding, which may also affect human habitats.<sup>7</sup> The IPCC predicts even higher flows in the rivers that flow into Bangladesh from India,

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<sup>4</sup> BCCSAP 2009, above n 1, 4–5.

<sup>5</sup> Ibid.

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

Nepal, Bhutan and China as a direct result of increasing monsoon rainfalls and the melting of the Himalayan glaciers.<sup>8</sup>

### **3.2.2 Vulnerability to Non-climatic Factors**

#### **3.2.2.1 Fragile Environment**

Bangladesh has a very fragile environment; historically, it is a hazard-prone country. Bangladesh has been regularly ravaged by catastrophic environmental events such as floods, tropical cyclones, storm surges and droughts.<sup>9</sup> The UNDP ranked Bangladesh ‘the most vulnerable country in the world to tropical cyclones and the sixth most vulnerable country to floods’.<sup>10</sup>

#### **3.2.2.2 Dependence on Vulnerable Ecosystems**

Agriculture is an important part of the formal and informal economy in Bangladesh, as well as the lives of the majority of its population.<sup>11</sup> While this crucial sector accounts for about one-fifth (19.95 per cent in financial year 2010–11) of Bangladesh’s GDP and 63 per cent of the national employment, it faces serious challenges posed by low productivity and the decline of land availability.<sup>12</sup> The situation is further aggravated due to global warming and climate change scenarios because agriculture in Bangladesh is heavily dependent on the weather.

#### **3.2.2.3 Population Growth**

Bangladesh is the sixth most densely populated country in the world, with a relatively small inhabitable area, and it is ‘in the top ten in terms of percentage of population living in the low elevation coastal zone’.<sup>13</sup> According to the UNDP Human Development Index (HDI), the current population in Bangladesh is around 150 million,<sup>14</sup> with a population

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<sup>8</sup> IPCC, *Climate Change 2007: The Physical Science Basis, Summary for Policy Makers, Contribution of Working Group I to the Fourth Assessment Report of the IPCC 2-16 (2007)* (hereinafter IPCC, Summary for Policy Makers), <<http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-spm.pdf>>.

<sup>9</sup> BCCSAP 2009, above n 1, 5.

<sup>10</sup> Ibid.

<sup>11</sup> Noor Mohammad, ‘The Agricultural Governance in Bangladesh: A Case Study’ (2012) 63 *World Academy of Science, Engineering and Technology* 894, 894–897.

<sup>12</sup> Government of the People’s Republic of Bangladesh, *Bangladesh Economic Review 2011*, 83–84. <[http://www.mof.gov.bd/en/budget/12\\_13/ber/en/chapter-7\\_en.pdf](http://www.mof.gov.bd/en/budget/12_13/ber/en/chapter-7_en.pdf)>.

<sup>13</sup> James S Pender, ‘What is Climate Change? And How it Will Effect Bangladesh’ (Briefing Paper (Final Draft), Church of Bangladesh Social Development Programme, 2008) 38.

<sup>14</sup> UNDP, Bangladesh: Country Profile—Human Development Indicators <<http://hdrstats.undp.org/en/countries/profiles/BGD.html>>.

density of 1,064 inhabitants per square kilometre.<sup>15</sup> A higher population density increases vulnerability to climate change because more people are exposed to the risks of migration.

#### **3.2.2.4 Adaptive Capacity**

In socio-economic terms, Bangladesh represents one of the poorest states. Annual growth rates are slowly declining (currently at 1.8 per cent) and are projected to fall to 0.56 per cent by 2045–2050. Regarding the HDI, 56 million people, or 40 per cent of the population, live below the poverty line, and the country was ranked 146 out of 187 in 2011.<sup>16</sup> According to the Population Reference Bureau (PRB), as many as 81 per cent of Bangladeshis were living on less than US\$2 per day between 2000 and 2009.<sup>17</sup> Combined, these figures evidently represent low adaptive capacity and the resilience of people to respond to climatic change and present significant risks of mass migration that occurs because of climate change.

### **3.3 Typology of Climate Change Induced Displacement in Bangladesh**

The type of human migration in response to the effects of climate change is diverse and complex.<sup>18</sup> A variety of typologies have been provided by scholars and organisations to identify the responses of people coping with the effects of climate change. They are primarily based on the relative permanency of the move, the extent of the movement, the nature of the boundaries crossed, the causes of the move and the characteristics of the drivers of migration.<sup>19</sup> However, this study categorises climate change induced displacement based on two interrelated factors: the nature of environmental disasters and the extent of the movement.<sup>20</sup> First, the movement may be due to progressive changes in the environment that take effect slowly and over a long period, or from sudden and acute

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<sup>15</sup> Population Reference Bureau, 2008 World Population Datasheet, (PRB, 2008) 2, <[http://www.prb.org/pdf08/08wpds\\_eng.pdf](http://www.prb.org/pdf08/08wpds_eng.pdf)>. The population density was as high as 1,111.1 population per square kilometre in 2008 (UN Data, A World of Information, <<http://data.un.org/CountryProfile.aspx?crName=Bangladesh>>).

<sup>16</sup> UNDP, Human Development Report 2011, <<http://hdrstats.undp.org/images/explanations/BGD.pdf>>. The HDI is a summary measure used to assess long-term progress in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living.

<sup>17</sup> PRB 2011 World Population Data Sheet.

<sup>18</sup> Susana B Adamo, 'Addressing Environmentally Induced Population Displacements: A Delicate Task' (Background Paper for the Population–Environment Research Network Cyberseminar on 'Environmentally Induced Population Displacements', 2008) 5.

<sup>19</sup> Graeme Hugo, 'Environmental Concerns and International Migration' (1996) 30 *International Migration Review* 105, 106.

<sup>20</sup> Tracey King, 'Environmental Displacement: Coordinating Efforts to Find Solutions' (2005) 18 *Georgetown International Environmental Law Review* 543, 546.

disasters.<sup>21</sup> Second, movements can be either internal or international, and both types may be sudden and temporary with the possibility of return, or permanent and without the possibility of return.<sup>22</sup>

### 3.3.1 Typology Based on Nature of Environmental Events

The initial difficulty in determining the role of environment in population displacement is that most ‘authors interpret “environment” quite broadly, or keep it ill-defined’.<sup>23</sup> For example, some authors provide definitions of ‘environment’ that broadly encompass large numbers of people within the concept of environmental refugee.<sup>24</sup> Walter Kälin, Representative of the Secretary-General on the Human Rights of Internally Displaced Persons, urged a thorough analysis of the different contexts and forms of climate change induced displacement.<sup>25</sup> To precipitate this, he identified five displacement-triggering scenarios that are widely used by other authors.<sup>26</sup> This classification has also been recently adopted by the IASC<sup>27</sup> Working Group on Migration/Displacement and Climate Change,

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<sup>21</sup> Ibid.

<sup>22</sup> Ibid.

<sup>23</sup> Steve Lonergan, ‘The Role of Environmental Degradation in Population Displacement’ (Woodrow Wilson International Centre for Scholars, 1998) 9.

<sup>24</sup> El-Hinnawi notes three categories of ‘environmental refugee’<sup>24</sup> in which he has incorporated three different groups of migrants: temporary migrants due to natural disasters, migrants from technological disasters and slow-onset environmental change migrants (Essam El-Hinnawi, *Environmental Refugees* (1985) 4.). Bates uses the term ‘environmental refugee’ to incorporate those who flee any type of environmental harm. She also creates subcategories based on the type of harm and divides environmental refugees into disaster refugees, who flee natural or technological disasters; expropriation refugees, who are permanently and intentionally relocated by economic development or war; and deterioration refugees, who leave their homes because of gradual environmental degradation (Diane C Bates, ‘Environmental Refugees? Classifying Human Migrations Caused by Environmental Change’ (2002) 23 *Population and Environment* 465, 467–468). Her classification system is based in part on El-Hinnawi. Myers’ definition of environmental refugee also includes victims of diverse environmental degradations ranging from natural disasters to industrial accidents (Norman Myers and Jennifer Kent, ‘Environmental Exodus: An Emergent Crisis in the Global Arena’ (Research Report, Climate Institute, June 1995) 18). However, environmental factors used in Dana Zartner Falstrom’s classification include ‘water shortages due to pollution, food shortages due to desertification or pollution, a sudden environmental disaster such as a hurricane, flood, fire, tornado, etc., or inhabitability of an area due to pollution, toxicity, or a sudden disaster such as a nuclear explosion’ (Dana Zartner Falstrom, ‘Stemming the Flow of Environmental Displacement: Creating a Convention to Protect Persons and Preserve the Environment’ (2001) 1 *Colorado Journal of International Environmental Law and Policy*, 1, 24).

<sup>25</sup> Walter Kälin, *The Climate Change—Displacement Nexus* (paper presented by Professor Walter Kälin, Representative of the Secretary-General on the Human Rights of Internally Displaced Persons, Panel on Disaster Risk Reduction and Preparedness: Addressing the Humanitarian Consequences of Natural Disasters, ECOSOC Humanitarian Affairs Segment, 16 July 2008, <[http://www.brookings.edu/speeches/2008/0716\\_climate\\_change\\_kalin.aspx](http://www.brookings.edu/speeches/2008/0716_climate_change_kalin.aspx)>).

<sup>26</sup> Ibid.

<sup>27</sup> The Inter-Agency Standing Committee (IASC) is a unique inter-agency forum for humanitarian coordination, while for its members, it is a policy development and decision-making forum involving key UN and non-UN humanitarian actors. The IASC was established in June 1992 in response to UN General

which was established in 2008 to define and propose the appropriate terminology and typology on migration and displacement induced by climate change.<sup>28</sup> These include: (1) hydro-meteorological disasters (e.g. flooding, hurricanes/typhoons/cyclones, mudslides); (2) zones designated by governments as being too high risk and dangerous for human habitation; (3) environmental degradation and slow-onset disasters (e.g. reduction of water availability, desertification, recurrent flooding, salinisation of coastal zones); (4) ‘sinking’ small island states; and (5) violent conflicts triggered by a decrease in essential resources (e.g. water, land, food) due to climate change. The IASC identified four causes of movements in the context of climate change.<sup>29</sup> Most of the typologies found in the literature more or less followed this model.

In most of the scenarios developed in the global context, the environment was explained widely. The scenarios included all types of environmental displacement including environmental disasters (both sudden and gradual), technological hazards due to industrial accidents, displacement arising from development projects (e.g. dams and electric plants) and displacement arising from conflicts due to the depletion of resources resulting from environmental degradation.

However, a similar climatic phenomenon in a different part of the world might not have the same effects on displacement scenarios. The effects of climate change may be differently perceived by people in Bangladesh due to geo-physical variations or the variable coping capacities of local social, political and economic structures.<sup>30</sup> For example, the sinking island scenario is not applicable in the Bangladesh context because it is not completely going to disappear due to sea-level rises. However, a substantial part of its territory is at risk of disappearing due to rising seas. Migration arising out of government-initiated planned evacuations in response to disasters does not appear to be a major factor for environmental displacement in Bangladesh because no major evacuation or resettlement programme has been seen to date.

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Assembly Resolution 46/182 on the strengthening of humanitarian assistance. More information can be found at <[www.humanitarianinfo.org/iasc](http://www.humanitarianinfo.org/iasc)>.

<sup>28</sup> IASC, *Climate Change, Migration and Displacement: Who will be Affected?* 1 (IASC, 2008); IASC, *Displacement and Climate Change: Towards Defining Categories of Affected Persons* (First Draft of a Working Paper submitted by the informal IASC Working Group on Migration/Displacement and Climate Change, 2008).

<sup>29</sup> First, hydro-meteorological extreme hazard events; second, environmental degradation and/or slow-onset extreme hazard events; third, significant permanent losses in state territory as a result of sea-level rises; and fourth, armed conflict/violence over shrinking natural resources.

<sup>30</sup> Camillo Boano, Roger Zetter and Tim Morris, ‘Environmentally Displaced People: Understanding the Linkages between Environmental Change, Livelihoods and Forced Migration’ (Refugee Studies Centre, Forced Migration Policy Briefing No. 1, 2008) 13.

Taking into context all of the associated particularities attributed to climate change displacement scenarios in Bangladesh, the recent IOM report on Bangladesh (published in 2011) confirmed that:

[c]limate change is expected to affect the movement of people in at least four ways: 1) the intensification of natural disasters—both sudden and slow-onset—leading to increased displacement and migration; 2) the adverse consequences of increased warming, climate variability and of other effects of climate change for livelihoods, public health, food security and water availability; 3) rising sea levels that make coastal areas uninhabitable; and 4) competition over scarce natural resources potentially leading to growing tensions and even conflict and, in turn, displacement.<sup>31</sup>

The security risk arising from climate change induced movements in Bangladesh has received considerable attention from academics and policy-makers, as Bangladeshi Prime Minister warned in September 2010 of possible ‘social disorders, political instability, cross-border conflicts and upheavals’ unless sufficient global multilateral actions were initiated to fund the adaptation and rehabilitation of a potentially large number of climate migrants.<sup>32</sup> The assumption is that climate change reduces resources for livelihoods, which will lead to conflicts over remaining resources and, as a result, intensified migration flows. This may be exacerbated further if migrants enter the territory of others who are also resource-constrained.<sup>33</sup> However, most experts and scholars are doubtful of confirming a direct link between environmental issues and armed conflicts in the sense that the latter would have been solely based on environmental factors.<sup>34</sup> Still, there is little empirical evidence in the literature that substantially establishes that mass ‘climate refugee’ flows from Bangladesh will threaten international or regional security.<sup>35</sup>

McAdam and Saul’s field visit in Bangladesh did not find any direct link between climate change and security risks arising out of climate-related movements.<sup>36</sup> Nevertheless, the interaction of ecological developments and social and political conflicts cannot be denied because social conflicts already exist over scarce resources, risks of radicalisation,

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<sup>31</sup> Matthew Walsham, ‘Assessing the Evidence: Environment, Climate Change and Migration in Bangladesh’ (IOM, 2010) ix.

<sup>32</sup> Jane McAdam and Ben Saul, ‘Displacement with Dignity: International Law and Policy Responses to Climate Change Migration and Security in Bangladesh’ (2010) 53 *German Yearbook of International Law* 234, 248.

<sup>33</sup> Ragnhild Nordås and Nils Petter Gleditsch, *Climate Change and Conflict* (2007), <[http://graduateinstitute.ch/webdav/site/political\\_science/shared/political\\_science/1701/Environmental-Security-Article-Nordas-Gleditsch.pdf](http://graduateinstitute.ch/webdav/site/political_science/shared/political_science/1701/Environmental-Security-Article-Nordas-Gleditsch.pdf)>.

<sup>34</sup> Kraler, Cernei and Noack, above n 3, 23.

<sup>35</sup> German Advisory Council on Global Change, *World in Transition: Climate Change as a Security Risk: Summary for Policy Makers* (Berlin, WBGU Secretariat, 2007) 6; P Schwartz and D Randall, ‘An Abrupt Climate Change Scenario and its Implications for United States National Security’ (October 2003), 3, 17; McAdam and Saul, above n 32, 248–265; The German Marshall Fund of the United States, above n 61, 6.

<sup>36</sup> McAdam and Saul, above n 20, 248–265.

religious terrorism, ethnic insurgencies and tension in borders.<sup>37</sup> It appears that climate change is only one of several interrelated causes of conflict; a cascading set of factors could increase tensions in the future.<sup>38</sup> Indeed, environmental stress due to climate change is likely to exacerbate existing tensions, notably in already disadvantaged areas with high levels of inequality in access to natural resources and contested property and usufruct rights.<sup>39</sup> However, even if there is an outbreak of conflict and mass disruption of security, the 1951 Refugee Convention and the Four Geneva Conventions are the most relevant frameworks for the protection of migrants.

Two types of climate-related changes affect livelihoods and are likely to trigger human migration: sudden hydro-meteorological disasters and slow-onset environmental degradation.<sup>40</sup>

### ***3.3.1.1 Sudden Hydro-meteorological Disasters***

Climate change, with scientific certainty, is likely to increase the frequency and severity of sudden-onset hydro-meteorological disasters such as flooding, hurricanes, typhoons and cyclones.<sup>41</sup> The increased prevalence of extreme weather patterns in Bangladesh manifests in direct human displacement.<sup>42</sup> During, and in the aftermath of, such natural disasters, people's lives and livelihoods are at risk due to the destruction of harvests, livestock and productive assets.<sup>43</sup> Consequently, people start moving from the affected area to safer places to secure their lives and livelihoods.<sup>44</sup> This type of movement is easily identifiable due to the observable nature of the environmental events and, in some cases, it is reported by the media.<sup>45</sup> Generally, this type of displacement is short term. When the disaster is

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<sup>37</sup> Ibid; Kraler, Cernei and Noack, above n 3, 23.

<sup>38</sup> The German Marshall Fund of the United States, 'Climate Change and Migration: Report of the Transatlantic Study Team' (The German Marshall Fund of the United States, 2010) 6.

<sup>39</sup> Kraler, Cernei and Noack, above n 3, 23.

<sup>40</sup> McAdam and Saul, above n 32, 237–241; Walsham, above n 31, 9–24.

<sup>41</sup> Elizabeth Ferris, 'Making Sense of Climate Change, Natural Disasters, and Displacement: A Work in Progress' (Speech delivered at the Calcutta Research Group Winter Course, Calcutta, 14 December 2007) 8.

<sup>42</sup> Etienne Piguat, 'Climate Change and Forced Migration' (UNHCR, 2008) 5.

<sup>43</sup> Koko Warner, 'Assessing Institutional and Governance Need Related to Environmental Change and Human Migration' (Background Paper, The German Marshall Fund of the United States, 2010) 2, <[http://www.gmfus.org/galleries/default-file/Warner\\_MAH\\_EditsV2.pdf](http://www.gmfus.org/galleries/default-file/Warner_MAH_EditsV2.pdf)>.

<sup>44</sup> Koko Warner, 'Global Environmental Change and Migration: Governance Challenges' (2010) 20 *Global Environmental Change* 402, 405.

<sup>45</sup> Warner, above n 43, 2; Walter Kälin, *Displacement Caused by the Effects of Climate Change: Who Will Be Affected and What are the Gaps in the Normative Framework for Their Protection?* 10 October 2008, Brookings, <[http://www.brookings.edu/papers/2008/1016\\_climate\\_change\\_kalin.aspx](http://www.brookings.edu/papers/2008/1016_climate_change_kalin.aspx)>.

over, people are able to return to their lives and livelihoods depending on the level of measures adopted for the recovery of social, economic and physical characteristics of the affected area.<sup>46</sup> Their mobility decisions are based on disaster management initiated by the concerned authority.<sup>47</sup>

According to the IPCC, sudden environmental disasters that have deleterious effects on human lives as well as human mobility include floods, cyclones and storm surges.

### **3.3.1.1.1 Cyclone**

Cyclone winds are likely to increase in intensity because of the positive correlation with sea surface temperature; thus, increased intensity of cyclone winds and precipitation are expected in Bangladesh due to the warming of the Northern Indian Ocean. Tropical cyclones trigger mass human displacement, both during and after the storm itself.<sup>48</sup> Around 53 per cent of the world's deaths from cyclones have taken place in Bangladesh.<sup>49</sup> For example, in November 2007, tropical cyclone Sidr, with winds up to 240 km per hour, affected the livelihoods of seven million people, displaced 650,000 people and killed 3,447.<sup>50</sup> In 2009, two cyclones (Bijli in April 2009 and Aila in May 2009) stroked Bangladesh.<sup>51</sup>

### **3.3.1.1.2 Floods**

Bangladesh is ranked second in the list of countries most at risk of floods. Almost 80 per cent of the total land area is prone to flooding.<sup>52</sup> The effects of increased flooding, including loss of life through drowning, spreading of disease and destruction of property,

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<sup>46</sup> Warner, above n 44, 405.

<sup>47</sup> Warner, above n 43, 2.

<sup>48</sup> Walsham, above n 31, 12.

<sup>49</sup> Anwar Ali, 'Climate Change Impacts and Adaptation Assessment in Bangladesh' (1999) 12 *Climate Research* 109, 111.

<sup>50</sup> Reliefweb Report, Central Emergency Response Fund Grants US\$8.75 million for Assistance to Bangladesh, Reliefweb, <[http://reliefweb.int/sites/reliefweb.int/files/reliefweb\\_pdf/briefingkit-ac1e87afa0d27b78a0ddb1ad45b5ea3b.pdf](http://reliefweb.int/sites/reliefweb.int/files/reliefweb_pdf/briefingkit-ac1e87afa0d27b78a0ddb1ad45b5ea3b.pdf)>, 201; Susan Chaplin, 'Climate-Related Displacement and Human Security in South Asia: A Review of the Social Science Research' (Institute for Human Security Working Paper Series, La Trobe University, 2011) 6.

<sup>51</sup> 'About 200,000 people were displaced by cyclone Bijli. Cyclone Aila exposes the risks and vulnerability associated with it aftermath of the natural event which has huge policy implications. The cyclone struck on 25th May 2009, affected 3.9 million people and the loss of about 150,000 livestock, breaching 1,742 kilometers of embankments and displacing 76,478 families in Satkhira and Khulna alone (the two worst affected districts). One year on, large areas remain flooded and around 100,000 people are still living on embankments, roads and any other available elevations of land' (Walsham, above n 20, vii.).

<sup>52</sup> Susan Chaplin, 'Climate-Related Displacement and Human Security in South Asia: A Review of the Social Science Research' (Institute for Human Security Working Paper Series, La Trobe University, 2011) 5.

cause displacement on a massive scale in Bangladesh,<sup>53</sup> where it is projected that more than one million people every year lose their land and homes to flooding.<sup>54</sup> One could argue that Bangladesh is a country that traditionally faces difficulties due to flooding and related environmental degradation. However, current climate changes promise to further aggravate the intensity, severity and frequency of the flood hazards through higher river flows resulting from heavier and more erratic rainfall in the Ganges–Brahmaputra–Meghna system during the monsoon and increased melting of the Himalayan glaciers.<sup>55</sup> The IPCC projects a 20 per cent increase in the intensity of associated rainfall that would contribute to (rainwater) flooding both in the coast and inland.<sup>56</sup>

### ***3.3.1.2 Slow-onset Environmental Degradation***

Long term and gradual environmental degradation, such as drought, desertification, reduced water availability due to melting glaciers, land erosion and increased salinity in coastal zones due to sea-level rises, cause large-scale progressive displacements. These gradual changes deteriorate herding, farming and fishing, and they may negatively affect livelihood systems that ultimately motivate people to move in the long term.<sup>57</sup> Communities in the affected areas may increasingly choose to move to safer places to avoid life-threatening environmental degradations that are likely to arise in the near future and avail the quality of living standards.<sup>58</sup> Indeed, this type of migration is a challenging and complex issue.<sup>59</sup> The gradual environmental effects are rarely reported by the media and concerned authorities until they transform into a severe crisis.<sup>60</sup> People displaced by slow-onset disasters may not return to their original place due to the loss of physical existence of their land (because of sea-level rises and coastal erosion) or livelihoods (due to desertification, salinity and the extinction of fish and species).<sup>61</sup> Provided the physical

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<sup>53</sup> Walsham, above n 31, 10.

<sup>54</sup> Cecilia Tacoli, 'Migration and Adaptation to Climate Change' Sustainable Development Opinion, 2007 IIED, <<http://pubs.iied.org/pdfs/17020IIED.pdf>>.

<sup>55</sup> BCCSAP, above n 1, 14.

<sup>56</sup> NIDOS, *Bangladesh Climate Change Factsheet*, NIDOS 3  
<<http://www.nidos.org.uk/downloads/BangladeshFactsheet.pdf>>.

<sup>57</sup> Warner (Assessing Institutional and Governance Need), above n 43, 4.

<sup>58</sup> Ibid.

<sup>59</sup> For example, Warner (Global Environmental Change and Migration), above n 44, 409.

<sup>60</sup> Warner (Assessing Institutional and Governance Need), above n 43, 4.

<sup>61</sup> For example, Warner (Global Environmental Change and Migration), above n 44, 409.

land is available, these people may choose to return to their original place if they can adopt an alternative livelihood.<sup>62</sup> Kälin explains:

such deterioration may not necessarily cause displacement, but it may prompt people to consider “voluntary” migration as a way to adapt to the changing environment and be a reason why people move to regions with better living conditions and income opportunities. However, if areas become uninhabitable over time because of further deterioration, finally leading to complete desertification, permanent flooding of coastal zones or similar situations, population movements will amount to forced displacement and become permanent.<sup>63</sup>

### **3.3.1.2.1 Sea-level Rises**

A higher temperature resulting from global warming would ultimately cause sea levels to rise, which is an impending threat to coastal areas in Bangladesh, which is particularly vulnerable to sea-level rises due to its low-lying topography, high population density in deltaic coastal regions and limited financial resources to respond.<sup>64</sup> A warming of 2° C with a 10 per cent increase in precipitation would increase runoff in the Ganges, Brahmaputra and Meghna (GBM) rivers by 19, 13 and 11 per cent respectively.<sup>65</sup> This will have far-reaching consequences for the population migration within Bangladesh, as two-thirds of the country is less than five metres above sea level and 20 per cent is one metre or less above sea level.<sup>66</sup> It covers 19 out of 64 districts and is home to about 35 million people.<sup>67</sup> The rising sea level is likely to have effects on saltwater intrusion, inundation and coastal erosion, as well as storms that are more destructive and decreased freshwater ability.<sup>68</sup> Consequently, there is strong evidence that all of these effects threaten to undermine crop growth, destroy subsistence food resources, water supplies and vital infrastructure, and inundate low-lying coastal areas that are home to millions of people.<sup>69</sup>

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<sup>62</sup> Ibid.

<sup>63</sup> Walter Kälin, ‘Conceptualising Climate-Induced Displacement’ in Jane McAdam (ed.), *Climate Change and Displacement: Multidisciplinary Perspectives* (Oxford: Hart Publishing, 2010) 85.

<sup>64</sup> Svitlana Kravchenko, ‘Right to Carbon or Right to Life: Human Rights Approaches to Climate Change’ (2008) 9 *Vermont Journal of Environmental Law* 513, 527.

<sup>65</sup> MMQ Mirza and A Dixit, ‘Climate Change and Water Resources in the GBM Basins’ (1997) 5(1) *Water Nepal* 71–100.

<sup>66</sup> Shardul Agrawala et al., ‘Development and Climate Change in Bangladesh: Focus on Coastal Flooding and the Sundarbans’ (OECD, 2003) 14–15.

<sup>67</sup> Ibid 45, 34.

<sup>68</sup> Koko Warner, ‘In Search of Shelter: Mapping the Effects of Climate Change on Human Migration and Displacement’ (Report, CARE, 2009) iv; Derek R Bell, ‘Environmental Refugees: What Rights? Which Duties?’ (2004) 10 *Res Publica* 135; Andrew Morton, Philippe Boncour and Frank Laczko, ‘Human Security Policy Challenges’ (2008) 31 *Forced Migration Review* 5, 5–6.

<sup>69</sup> Warner (In Search of Shelter), above n 47, iv; Bell, above n 68, 135–137; Morton, Boncour and Laczko, above n 68, 5–6.

Thus, rising sea levels may motivate resettlement, forced migration or other forms of human mobility.<sup>70</sup>

### **3.3.1.2.2 Melting Glaciers and River-bank Erosion**

Higher temperatures will result in the increased melting of glaciers, thus increasing runoff from the neighbouring Himalayas into the Ganges and Brahmaputra rivers in the short term, with the possibility of the rivers drying up in the long term.<sup>71</sup> Many of the largest rivers flowing through Bangladesh, including Ganga, survive on melt-water from Himalayan glaciers—‘the Water Tower of Asia’.<sup>72</sup> As the flow speeds up from the Himalayas to Bangladesh through the Ganges–Brahmaputra and into the coast, it is expected that the rising intensity of tidal waves will worsen river-bank erosion (RBE), which is a regular phenomenon in Bangladesh that jeopardises the lives and livelihoods of people living alongside Bangladesh’s major rivers and on river islands (‘chars’).<sup>73</sup> According to the Centre for Environment and Geographic Information Services (CEGIS), a research study found that 0.1 million people become homeless every year because of RBE.<sup>74</sup>

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<sup>70</sup> Gordon McGranahan, Deborah Balk and Bridget Anderson, ‘The Rising Tide: Assessing the Risks of Climate Change and Human Settlements in Low Elevation Coastal Zones’ (2007) 19 *Environment & Urbanization* 17, 21–27.

<sup>71</sup> The 4AR of the IPCC confirms that glaciers in the Himalayas are receding faster than in any other part of the world. Massive amounts of melted water increase the downward flow of rivers.

<sup>72</sup> Nicholas Stern, *The Economics of Climate Change: The Stern Review* (Cambridge University Press, 2006), 63.

<sup>73</sup> Walsham, above n 31, 13. ‘Since 1973, over 158,780 hectares of land has been eroded and in 2010 alone, RBE is expected to displace 11,000 people living on the banks of the *Jamuna*, and more than 5,000 living alongside the Ganges and Padma rivers’ (Ibid).

<sup>74</sup> Another study mentioned that an average of 0.1 per cent of people are displaced every year because of RBE (Tahera Akter, ‘Climate Change and Flow of Environmental Displacement in Bangladesh’ (Unnayan Onneshan—The Innovators, 2009, 8). However, at the same time, land accretion creates new land in and along the rivers themselves—chars—on which more than two million people are estimated to live (Walsham, above n 31, 13). Although RBE primarily affects rural people, urban communities ultimately bear the stress. Every year, hundreds of people who lost land, homes and livelihoods due to RBE rush to cities for food, shelter and employment. As said by Islam, ‘a family whose entire property, both homestead and cultivable land, is lost to river erosion, may be fortunate enough to move to a safer place in the same locality, but more often that family has no option but to move to an urban slum’ (M Islam, ‘Natural Calamities and Environmental Refugees in Bangladesh’ (1992) 12(1) *Refuge* (Special Issue Environmental Refugees), 5–10, 6).

### ***3.3.1.2.3 Drought, Desertification and Scarcity of Water Resources***

Current scientific projections and scenarios indicate that climate change will exacerbate droughts in terms of intensity and frequency in Bangladesh.<sup>75</sup> Desertification gradually diminishes the productivity of the land; it affects livelihood and people are thus compelled to move to other areas as the land becomes inhabitable.<sup>76</sup> The availability of freshwater will be reduced by increased salinity intrusion into fresh water sources during the low-flow conditions.

Thus, climate change increases the frequency and magnitude of both sudden- and slow-onset climate-related disasters. Indeed, the change of pace in the environment has a tremendous effect on the nature and extent of human displacement and migration.<sup>77</sup> Therefore, distinguishing between rapid- and slow-onset events helps the understanding of different migration patterns due to climate change. Regarding forced migration, both sudden and gradual disruptions require a humanitarian response; thus, the policy responses should target migration caused by either or both.<sup>78</sup>

### ***3.3.2 Typology Based on the Extent and Permanency of Movements***

When people are compelled to move to safer places in the face of natural disasters, the destination and extent of their movements are determined by family and community networks, historical ties, proximity, the capacity of resilience, access to social protection and level of adaptation. Accordingly, the same climatic phenomenon produces migration in diverse forms and directions. Generally, at the early and intermediate stages, environmental degradation may lead to predominantly temporary migration. People initially move to higher ground in the vicinity as well as better-protected neighbouring villages and towns. When environmental degradation becomes severe or irreversible, resulting migration can become permanent.<sup>79</sup> While most of these migrants remain within the country, few of them who have resources, including money, education and networks, leave the country for safe refuge.

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<sup>75</sup> R Selvaraju et al., 'Livelihood Adaptation to Climate Variability and Change in Drought-Prone Areas of Bangladesh: Developing Institutions and Options' (Institutions for Rural Development 5, Asian Disaster Preparedness Centre and Food and Agricultural Organization of the United Nations, 2006) 57.

<sup>76</sup> Bonnie Docherty and Tyler Giannini, 'Confronting a Rising Tide: A Proposal for a Convention on Climate Change Refugees' (2009) 33 *Harvard Environmental Law Review*, 349–403, 349.

<sup>77</sup> Warner (Global Environmental Change), above n 44, 404.

<sup>78</sup> *Ibid.*

<sup>79</sup> Global Migration Group (GMG), 'Mainstreaming Migration into Development Planning: A Handbook for Policy-makers and Practitioners' (IOM, 2010) 109.

The Displacement Solutions state that displacement due to climate change is likely to manifest in six primary ways. These are (1) temporary displacement, (2) permanent local displacement, (3) permanent internal displacement, (4) permanent regional displacement, (5) permanent inter-continental displacement and (6) temporary regional or international displacement.<sup>80</sup> In the context of Bangladesh, the climate-related human movement is likely to be correlated with existing migration flows since the social networks and access to capital have significant role in determining the extent and patterns of migration.<sup>81</sup>

However, the Study Team on Climate Change Induced Migration of the German Marshall Fund of the United States, which visited Bangladesh, outlined three broad scenarios of migration patterns applicable to Bangladesh:

- sudden large-scale forced displacement caused by sudden-onset disasters
- unplanned rural–urban migration into growing urban slums and other areas, possibly creating conflict and tensions over competition for land
- more gradual migration to other destinations in Bangladesh and abroad, facilitated by sufficient economic assets and skills among out-migrants to support sustainable livelihoods at the destinations and remittance flows back to source communities.<sup>82</sup>

Broadly, based on the possibility of returning to their original homes, environmental migration may be temporary, people may choose to return home when conditions allow or they may be unwilling or unable to return, resulting in a permanent migration.<sup>83</sup> Regarding the extent of their movements, they may be internal, with people moving shorter or longer distances to find new homes and livelihoods within their own countries, or it may be international, with people moving much further away and crossing international borders.<sup>84</sup> The classification based on ‘cross of international border’ will help to determine the jurisdiction and protection mechanism. However, it is an urgent necessity to promote the

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<sup>80</sup> Displacement Solutions, *Climate Change, Human Rights and Forced Human Displacement: Case Studies as Indicators of Durable Solutions* (Meeting Report, Displacement Solutions, 2008) 4 <[http://www.displacementsolutions.org/files/documents/Climate\\_Change\\_Displacement\\_Meeting\\_Paper.pdf](http://www.displacementsolutions.org/files/documents/Climate_Change_Displacement_Meeting_Paper.pdf)>.

<sup>81</sup> Jon Sward, ‘Migration and Climate Change: How Will Climate Shifts Affect Migration Trends?’ (Briefing No. 12, Development Research Centre on Migration, Globalisation & Poverty, 2008) 1.

<sup>82</sup> The German Marshall Fund of the United States, above n 38, 4.

<sup>83</sup> Susan F Martin, ‘Climate Change and International Migration’ (Background Paper, The German Marshall Fund of the United States, 2010) 2, <[http://www.gmfus.org/galleries/default-file/Martin\\_V3.pdf](http://www.gmfus.org/galleries/default-file/Martin_V3.pdf)>.

<sup>84</sup> Heren J Ketel, ‘Global Warming and Human Migration’ in Antoaneta Yotova, *Climate Change, Human Systems and Policy* (2004) 2; Adamo, above n 15, 5; UNHCR, ‘Climate Change, Natural Disasters and Human Displacement: A UNHCR Perspective’ (UNHCR, 2009) 4, <<http://www.unhcr.org/refworld/docid/4a8e4f8b2.html>>.

development of a sophisticated typology of climate change induced displacement because each of the available forms of migration requires significantly different approaches and policy frameworks.<sup>85</sup>

### ***3.3.2.1 Internal Displacement***

#### ***3.3.2.1.1 Temporary Internal Displacement***

Most empirical research concludes that the majority of people displaced by climate change related environmental factors in Bangladesh will be internal; that is, within the national borders.<sup>86</sup> In the case of extreme and sudden-onset natural disasters such as floods, hurricane and storm surges, people are typically displaced temporarily and within very short distances because the people cannot afford long distance movement migration because of poverty associated with fragile socio-economic circumstances.<sup>87</sup>

Temporary and circular migration is a common longer-term survival strategy in Bangladesh.<sup>88</sup> Seasonal migration to both rural and urban areas provides vital income sources for the rural poor during periods of low local employment opportunities.<sup>89</sup> Although seasonal migration is not solely linked to natural hazards, field research by the BISS shows that the number of people migrating temporarily from areas that are vulnerable to natural hazards has significantly increased over recent years, as localised coping strategies have become more difficult to sustain.<sup>90</sup> Seasonal migration is predominant among the poor and it is a crucial way of achieving and maintaining alternative livelihoods, as well as a way to cope with environmental degradations.<sup>91</sup> These temporary seasonal migrants usually move to urban areas to seek employment in the

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<sup>85</sup> Boano, Zetter and Morris, above n 30, 1; Martin, above n 83, 2.

<sup>86</sup> McAdam and Saul, above n 32, 235.

<sup>87</sup> Jane McAdam, 'Swimming against the Tide: Why a Climate Change Displacement Treaty is not the Answer' (2011) 23(1) *International Journal of Refugee Law* 2, 11–12. When disasters occur, people search for safe shelter to move family members and other household materials. Preferably, they choose the house or land of relatives or neighbours who are not at risk of the disaster. This is difficult because every family is in competition to receive a welcome address from wealthy friends, relatives or neighbours. Failing to secure a safe refuge, these displaced people compete again to secure a place in nearby 'khas' land or on an embankment, with the hope of returning to their original home when the danger is over.

<sup>88</sup> CR Abrar and SN Azad, 'Coping with Displacement: Riverbank Erosion in North-West Bangladesh' (RDRS Bangladesh, North Bengal Institute, and Refugee and Migratory Movements Research Unit, 2004) 113; Rita Afsar, 'Internal Migration and the Development Nexus: The Case of Bangladesh' (DFID and RMMRU, 2003) 2, <[http://www.eldis.org/vfile/upload/1/document/0903/Dhaka\\_CP\\_6.pdf](http://www.eldis.org/vfile/upload/1/document/0903/Dhaka_CP_6.pdf)>.

<sup>89</sup> Afsar, above n 88, 2.

<sup>90</sup> BISS and Safeworld, 'Climate Change and Security in Bangladesh' (BISS and Safeworld, 2009) 17.

<sup>91</sup> R Selvaraju et al., above n 75, 26.

informal sector (such as rickshaw driving) or to rural areas to take up employment as labourers in agricultural sectors.<sup>92</sup>

Thus, a possible correlation exists between climate change and the rapid growth of urbanisation in Bangladesh.<sup>93</sup> Many people who are compelled to leave their homes in rural areas due to floods, cyclones and river erosion are moving to the capital city of Dhaka or the port city of Chittagong for work and shelter, which has contributed to the rapid growth of urban populations.<sup>94</sup> As a result, Dhaka's population increased from 1.4 million in 1970 to 14 million in 2010, and it is expected to rise to 21 million by 2025.<sup>95</sup> Indeed, a comprehensive account of climate-induced rural–urban migration trends requires more mapping and assessment to understand where these people originate from, under what circumstances, by what means and, more importantly, their destination.<sup>96</sup>

In most cases of temporary displacement, a return to their habitats is often feasible in the long run, and people can start to rehabilitate their livelihoods and reconstruct their houses once the event has ceased.<sup>97</sup>

### ***3.3.2.1.2 Permanent Internal Displacement***

While people from rural areas generally adopt temporary circular and seasonal migration for their livelihoods, a recent trend has indicated considerable increased permanent

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<sup>92</sup> BIISS and Safeworld, above n 90, 16; McAdam (Swimming against the Tide), above n 87, 11.

<sup>93</sup> For Bangladesh, the current growth rate of the urban population is 4.8 per cent per year. Major metropolitan areas saw populations expand from 1.6 million in 1974 to 20.15 million in 1991. By 2001, this had risen to 23.1 million and by 2006 to 35 million (Centre for Urban Studies, *Squatters in Bangladesh Cities: A Survey of Urban Squatters in Dhaka, Chittagong and Khulna—1974* (Dhaka: CUS, 1976) and Bangladesh Bureau of Statistics, *Bangladesh National Population Census Report—1974* (Dhaka: Ministry of Planning, 1977); *Bangladesh Population Census 1991 Urban Area Report* (Dhaka: Ministry of Planning, 1997); *Population Census 2001, National Report (Provisional)*; Rabab Fatima and Adnan Ahmed Sirajee, 'Climate Change and Displacement in Bangladesh—A Silent Crisis?' Migration Autumn 2009, 11

<[http://publications.iom.int/bookstore/free/migration\\_autumn\\_09.pdf](http://publications.iom.int/bookstore/free/migration_autumn_09.pdf)>.

One field study on victims of cyclone Ayla found that a large portion of the extreme poor migrated to the urban areas, as they had limited belongings in their own locality (Hasan Mehedi, AK Nag and S Farhana, 'Climate Induced Displacement: Case Study of Cyclone Aila in the Southwest Coastal Region of Bangladesh' (Humanitywatch, 2010) 20). Urban migration is dominant with young people, while the older population prefers to stay in rural villages (R Selvaraju et al., above n 75, 26).

<sup>94</sup> Fatima and Sirajee, above n 93, 11.

<sup>95</sup> Dhaka will be one of the megacities with 30 million people. Nearly 3.5 million people in Dhaka live in slums. The informal settlements that have mushroomed in every corner of Dhaka over the past years suggest that the national population is expected to be predominantly urban-centric in roughly three decades from now (Fatima and Sirajee, above n 93, 11).

<sup>96</sup> Fatima and Sirajee, above n 93, 11.

<sup>97</sup> Walsham, above n 31, 3.

migration from areas affected by climate change.<sup>98</sup> Initially, most of the people move temporarily with the hope of returning home when it is possible to do so.<sup>99</sup> They only move permanently when all alternative coping mechanisms have been exhausted.<sup>100</sup> Indeed, a number of socio-economic factors are responsible for this increase in permanent migration; however, climate change has accelerated the process.<sup>101</sup> The effects of climate change are likely to cause irreversible changes to the living environment and make certain areas unliveable due to the depletion of natural resources.<sup>102</sup> In this situation, people need to be relocated to places that are less dangerous because returning to their original home is unlikely or impossible.<sup>103</sup> Obviously, rich people have more options; they can buy land in other places or move to urban areas. However, permanent relocation is difficult in densely populated developing countries such as Bangladesh, where large numbers of people must share limited resources. There is also a risk that land owners will refuse to allow the settlement of migrant victims of natural disasters.<sup>104</sup>

### ***3.3.2.2 Cross-border Displacement***

There is a common assumption supported by the literature, including Myers, that environmental degradation that severely affects livelihoods and basic infrastructures in a particular area result in international migration from Bangladesh.<sup>105</sup> However, the existing

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<sup>98</sup> BIISS and Safeworld, above n 90, 17. The findings from field research by BIISS and Safeworld suggested that increased migration in response to the severity of natural events tends to become permanent (Ibid).

<sup>99</sup> Ibid.

<sup>100</sup> Ibid. For example, around 20,000 people from a South Eastern coastal island of Bangladesh, Kutubdia, who lost their habitat during a 1991 cyclone, have been forced to migrate to Cox'sbazar, a neighbouring tourist city. They are presently living permanently in an urban slum called 'Kutubdia Para' in Cox'sbazar (Md. Shamsuddoha, 'Climate Change Induced Forced Migrants: In Need of a Dignified Recognition under a New Protocol' (Policy Paper, Equity and Justice Working Group, Bangladesh (EquityBD), 2009) 11). People are still moving away from this island, as its surroundings are gradually being submerged due to rising sea levels. Another field study by BIISS and Safeworld found that, in two villages in the Sirajganj District, over 10 per cent of families had made a deliberate and permanent move to Dhaka, while an additional 20–30 per cent had not returned after migrating seasonally (Ibid).

<sup>101</sup> Ibid.

<sup>102</sup> King, above n 20, 547.

<sup>103</sup> Adamo, above n 18, 5.

<sup>104</sup> Ibid.

<sup>105</sup> Myers (2002) argued that climate refugees from Bangladesh alone might outnumber all current refugees worldwide. He projected that 26 million refugees will come from Bangladesh. An earlier study by Homer-Dixon (1994) concluded that Bangladeshi migrants have expanded the population of neighbouring India by 12–17 million over the past 40 years due to environmental scarcity. Dr Rajendra Pachauri of the Nobel Prize-winning IPCC stated that 'Bangladesh is going to be one of the worst-hit regions and that will certainly be a matter of concern. It may generate refugees at a scale not seen before. Obviously many will move towards India'. See Norman Myers, 'Environmental Refugees: A Growing Phenomenon of the 21<sup>st</sup> Century' (2002) 357(1420) *Philosophical Transactions: Biological Sciences* 609, 611; Norman Myers and Jennifer Kent, *Environmental Exodus: An Emergent Crisis in the Global Arena* (Climate Institute, 1995) 149.

patterns of movements from natural disasters, which provide the best indicators of future movements and experts' views, do not endorse this assumption.<sup>106</sup> Despite annual flooding, cyclones and coastal and river-bank erosion for the past decades, there is little evidence at present of any substantial linkage between environmental degradation and long distance international migration.<sup>107</sup> The main reason is that it needs considerable resources, including education, information, social networks, skills and financial, for long distance and international migration. It also implies that the people who are most vulnerable to environmental change and degradation are those who are least able to move far away (e.g. crossing international borders).<sup>108</sup> Moreover, people do not want to move abroad permanently owing to attachment to land, family and culture.<sup>109</sup>

Whatever the reasons that inhibit cross-border movement, it is certain that only some portions of the affected people—those who mostly belong to the economically solvent class—will succeed in international migration.<sup>110</sup> Thus, Myers' assumption that a large number of environmental migrants will rush to developed countries is unlikely to happen in reality. The recent IOM study on patterns of human migration in Bangladesh stated that 'the overwhelming majority of migration in which environmental factors play a role at present is internal rather than external'.<sup>111</sup> McAdam and Saul also cast doubts on mass cross-border movements due to climate change in Bangladesh.<sup>112</sup> Thus, the connections between climate change and a permanent form of cross-border migration are 'far less clear'.<sup>113</sup>

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<sup>106</sup> For example, Hugo, Graeme, 'Climate Change-Induced Mobility and the Existing Migration Regime in Asia and the Pacific' in McAdam (ed.), *Climate Change and Displacement: Multidisciplinary Perspectives* (Hart Publishing, 2010) 9.

<sup>107</sup> McAdam and Saul, above n 32, 246.; Walsham, above n 31, 30.

<sup>108</sup> Walsham, above n 31, 28.

<sup>109</sup> McAdam (Swimming against the Tide), above n 87, 12.

<sup>110</sup> For instance, a recent study on the migration effects of floods found that only 5 per cent of households with a migrant had a family member overseas, and they were all from the richest class in the village (MZM Rahman, 'Emigration and Development: The Case of a Bangladeshi Village' (2000) 38 *International Migration* 109, cited in McAdam (Swimming against the Tide), above n 87, 12).

<sup>111</sup> Walsham, above n 31, 28.

<sup>112</sup> McAdam and Saul, above n 32, 243–245.

<sup>113</sup> Walsham, above n 31, 31.

### *3.4 Definition of Climate Change Induced Displacement: An Analysis*

Although various attempts have been made to define the people moved for environmental/climate change reasons at the international level, there is no agreed-upon definition of climate change induced displaced persons. Thus, this section endeavours to define climate change induced displacement in Bangladesh. The policy-makers, government reports and policy papers repeatedly use the terms ‘climate refugee’, ‘environmental refugees’ or ‘climate victims’; however, these terms are not formally defined to identify the people likely to be displaced due to the effects of climate change.<sup>114</sup> Therefore, no guidelines denote how the needs and rights of these persons would be assessed.<sup>115</sup> Thus, the lack of a formal definition dissuades the conceptualisation and protection of climate change induced displaced persons.

However, it can be argued that the attempt to define those who are in flight or in search of safer livelihoods and shelter due to climate change effects may complicate the issue because human migration is associated with multiple causes.<sup>116</sup> In addition, a fixed definition risks excluding people who are in need of greater protection, such as those moved by poverty or development projects.<sup>117</sup> Nevertheless, from legal protection and policy-setting perspectives, it is necessary to define the people subject to the intended protection mechanism for the sake of clarity and certainty.<sup>118</sup> Without an agreed working or descriptive definition, it may be impossible to achieve the targeted level of protection.<sup>119</sup>

However, most of the definitions found in the literature on environmental/climate change migration are developed in a global setting.<sup>120</sup> No definition of climate change induced

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<sup>114</sup> Roger Zetter, ‘Protecting Environmentally Displaced People: Developing the Capacity of Legal and Normative Frameworks’ (Research Report, Refugee Studies Centre, 2011) 44.

<sup>115</sup> *Ibid.*

<sup>116</sup> Tina Acketoft, ‘Environmentally Induced Migration and Displacement: A 21<sup>st</sup> Century Challenge’ (Report of Committee on Migration, Refugees and Population, Parliamentary Assembly, Council of Europe, 2008) 13, <<http://assembly.coe.int/Documents/WorkingDocs/Doc08/EDOC11785.pdf>>.

<sup>117</sup> *Ibid.*

<sup>118</sup> *Ibid.*

<sup>119</sup> *Ibid.*

<sup>120</sup> Terms and concepts such as ‘environmental migration’, ‘climate change-induced migration’, ‘ecological or environmental refugees’, ‘climate refugees’, ‘climate change migrants’ and ‘environmentally induced forced migrants’ are found scattered throughout the emerging literature. Generally, persons forcibly displaced across borders for environmental reasons have been referred to as ‘environmental refugees’ or ‘climate refugees’. No existing legal instrument explicitly protects people who flee environmental threats. For a definition of that group, one must turn to academic literature, in which there is a lively theoretical debate. Most people who study environmental migration discuss the broader class of environmental refugees rather than the more specific subset of climate change refugees. They use a variety of terms to refer to this group of people and its subcategories.

displaced people is found in academic literature and policy papers regarding the Bangladesh context. In developing a definition, this chapter suggests that the following matters must be considered:

1. What is the appropriate terminology to identify the people displaced by environmental degradation resulting from climate change?
2. Does the definition of climate change induced displacement include all types of environmental events—both natural and man-made—including technological and development-induced disasters or specific characteristics of environmental degradations resulting from climate change as causes for migration?
3. Does the definition include internal and/or cross-border movements or both?
4. Does the definition include both temporary and permanent displacement?
5. Do migrants need to be exclusively forced to move from their original place?
6. Does the definition include both sudden and gradual environmental degradations?

### **3.4.1 *Appropriate Terminology***

Academics and policy-makers use different terminologies such as ‘refugees’, ‘migrants’ or ‘displaced persons’ to identify persons moved for environmental reasons. While the term ‘environmental refugee’ has been used in academic circles since 1970, the term ‘climate refugee’ has become very popular in recent years.<sup>121</sup> Many academics, NGOs and noted personalities such as Barack Obama and Ban Ki Moon frequently use the term ‘climate refugee’. By the same token, academics, government officials, policy-makers and NGOs in Bangladesh popularly use the term ‘environmental refugee’ or ‘climate refugee’ to refer to ‘people displaced for environmental degradation as a result of climate change’, without any corresponding reference.

Although the term ‘refugee’ has a precise meaning in international law,<sup>122</sup> Cooper boldly argued that people who move for environmental reasons are implicitly included under the Convention’s refugee definition and thus can avail themselves of the Convention’s protection.<sup>123</sup> Cooper’s arguments are based on the notion that environmentally displaced

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<sup>121</sup> For example, Myers and Kent, above n 24, 17; El-Hinnawi, above n 24, 4; Astri Suhrke and Annamaria Visentin, ‘The Environmental Refugee: A New Approach’ (1991) 2 *Eco-decision* 73.

<sup>122</sup> Stephen Castles, ‘Environmental Change and Forced Migration: Making Sense of the Debate’ (Working Paper No. 70, UNHCR, 2002) 8.

<sup>123</sup> Jessica B Cooper, ‘Environmental Refugees: Meeting the Requirements of the Refugee Definition’ (1998) 6 *New York University Environmental Law Journal* 480, 501–502; Brooke Havard, ‘Seeking Protection: Recognition of Environmentally Displaced Persons under International Human Rights Law’ (2007) 18 *Villanova Environmental Law Journal*, 65, 74.

people are generally forced to flee for both environmental and political reasons,<sup>124</sup> and the environment can be used as an instrument of harm.<sup>125</sup>

Some scholars, including Docherty and Giannini and Biermann and Boas, do not consider the Refugee Convention an appropriate framework for the protection of ‘climate refugees’; rather, they suggest separate global governance for addressing this category of migrants and prefer the term ‘refugee’ to refer to the human movement for environmental reasons.<sup>126</sup> These scholars argue that, although international law defines a ‘refugee’ in a particular way, the term is not exclusively reserved for a particular category of migrants and people outside this definition are worthy of protection.<sup>127</sup> As Biermann and Boas argue:

we see no convincing reason to reserve the stronger term ‘refugee’ for a category of people that stood at the centre of attention after 1945, and to invent less appropriate terms—such as ‘climate-related environmentally displaced persons’—for new categories of people who are forced to leave their homes now, with similar grim consequences.<sup>128</sup>

However, many articles and studies that have emerged since the 1990s have debated whether people forced to migrate as a result of environmental degradation should be described as environmental or climate change refugees.<sup>129</sup> Given the existing international law regarding refugees, some academics and intergovernmental agencies, including UNHCR and IOM, consider that using the term ‘refugee’ to categorise these people is

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<sup>124</sup> Havard, above n 123, 75; Cooper, above n 123, 502.

<sup>125</sup> Molly Conisbee and Andrew Simms, *Environmental Refugees: The Case for Recognition* (2003) 30. However, the definition of ‘refugee’ does not leave open for interpretation the reasons for persecution; instead, it includes an exhaustive list of ‘race, religion, nationality, membership of a particular social group or political opinion’, ‘clearly setting the boundaries of the legal application of the Refugee Convention’ (Angela Williams, ‘Turning the Tide: Recognizing Climate Change Refugees in International Law’ (2008) 30(4) *Law & Policy* 502, 508).

<sup>126</sup> Frank Biermann and Ingrid Boas, ‘Preparing for a Warmer World: Towards a Global Governance System to Protect Climate Refugees’ (2010) 10 *Global Environmental Politics*, 67, 75–83; Docherty and Giannini, above n 76, 370.

<sup>127</sup> Biermann and Boas, above n 126, 67, 75–83.

<sup>128</sup> *Ibid* 67.

<sup>129</sup> Roger Zetter, ‘The Role of Legal and Normative Frameworks for the Protection of Environmentally Displaced People’ in Frank Laczko and Christine Aghazarm (eds), *Migration, Environment and Climate Change: Assessing the Evidence* (2009) 387, 397; David Keane, ‘Environmental Causes and Consequences of Migration: A Search for the Meaning of “Environmental Refugees”’ (2004) 16 *Georgetown International Environmental Law Review* 209–211; Fabrice Renaud et al., ‘Control, Adapt or Flee: How to Face Environmental Migration?’ (Intersections No. 5/2007, UNU-EHS, 2007) 1; Tess Burton and David Hodgkinson, *Towards a Convention for Persons Displaced by Climate Change: A discussion Note on an Ethical Response to the Human Impacts of Climate Change and its Implications for the Relationship between Adaptation and Displacement*, The Hodgkinson Group—Climate Change and Aviation Advisors (Publications)  
<<http://www.hodgkinsongroup.com/documents/Draft%20Discussion%20Note%20Adaptation%20and%20Displacement.pdf>>.

unhelpful, unsound, controversial<sup>130</sup> and legally meaningless with no practical value.<sup>131</sup> To them, applying the term ‘refugee’ to environmentally displaced people raises many legal complexities, as this application does not adhere to the internationally accepted definition of a refugee under the 1951 Refugee Convention,<sup>132</sup> which is the yardstick for granting refugee status.<sup>133</sup> According to the Convention, a refugee is someone who holds 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 or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable, or, owing to such fear, is unwilling to return to it.<sup>134</sup>

Clearly, someone who flees due to environmental reasons does not fall under this definition. These scholars raise the question of whether ‘environmental harm’ can be considered ‘persecution’ in cases of environmental migration. Unless it is assumed that either nature or the environment can be a persecutor, the term ‘refugee’ does not appear suitable for describing people displaced by environmental factors. Except in the most extreme circumstances, environmental degradation cannot be qualified as persecution,<sup>135</sup> and the definition does not leave open for interpretation the reason for persecution. Instead, it includes an exhaustive list of ‘race, religion, nationality, membership of a particular social group or political opinion’.<sup>136</sup>

Therefore, the limitations regarding the applicability of the Refugee Convention,<sup>137</sup> together with widespread confusion and scepticism, negate the categorisation of climate change induced displaced persons as refugees.<sup>138</sup>

It appears that both views—providing protection to climate change induced displaced persons categorised as ‘refugees’ and counterarguments against the terms ‘environmental

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<sup>130</sup> Robin Bronen, *Forced Migration of Alaskan Indigenous Communities due to Climate Change: Creating a Human Rights Response*, 5

<<http://www.iom.int/jahia/webdav/site/myjahiasite/shared/shared/mainsite/events/docs/abstract.pdf>>.

<sup>131</sup> Richard Black, ‘Environmental Refugees: Myth or Reality?’ (Working Paper No. 34, UNHCR, 2001) 10. He leaves the reader in no doubt that he sees the concept as a myth—and a misleading, highly politicised and potentially damaging one at that.

<sup>132</sup> Convention Relating to the Status of Refugees, opened for signature 28 July 1951, 189 U.N.T.S. 150 (hereinafter Refugee Convention).

<sup>133</sup> Docherty and Giannini, above n 76, 361–362; Williams, above n 125, 507–508.

<sup>134</sup> Art. 1(A)(2) of the Refugee Convention, above n 132.

<sup>135</sup> Williams, above n 125, 508.

<sup>136</sup> Refugee Convention, above n 132.

<sup>137</sup> Ibid.

<sup>138</sup> Williams, above n 125, 503.

refugee’ or ‘climate refugee’—are premised on the preconceived concept of ‘refugee’ set by the Refugee Convention. This notion of interpreting the existence of climate change induced displacement in light of traditional refugee concepts leaves the root causes of environmental migration unaddressed.<sup>139</sup> While climate change induced displacement is a complex phenomenon of the twenty-first century that refers to persons likely to be displaced by anthropogenic climate change, the concept of traditional refugees was developed in the context of World War II to protect the people who were persecuted due to specific political reasons.<sup>140</sup>

Given the existence of conceptual and practical differences between traditional refugees and environmental or climate ‘refugees’ in many respects, it seems unjustified to address the contemporary complex challenges’ of environmental migration in light of the traditional Refugee Convention framework.<sup>141</sup>

Therefore, this study prefers the terms ‘displaced persons’ and ‘migrants’ to refer to those who leave their homes due to sudden or progressive environmental degradations. However, it suggests that the discussion of ‘appropriate terminology’ to refer to people displaced by climate change should not be the focus, leaving aside the more important issue of their protection. Rather, developing a definition that describes the people displaced by climate change is more important than disputing terminology. As Walter Kälin, the former Representative of the UN Secretary-General on the Human Rights of Internally Displaced Persons, said:

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<sup>139</sup> Jessica Lehman, ‘Environmental Refugees: The Construction of a Crisis’, Prepared for the UHU–EHS Summer Academy 2009, <<http://www.ehs.unu.edu/file.php?id=662>>, 15 October 2009, 3.

<sup>140</sup> The Refugee Convention was first adopted to deal with the vast numbers of people displaced after the World War II and was approved by a special UN conference in July 1951. The first draft was mainly aimed at protecting Europeans; it was extended in 1967 to include people from around the world. It is alleged that it is ‘Eurocentric’ in its origins and ignores the reality of mass displacement through war and generalised conflict in countries in the south. The majority of people in need of protection and assistance do not count as refugees. Created in response to the escalating refugee flow in post-war Europe, the Refugee Convention adopts a restrictive definition that consequently limits refugee status to a fairly narrow legal interpretation.

<sup>141</sup> Williams, above n 125, 510. However, UNHCR, as the only mandated international institution under the Refugee Convention to deal with the refugee definition, has limited involvement in environmental issues. The 1951 Convention and UNHCR were both established over 50 years ago to protect the large number of displaced people after the World War II (Robert Stojanov, ‘Environmental Refugees—Introduction’ (2004) 38 *Geographica* 77, 79.) It maintained that ‘there are significant and fundamental differences between traditional refugees accorded status under the Refugee Convention and those now more commonly referred to as environmental refugees’ (Williams, above n 125, 509). The UNHCR has consistently rejected the case for categorising the environment as a basis for refugee status. Moreover, the UNHCR operates on a limited budget, out of which it must manage those fleeing political, religious or ideological persecution (Conisbee and Simms, above n 110, 26). It argues that ‘the use of such terminology (refugee) could potentially undermine the international legal regime for the protection of refugees whose rights and obligations are quite clearly defined and understood’ (UNHCR, *Climate Change, Natural Disasters and Human Displacement: A UNHCR Perspective*, 2009).

We should not be distracted by semantic discussions with little practical meaning about whether to call affected persons “climate change refugees”, “environmental migrants” or something else. Instead, what is needed is a thorough analysis of the different contexts and forms natural disaster induced displacement can take.<sup>142</sup>

### ***3.4.2 Defining ‘Environmental Events Arising from Climate Change’ in the Bangladesh Context***

The breadth of the traditional notion of ‘environmental refugee’ that covers all who flee any environmental harm, including technological and development-induced disasters, might undermine the level of protection for the people who are most in need of protection.<sup>143</sup> Conversely, climate change by its very nature is a form of environmental change, albeit relatively precise. Therefore, a restrictive notion of the environment that maintains a narrow definition will help to reach a consensus on protection mechanisms.<sup>144</sup>

For example, Biermann and Boas identified only a few specified environmental changes, such as sea-level rises, extreme weather events, droughts and water scarcity.<sup>145</sup> In contrast to Biermann and Boas’s list of disruptions, Docherty and Giannini’s proposed climate refugee definition encompasses, but does not enumerate, a range of climate-related environmental disruptions, allowing for advances in science that may show additional environmental disruptions consistent with climate change.<sup>146</sup> Their climate refugee definition adopts the IPCC’s ‘more likely than not’<sup>147</sup> standard that includes ‘the range of environmental disruptions most commonly associated with climate change and related displacement’.<sup>148</sup> They argued that, while this standard acknowledges a limited degree of uncertainty, the precautionary principle articulated in the UNFCCC states that scientific uncertainty should not be used as an excuse not to act.<sup>149</sup> The inclusion of certain types of

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<sup>142</sup> Walter Kälin, *The Climate Change—Displacement Nexus 2* (Speech delivered at the ECOSOC Panel on Disaster Risk Reduction and Preparedness: Addressing the Humanitarian Consequences of Natural Disasters, 16 July 2008).

<sup>143</sup> Olivia Dun and Francois Gemenne, ‘Defining Environmental Migration’ (2008) 31 *Forced Migration Review* 10.

<sup>144</sup> *Ibid.*

<sup>145</sup> Biermann and Boas, above n 126, 67.

<sup>146</sup> Docherty and Giannini, above n 76, 370.

<sup>147</sup> The ‘more likely than not’ standard means a probability greater than 50 per cent.

<sup>148</sup> Docherty and Giannini, above n 76, 371.

<sup>149</sup> UNFCCC, Art. 3: ‘The Parties should take precautionary measures to anticipate, prevent or minimise the causes of climate change and mitigate its adverse effects. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures’. This version of the precautionary principle borrows from Principle 15 of the Rio Declaration on Environment and Development. UN Conference on Environment and Development, 3–14 June 1992, Rio Declaration on Environment and Development, princ. 15, UN Doc. A/CONF.151/26 (Vol. 1) (12 August 1992) (hereinafter Rio Declaration).

environmental events in the definition of climate change displacement, as Biermann and Boas included in their definition of ‘climate refugee’, denies the development of future scientific research regarding the effects of climate change.<sup>150</sup> Thus, it seems more appropriate that the definition of climate change displacement illustrates the general character of environmental degradation while maintaining flexibility so that researchers and international organisations such as the IPCC can include the environmental disruptions that are consistent with climate change in the list of climate change induced events.

However, this study suggests including climatic events in the definition of climate change displacement that are based on scientific evidence confirmed by the IPCC as consistent with climate change. The IPCC identified certain events that are directly related to the effects of anthropogenic climate change. The IPCC considers increased incidence of extreme high sea levels (excluding tsunamis), increased intense tropical cyclone activity and areas affected by drought increases as ‘likely’; that is, with more than 66 per cent probability.<sup>151</sup> The national instrument that seeks to address migration induced by climate change events must be based on scientific evidence regarding whether those events are consistent with climate change and sufficiently flexible to reflect developments in scientific understanding over time. The BCCSAP identified that Bangladesh is mostly susceptible to floods, tropical cyclones, storm surges and droughts.<sup>152</sup> The UNDP ranked Bangladesh ‘the most vulnerable country in the world to tropical cyclones and the sixth most vulnerable country to floods’.<sup>153</sup>

The main reason for proposing a restrictive notion of ‘environment’, authenticated by the IPCC as consistent with climate change, is to establish the responsibility of industrialised countries for the localised effects of climate change as well as consequent climate change induced displacement.<sup>154</sup> The higher standard of climate events endorsed by authentic

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<sup>150</sup> Docherty and Giannini, above n 76, 371.

<sup>151</sup> IPCC, *Climate Change 2007: Impacts, Adaptation and Vulnerability* (Cambridge University Press, 2007) 53. ‘Virtually certain’ means a probability greater than 99 per cent; ‘extremely likely’ means a probability greater than 95 per cent and ‘very likely’ means a probability greater than 90 per cent.

<sup>152</sup> BCCSAP, above n 1, 4–14.

<sup>153</sup> *Ibid* 85, 5.

<sup>154</sup> Various IPCC reports confirmed that developed countries are mostly responsible for anthropogenic climate change. See IPCC, *Climate Change: The IPCC Scientific Assessment: Final Report of Working Group I* (Cambridge University Press, New York, 1990) 8; IPCC—Summary for Policymakers, above n 1, 5, 6, 12, 13.

The term ‘climate change’ helps to establish a link between human activity (GHG emission by developed countries) and climate change displacement. However, some commentators deny any human responsibility, arguing that environmental change may occur due to natural causes, without any anthropogenic factors. Consequently, industrialised countries do not incur responsibility for the protection of people displaced by

scientific evidence provides increased certainty of climate change displacement. Thus, the protection framework under the climate change scenario would facilitate seeking international cooperation, including funding, and justify the universally acclaimed moral obligation (although not the legal obligation) of developed countries for assistance and support of climate change induced displacement in Bangladesh as proclaimed by article 14(f) of the Cancun Adaptation Framework.<sup>155</sup> Otherwise, many developed countries are not ready to expend money for uncertain science.<sup>156</sup>

However, while the suggested definition and protection mechanism focus on climate change for the reason stated above, the study does not neglect other causes of natural disasters and environmental changes such as volcano eruptions, tsunamis or earthquakes, which have no relevance to climate change and thus amount to discrimination against persons having equally urgent protection needs.<sup>157</sup> The government incurs obligations to all people within its jurisdiction and is not permitted to discriminate among them under international human rights law. Government bodies such as the Disaster Management Ministry and other associated bodies are responsible for people affected by those events. These issues are effectively incorporated in the ‘Standing Orders’ on Disasters and the Disaster Management Action Plan. Rather, the protection framework developed under climate change induced displaced people may provide assistance to those displaced by earthquakes and tsunamis.

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‘climate change’. They also argue that it is not possible for science to determine whether a particular environmental degradation in ecosystems leading to displacement has been caused due to climate change (Maria Stavropoulou, *Drowned in Definitions?* (2008) 31 *Forced Migration Review* 12.; Docherty and Giannini, above n 76, 370). However, since 1970, there has been growing scientific agreement that global warming and climate change is mostly anthropogenic, and that developed nations are responsible for this change (IPCC Report, 1990, above n 4; IPCC Summary for Policymakers, above n 1). Although science cannot specifically determine if climate change has caused a particular environmental event, the IPCC has identified several types of effects as ‘consistent with’ climate change, including warmer temperatures, more frequent droughts, more intense storms and rising sea levels (IPCC Summary for Policymakers, above n 8, 18).

<sup>155</sup> Para. 14(f) of the UNFCCC Cancun Adaptation Framework is a landmark in policy discussions on climate change displacement that invites all state parties to take ‘measures to enhance understanding, coordination and cooperation with regard to climate change induced displacement, migration and planned relocation, where appropriate, at national, regional, and international levels’. For details on the background and extent of Para. 14(f) of the Cancun Framework, see Koko Warner, ‘Climate Change Induced Displacement: Adaptation Policy in the Context of the UNFCCC Climate Negotiations’ (UNHCR, 2011); Michelle Leighton, Xiomeng Shen and Koko Warner, ‘Climate Change and Migration: Rethinking Policies for Adaptation and Disaster Risk Reduction’ (SOURCE No. 15/2011, UNU-EHS, 2011). See Chapter 4 for a detailed discussion on the Cancun Framework.

<sup>156</sup> King, above n 20, 554.

<sup>157</sup> Walter Kälin, ‘Climate Change Induced Displacement—A Challenge for International Law’ (Distinguished Lecture Series—3, Mahanirban Calcutta Research Group (MCRG), 2011) 33–34.

### 3.4.3 *Displaced Populations in Bangladesh: Internal or Trans-boundary Movements?*

Many definitions vary on whether it should include relocation both within state boundaries and trans-boundary or only trans-boundary migration.<sup>158</sup> Between 1970 and 1990, the various definitions of environmental refugee that emerged did not distinguish between persons migrating across international borders and those who did not, conflating globally recognised labels of ‘refugees’ with IDPs.<sup>159</sup> Although under existing refugee law, the term ‘refugee’ refers only to trans-boundary migrants, most writers, such as El-Hinnawi and Myers, include both trans-boundary migrants and IDPs in their definitions.<sup>160</sup> While discussing the climate refugee subset in particular, Biermann and Boas wrote that ‘it seems difficult to argue that a global governance mechanism for their protection should bestow a different status, and a different term, depending on whether the victims of climate change have crossed a border’.<sup>161</sup>

A number of migration experts, including the IASC Expert Group, agree that the majority of those displaced by the effects of climate change, whether due to sudden-onset hydro-meteorological disasters or environmental degradation, are likely to remain within the borders of their own country.<sup>162</sup> They do not have sufficient resources and networks abroad to move and cross the border. It is found in a study on displacement due to river bank erosion in Bangladesh that 88 per cent of migrants who lost homes due to river bank erosion and flooding remained within two miles of their previous residence.<sup>163</sup>

However, some displacement may also take place across borders, particularly to neighbouring countries such as India, Pakistan and Myanmar. Climate change induced displaced persons who moved across borders remain citizens of Bangladesh and are entitled to all human rights protection both at home and abroad. Therefore, both internal

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<sup>158</sup> Docherty and Giannini, above n 76, 365.

<sup>159</sup> Camillo Boano, ‘FMO Research Guide on Climate Change and Displacement’ (FMO Research Guide, Forced Migration Online (FMO) 2008) 5.

<sup>160</sup> El-Hinnawi, above n 24, 4–5; Myers, above n 205, 609.

<sup>161</sup> Biermann and Boas, above n 114, 66.

<sup>162</sup> Vikram Kolmannskog, *Climate Change, Disaster, Displacement and Migration: Initial Evidence from Africa* 3 (UNHCR, 2009); UNHCR, ‘Forced Migration in the Context of Climate Change: Challenges for States under International Law’ (UNHCR, 2009) 4; Frank Laczko and Christine Aghazarm, ‘Introduction and Overview: Enhancing the Knowledge Base’ in Frank Laczko and Christine Aghazarm (eds) *Migration, Environment and Climate Change: Assessing the Evidence* (2009) 23. Today, approximately three-quarters of all migrants move within borders, and only 37 per cent of migration around the world is from developing to developed countries (UNDP, 2009).

<sup>163</sup> MQ Zaman, ‘The Social and Political Context of Adjustment to Riverbank Erosion Hazard and Population Resettlement in Bangladesh’ (1989) 48 *Human Organization* 196–205.

and cross-border migrants must be included in the common definition of climate change induced displacement. As both types of displacements are two different consequences of similar environmental events and are determined by the level of access to capital and resources, distinguishing between the two is not justified. Of course, protection mechanisms will vary for these two types of displacements when considering the real circumstances.

#### **3.4.4 Displacement Populations in Bangladesh: Permanent or Temporary?**

In general, it is assumed that sudden disasters cause temporary migration, while gradual changes in the environment, such as the depletion of resources (land and water), deforestation, desertification and pollution lead to slow-onset permanent migration.<sup>164</sup> However, the patterns of population movements in response to natural disasters may not be so straightforward. For example, people may be evacuated temporarily in the event of an increased frequency of extreme events, floods or droughts, but in the long run, permanent resettlement may be required if affected areas become unliveable because of the depletion of resources and the limited scope of livelihoods.<sup>165</sup> Whether the nature of migration is permanent or temporary, the need for relocation assistance and protection arises in all situations at both the national and international levels. Therefore, it is not necessary or justified to distinguish between temporary and permanent displacement for the protection of climate change displacement.<sup>166</sup> The protection mechanisms will vary depending on the length and extent of the movement. While temporary migrants who return to their original places afterwards require emergency humanitarian assistance for food, shelter and medical services, permanent migrants need durable solutions including land, housing and access to livelihoods for permanent settlement.

#### **3.4.5 Displacement Population in Bangladesh: Forced or Voluntary?**

In the complex issues of twenty-first century environmental migration, it is increasingly essential to distinguish between voluntary and forced migration.<sup>167</sup> However, the distinction is not as easy as it appears.<sup>168</sup> Uncertainty surrounding the degree to which

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<sup>164</sup> Boano, Zetter and Morris, above n 30, 14.

<sup>165</sup> Ibid.

<sup>166</sup> Biermann and Boas, above n 126, 66.

<sup>167</sup> Martin Beniston, 'Issues Relating to Environmental Change and Population Migrations: A Climatologist's Perspective' in Jon D Unruh, Maarten S Krol and Nurit Kilot (eds) *Environmental Change and its Implications for Population Migration* (Springer, 2004) 12.

<sup>168</sup> Hugo, above n 19, 106.

environmentally induced migration is forced complicates the formulation of a definition.<sup>169</sup> There are serious debates among scholars concerning whether environmental migration is inherently a form of forced displacement or whether it can take the form of voluntary relocation.

The idea of ‘compulsion’ receives a prominent place in the discussion on climate change induced displacement.<sup>170</sup> El-Hinnawi limited his definition to those ‘forced to leave’.<sup>171</sup> Myers, who provided the most frequently and commonly cited definition, adopted a similar approach.<sup>172</sup> He described environmental refugees as those ‘who can no longer gain a secure livelihood in their homelands’ and ‘who feel they have no alternative but to seek sanctuary elsewhere’.<sup>173</sup> Others divide people who flee environmental harm into subcategories based on a degree of compulsion. In 2007, Renaud and his co-authors, in a UN University report, articulated three categories: environmentally motivated migrants, who may leave a steadily deteriorating environment; environmentally forced migrants, ‘who have to leave in order to avoid the worst’; and environmental refugees, who flee the worst, including natural disasters.<sup>174</sup> The phrase ‘forced to flee’ in Docherty and Giannini’s definition and ‘people who have to leave’ in Biermann and Boas’s definition indicate that these scholars reject voluntariness as a criterion for determining a ‘climate refugee’.<sup>175</sup> According to Corlett, ‘force involves a lack of choice, a violation of liberty. Forced migration entails a lack of consent, a denial or diminution of agency’.<sup>176</sup> These approaches suggest a recognition that the classification of displacement should be ‘reserved for those who are forced to relocate’.<sup>177</sup>

However, Biermann and Boas have questioned the practical implications of categorisation based on ‘involuntary’ criterion.<sup>178</sup> To them:

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<sup>169</sup> Lehman, above n 139, 5.

<sup>170</sup> David Corlett, *Stormy Weather: The Challenge of Climate Change and Displacement* (University of New South Wales Press Ltd, 2008) 43.

<sup>171</sup> El-Hinnawi, above n 24, 4.

<sup>172</sup> Myers and Kent, above n 24, 18–19.

<sup>173</sup> Myers, above n 105, 609.

<sup>174</sup> Renaud et al., above n 129, 29–30.

<sup>175</sup> Docherty and Giannini, above n 76, 361, 367; Biermann and Boas, above n 126, 67.

<sup>176</sup> Corlett, above n 170, 43.

<sup>177</sup> Docherty and Giannini, above n 76, 364.

<sup>178</sup> Biermann and Boas, above n 126, 65.

the legal operationalization of such distinctions could have severe ethical implications and political consequences. Distinguishing between climate refugees, migrants and emigrants according to the degree of ‘voluntariness’ of their relocation would artificially minimize the scale of the problem and could create different levels of protection and support without much basis in political, legal, or ethical criteria.<sup>179</sup>

They exhort that people who move pre-emptively due to prior information or experiences of repeated natural disasters may be classified as voluntary migrants and so denied the required protection.<sup>180</sup>

However, the IOM recognises the challenges to distinguish between voluntary and forced population movements, particularly with regard to slow-onset disasters and progressive environmental degradation.<sup>181</sup> Without drawing a straightforward distinction, the IOM advocates pursuing a holistic approach to environmental migration to address all forms of movement comprehensively, putting the migrant at the centre of concern rather than focusing on formal legal categories.<sup>182</sup> The IOM definition contains the words ‘obliged to leave their homes or chooses to do so’, widening the coverage of environmental or climate change migrants.<sup>183</sup> It argues that it is not always straightforward to draw a clear distinction between ‘forced’ and ‘voluntary’ instances of migration related to environmental factors, except in cases of imminent and acute disaster.<sup>184</sup> A similar approach is adopted in the definition of IDPs under the Kampala Convention, which not only covers ‘persons or group of persons who have been forced or obliged to flee or to leave their home or places of habitual residence’ as a result of events including natural or man-made disasters, but also includes those who do so in anticipation of, or in order to avoid, the effect of disasters.<sup>185</sup>

Indeed, extremely forced migration, defined by Hugo as the situation ‘where the migrants are faced with death if they remain in their present place of residence’, rarely occur.<sup>186</sup> Rather, most of the environmental migration occurs in the continuum of both extreme sides

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<sup>179</sup> Ibid.

<sup>180</sup> Ibid.

<sup>181</sup> *Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship between Climate Change and Human Rights*, UN Doc. A/HRC/10/61 (2009), 20, para. 57.

<sup>182</sup> IOM, ‘Migration, Climate Change and the Environment’ (IOM Policy Brief, IOM, 2009) 4.

<sup>183</sup> IOM, *Definitional Issues* (IOM, 2009) <<http://www.iom.ch/jahia/Jahia/pid/2071>>.

<sup>184</sup> IOM, above n 182, 5; Frank Laczko, ‘Migration, the Environment and Climate Change: Assessing the Evidence’ (Background Paper, The German Marshall Fund of the United States, June 2010) 2 <[http://www.gmfus.org/galleries/default-file/Laczko\\_MAH\\_EditsV2.pdf](http://www.gmfus.org/galleries/default-file/Laczko_MAH_EditsV2.pdf)>.

<sup>185</sup> Art. 1(K) of the Kampala Convention.

<sup>186</sup> Hugo, above n 19, 107.

of voluntary and forced migration.<sup>187</sup> Between these two extremes of ‘voluntary’ and ‘forced’ migration, it is argued that protection should be extended to people situated in the forced end of this continuum who face a substantial degree of coercion and powerlessness in the decision to move and the selection of destination, and who have limited control over the entire process and a high degree of vulnerability.<sup>188</sup>

To measure the ‘compulsion’ and assess when a particular place becomes uninhabitable, instead of ‘subjective motive’, Kälin emphasises objective criterion based on the question of ‘whether in light of the prevailing circumstances and the particular vulnerabilities of the persons concerned it would be appropriate to require them to go back to their original homes’.<sup>189</sup> The question should be judged in the light of three interrelated factors: the permissibility of return to original place in existing scenario;<sup>190</sup> the possibility of return based on the factual situation; and reasonableness to push displaced people back to their original places in the prevailing circumstances.<sup>191</sup>

### **3.4.6 Environmental Change: Sudden or Gradual?**

Climate change increases the frequency and magnitude of both sudden-onset and slow-onset climate-related disasters.<sup>192</sup> While a sudden disaster, such as a cyclone, may cause temporary displacement, progressive environmental changes, including coastal inundation, erosion and salinity due to sea-level rise and desertification, ultimately necessitate the relocation of a large number of people.<sup>193</sup> Except in very clear cases of forced displacement due to sudden-onset environmental changes, such as earthquakes, storms or floods, in most cases, gradual changes in the environment may have a much greater effect on migration.<sup>194</sup> For example, during the period 1979 to 2008, 718 million people were affected by storms compared to 1.6 billion people affected by droughts.<sup>195</sup> Cyclone Aila in

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<sup>187</sup> Ibid.

<sup>188</sup> Adamo, above n 18, 3.

<sup>189</sup> Kälin (Displacement Caused by the Effects of Climate Change), above n 45.

<sup>190</sup> This principle was derived by the European Court of Human Rights and the UNHRC from the prohibition of torture, cruel and inhuman treatment (Art. 3 ECHR; Art. 7 ICCPR). The principle of non-refoulement is also a corner-stone principle of international refugee law (Art. 33 1951 Convention) that has gained the quality of international customary law and arguably even *jus cogens*.

<sup>191</sup> Kälin, above n 157.

<sup>192</sup> Docherty and Giannini, above n 76, 370.

<sup>193</sup> McAdam (Swimming against the Tide), above n 87, 10.

<sup>194</sup> Laczko, above n 184, 3.

<sup>195</sup> Ibid.

2009 left at least 500,000 people temporarily landless and homeless, while up to one million people a year are displaced by river-bank erosion in Bangladesh.

Slow-onset migration is normally caused by the depletion of natural resources (land and water), deforestation and pollution.<sup>196</sup> This is especially true when slow environmental degradation processes, such as desertification, affect people who are directly dependent on the environment for their livelihoods.<sup>197</sup> There is relatively little information on the numbers of slow-onset environment disaster victims and migration.<sup>198</sup>

As the conditions faced by rapid-onset disaster migrants and slow-onset disaster migrants are not the same, both groups make significantly different migration decisions.<sup>199</sup> Rapid-onset disaster migrants tend to return home immediately after the disaster is over or when it is safe to do so.<sup>200</sup> Conversely, slow-onset disaster migrants prefer to settle permanently in other areas or countries as a means of coping with longer-term or persistent environmental degradations.<sup>201</sup> For this reason, migrants displaced from rapid-onset disasters have an ‘immediate and temporary need for protection’.<sup>202</sup> Slow-onset disaster migrants need to relocate gradually to other places, provided the affected areas become inhabitable in the near future. As the forced migration from sudden and gradual disruptions both require a humanitarian response, the definition should apply to migration caused by either or both.<sup>203</sup>

### ***3.5 Proposed Definition of Climate Change Induced Displacement in Bangladesh Context***

In reality, environmental migration occurs in a large and dynamic continuum. Climate change displacement can best be depicted as a continuum ranging from clear cases of forced migration in response to environmental disasters to voluntary migration that can contribute to adaptation. In the same situation of climatic impacts, such as storm surge and salinity due to sea-level rise, flooding and cyclone, people behave differently in their

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<sup>196</sup> Boano, above n 159, 17.

<sup>197</sup> Dun and Gemenne, above n 143, 10.

<sup>198</sup> Laczko, above n 184, 3.

<sup>199</sup> Michelle Leighton, ‘Climate Change and Migration: Key Issues for Legal Protection of Migrants and Displaced Persons’ (Background Paper, The German Marshall Fund of the US, June 2010) 5, <[http://www.gmfus.org/galleries/default-file/Leighton\\_MAH\\_EditsV2.pdf](http://www.gmfus.org/galleries/default-file/Leighton_MAH_EditsV2.pdf)>.

<sup>200</sup> Ibid.

<sup>201</sup> Ibid.

<sup>202</sup> Ibid.

<sup>203</sup> Warner, above n 44, 404.

reactive responses. Some people may choose migration as part of adaptive strategy and start leaving their place and move to cities or other safe places as they have some sort of skill, education and resources. Other families in more or less the same situation either due to their strong resilience capacity struggle with adverse situation and try to cope with it, or trapped in the affected areas and remain there reluctantly to suffer due to lack of enough resources.<sup>204</sup> However, all of them face to some way or other adversity due to impending climatic disasters. It will not be fair to discriminate among them while all of them are victim of same climatic phenomenon. For instance, Renaud and colleagues created three labels for migrants related to environmental change: 1) environmental emergency migrants are those who leave their homes in the wake of a natural disaster, such as a cyclone and flood; 2) environmentally forced migrants are those who flee in order to ‘avoid the worst of environmental deterioration’, such as drought and salinity; and environmentally motivated migrants are those who leave voluntarily from stressed ecosystems in order to seek better livelihoods elsewhere.<sup>205</sup>

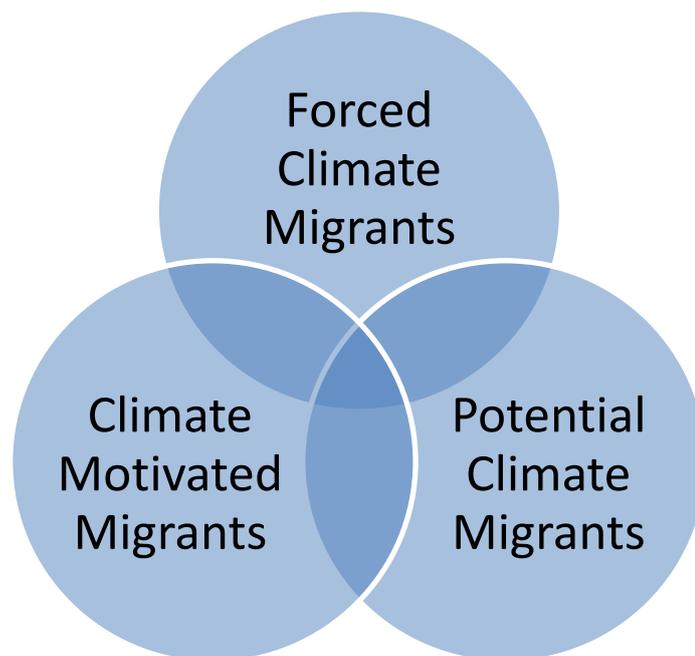
This study adopts definition for climate change induced displacement for the purpose of suggesting a protection framework. However, provided the climate change induced displacement in reality happens in a long continuum between forcedness and voluntariness, the impacts of climate change induced displacement may produce three different scenarios. While some people choose to migrate completely voluntarily, some people move because they perceive that there is simply no other way to survive.<sup>206</sup> Based on these scenarios, they are categorised into three different groups for purpose of providing their protection need.

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<sup>204</sup> Elizabeth Ferris, ‘Protection and Planned Relocations in the Context of Climate Change’ (UNHCR, 2012) 7.

<sup>205</sup> Fabrice G Renaud et al., ‘A Decision Framework for Environmentally Induced Migration’ (2011) 49(S1) *International Migration* e14–e15.

<sup>206</sup> Alexander Betts, ‘Survival Migration, A New Protection Framework’ (2010) 16 *Global Governance*, 361–382.



**Box 4: Three categories of climate change induced displacement**

**Forced climate migrants:**<sup>207</sup> people who are ‘forced’ to leave their habitat as that becomes unliveable due to sudden or progressive environmental degradations. Their movement is involuntary in nature; they have no options but to leave their original place. This category is likely to include victim of tropical cyclones, floods, storm surges and droughts who are compelled to leave their home and require either temporary or permanent protection. These forced migrants need access to basic humanitarian assistance including food, shelter, medical services etc.

**Climate motivated migrants:**<sup>208</sup> people who ‘decide to move’ pre-emptively in the face of impending natural disasters before arrival of the compelling situation, mostly in cases of slow-onset disasters such as sea-level rise, drought, salinity intrusion, scarcity of water resources etc. The policy responses need to facilitate such migration through managed and planned relocation with safety and dignity. Access to livelihood is the main concern for these migrants.

**Potential climate migrants:**<sup>209</sup> People who either chooses to remain in the affected areas struggling with the adverse climatic phenomenon or cannot move due to lack of sufficient

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<sup>207</sup> The definition of forced climate migrants and the protection mechanism of these people are discussed in Chapter 7.

<sup>208</sup> The definition of climate motivated migrants and the protection mechanism of these people are discussed in Chapter 8.

<sup>209</sup> The definition of potential climate migrants and the protection mechanism of these people are discussed in Chapter 9.

resources. They may at any point of time be actuated into ‘forced climate migrants’ provided adaptation and coping strategies are not adequate enough to retain them in their original place and thus fail to prevent forced migration. These people require sustainable adaptation support through building infrastructure, innovative agriculture, reduction of poverty so that they can build resilience to environmental vulnerability.

### **3.6 Concluding Remarks**

The environment, climate change and migration nexus is a complex one.<sup>210</sup> The complexity appears more aggravated in Bangladesh due to its pre-existing socio-economic vulnerability. The climatic impacts are felt more acutely than other parts of the world in Bangladesh because of geographical location, high population density and extreme poverty. Nonetheless the existence of a clear link between anthropogenic climate change and consequent human displacement is increasingly recognised and emerging scientific studies confirm that climate change has substantial role in triggering mass human displacement in Bangladesh.<sup>211</sup> The magnitude and scale of such flows is expected to mount drastically in coming years and will take in different forms.<sup>212</sup> Thus, environmental displacement, as reported in many studies and scientific reports, has rapidly been emerging a delicate problem for Bangladesh that thwarts the achievement of Millennium Development Goals (MDGs). Once this widely agreed point is accepted, the role of climate change in population movement should be difficult to ignore.<sup>213</sup>

However, for the conceptualisation of environmental migration, developing national legal and policy framework, and seeking international cooperation for protection of climate change induced displacement, it is essential to formulate a comprehensive, accepted and concrete definition of environmental forced migrants.<sup>214</sup> The generation of accepted statistics of climate change displacement depends on how those migrate for environmental reasons are defined.<sup>215</sup> The absence of a formal legal definition may perpetuate uncertainty about the parameters of the phenomenon, and complicate questions of State and

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<sup>210</sup> For example, Laczko and Aghazarm, above n 162, 13.

<sup>211</sup> Vikram Kolmannskog, ‘Climate Change, Disaster, Displacement and Migration: Initial Evidence from Africa’ (UNHCR, 2009) 5.

<sup>212</sup> Warner, above n 47, iv.

<sup>213</sup> Steve Lonergan and Ashok Swain, *Environmental Degradation and Population Displacement 2 AVISO* (published by Global Environmental Change and Human Security Project (GECHS) (1999) 2 <<http://www.gechs.org/aviso/02/>>.

<sup>214</sup> Laczko and Aghazarm, above n 162, 18.

<sup>215</sup> Ibid

institutional responsibility for the displaced.<sup>216</sup> The use of incorrect terminology gives governments ground to disregard protection of climate change induced displaced people.<sup>217</sup> It makes a big difference whether people are perceived as refugees, other types of forced migrants or voluntary migrants for the purpose of legal protection.<sup>218</sup> Furthermore, without a precise definition, practitioners and policy-makers are not easily able to establish plans and make targeted progress. Thus, the lack of conceptual clarity and consensus is a key problem that left the large numbers of climate change induced forced migration unprotected in international law. In sum, the disagreement surrounding the issue has important ramifications for assigning responsibility to appropriate domestic and international institutions and agencies to address the rights and duties concerned.<sup>219</sup> The definition serves an instrumental purpose delimiting rights and obligations of displaced people.<sup>220</sup> After creating a definition, a legal and institutional framework can be constructed to relocate communities.

Thus, this study defines climate change induced human migration in three different contexts recognising the large continuum associated with environmental migration. The nature and patterns of environmental migration is apprehended through these definitions. These will also help developing normative framework and policy responses.<sup>221</sup>

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<sup>216</sup> McAdam (Swimming Against the Tide), above n 87, 7.

<sup>217</sup> Boano, Zetter and Morris, above n 30, 31.

<sup>218</sup> Castles, above n 122, 9.

<sup>219</sup> Displacement Solutions, Climate Change Human Rights and Forced Human Displacement: Case Studies as Indicators of Durable Solutions (Meeting Paper) 6 <[http://www.displacementsolutions.org/files/documents/Climate\\_Change\\_Displacement\\_Meeting\\_Paper.pdf](http://www.displacementsolutions.org/files/documents/Climate_Change_Displacement_Meeting_Paper.pdf)>.

<sup>220</sup> McAdam (Swimming Against the Tide), above n 87, 7.

<sup>221</sup> ADB, 'Climate Change and Migration in Asia and the Pacific' (ADB, 2011) 4.

## CHAPTER 4

# CLIMATE CHANGE INDUCED DISPLACEMENT IN BANGLADESH: RECOGNITION AND PROTECTION UNDER INTERNATIONAL LAW\*

### 4.1 Introduction

Bangladesh is often cited as the country that will produce the largest number of climate migrants. The density of the population further magnifies the challenges posed by climate change. A number of scientific reports confirm that a large number of people have already been displaced in Bangladesh because of the direct effects of climate change, and the number is likely to increase considerably in the future.<sup>1</sup> It is a challenging and daunting task to resettle a large number of people in the face of environmental change in an LDC country such as Bangladesh. While most of the displacement will primarily be internal, a negligible number of migrants will cross international borders.<sup>2</sup> Although most existing literature on climate change and ‘environmental/climate refugees’ makes ‘no legal distinction as to the type of displacement (internal or trans-border)’, the current international legal framework, both national and international, and state practice, clearly distinguishes between trans-border (i.e. refugees) and internal displacement (i.e. IDPs).<sup>3</sup> It recognises only refugees who crossed an international border/s according to the Refugee Convention, and displacements within states are considered as IDPs in accordance with the UN Guiding Principles on IDPs.<sup>4</sup>

Although the effects of climate change on human movements are exposed at the local level, climate change that contributes to accelerating the intensity and frequency of natural disasters is a global process.<sup>5</sup> Climate change induced displacement, therefore, should not

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\* An earlier version of this chapter has been published as a working paper. The citation of the paper is MM Naser, ‘Global Governance and Forced Migration: In Search of Recognition in International Law’, Environmental Policy Research Centre, Freie Universitat Berlin, Germany (2010).

<sup>1</sup> See Chapter 2 for a detailed discussion on the predicated numbers and figures of climate-induced displacement.

<sup>2</sup> For patterns of climate-induced migration in Bangladesh, see Chapter 3.

<sup>3</sup> Angela Williams, ‘Turning the Tide: Recognizing Climate Change Refugees in International Law’ (2008) 30(4) *Law & Policy* 502, 517–518.

<sup>4</sup> *Ibid* 517.

<sup>5</sup> Vikram Kolmannskog and Lisetta Trebbi, ‘Climate Change, Natural Disasters and Displacement: A Multi-track Approach to Filling the Protection Gaps’ (2010) 92(879) *International Review of the Red Cross* 713, 729.

only be considered a local problem, but also an international problem.<sup>6</sup> As the predicted mass human migration is the direct outcome of global warming, sea-level rises and increasing severe natural events, it is unjustified to place the burden of assisting and protecting the displaced populations on the shoulders of most affected states alone.<sup>7</sup> Rather, developed countries owe compensation to those nations or citizens who are most likely to be harmed by climate change.<sup>8</sup> They also have an obligation to assist the LDCs facing the challenges of climate change, both through technology transfer to allow sustainable development (SD) and also through financial assistance for adaptation so that the risk of displacement can be mitigated.

The vulnerability of displaced persons has long been recognised by the international law. However, currently, no legal instruments or international norms are mandated to deal specifically with persons displaced either within a country or internationally, for environmental reasons. While the recognition of environmentally displaced persons is still in evolution in international forums, primarily the writing of academics and researchers originated and flourished the concept of ‘environmental/climate refugee’.<sup>9</sup> Gradually, these terms have become popular, and now academics and policy-makers frequently use the terms ‘environmental refugee’ or ‘climate refugee’ to identify persons displaced for environmental reasons. Nevertheless, the international community is yet to offer any coordinated response and concrete protections to people displaced for environmental or climatic factors, except some references in climate summit talks, side events and plenary meetings.<sup>10</sup> To date, the only achievement in this regard is an inclusion in Paragraph 14(f) in the Cancun agreement, which calls for international cooperation for the protection of ‘environmental refugees’.

Indeed, the government of Bangladesh is primarily responsible for protection of the people in Bangladesh displaced for environmental reasons. However, developed countries cannot escape their responsibility under international human rights law, environmental law and the UNFCCC framework. Developed countries need to extend their support, including funding for the protection of persons displaced internally by climate change in Bangladesh under

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<sup>6</sup> Ibid.

<sup>7</sup> Koko Warner, ‘In Search of Shelter: Mapping the Effects of Climate Change on Human Migration and Displacement’ (Report, CARE, 2009) iv.

<sup>8</sup> Eric A Posner and Cass R Sunstein, ‘Climate Change Justice’ (Public Law and Legal Theory Working Paper No. 177, Law School, University of Chicago, 2007) 2.

<sup>9</sup> See Chapter 3 for detail.

<sup>10</sup> Brooke Havard, ‘Seeking Protection: Recognition of Environmentally Displaced Persons under International Human Rights Law’ (2007) 18 *Villanova Environmental Law Journal* 65, 65.

the humanitarian obligations and principles of international cooperation. Although the status of cross-border migration is in limbo, Bangladeshi climate migrants who are forced to cross an international border in response to environmental events for safe refuge may receive temporary complementary protection in another country.

In this context, this chapter is designed to explore how the current norms and principles of international law can be transformed into national laws and policies for the protection of climate change induced displacement. Therefore, the first part of this chapter presents the current status of ‘climate refugee’ in international refugee law and UNFCCC framework. It identifies legal gaps that preclude climate migrants from recognition and protection under international law. It argues considering the climate change induced displacement a distinct category of migrants under international law so that international climate finance can be used directly for their benefit.

The second part examines the global responsibility towards climate change induced displacement in Bangladesh. It reviews current protection instruments to see how appropriate they are in regulating climate change induced displacement. This section also argues that, while the government of Bangladesh is primarily responsible for the protection of people displaced by climate change, the international community also has an obligation to cooperate and provide assistance and resources, including financial, technical and physical, to the government of Bangladesh so that it can fulfil its human rights obligation towards the displaced people.

The third part examines how the climate change induced migrants who crossed an international border for temporary safe refuge may receive protection under current international framework.

The fourth part suggests developing a normative framework in the form of soft guidelines for the protection of climate change induced displacement.

Lastly, it discusses the necessity of regional framework for climate change induced displacement. Lessons learned from other regional frameworks, this part proposes to develop a regional framework under the SAARC for climate change induced displacement in South Asia.

## ***4.2 Climate Change Induced Displacement: Recognition as Distinct Category of Migrants***

Various sceptics groups mount the debate whether any climate change induced displacement really exists based on the arguments of scientific uncertainty of the effects of climate change, multi-causality factors and other related issues, and hence denying the possibility of international recognition and responsibility of international community towards climate change induced displacement. However, various studies, including IPCC reports, confirm that a profound connection exists between climate change and forced migration and the number of climate change induced migration will grow in magnitude due to the direct effects of climate change.<sup>11</sup> While the debate that the prediction of 200 million or 1 billion people will likely be displaced globally due to climate change necessitating resettlement is exaggerated, it is undeniable that the risk is ‘real and considerable’.<sup>12</sup> The number of climate change induced displacements will surpass the numbers of traditional political refugees by 2050. The risks may become significant unless these persons are recognised as a separate group for protection and targeted protection systems are developed to manage the emerging magnitude of internal and external climate change induced displacement.

Currently, numerous national, regional and international mechanisms, agreements, guiding principles, norms and institutions such as the Refugee Convention, the Guiding Principles on IDPs, international humanitarian law, human rights and customary law deal with human migration.<sup>13</sup> However, the current international legal regime, except for a few regional and soft-law instruments, disregards the correlation between environmental degradation and human displacement.<sup>14</sup> The UNFCCC, which is the only framework to deal with climate change issues, does not extend its protection to persons displaced for climate change related events. Similarly, the 1951 Refugee Convention, which has become a universal tool for the protection of refugees all over the world, does not cover ‘climate refugees’.<sup>15</sup>

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<sup>11</sup> Grame Hugo et al., ‘Climate Change and Migration in Asia and the Pacific’ (Draft Edition) (ADB, 2011) 66; see Chapter 2 for detail.

<sup>12</sup> Ibid 64. For a detailed discussion of real scenarios of climate-induced displacement, see Chapter 2.

<sup>13</sup> Koko Warner, ‘Global Environmental Change and Migration: Governance Challenges’ (2010) 20 *Global Environmental Change* 402, 403; David Hodgkinson et al., ‘Copenhagen, Climate Change “Refugees” and the Need for a Global Agreement’ (2009) 4(2) *Public Policy* 155,165.

<sup>14</sup> Aurelie Lopez, ‘The Protection of Environmentally-Displaced Persons in International Law’ (2007) 37 *Environmental Law* 365, 367; Warner (Global Environmental Change and Migration), above n 13, 404.

<sup>15</sup> See International Council on Human Rights Policy, ‘Climate Change and Human Rights: A Rough Guide’ (International Council on Human Rights Policy, 2008); Human Rights and Equal Opportunity Commission,

Presently, no legal instruments or international norms are mandated to deal specifically with people displaced internally or internationally for environmental reasons. These persons are, therefore, not yet ‘recognised in international law as an identifiable group whose rights are expressly articulated, or as a formal legal category of people in need of special protection’.<sup>16</sup> In this context, this section explores the status of persons who are either already displaced or likely to be displaced in Bangladesh under current international law and in the national framework.

#### ***4.2.1 Climate Change Induced Displacement and Current Refugee Framework***

The Refugee Convention has become a universal tool for the protection of refugees all over the world.<sup>17</sup> Although persons displaced for environmental reasons are often referred as ‘environmental refugee’ or, more specifically, ‘climate refugee’,<sup>18</sup> the Refugee Convention and its Protocol are not adequately equipped to protect these individuals ‘both in terms of the text and intent of the drafters, and in terms of much current practice’.<sup>19</sup> The Refugee Convention offers only a restrictive definition of refugee that does not cover persons displaced for environmental reasons.<sup>20</sup>

However, Jessica B Cooper boldly argues that people move for environmental reasons are implicitly included under the Convention’s refugee definition and thus can avail

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‘Human Rights and Climate Change, Background Paper’ (Human Rights and Equal Opportunity Commission, 2008); Derek R Bell, ‘Environmental Refugees: What Rights? Which Duties?’ (2004) 10 *Res Publica* 135; Richard Black, ‘Environmental Refugees: Myth or Reality?’, (New Issues in Refugee Research, Working Paper No. 34, Evaluation and Policy Analysis Unit, UNHCR, 2001); Stephen Castles, ‘Environmental Change and Forced Migration: Making Sense of the Debate (New Issues in Refugee Research, Working Paper No. 70, Evaluation and Policy Analysis Unit, UNHCR, 2002).

<sup>16</sup> Jane McAdam and Ben Saul, ‘An Insecure Climate for Human Security? Climate-Induced Displacement and International Law’ (Sydney Centre Working Paper No. 4, Sydney Centre for International Law, 2008) 2.

<sup>17</sup> Havard, above n 10, 73. However, the original 1951 Convention, created in Europe after the end of the World War II, was restricted in application to the geographical region of Europe. The Convention was mainly developed by the international community as a response to the millions of people displaced throughout Europe as a result of the war and to protect those persecuted by Nazism. Under the Convention’s original definition of refugee, only those persons who became refugees as a result of events that occurred before 1 January 1951 were included in the definition. Not long after the Refugee Convention was adopted, it became apparent that the worldwide refugee crisis was not temporary. Thus, the Convention was revised by the 1967 Protocol Relating to the Status of Refugees (hereinafter the Protocol) so that it could provide protection to all people around the world. The Protocol’s revisions struck the words ‘as a result of events occurring before 1 January 1951’ and ‘as a result of such events’ from the Convention definition.

<sup>18</sup> Although most of them will not cross international borders, they are often termed as ‘refugee’. See International Council on Human Rights Policy, above n 15; Human Rights and Equal Opportunity Commission, above n 15; Bell, above n 15, 135; Black, above n 15.

<sup>19</sup> Hermen J Ketel, ‘Global Warming and Human Migration’ in Antoaneta Yotova, *Climate Change, Human Systems and Policy* (Eolss Publishers, 2004), <<http://www.eolss.net>>.

<sup>20</sup> Refugee Convention, opened for signature 28 July 1951, 189 U.N.T.S. 150.

themselves of the Convention's protection.<sup>21</sup> Cooper's arguments are based on the notion that 'environmentally displaced people' are generally forced to flee for both environmental and political reasons, and the environment can be used as an instrument of harm.<sup>22</sup> Therefore, the discriminatory actions to the disadvantaged groups on part of the respective government during natural disasters satisfy the requirements of the act of persecution towards certain groups under the Refugee Convention.<sup>23</sup> She contends that 'with governments playing so pertinent a role in the occurrence of environmental crises, refugees seeking refuge from the resulting environmental degradation are effectively seeking refuge from their governments'.<sup>24</sup>

To ensure the protection of human rights of 'environmental refugee', some academics, including Cooper and policy-makers, suggest the expansion of the traditional definition of 'refugee' to include individuals fleeing environmental degradation so that these persons can have access to the same international structure of humanitarian assistance and protection.<sup>25</sup>

However, many articles and studies that have emerged since the 1990s have started a debate on the question of whether people forced to migrate as a consequence of environmental degradation should be categorised as (environmental or climate change) 'refugees'.<sup>26</sup> Given the existing international law on refugees, these scholars consider such

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<sup>21</sup> Jessica B Cooper, 'Environmental Refugees: Meeting the Requirements of the Refugee Convention' (1998) 6 *New York University Environmental Law Journal* 480, 501–502.

<sup>22</sup> Cooper, above n 21, 502.

<sup>23</sup> Ibid. 501–502.

<sup>24</sup> Ibid.

<sup>25</sup> Cooper, above n 21, 480, 494. Cooper advocates for an expansion of the traditional refugee definition in the following manner:

any person who owing (1) to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion, or (2) to degraded environmental conditions threatening his life, health, means of subsistence, or use of natural resources, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country (Cooper, above n 21, 480, 494).

At the state level, for example, the Maldives in 2006 proposed amending the 1951 Refugee Convention to extend the definition of 'refugee' in art. 1A(2) to include climate-induced displacement (Republic of the Maldives Ministry of Environment, Energy and Water, 'Report on the First Meeting on Protocol on Environmental Refugees: Recognition of Environmental Refugees in the 1951 Convention and 1967 Protocol Relating to the Status of Refugees', Male, Maldives, 14–15 August 2006). In December 2009, in the lead-up to the Copenhagen Climate Change Conference, the Bangladeshi Finance Minister similarly stated: 'The Convention on refugees could be revised to protect people. It's been through other revisions, so this should be possible' (H Grant, J Randerson and J Vidal, 'UK Should Open Borders to Climate Refugees, Says Bangladeshi Minister', *The Guardian*, 4 December 2009, <<http://www.guardian.co.uk/environment/2009/nov/30/rich-west-climate-change/print>>

<sup>26</sup> Roger Zetter, 'The Role of Legal and Normative Frameworks for the Protection of Environmentally Displaced People' in Frank Laczko and Christine Aghazarm (eds) *Migration, Environment and Climate*

categorisation unhelpful, unsound, controversial and legally meaningless, with no practical value.<sup>27</sup> To them, environmentally displaced people do not qualify for the internationally accepted definition of a refugee under the Refugee Convention,<sup>28</sup> which is the yardstick for granting a refugee status.<sup>29</sup>

This definition consists of four elements. First, the refugee must have a well-founded fear of persecution;<sup>30</sup> second, the persecution must be related to the refugee's status in a particular group (i.e. 'race, religion, nationality, membership of a particular social group or political opinion'); third, the refugee fled his or her country;<sup>31</sup> and fourth, the refugee must be unable or unwilling to return home.<sup>32</sup>

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*Change: Assessing the Evidence* (IOM, 2009) 387, 397; David Keane, 'Environmental Causes and Consequences of Migration: A Search for the Meaning of "Environmental Refugees"' (2004) 16 *Georgetown International Environmental Law Review* 209–211; Fabrice Renaud et al., 'Control, Adapt or Flee: How to Face Environmental Migration?' (Intersections No. 5/2007, UNU-EHS, 2007) 1; Tess Burton and David Hodgkinson, *Towards a Convention for Persons Displaced by Climate Change: A Discussion Note on an Ethical Response to the Human Impacts of Climate Change and its Implications for the Relationship between Adaptation and Displacement*, The Hodgkinson Group—Climate Change and Aviation Advisors (Publications)

<<http://www.hodgkinsongroup.com/documents/Draft%20Discussion%20Note%20Adaptation%20and%20Displacement.pdf>>.

<sup>27</sup> Black, above n 15, 1. He leaves the reader in no doubt that he sees the concept as a myth—and a misleading, highly politicised and potentially damaging.

<sup>28</sup> Refugee Convention, opened for signature 28 July 1951, 189 U.N.T.S. 150.

<sup>29</sup> Bonnie Docherty and Tyler Giannini, 'Confronting a Rising Tide: A Proposal for a Convention on Climate Change Refugees' (2009) 33 *Harvard Environmental Law Review*, 349, 361–362; Williams, above n 3, 507–508. According to the Convention:

a refugee is someone who holds 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 or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable, or, owing to such fear, is unwilling to return to it (art. 1(A)(2) of the Refugee Convention).

<sup>30</sup> Although persecution is a controversial term that the Convention leaves undefined, there have been various attempts on the part of the judiciary and academics to define the term 'persecution'. Persecution has been defined as 'a threat to the life or freedom of, or the infliction of suffering or harm upon, those who differ in a way regarded as offensive' [*Matter of Acosta*, 19 I. & N. Dec. 211 (BIA 1985)]. It has also been characterised by confinement and torture, including substantial economic deprivation constituting a threat to an individual's life or freedom [*Borca v. I.N.S.*, 77 F.3d 210 (7th Cir. 1996), 215–217] or the infliction, under government sanction, of suffering or harm upon persons who differ in a way regarded as offensive [*Abdel-Masieh v. U.S. I.N.S.*, 73 F.3d 579, 583 (5th Cir. 1996)]. James Hathaway states, however, that 'persecution may be defined as the sustained or systemic violation of basic human rights demonstrative of a failure of State protection' [James C Hathaway, *The Law of Refugee Status* (1991), 112].

<sup>31</sup> The UNHCR Handbook on Procedures and Criteria for Determining Refugee Status, 1992. In the traditional refugee concept, people are unable or unwilling to return home due to a present adverse situation in their country of origin. They cannot turn to their own governments for protection because nation-states are often the source of their persecution. Thus, they need international intervention to ensure that there is safe refuge. The statement 'unable or, owing to such fear, is unwilling to avail himself of the protection of that country' implies there are circumstances that are beyond the will of the person—for example, a state of war or civil war that prevents the national authorities from protecting that person or that makes protection ineffective. In addition, protection by the country of nationality may have been denied to that particular

However, ‘rising sea-levels, salination, drought and increasingly frequent storms, and floods may be harmful, and persons likely to be affected by those effects of climate change may be fearful but they do not constitute “persecution” in accordance with the meaning it has been ascribed in international refugee law’.<sup>33</sup> In order to be recognised as a ‘refugee’ on grounds of governmental persecution, the victim of environmental or climate change must demonstrate that the environmental degradation is caused by ‘governmental actions’ and the governmental entity have both the ‘persecutory impact and persecutory intent’ targeting a ‘particular social group’, which is impossible to prove.<sup>34</sup> Thus, climate change induced migrants do not fulfil the criterion of ‘well-founded fear of persecution’ because there is a difficulty in characterising climate change itself as ‘persecution’.

The interpretive guides illustrated above entail that someone who is forced to move because of climate change does not fit the international legal definition of ‘refugee’.<sup>35</sup> Rather, there is resistance to categorising refugees on these grounds.<sup>36</sup> The current refugee structure is not an appropriate framework for most cases of environmental displacement because it was constructed more than 50 years ago for a very different context; that is, to address certain post-World War II scenarios.<sup>37</sup> The legislative history of the international refugee law indicates that the drafters of the Refugee Convention intentionally declined to extend protection for the people displaced for environmental reasons, although they had reasonably recognised environmental degradation as major causes of human migration.<sup>38</sup> Therefore, ‘the limitations as to the applicability of ... the Refugee Convention, together with widespread confusion and skepticism’ negate the categorisation of climate change

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person. The term ‘unwilling’ refers to refugees who refuse to take up the protection of the government of their nationality, as they fear persecution.

<sup>32</sup> For this breakdown of the Refugee Convention’s definition, see Guy S Goodwin-Gill and Jane McAdam, *The Refugee in International Law* (2007) 37; James C Hathaway, *The Law of Refugee Status*, (1991) vi–vii.

<sup>33</sup> McAdam and Saul, above n 16, 8.

<sup>34</sup> Lopez, above n 14, 380.

<sup>35</sup> Ibid 368; Ben Saul et al., ‘Climate Change and Human Rights’ (Submission to the Office of the United Nations High Commissioner for Human Rights on the Relationship between Climate Change and Human Rights, 2008) <<http://www.law.usyd.edu.au/scil/pdf/Sub-ClimateChangeHRSept08.pdf>>; Jeanhee Hong, ‘Refugees of the 21<sup>st</sup> Century: Environmental Injustice’ (2001) 10 *Cornell Journal of Law and Public Policy* 323, 332. Gregory S McCue, ‘Environmental Refugees: Applying International Environmental Law to Involuntary Migration’ (1993) 6 *Georgetown International Environmental Law Review* 151, 152; Keane, above n 6, 215.

<sup>36</sup> Molly Conisbee and Andrew Simms, *Environmental Refugees: The Case for Recognition* (2003) 26.

<sup>37</sup> Dana Zartner Falstrom, ‘Stemming the Flow of Environmental Displacement: Creating a Convention to Protect Persons and Preserve the Environment’ (2001) 1 *Colorado Journal of International Environmental Law and Policy* 1, 11; William, above n 3, 510.

<sup>38</sup> Hong, above n 35, 332; McCue, above n 35, 151, 152; Falstrom, above n 37, 15; Keane, above n 26, 215. Cited in Lopez, above n 14, 368.

induced displaced persons as ‘refugee’.<sup>39</sup> Similarly, renegotiating the Convention to incorporate ‘environmental refugee’ is opposed by many scholars because this ‘would, inevitably, introduce greater complexity and confusion into status determination procedures’.<sup>40</sup>

Moreover, such an expansion demands the modification of the definition of ‘refugee’, survived without modifications for more than five decades since its promulgation, which seems politically unfeasible considering the likely opposition of receiving countries and the attitudes and priorities of governments.<sup>41</sup> It is unlikely that ‘donor countries would allow the current refugee regime with its fixed set of refugee rights to be extended to cover a twenty times larger group of refugees’ while they are even reluctant to provide adequate protection or respecting their obligations to existing traditional refugees under the Convention.<sup>42</sup> The governments of developed countries are also concerned that such a move would open the ‘refugee floodgates’ from developing and LDCs to their countries.

#### ***4.2.2 Conceptual and Practical Differences between Political Refugees and Climate Change Induced Displacement***

It appears that both the views—providing protection to the climate change induced displaced persons categorising as ‘refugees’ under the Refugee Convention and counterarguments against such categorisation and reservation—are premised on preconceived concept of ‘refugee’ set by the Refugee Convention. Such a notion, interpreting the existence of climate change induced displacement in light of traditional refugee concepts, leaves the root causes of environmental migration unaddressed.<sup>43</sup> While climate change induced displacement is a complex phenomenon of the 21<sup>st</sup> century, which refers persons likely to be displaced by anthropogenic climate change, the concept of traditional refugees was developed in the context of World War II to protect the people

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<sup>39</sup> Williams, above n 3, 503.

<sup>40</sup> Zetter, above n 26, 397.

<sup>41</sup> Lopez, above n 14, 392; Kara K Moberg, ‘Extending Refugee Definitions to Cover Environmentally Displaced Persons Displaces Necessary Protection’ (2009) 94 *Iowa Law Review* 1107, 1128; Etienne Piguet, ‘Climate Change and Forced Migration’ (UNHCR, 2008) 8.

<sup>42</sup> Frank Biermann and Ingrid Boas, ‘Preparing for a Warmer World: Towards a Global Governance System to Protect Climate Refugees’ (2010) 10 *Global Environmental Politics* 74; Williams, above n 3, 509; Keane, above n 26, 214–217.

<sup>43</sup> Jessica Lehman, ‘Environmental Refugees: The Construction of a Crisis’, Prepared for the UHU–EHS Summer Academy 2009, <<http://www.ehs.unu.edu/file.php?id=662>>, 15 October 2009, 3.

persecuted due to some specific political reasons.<sup>44</sup> Substantial conceptual and practical differences exist between traditional refugees under the Refugee Convention and ‘environmental or climate refugees’.<sup>45</sup> Thus, the concept of climate change induced displacement is distinct from that of traditional refugee in many respects.

First, the distinction between refugees and internally displaced persons is ‘a fundamental and integral characteristic of traditional refugee law’.<sup>46</sup> Thus, one has to be outside the country of origin to be determined a refugee. There are no exceptions to this principle. Thus, current refugee law does not encompass situations of internal displacement. It is confirmed by many studies that most of the climate migrants in Bangladesh will be internal; only the few who are affluent, having money, education and networks, may cross international borders.<sup>47</sup> Thus, the majority of people who have not yet moved but are facing habitat destruction, or those who are internally displaced due to climate change related effects falls outside the mandate of the Refugee Convention.<sup>48</sup> As they are still in the territorial jurisdiction of their country and able to enjoy the protection of their governments, international refugee protection cannot be given to them until they cross an international border.<sup>49</sup>

Second, refugee law is premised on the notion that refugees need legal protection because they are outside of their country of origin due to persecution by a government actor or an actor the government cannot control.<sup>50</sup> They cannot turn to their own governments for protection because nation-states are often the source of their persecution and are therefore ‘unwilling to avail himself of the protection of that country’ as required by Article 1A(2) of the Refugee Convention.<sup>51</sup> They are outside of their country of origin due to such

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<sup>44</sup> The Refugee Convention was first adopted to deal with the vast numbers of people displaced after the World War II and was approved by a special UN conference in July 1951. The first draft was mainly aimed at protecting Europeans; it was extended in 1967 to include people from around the world. It is also alleged that it is ‘Eurocentric’ in its origins and ignores the reality of mass displacement through war and generalised conflicts in countries in the south. The majority of persons in need of protection and assistance do not count as refugees. Created in response to the escalating refugee flow in post-war Europe, the Refugee Convention adopts a restrictive definition that consequently limits refugee status to a fairly narrow legal interpretation.

<sup>45</sup> Williams, above n 3, 509. See the differences in detail in Chapter 3.

<sup>46</sup> Ibid 510.

<sup>47</sup> For the typology and pattern of climate change induced displacement, see Chapter 2 of this thesis.

<sup>48</sup> Williams, above n 3, 510.

<sup>49</sup> Biermann and Boas, above n 42, 14; Saul et al., above n 35, 5.

<sup>50</sup> Refugee Convention, above n 28.

<sup>51</sup> Refugee Convention, above n 28; Refugee law is based on the fundamental principle that persons need legal protection because they are outside of their country of origin due to persecution by a government actor or an actor the government cannot control. Implicit in this definition is the understanding that the nation-state has failed in its responsibilities to its citizens.

persecution and need international intervention to ensure there is a safe refuge.<sup>52</sup> However, ‘environmental refugees’ or ‘climate refugees’ will be forced to leave their homes, as evidenced by IPCC, due to environmental degradation caused by climate change. Thus, their state is not intentionally persecuting them.<sup>53</sup> Rather, they have actively fled the effects of climate change because it is impossible to continue their lives in their original homes. Rather, in theory, they could still rely on the protection of their national government. The governments of affected countries, instead of becoming a ‘persecutor’, are rather simply unable to assist its citizens. These people still rely on the protection of their national government. The government is sincere and benevolent towards their protection but completely powerless to prevent the effects of the changing climate.<sup>54</sup> For example, people who are likely to be displaced in Bangladesh due to the direct effects of climate change are in no way persecuted by the government of Bangladesh. Rather, it is the important protector against the environmental degradations that result from activities (i.e. carbon emissions of developed and large developing nations). The governments of the affected countries may lack the sufficient capacity to support displaced people with emergency relief or longer-term reconstruction assistance due to their fragile economy and lack of resources, and so warrant international protection.<sup>55</sup>

Third, the durable solution of refugee is based on three notions: returning home once the fear of persecution is over, resettlement and third-country settlement.<sup>56</sup> Although people displaced due to rapid and sudden-onset disasters such as floods and hurricanes might return home when the danger is over, people displaced by slow-onset disasters such as rising sea levels and desertification are unlikely to return home due to a loss of basic infrastructure for their livelihoods.<sup>57</sup> Permanent resettlement within the country or across borders is the only option for these people.

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<sup>52</sup> Robin Bronen, ‘Forced Migration of Alaskan Indigenous Communities Due to Climate Change: Creating a Human Rights Response’ (2009) 5

<<http://www.iom.int/jahia/webdav/site/myjahiasite/shared/shared/mainsite/events/docs/abstract.pdf>>.

<sup>53</sup> Tracey King, ‘Environmental Displacement: Coordinating Efforts to Find Solutions’ (2005) 18 *Georgetown International Environmental Law Review* 543, 553; McAdam, above n 22, 13.

<sup>54</sup> David Corlett, *Stormy Weather: The Challenge of Climate Change and Displacement* (University of New South Wales Press Ltd, 2008) 46.

<sup>55</sup> UNHCR, *The State of the World Refugees: A Humanitarian Agenda* Box 1.2 (UNHCR, 1997), <<http://www.unhcr.org/cgi-bin/texis/vtx/search?page=search&docid=3eb789912&query=The%20State%20of%20the%20World%E2%80%99s%20Refugees%201997>>.

<sup>56</sup> Refugee Convention, above n 1.

<sup>57</sup> Zetter, above n 26, 398.

Fourth, people likely to be displaced by climate change may not want to be characterised as ‘refugees’, as it invokes a sense of helplessness and a lack of dignity.<sup>58</sup> They may prefer to be represented as people with active resilience rather than passive victims waiting for help and ‘refuge’ from developed countries.<sup>59</sup>

Given the existence of such conceptual and practical differences between traditional refugees and environmental or climate refugees, it appears that the existing refugee structure and norms, which is founded on providing protection to people fleeing imminent danger, are ill-suited to address the contemporary complex challenges of climate change induced displacement.<sup>60</sup> In reality, these people require a different kind of protection, planned and organised with the support of the government and public agencies, which is opposite from political or religious persecution.<sup>61</sup> As the UNHCR considers ‘lumping both groups together under the same heading would further cloud the issues and could undermine efforts to help and protect either group and to address the root causes of either type of displacement’.<sup>62</sup>

However, in recent years, many scholars, including Docherty and Giannini and Biermann and Boas, used the term ‘refugee’ to refer to the human movement for environmental reasons, treat these persons a distinct category of migrants requiring international protection.<sup>63</sup> These scholars do not consider the Refugee Convention an appropriate framework for the protection of ‘climate refugees’; rather, they suggest separate global governance for addressing this category of migrants.<sup>64</sup> The scholars propose mainly two types of governance framework for this ‘distinct category’ of migrants, namely a separate protocol under the UNFCCC and an independent separate treaty.

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<sup>58</sup> McAdam, above n 22, 12 (it is against their self-pride and dignity).

<sup>59</sup> Ibid.

<sup>60</sup> Williams, above n 3, 510; Falstrom, above n 37, 2; Williams, above n 3, 510; Jane McAdam, ‘How to Address the Protection Gaps—Ways Forward’ (Paper presented at the Nansen Conference: Climate Change and Displacement in the 21<sup>st</sup> Century, Oslo, 5–7 June 2011) 3, <<http://d2530919.hosted213.servetheworld.no/expose/global/download.asp?id=2267&fk=1626&thumb=>>.

<sup>61</sup> Biermann and Boas, above n 42, 74.

<sup>62</sup> UNHCR, ‘The Environment: A Critical Time’ (2002) 127 *Refugees* 2, 13. In reviewing the debate over whether the appropriate label should be ‘refugees’ or ‘forced migrants’, Castles argues that using a non-legal definition could not only be incorrect and misleading from an international refugee law perspective, but also ‘possibly harmful’. He reasons that ‘it potentially erodes the concept of international protection as it may encourage receiving states to treat refugees in the same way as “economic migrants” to reduce their responsibility to protect and assist’ (Castles, above n 15, 10).

<sup>63</sup> Biermann and Boas, above n 42, 67, 75–83; Docherty and Giannini, above n 29, 370.

<sup>64</sup> Biermann and Boas, above n 42, 75–83; Docherty and Giannini, above n 29, 370.

### **4.2.3 Growing Recognition of Climate Change Displacement under UNFCCC Framework**

While the climate change induced displacement does not fit well within the international refugee law framework, growing demand persists that the adaptation and risk management regime of the UNFCCC framework agreement should recognise climate change induced displacement and an effective, and a meaningful multilateral agreement in the form of a climate change displacement protocol can be adopted through the UNFCCC negotiation process.<sup>65</sup>

However, even though the IPCC highlighted migration and displacement in 1990, nowhere in UNFCCC or the more recent Bali Action Plan of December 2007<sup>66</sup> are the words ‘migrant, migration, refugee or displacement’ mentioned.<sup>67</sup> In recent times, with repeated claims from affected countries, including LDCs and Small Island Developing States (SIDS), developed countries did not reach a consensus to include the issue in the ‘Accord’, which was the only outcome of the Copenhagen summit in 2009. However:

[t]he Copenhagen LCA Negotiating Text did include a bracketed paragraph on “environmental refugees” in the context of economic and social consequences of responses measures... Although this proposed a commitment to compensate developing countries for the losses associated with environmental migration and displacement may have been worthy of support, the unclear basis for granting and calculating compensation, and the political controversies arising there from, made its eventual adoption by the Conference of the Parties highly unlikely.<sup>68</sup>

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<sup>65</sup> Biermann and Boas, above n 42, 75–83; Williams, above n 3, 519; Walter Kälin, ‘The Human Rights of Internally Displaced Persons’, (Speech delivered at the UN General Assembly, New York, 26 October 2009), <[http://www.brookings.edu/speeches/2009/1026\\_internal\\_displacement\\_kalin.aspx](http://www.brookings.edu/speeches/2009/1026_internal_displacement_kalin.aspx)>; Biermann and Boas, above n 42, 26–30 (proposing protocol to the UNFCCC); Williams, above n 3 (proposing regional system of management related to the UNFCCC). A Bangladeshi NGO network, Equity and Justice Working Group Bangladesh (EquityBD), called for a new Protocol to the UNFCCC ‘to ensure social, cultural and economic rehabilitation of the “climate refugees” through recognizing them as “Universal Natural Persons”’ (EquityBD, ‘Climate Change Induced Forced Migrants: In Need of Dignified Recognition under a New Protocol’, December 2009).. In September 2010, the Bangladeshi Prime Minister, Sheikh Hasina proposed a joint South Asian initiative to mobilise international support under the UNFCCC Protocol to ensure the social, cultural and economic rehabilitation of climate change-induced displaced people (e.g., ‘PM Warns of Climate Refugee Crisis’, *The Daily Star*, 22 September 2010,

<[http://www.thedailystar.net/newDesign/latest\\_news.php?nid=26005](http://www.thedailystar.net/newDesign/latest_news.php?nid=26005)>; ‘Hasina Highlights Unfortunate Plight of Climate Migrants’, above n. 43.

<sup>66</sup> The Bali Action Plan is in negotiations to develop a new protocol to succeed the Kyoto Protocol.

<sup>67</sup> Docherty and Giannini, above n 29, 395. The word displacement actually occurs twice in the Bali Action Plan, but in the context of displacement of emissions, not displacement of persons; for example, UNFCCC, above n 5, pmb., para. 19, art. 4(8)(a)–(b); Bali Action Plan, above n 62, P 1(c)(i).

<sup>68</sup> Sébastien Jodoin, ‘From Copenhagen to Cancun: A Changing Climate for Human Rights in the UNFCCC?’ (A CISDL Legal Brief, CISDL, 2011) 3, 6.

In 2010, Paragraph 14 (f) was included in Cancun LCA Text, which urges the parties to enhance action on adaptation by undertaking, among other things, ‘[m]easures to enhance understanding, coordination and cooperation with regard to climate change induced displacement, migration and planned relocation, where appropriate, at national, regional and international levels’.<sup>69</sup> This paragraph may be ‘the first step towards effectively addressing the thorny and complicated problem of environmental migration and displacement’.<sup>70</sup> However, it remains uncertain whether adaptation funding can be expended for migration or resettlement programmes.<sup>71</sup>

#### ***4.2.4 Growing Advocacy for Recognition of Climate Change Displacement as A Distinct Group***

Recognising the fact that both the options of expansion of the Refugee Convention and developing separate protocol under UNFCCC have restricted mandates, and legal and/or political limitations, to deal with the issue of climate change induced displacement appropriately, scholars such as Docherty and Giannini and Hodgkinson et al. advocate for an entirely independent convention addressing climate change displacement to deal with the underlying issues raised by the climate change displacement problem and fill the legal vacuum in international law for protection of this group of people.<sup>72</sup> Recently, a group of legal scholars from the University of Limoges published a Draft Convention on the International Status of Environmentally-Displaced Persons.<sup>73</sup>

For developing an international framework, the scholars argue that, since the causation and extent of this displacement problem is global, the solution of managing the predicted large numbers of climate change induced displacements in the future must be through an

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<sup>69</sup> Cancun LCA Text, para. 14(f).

<sup>70</sup> Jodoin, above n 68, 3.

<sup>71</sup> Benoit Mayer, ‘Environmental Migration in Asia and the Pacific: Could We Hang Out Sometimes?’ (Earth System Governance Working Paper No. 22, Earth System Governance Project, 2012) 11.

<sup>72</sup> Docherty and Giannini, above n 29, 397–401; Jessica Scott, *Protection of Environmentally Displaced Populations through Strengthening Existing Environmental Human Rights Law*, 2010, 4 ExpressO <[http://works.bepress.com/jessica\\_scott/1](http://works.bepress.com/jessica_scott/1)>.

<sup>73</sup> Draft Convention on the International Status of Environmentally-Displaced Persons (CRIDEAU and CRDP, Faculty of Law and Economic Science, University of Limoges) (2008) 4 *Revue Européenne de Droit de l’Environnement* 375. Art. 2(2) defines ‘environmentally-displaced persons’ as ‘individuals, families and populations confronted with a sudden or gradual environmental disaster that inexorably impacts their living conditions and results in their forced displacement, at the outset or throughout, from their habitual residence and requires their relocation and resettlement’. A ‘right to resettlement’ is elaborated in art. 9: state parties are to establish ‘transparent and open legal procedures for the demand and grant or refusal of the status of environmentally-displace [sic] person based on the rights set forth in the present chapter’.

international framework based on the principles of international cooperation. According to Docherty and Giannini, a separate framework:

[w]ould provide a number of advantages, including: 1) deserved prioritisation of the large and emerging problem of climate change refugees; 2) the flexibility needed for a specialised framework that blends principles and solutions drawn from human rights, humanitarian assistance, and international environmental law; and 3) better opportunities for the inclusion of civil society and affected communities in the design and negotiation of the treaty.<sup>74</sup>

They also argue that a separate treaty framework would be able to combine multiple regimes such as human rights, humanitarian assistance and international environmental law into one specialised instrument and ensure both assistance and protection to climate change displaced persons, imposing affirmative obligations for states to prevent the environmental disasters that force people to leave their homes.<sup>75</sup>

However, general arguments against the proposition of a new instrument for climate change displacement are that wide consensus and ratification seems impossible, it would be an extremely costly and time-consuming proposition and the compliance and enforcement problem would frustrate its purpose.<sup>76</sup> Negating the efficacy of a separate treaty to solve the problem of climate change induced displacement, however, McAdam doubted the legal benefits of a new convention.<sup>77</sup> McAdam, in line with the outcome of Nansen Conference in 2011, is in favour of developing ‘soft guidelines’ for the protection of ‘climate-related displacement’.<sup>78</sup>

The above discussion indicates that, while there are disputes regarding the nature and means of the protection of climate change displacement, there is a wide agreement among academics, scholars and policy-makers to treat persons displaced by the direct effects of

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<sup>74</sup> Docherty and Giannini, above n 29, 397–401.

<sup>75</sup> Ibid, 398.

<sup>76</sup> Scott, above n 72, 6; Williams, above n 3, 517.

<sup>77</sup> Jane McAdam, ‘Swimming against the Tide: Why a Climate Change Displacement Treaty is not the Answer’ (2011) 23(1) *International Journal of Refugee Law* 2, 4, 5, 17. McAdam and Saul identify a number of shortcomings to creating a new treaty:

firstly, inherent difficulty to segregate climate change from other factors as the main cause of movement may create problems in defining the legal scope/application of the new treaty; secondly, placing climate change migrants in privileged position over other forms of forced migrants would be questioned for its moral/legal justification; thirdly, the new framework likely to be modelled on individual status determination may be unsuitable for mass displacement; fourthly, terming them as ‘climate refugee’ may harden the category excluding some people from much-needed assistance; and fifthly, uncertainty circling around political agreement for a separate international treaty. Finally, they opine, ‘a treaty could dilute existing, hard-won refugee protection and encourage general migration, abusive claims and people smuggling’ (Jane McAdam and Ben Saul, ‘Displacement with Dignity: International Law and Policy Responses to Climate Change Migration and Security in Bangladesh’ (2010) 53 *German Yearbook of International Law* 234, 279.)

<sup>78</sup> Jane McAdam, *Climate Change, Forced Migration and International Law* (Oxford University Press, 2012) 237–266.

climate change as a ‘distinct group of migrants’ requiring special protection. The governments may consider providing a legal status to those people who are compelled to flee environmental disasters and obtain refuge across borders to save their lives and livelihoods because the continuation of life in their original places becomes impossible; their lives would be in jeopardy if they returned home.

The development of an international framework recognising ‘climate change induced displacement’ as a separate entity and thus legal framework for their protection would benefit the climate change induced displacement in Bangladesh. However, if the international framework exclusively focuses on cross-border migration as suggested by Docherty and Giannini, doubt remains regarding how far a separate framework would protect the plight of vulnerable people likely to be displaced in Bangladesh while a relatively small number of people may move across borders.<sup>79</sup>

Rather, the international framework needs to consider the socio-economic conditions of affected poor countries, including Bangladesh, and extend its protection to all people likely to be affected by climate change. The international institutions need to complement the work of the national government and provide sufficient funding for the protection of climate change induced displacement. Indeed, the size and density of the population and limited area in Bangladesh particularly make it vulnerable to climatic effects that require different types of national protection.

However, to receive such protection from the international community, the government of Bangladesh should recognise the climate change displacement in its legal system. Scientific evidence should be mapped to develop a typology and pattern of climate change induced displacement. For this, they need to be defined first according to international law standards.<sup>80</sup> However, the current national framework does not recognise ‘climate change displacement’ as a separate category of migrants. Currently, no national framework deals with migrants, be it development-induced migrants or environment-induced migrants. Such recognition in a national framework would help to develop a protection mechanism of climate change induced displacement in Bangladesh.

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<sup>79</sup> Roger Zetter, ‘Protecting Environmentally Displaced People: Developing the Capacity of Legal and Normative Frameworks’ (Research Report, Refugee Studies Centre, 2011) 16.

<sup>80</sup> See Chapter 3 for a definition of climate change induced displacement in Bangladesh.

### ***4.3 Fathoming Global Responsibility towards Climate Change Induced Displacement***

As climate change is a global process rather than a local crisis, it should have an international solution.<sup>81</sup> While natural climate variations have existed for millennia, anthropogenic climate change has gradually emerged since the industrial revolution and especially after World War II due to the availability of cheap fossil fuels (coal, oil, natural gas) and the dramatic increase in its consumption, particularly in industrialised countries. According to the IPCC, developed countries are largely responsible for the effects of climate change.<sup>82</sup> The UNFCCC defined those industrialised countries as Annex I countries that have historically contributed the most to greenhouse gas (GHG) emissions.

Thus, although historical and current global emissions of GHG have originated in developed countries, the negative effects of climate change have been unevenly and disproportionately visited upon LDCs such as Bangladesh. That is, those who have generally contributed the least to anthropogenic climate change are bearing the most harms and responsibility stemming from its effects (i.e. managing climate change induced displacement, with least capacity).<sup>83</sup> Almost 30 million people are likely to be displaced from their homes in Bangladesh, which is already burdened with its human population and fragile economy. Bangladesh has a limited ability to mitigate the effects of climate change (e.g. building dykes, sea walls and embankments). It also lacks adequate resources to build resilience and adaptation to the effects of climate change.

Indeed, the primary responsibility to protect the (potential) climate change induced displacement in Bangladesh lies with its government because the effects of climate change and consequent migration are experienced within its national borders.<sup>84</sup> However, placing the sole responsibility on Bangladesh alone, which is already vulnerable to climate change,

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<sup>81</sup> Docherty and Giannini, above n 29, 382.

<sup>82</sup> IPCC, *Summary for Policy Makers*, <<http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-spm.pdf>>.

<sup>83</sup> *Report of the Office of the United Nations High Commissioner for Human Rights on the relationship between climate change and human rights*, UN Doc. A/HRC/10/61 (2009), 5, para. 10.

<sup>84</sup> *A More Secured World: Our Shared Responsibility*—Report of the Secretary-General's High-level Panel on Threats, Challenges and Change (A/59/565), 21-22: Michele Morel, *Protecting Environmental Migrants: Recent Findings from the UNU-EHS Summer Academy*, 11 November 2010, 3

<<http://internationallawobserver.eu/2010/11/11/protecting-environmental-migrants-findings-from-the-unu-ehs-summer-academy>>; Michelle Leighton, 'Climate Change and Migration: Key Issues for Legal Protection of Migrants and Displaced Persons' (Background Paper, The German Marshall Fund of the US, June 2010) 3 <[http://www.gmfus.org/galleries/default-file/Leighton\\_MAH\\_EditsV2.pdf](http://www.gmfus.org/galleries/default-file/Leighton_MAH_EditsV2.pdf)>. The State has the primary obligation to protect the welfare of its own peoples.

will ‘contradict the global responsibility for the victims of climate change’.<sup>85</sup> International human rights law, international environmental law and climate change conventions recognise that those who contributed most to causing the harm bear both legal and moral obligations for mitigating it.<sup>86</sup> Moreover, the international community is committed to ‘intensify cooperation to reduce the number and effects of natural and man-made disasters’.<sup>87</sup>

#### **4.3.1 Responsibility under International Environmental Law**

The ‘No-harm Principle’: a widely recognised principle in international environmental law that recognises state responsibility for trans-boundary harms that cause environmental and other collateral damages and oblige a state to prevent damage and to minimise the risk of damage to other states. This principle was first employed in the Trail Smelter Arbitration (*United States v. Canada*) and was subsequently confirmed by different decisions of international and regional courts and tribunals.<sup>88</sup> It was later reassessed in several soft-law instruments<sup>89</sup> and is now part of international customary law.<sup>90</sup>

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<sup>85</sup> Biermann and Boas, above n 42, 13.

<sup>86</sup> Docherty and Giannini, above n 29, 382.

<sup>87</sup> United Nations Millennium Declaration, UNGA res 55/2 8<sup>th</sup> plenary meeting (8 September 2000).

<sup>88</sup> In the Trail Smelter case, an international arbitral tribunal condemned Canada for failing to prevent an enterprise on its territory from releasing fumes that damaged property in US territory. The tribunal stated in general terms that:

under the principles of international law, [...] no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence.

The Advisory Opinion of the International Court of Justice (ICJ) in the *Legality of the Threat or Use of Nuclear Weapons* (1996) stated that, ‘the existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment’. The ‘no harm’ rule was restated and accepted by both parties (Hungary and Slovakia) in the *Gabcikovo* case, 1997, decided by ICJ.

At the regional level, the European Court of Human Rights found the Russian government negligent in preventing mud slides in the northern Caucasus and ordered it to pay compensation to the surviving relatives. The Court based its decision on the failure of the government to live up to its duty to ‘safeguard’ lives and take preventive measures against the consequences of a disaster (W Kälin and C Haenni Dale, ‘Disaster Risk Mitigation—Why Human Rights Matter’, 31 *Forced Migration Review* (2008) 38–39.

<sup>89</sup> *UNFCCC*, 9 May 1992, 1771 U.N.T.S. 107, entered into force 21 March 1994, recitals 8 and 9; *Declaration of the United Nations Conference on the Human Environment*, 16 June 1972, UN Doc. A/Conf.48/14/Rev. 1, 11 I.L.M. 1416, principle 21; *Rio Declaration on Environment and Development*, 14 June 1992, UN Document A/CONF.151/26 (Vol. I), principle 2.

It has also been incorporated in various international law and policy documents. Principle 21 of the Stockholm Declaration provides that

[s]tates have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

As atmospheric pollution that causes climate change clearly falls within the purview of ‘No-harm Principle’, industrialised countries are obliged to reduce carbon emissions to stabilise the atmosphere and thus stop causing harm to affected countries. In responding to this responsibility, in terms of mitigation, rigorous emissions targets should be made by developed countries to avoid dangerous climate change.

The initiatives for the elimination of carbon emissions are not enough. The ‘polluter-pays’ principle<sup>91</sup>, which obliges industrialised countries that undertook disproportionate accumulation and benefitted from emissions activities for assisting climate migrants, resulted from the effects of carbon pollution. Thus, the polluter must pay according to the principle of CBDR articulated in UNFCCC.<sup>92</sup> The principle of CBDR is widespread within international environmental law and is found throughout the international climate change regime.<sup>93</sup> Both the UNFCCC and Kyoto Protocol recognise this principle, and the efforts to protect the climate system should be done so on the basis of equity and in accordance with states’ CBDR and respective capacities.<sup>94</sup> Thus, CBDR confers ‘a positive obligation on wealthier countries to ‘assist’ poorer countries’.<sup>95</sup>

Thus, while extra-territorial responsibility is an established principle under international environmental law for trans-boundary harm and is embodied in art. 3 of the UNFCCC in the form of CBDR, it is untenable not to exert the same principle for migration resulting

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This principle is also included in Art. 3 of the 1992 Biodiversity Convention, the 1985 Vienna Convention for the Protection of the Ozone Layer [Preamble 2nd paragraph], and UN General Assembly, Resolution 2996 (XXVII), 15 December 1972. It has also been reiterated in the preamble to the UNFCCC [Preamble, 9th paragraph].

<sup>90</sup> Rudiger Wolfrum, ‘International Environmental Law: Purposes, Principles and Means of Ensuring Compliance’ in Fred Morrison and Rudiger Wolfrum (eds), *International, Regional and National Environmental Law* (Kluwer, 2000), 7; Joseph Smith and David JC Shearman, *Climate Change Litigation: Analyzing the Law, Scientific Evidence & Impacts on the Environment, Health & Property* (Presidian, 2006) 49; P Sands, ‘International Law in the Field of Sustainable Development: Emerging Legal Principles’ in W Lang (ed.), *Sustainable Development and International Law* (Graham & Trotman, 1995) 53, 62.

<sup>91</sup> This principle already serves as a basis for liability and compensation for trans-boundary pollution in international law. The alternative proposition is the ‘beneficiary pays’ principle.

<sup>92</sup> The principle of CBDR, recognised first in the 1992 Rio Declaration on Environment and Development and then in UNFCCC, recognises that developed countries are obliged to take the lead and help other states in dealing with climate change. This principle recognises historical differences in the contributions of developed and developing states to global environmental problems, as well as differences in their respective economic and technical capacities to tackle these problems (Hodgkinson et al., above n 13, 164).

<sup>93</sup> Under the UNFCCC framework, all states, especially developed countries, incur obligations to respect and protect human rights and channel resources towards the economic and social development of the poor countries to tackle climate change. This moral obligation arises because the developed world bears the greatest share of responsibility for climate change.

<sup>94</sup> Williams, above n 3, 17.

<sup>95</sup> International Council on Human Rights Policy, above n 15, 62; Lavanya Rajamani, *Differential Treatment in International Environmental Law* (2006) 108–109.

from the direct effects of climate change. The international negotiations and policy responses should embody this principle in designing any framework for protecting or managing displacement stemming from climate change.<sup>96</sup> Technological and financial resources should be provided by industrialised nations as compensation to developing nations and LDCs for the damage already done to the climate based on proportional contribution to climate change and respective capacity of the states. Significant effort should be extended to strengthen adaptation programmes in affected countries to mitigate the risk of displacement.

#### **4.3.2 Responsibility under UNFCCC Framework**

The international climate change regime has already developed a number of principles and mechanisms that aim to promote distributive justice. The UNFCCC emphasises the notion of cooperation by stating that ‘the global nature of climate change calls for the widest possible cooperation by all countries’ and establishes a framework for international cooperation on climate change. Although international cooperation in respect to mitigation is mostly reflected in the past, the necessity of cooperation for building adaptive capacity in developing countries has increasingly received attention in recent years. The Convention imposes obligations on developed countries to consider the specific needs and special circumstances of developing countries.<sup>97</sup> The Preamble of the UNFCCC acknowledges ‘that the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response in accordance with their CBDR and respective capabilities, as well as their social and economic conditions’.<sup>98</sup> The Convention’s Article 4, Paragraph 1(e–f) commits the parties to cooperation and support relating to funding, insurance and the transfer of technology in meeting the costs of vulnerable poor countries in preparing and planning for adaptation.<sup>99</sup> Paragraph 8 demands attention to the specific needs and concerns of developing countries, listing small island states, countries with low-lying coasts, arid countries and countries dependent on fossil fuels as requiring attention when deciding on financial assistance, insurance and the transfer of technology. Paragraph 9 presents a similar requirement for acknowledging the special needs and circumstances of LDCs.

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<sup>96</sup> Warner, above n 7, iv.

<sup>97</sup> Para. 2 of Art. 3 of the UNFCCC.

<sup>98</sup> UNFCCC, pmb.

<sup>99</sup> Lavanya Rajamani, ‘The Increasing Currency and Relevance of Rights-Based Perspectives in the International Negotiations on Climate Change’ (2010) 22(3) *Journal of Environmental Law* 391, 427.

The climate change convention's adaptation provisions have been specified in the Kyoto Protocol and in the decisions of the conferences of the parties (COP) to Convention. The Copenhagen Accords adopted in December 2009 committed the international community to enhanced action and international cooperation to reduce vulnerability and build resilience in developing countries to meet the challenges of climate change. The Accord reiterates the necessity of international cooperation in this regard, stating that 'we agree that developed countries shall provide adequate, predictable and sustainable financial resources, technology and capacity-building to support the implementation of adaptation action in developing countries'.<sup>100</sup> Non-paper 41 on climate change adaptation produced after the seventh session of the Ad Hoc Working Group on Long-Term Cooperative Action under the UNFCCC in Barcelona refers to migration and displacement as follows:

All Parties [shall] [should] jointly undertake action under the Convention to enhance adaptation at the international level, including through ... (b) Activities related to migration and displacement or planned relocation of persons affected by climate change, while acknowledging the need to identify modalities of interstate cooperation to respond to the needs of affected populations who either cross an international frontier as a result of, or find themselves abroad and are unable to return owing to, the effects of climate change.<sup>101</sup>

The concept of cooperation is also endorsed in the post-2012 negotiations, which are titled 'long-term cooperative action under the Convention'.<sup>102</sup> Thus, the climate change framework including the UNFCCC, the Kyoto Protocol, and COP decisions confirms that industrialised countries bear obligations to assist developing countries—particularly the vulnerable and least developed ones—to adapt with changed environment by transferring finance, resources and technology.<sup>103</sup>

#### **4.3.3 Responsibility under International Human Rights Law**

While the responsibility of developed countries is evident under well-recognised principles of customary international environmental law, there are challenges in assigning responsibility to industrialised countries. These countries may escape their responsibility, claiming that science does not prove with certainty that the consequences of climate change are 'caused' by carbon emissions and the displacements are typically interrelated

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<sup>100</sup> Copenhagen Accord, 2009.

<sup>101</sup> The adaptation non-paper 53 of 6 November 2009 is available at <[http://unfccc.int/files/meetings/ad\\_hoc\\_working\\_groups/lca/application/pdf/awglcaadaptnp53061109.pdf](http://unfccc.int/files/meetings/ad_hoc_working_groups/lca/application/pdf/awglcaadaptnp53061109.pdf)>, cited in Norwegian Refugee Council, 'Climate Changed: People Displaced' (Norwegian Refugee Council, 2009) 23.

<sup>102</sup> Rajamani, above n 99, 425.

<sup>103</sup> Jouni Paavola and W Neil Adger, 'Justice and Adaptation to Climate Change' (Working Paper 23, Tyndall Centre for Climate Change Research, 2002) 12.

with many other socio-economic and political factors.<sup>104</sup> Nevertheless, the reality is that a large number of people who are at risk of displacement due to the effects of climate change in Bangladesh are likely to face severe human rights violations.<sup>105</sup>

Under international human rights law, generally, a state bears human rights obligations towards all persons within its jurisdiction. In addition, some extra-territorial human rights obligations can be derived by the wider international community from human rights law provisions, especially when a state is unwilling or unable to assume the responsibility to protect the human rights of its citizens.<sup>106</sup> One of the purposes of the UN is to ‘achieve international co-operation in solving international problems of an economic, social, cultural, or humanitarian character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion’.<sup>107</sup> A number of human rights instruments, including the International Covenant on Economic, Social and Cultural Rights (ICESCR), encourage international cooperation according to which states parties should support the governments, local communities and national agencies that are not in a position to ensure basic rights for their populations.<sup>108</sup> Article 2(1) of ICESCR refers to an obligation on states to utilise available international assistance towards the fulfilment of the human rights of all people around the world. Thus, ‘[i]nternational human rights law complements the UN Framework Convention on Climate Change by underlining that international cooperation is not only expedient, but also a human rights obligation’.<sup>109</sup>

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<sup>104</sup> See Chapter 2 for a detailed discussion.

<sup>105</sup> See Chapter 5 for a detail discussion.

<sup>106</sup> *A More Secured World: Our Shared Responsibility*—Report of the Secretary-General’s High-level Panel on Threats, Challenges and Change (A/59/565), 22: the State has the primary obligation to protect the welfare of its own people.

<sup>107</sup> *Charter of the United Nations*, 26 June 1945, art. 1§3.

<sup>108</sup> Art. 2 ICESCR, *International Covenant on Economic, Social and Cultural Rights*, 16 December 1966, 993U.N.T.S.3, 6I.L.M.368, art.11, 15, 22, 23; General Assembly resolution 2625 (XXV), *Declaration on Principles of International Law Concerning Friendly Relations and Co-operation among States in Accordance with the Charter of the United Nations*, 24 October 1970; General Assembly resolution 3281 (XXIX), *Charter of Economic Rights and Duties of States*, 12 December 1974; General Assembly resolution 55/2, *United Nations Millennium Declaration*, 18 September 2000, §2. In addition, CESCR General comment 3, *The nature of States parties obligations (Art. 2, par.1)*, 14 December 1990, UN Doc. E/1991/23, §13–14; Felipe Gómez Isa, ‘Transnational Obligations in the Field of Economic, Social and Cultural Rights’ (2009) 18 *Revista electrónica de estudios internacionales*.

<sup>109</sup> UNHRC, *Annual Report of the United Nations High Commissioner for Human Rights and Reports of the Office of the High Commissioner and the Secretary-General*, UN Doc. A/HRC/10/61 (15 January 2009), <[http://www.ohchr.org/Documents/ Press/HC\\_Annual\\_report.pdf](http://www.ohchr.org/Documents/Press/HC_Annual_report.pdf)>; Laura MacInnis, *UN Human Rights Body Turns to Climate Change*, REUTERS, 28 March 2008,

<<http://www.reuters.com/article/africaCrisis/idUSL28896962>>; Laura MacInnis, *Red Cross Says Changing Climate Worsens Disasters*, REUTERS, 21 January 2008,

In this context, it may be appropriate to explore the potential of the emerging concept of ‘Responsibility to Protect’ (R2P)<sup>110</sup> to address the situation of climate change induced displacement change to recognise a responsibility of the international community to take appropriate and effective measures to protect those displaced by climate change (and indeed those affected by climate change but not displaced by it), and to sustainably rebuild communities displaced by climate change, by providing permanent and durable solutions.<sup>111</sup>

Although the R2P framework is not a legally binding norm, it may have the potential to conceptualise the problem and can be applied only when the effects of climate change degrade the situation in a particular country in such a way that the state fails to prevent harm to its population.<sup>112</sup> In Bangladesh, in many situations concerning climate change displacement, the government is simply unable to provide effective and extensive assistance to its citizens because the capacity of the national government is severely limited.<sup>113</sup> In such a situation, however, inaction by the international community would defy the pledge of universal human rights enunciated in the UN Charter.<sup>114</sup>

Although the R2P is largely meant to prevent human-made harms inflicted on a population by particular actors (States or private groups), forced displacement resulting from overwhelming natural or environmental disasters was included in the R2P definition under the 2001 International Commission on Intervention and State Sovereignty (ICISS) report. However, the 2005 World Summit excluded this phenomenon from the R2P definition.

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<<http://www.reuters.com/article/idUSL2170391920080121>>; Press Release, UNHCR, UNHCR and Google Unveil New Map Programme for Humanitarian Operations (8 April 2008),

<<http://www.unhcr.org/news/NEWS/47f5e7e02.html>>.

<sup>110</sup> The R2P framework is in itself an innovative approach to address an apparent operational protection gap in international law. It has been developed to reaffirm the UN’s high moral authority for the universal protection of human rights. The emerging doctrine of the ‘responsibility to protect’ (R2P), which emphasises that while the primary responsibility for the protection of a state’s people lies with the state itself, the sovereign principle of non-intervention must yield to an international responsibility to protect where a population is suffering serious harm (whether due to internal war, insurgency, repression or state failure) and the state is unwilling or unable to halt or avert it (156 Report of the International Commission on Intervention and State Sovereignty, *The Responsibility to Protect*, December 2001, xi; Erika Feller, ‘The Responsibility to Protect: Closing the Gaps in the International Protection Regime’ in Jane McAdam (ed.) *Forced Migration, Human Rights and Security* (Hart Publishing, 2008) 283, 284).

<sup>111</sup> Steffen Bauer, ‘“Climate Refugees” beyond Copenhagen: Legal Concepts, Political Implications, Normative Considerations’ (Analysis 12, Brot für die Welt, 2010) 14.

<sup>112</sup> McAdam and Saul, above n 16, 24.

<sup>113</sup> Koko Warner, ‘Assessing Institutional and Governance Need Related to Environmental Change and Human Migration’ (Background Paper, The German Marshall Fund of the US, June 2010) 8, <[http://www.gmfus.org/galleries/default-file/Warner\\_MAH\\_EditsV2.pdf](http://www.gmfus.org/galleries/default-file/Warner_MAH_EditsV2.pdf)>.

<sup>114</sup> Bauer, above n 111, 14.

Indeed, in the original scope of the concept of R2P, the international community could shoulder the responsibility to address the challenges of climate change induced displacement and ‘take appropriate and effective measures to protect those displaced by climate change (and indeed those affected by climate change but not displaced by it); and to sustainably rebuild communities displaced by climate change, by providing permanent and durable solutions’.<sup>115</sup>

Thus, developed nations that are responsible for climate change induced environmental degradations should bear the cost.<sup>116</sup> The industrialised countries bear the responsibility to support and strengthen Bangladesh’s ability to provide protection from displacement, during displacement and to end displacement under the accepted legal principle of international cooperation and assistance.<sup>117</sup> With such assistance, Bangladesh will be able to adequately address migration caused by climate change.

#### ***4.4 Protection of Climate Change Induced Displacement in Bangladesh: Obligation of International Community***

##### ***4.4.1 Funding for Adaptation to Prevent Displacement***

Although academics and policy-makers often highlight the migration of large numbers of ‘climate refugees’ to developed countries, in reality, migration resulting from environmental degradation is likely to be internal and managed within the country. Bangladesh has the fewest resources to mitigate the effects of climate change and takes protective measures such as seawalls and embankments. The most vulnerable people who lead subsistence livelihoods in highly risk-prone areas are left unprotected, without any government support. Given that the opportunity for both cross-border and long-distance permanent displacement is limited, it seems more practicable to build the capacity of people-strengthening adaptation programmes so that people can stay in their original places to cope with adverse environmental situations. There may be some extreme situations when it is impossible for them to continue livelihoods there. In such situations, people either need to be relocated to new areas or the adaptation programme itself should

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<sup>115</sup> McAdam and Saul, above n 16, 24.

<sup>116</sup> Docherty and Giannini, above n 29, 382; Tahera Akter, ‘Climate Change and Flow of Environmental Displacement in Bangladesh’ (Unnayan Onneshan—The Innovators, 2009) 12; L Craig Johnstone, ‘The Climate Change Future is Now’ (Speech delivered at the Institute of Public Policy Research Conference on Climate Change and Forced Migration, 29 April 2008), <<http://www.unhcr.org/4901e8e82.html>>.

<sup>117</sup> Vikram Odedra Kolmannskog, ‘Climate Changed: People Displaced’ (Thematic Report, Norwegian Refugee Council, 2009) 36; Warner (In Search of Shelter), above n 7, iv; Docherty and Giannini, above n 29, 382; Akter, above n 116, 12.

support migration as part of the coping strategy. Affected communities in Bangladesh have already shown that they are capable of adapting to current climate change effects if they have some assistance.

However, it is not possible to implement adaptation strategies effectively in Bangladesh due to constraints of resources. Given the size and range of effects and the large number of people affected, it is widely recognised that Bangladesh requires a substantial amount of climate change financing, especially adaptation financing, for the measures, including relocation and adaptation facilitating migration. This ranges from the allocation of land and housing for resettlement to compensation and skills training for those relocated in the face of climate change.<sup>118</sup> Due to a lack of both financial and logistic resources, Bangladesh needs international cooperation to manage and protect people who are already displaced or who are likely to be displaced.<sup>119</sup> Therefore, Bangladesh needs human, technological and financial resources from developed countries for migration-related adaptation.<sup>120</sup>

However, although the ‘principle of international cooperation’ is recognised and frequently uttered in international negotiations on climate change, there are many questions and debates regarding the form of international assistance as a response to climate change, such as financial assistance or aid.<sup>121</sup> Developed countries have made legal commitments under the UNFCCC to help provide adaptation funding for developing countries. Article 4 of the UNFCCC highlights that developed country parties shall provide financial resources to help developing country parties adapt to climate change. To facilitate this, the Convention assigned to the Global Environment Facility (GEF) the responsibility of operating its financial mechanism. The GEF enables a transfer of financial resources from developed to developing countries by establishing operational programmes, providing programming documents and allocating resources. Based on guidance from the UNFCCC, the GEF operates three funds: the GEF Trust Fund’s Strategic Priority on Adaptation (SPA), the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF). Further funding opportunities currently available for developing countries to fund adaptation projects include the Adaptation Fund under the Kyoto Protocol, funds from

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<sup>118</sup> Campaign for Sustainable Rural Livelihoods (CSRL), ‘Climate Change Adaptation Financing: Managing a Transparent and Pro-poor Fund in Bangladesh’ (Briefing Note, CSRL, 2008) 3; Displacement Solutions, ‘Meeting Report on Climate Change, Human Rights and Forced Human Displacement’ (Displacement Solutions, 2008), 7.

<sup>119</sup> Warner (Assessing Institutional and Governance Need), above n 113, 8.

<sup>120</sup> Hugo, above n 11, 62.

<sup>121</sup> Akter, above n 116, 12.

other multilateral environmental agreements (MEAs), and bilateral and multilateral funding from governments, national and international organisations and agencies. The Cancun conference on climate change in December 2010 emphasises enhanced action on adaptation that includes ‘measures to enhance understanding, coordination and cooperation with regard to climate change induced displacement, migration and planned relocation, where appropriate, at the national, regional and international levels’.<sup>122</sup>

However, there is still no concrete protection mechanism supporting climate migrants in affected LDC countries such as Bangladesh.<sup>123</sup> It is challenging to transform the global responsibility into effective and sustainable international cooperation through concrete adaptation measures and programmes that provide durable solutions for climate change induced displacement. To date, protection and assistance schemes for climate change induced displacement remain inadequate, poorly coordinated and scattered. In the recent Copenhagen Accord, which is not legally binding upon the parties to the UNFCCC, \$100 billion are promised for poor countries to adapt to climate change. However, a concrete financing plan specifying where this money would come from has not been developed. Although the development partners of Bangladesh have promised US\$100 million to help the country face the climate change effects, Bangladesh will need several billion dollars (at least \$2 billion per year) to successfully tackle the issues of environmental degradation.

However, the adaptation fund could be vital in assisting climate change induced displaced persons.<sup>124</sup> As migration is viewed as adaptation to climate change, the costs of migration and relocation should come from international adaptation funding mechanisms.<sup>125</sup> The current financial mechanisms for climate change adaptation are limited; however, it is the only certain funding that could be used to address the growing need to cope with climate change induced displacement. Emphasising the need for international financial assistance for Bangladesh, McAdam and Saul explain that: ‘improving international financial and technical assistance to Bangladesh in adapting to climate change could play a critical role in preventing further displacement. Such assistance could help to build community

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<sup>122</sup> *Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention*, §14(f).

<sup>123</sup> Benoît Mayer, *Migration as a Sustainable Adaptation Strategy* (2011) 13, <<http://www.icarus.info/wp-content/uploads/2011/06/Mayer.pdf>>.

<sup>124</sup> Elizabeth Burlison, ‘Climate Change Displacement to Refuge’ (2010) 25 *Journal of Environmental Law and Litigation* 19, 35.

<sup>125</sup> John Campbell, ‘Climate Change and Population Movement in Pacific Island Countries’ in Bruce Burson (ed.), *Climate Change and Migration South Pacific Perspective* (Institute of Policy Studies, 2010) 34, 37.

resilience by providing alternative livelihoods, supplying technical solutions and encouraging disaster risk reduction' (DRR).<sup>126</sup>

Therefore, it should look forward to readying suitable plans to become the beneficiary of adequate funds and support from the international climate fund before time runs out. The government should explore the need for funding for policies and actions to support climate change induced migration, and the international mechanisms and facilities that could be used and/or set up to channel the funds. Therefore, a well-devised plan and actions are pertinent to negotiate in international forums by a strong team with a combination of Government officials, civil society and NGOs.<sup>127</sup>

#### ***4.4.2 Obligation to Provide Durable Solutions for Cross-border Climate Migrants***

The issue of international migration has gained priority among policy-makers and right-wing activists in recent years. They argue that the developed countries should not accomplish their obligation only by providing funding for adaptation, rather extend their cooperation by allowing international migration to 'climate refugees'.<sup>128</sup> Mayer argues that the international community bears certain obligations towards populations affected by climate change, including setting up international resettlement programs for climate migrants.

In reality, most climate migrants will be managed within Bangladesh. However, in a worst-case scenario, if the temperature is warmer than predicted or if it is impossible for people to continue life within the borders of Bangladesh, people may need to be relocated to other countries.

There is currently no mechanism for international cooperation to manage such climate change induced cross-border migration flows.<sup>129</sup> However, given the global cause and effect of the issue, the solution needs to be found in a global process, and not just locally.<sup>130</sup> Thus, the international community needs to design framework and develop

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<sup>126</sup> Jane McAdam and Ben Saul, 'Displacement with Dignity: International Law and Policy Responses to Climate Change Migration and Security in Bangladesh' (2010) 53 *German Yearbook of International Law* 234, 267.

<sup>127</sup> Ziaul Hoque Mukta and Khalid Hossain, 'Climate Change Adaptation Financing: Managing a Transparent and Pro-poor Fund in Bangladesh' (Briefing Note, CSRL, 2008) 3.

<sup>128</sup> Mayer, above n 123, 13.

<sup>129</sup> ADB, 'Climate Change and Migration in Asia and the Pacific' (ADB, 2011) vii.

<sup>130</sup> *Ibid.*

policies for international migration and relocation of climate change displaced persons under the principle of international cooperation.<sup>131</sup>

#### ***4.4.2.1 Temporary Protection of Climate Change Induced Displacement during Emergency Situation***

Given the limited applicability of the Refugee Convention, a question arises regarding how the international law treats climate change induced forced migrants from Bangladesh who cross international border/s in response to climatic natural disasters. Arguably, in such a situation, where return is impossible or cannot reasonably be required from the individual, an obligation of the state exists to at least temporarily admit a person to enter and remain. Once the situation for which the temporary protection is allowed has ended, the receiving states may re-examine the case and withdraw the temporary protection.<sup>132</sup> However, the host state can withdraw the temporary protection and ask the temporary migrants to return to their home country only when the adverse situation has ceased to exist and provided it is safe for the person to return to his or her home.<sup>133</sup> Temporary protection is desirable because states are more likely to assist victims of environmental degradation and disaster if it is seen as a temporary protection, rather than a permanent resettlement.<sup>134</sup>

Under international human rights law, once a migrant has entered into the territory of a particular state, even in the case of illegal entry, that state must protect all types of human rights guaranteed by international instruments as long as they are in the jurisdiction of the receiving state. More specifically, Article 2 of ICCPR requires that states must protect all persons under their control within their territory.<sup>135</sup> The basic rights defined in UDHR, ICCPR and ICESCR are applicable to those people. These rights are provided without distinction of any kind based on race, colour, sex, language, religion, political or other opinion, property or birth.<sup>136</sup> Those migrating because of environmental factors have the same rights and responsibilities as other international migrants in a particular country; no

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<sup>131</sup> Campbell, above n 125, 34.

<sup>132</sup> Falstrom, above n 37, 22.

<sup>133</sup> Lopez, above n 14, 404.

<sup>134</sup> Ibid.

<sup>135</sup> For example, European Convention on Human Rights, art. 1; International Covenant on Civil and Political Rights, art. 2.1; Office of the High Commissioner for Human Rights, General Comment No. 23: *The rights of minorities (Art. 27)*, 4 August 1994, UN Doc. CCPR/C/21/Rev.1/Add.5, §4 and General Comment No. 31, *Nature of the General Legal Obligation Imposed on States Parties to the Covenant*, 26 May 2004, UN Doc. CCPR/C/21/Rev.1/Add.13; Inter-American Convention on Human Rights, art. 1; Convention on the Rights of the Child, art. 2.1.

<sup>136</sup> Art. 2 of the UDHR.

discrimination can be made among this group of non-citizens. As with other migrants, they enjoy all of the human rights applicable in international law.

However, UDHR guarantees the right to leave any country and to seek asylum from persecution. It does not require any other country to admit people who exercise their right to leave and there is no corresponding obligation on the part of states to offer asylum. In such a case, they will not receive protection under the Refugee Convention because there is a wide agreement that persons moved for environmental reasons do not fit well in the refugee definition and hence do not qualify for refugee status.<sup>137</sup> However, in some specific situations, when people are fleeing ‘because of competition from resources arising from climate change may qualify if they are unable to access resources because of specific characteristics (i.e. race, religion, nationality, membership of a particular social group, or political opinion)’.<sup>138</sup>

However, sometimes it is argued that these people are protected under the *non-refoulement* principle of the Refugee Convention stated in Article 33, which prohibits a state to return, expel or extradite a ‘refugee’ in any manner whatsoever to another territory or frontier where there is a risk of that person being persecuted or suffering some particularly serious harm.<sup>139</sup> The UNHCR Handbook elaborates the concept further: ‘in general, the applicant’s fear should be considered well founded if he can establish, to a reasonable degree, that his continued stay in his country of origin has become intolerable to him for the reasons stated in the definition, or would for the same reasons be intolerable if he returned there’.<sup>140</sup> Evidently, environmental migrants who have crossed an international border in fear of adverse environmental degradations that threaten their lives are not protected by the *non-refoulement* principle.<sup>141</sup> As per Article 33, to receive protection under *non-refoulement*,

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<sup>137</sup> See discussion in Section 4.2.1 of this chapter. This is still the only international framework that guides cross-border forced movements. It is not always true that people in the context of climate change and natural disasters are never covered by the refugee definition under the Refugee Convention (cf Kolmannskog and Trebbi, above n 5, 723).

<sup>138</sup> Susan Martin, ‘Climate Change, Migration, and Governance’ (2010) 16 *Global Governance* 397, 405.

<sup>139</sup> Kees Wouters, *International legal standards for the protection from refoulement*, (Intersentia, 2009). The principle of non-refoulement set out in the Refugee Convention prohibits the expulsion or return (‘refoulement’) of a refugee ‘in any manner whatsoever to the frontiers of territories where his life or freedom would be threatened on account of his race, religion, nationality, membership of a particular social group or political opinion’. Art. 33 (No Contracting State shall expel or return (‘refouler’) a refugee in any manner whatsoever to the frontiers of territories where his life or freedom would be threatened on account of his race, religion, nationality, membership of a particular social group or political opinion).

<sup>140</sup> The UNHCR Handbook on Procedures and Criteria for Determining Refugee Status under the 1951 Convention and the 1967 Protocol Relating to the Status of Refugees (1992), para. 42.

<sup>141</sup> Ruma Mandal, ‘Protection Mechanism Outside of the 1951 Convention (“Complementary Protection”)’ (UNHCR, 2005).

one need to be a ‘refugee’ first under this Convention; however, as mentioned earlier, those persons do not fit well in the refugee definition and hence do not qualify for refugee status.<sup>142</sup>

However, the fundamental principle of *non-refoulement*—the prohibition on return to torture, cruel or inhuman or degrading treatment or punishment—is widely regarded as part of customary international law and has counterparts in human rights law known as ‘complementary protection’.<sup>143</sup> Complementary protection is the generic name that results from international legal obligations not to return a person to serious ill-treatment such as torture, cruel, inhuman and degrading treatment or punishment. Thus, the human rights regime has expanded countries’ protection obligations beyond the ‘refugee’ category to include a person who is not entitled to protection under the 1951 Convention but cannot be returned to his or her country of origin because of the risk of arbitrary deprivation of life, torture, or cruel, inhuman or degrading treatment or punishment.<sup>144</sup> The provision for ‘temporary and complementary protection’ is also endorsed in various regional treaties and decisions of the regional courts.<sup>145</sup> However, ‘[c]omplementary protection does not supplant or compete with protection under the 1951 Convention; by its nature, it is complementary to refugee status determination done in accordance with the 1951 Convention’.<sup>146</sup> This is a substitute for the protection that the home state is unable or unwilling to provide.

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<sup>142</sup> See discussion in this chapter. This is still the only international framework that guides cross-border forced movements. It is not always true that people in the context of climate change and natural disasters are never covered by refugee definition under the Refugee Convention (cf Kolmannskog and Trebbi, above n 5, 723).

<sup>143</sup> For example, para. 9 of *General Comment No. 20 (1992)* and *General Comment No.24 (1994)* of the UN Human Rights Committee; Kolmannskog and Trebbi, above n 5, 724; Mandal, above n 141, 21. This is so-called because it describes human rights-based protection that is complementary to that provided by the Refugee Convention.

<sup>144</sup> Zetter, above n 79, 20; Jane McAdam, ‘Climate Change Displacement and International Law: Complementary Protection Standards’ (UNHCR, 2011) 17.

<sup>145</sup> Art. 22 of the 1969 American Convention on Human Rights (ACHR) and art. 5 of the 1981 African Charter of Human and Peoples’ Rights (ACHPR) both complement the customary law and ICCPR prohibition on torture, cruel, inhuman or degrading treatment or punishment. Art. 22(8) of the ACHR states that, ‘in no case may an alien be deported or returned to a country, regardless of whether or not it is his country of origin, if in that country his right to life or personal freedom is in danger of being violated because of his race, nationality, religion, social status, or political opinions’. The European Court of Human Rights has consistently held that returning an individual, directly or indirectly, to a country where there are substantial grounds for believing he or she is at real risk of being subjected to torture or inhuman or degrading treatment or punishment amounts to a violation of art. 3 of the ECHR. For example, *Chahal v UK* (judgment of 25 October 1996) and *TI v UK* (admissibility decision of 7 March 2000. The language of art. 3 does not expressly refer to non-refoulement). As with other provisions of international law that ban torture, there are no exceptions to this prohibition.

<sup>146</sup> Zetter, above n 79, 20.

States have an obligation to provide complementary protection under two well-renowned human rights treaties, namely Article 3 of the 1984 Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT) and Articles 6 and 7 of the ICCPR.<sup>147</sup> The CAT is one of the most widely ratified and implemented treaties in international human rights law.<sup>148</sup> Under Article 3 of the CAT, there is a clear and absolute prohibition on returning an individual to a country where one is at risk of being tortured. Interestingly, the Convention applies to persons who fear torture, regardless of whether the person has committed a crime or entered a country illegally.

Moreover, unlike the Refugee Convention, it does not require that torture, cruel, inhuman or degrading punishments are based on race, religion, nationality, membership in a particular social group or political opinion. The obligation for the state not to repress those persons is, however, temporary, and lasts only ‘as long as the threat of torture exists’.<sup>149</sup> In addition, Article 7 of the ICCPR has been interpreted as absolutely prohibiting the removal of an individual to a place where he or she is at real risk of torture or to ‘cruel or inhuman or degrading treatment or punishment’.<sup>150</sup> However, the Human Rights Committee has noted that Article 2 of the ICCPR, governing the general obligation of states’ parties, requires countries to refrain from removing an individual from their territory ‘where there are substantial grounds for believing that there is a real risk of irreparable harm, such as that contemplated by articles 6 and 7 of the Covenant, either in the country to which removal is to be effected or in any country to which the person may subsequently be removed’.<sup>151</sup>

Moreover, the majority of the provisions in the ICCPR and ICESCR, as well as in other universal human rights instruments, apply to all individuals in the territory of a state, irrespective of their nationality. Thus, non-nationals who are granted relief from removal (whether or not on the basis of the 1951 Convention) are entitled to a core set of rights,

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<sup>147</sup> Ibid.

<sup>148</sup> Falstrom, above n 37, 20.

<sup>149</sup> Ibid 19.

<sup>150</sup> See *General Comment Nos. 31 (2004) and 20 (1992)* of the UN Human Rights Committee as well as *Chitat Ng v Canada* (View of the Human Rights Committee of 5 November 1993).

<sup>151</sup> See para. 12 of *General Comment No. 31 (2004)* of the UN Human Rights Committee on the Nature of the General Legal Obligation Imposed on States Parties to the Covenant.

unless an objective reason can be found to distinguish (as opposed to discriminate) them from the population at large.<sup>152</sup>

Thus, it is a well-recognised principle that ‘states are under a duty to admit an individual if rejection at the border might lead to him suffering torture or cruel, inhuman or degrading treatment or punishment’.<sup>153</sup> Rather, once individuals who have been granted protection from removal are entitled to basic human rights such as freedom of political opinion and religious belief, equality before the law, right to life and security of person as well as freedom from arbitrary detention.<sup>154</sup> Children of such persons are guaranteed access to free primary education.<sup>155</sup> In addition, all beneficiaries of protection from removal have the right to the highest attainable standard of physical and mental health,<sup>156</sup> as well as an adequate standard of living (i.e. shelter, food and clothing).<sup>157</sup>

Thus, under certain circumstances, people who cross an international border in the face of environmental degradations in Bangladesh could receive a complementary and temporary form of protection, whether they have the status of refugee, migrant or illegal intruder, to a country where they would be exposed to the danger of inhuman or degrading treatment likely to arise from environmental degradations.<sup>158</sup> It is argued that the return of a person to an area where the person faces extremely severe and life-threatening environmental problems constitutes a violation of human rights law. There can be little doubt that climate change-related events and processes will, in all likelihood, substantially interfere with the enjoyment of fundamental human rights, including the right to food, water, health and

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<sup>152</sup> For example, the non-discrimination provision in art. 2 of the ICCPR. In addition, *General Comment No. 15* (1986) of the Human Rights Committee in relation to the Position of Aliens under the ICCPR. Cited in Mandal, above n 141, 29.

<sup>153</sup> Mandal, above n 141, 22.

<sup>154</sup> See art. 5 of the 1985 UN Declaration on the Human Rights of the Individuals who are not Nationals of the Country in Which They Live. Although this Declaration is not legally binding, it is nevertheless an important affirmation by the international community of the rights of aliens. In addition, para. 10 of *General Comment No. 31* (2004) of the Human Rights Committee clearly states that the rights embodied in the ICCPR apply to all persons in a state’s territory, including asylum seekers, refugees and other non-nationals.

<sup>155</sup> See art. 28 of the 1989 Convention on the Rights of the Child as well as Articles 2(2) and 13 of the International Covenant on Economic, Social and Cultural Rights (ICESCR).

<sup>156</sup> See art. 12 ICESCR, as well as the 1979 Convention on the Elimination of Discrimination against Women and the CRC.

<sup>157</sup> See art. 11 ICESCR.

<sup>158</sup> See CW Wouters, *International Legal Standards for the Protection from Refoulement: A Legal Analysis on the Prohibitions on Refoulement Contained in the Refugee Convention, the European Convention on Human Rights, the International Covenant on Civil and Political Rights, and the Convention Against Torture* (Intersentia, 2009).

adequate housing.<sup>159</sup> Generally, serious or systematic human rights violations are normally considered as ‘persecution’, giving rise to a *non-refoulement* obligation.<sup>160</sup> For example, the right to life is non-derogable, with very few exceptions; hence, a person should not be sent back to his or her country of origin if there is a danger to his or her life. The constitutional courts in various countries constantly interpreted the violation of a socio-economic right, specifically, the violation of the right to an adequate standard of living as a form of inhuman treatment, which requires international protection.<sup>161</sup> However, it is confirmed by many judicial decisions that ‘general poverty, unemployment or lack of resources or medical care except in the most exceptional circumstances’ cannot be considered for remedy within the purview of inhuman or degrading treatment.<sup>162</sup>

Thus, the harms and violations of human rights resulting from climate change effects can be considered as inhuman or degrading treatment under existing jurisprudence.<sup>163</sup> In this respect, national policy-makers need to develop the concept and interpret the relevant human rights provisions in a progressive way before such harms would fall clearly within the scope of this concept. The national authorities can extend temporary protection to the climate change migrants who crossed a border following either a rapid-onset or slow-onset natural disaster and likely to face life-threatening environmental degradations upon return

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<sup>159</sup> Bruce Burson, ‘Protecting the Rights of People Displaced by Climate Change: Global Issues and Regional Perspective’ in Bruce Burson (ed.), *Climate Change and Migration South Pacific Perspective* (Institute of Policy Studies, 2010) 162; Kolmannskog and Trebbi, above n 5, 723. Support for such a view can be found in the work of the UN Human Rights Committee regarding the ‘inherent right to life’ guaranteed under art. 6 of the ICCPR, which cautioned against a narrow interpretation of the right to life. In General Comment 6—UN Doc. A/37/40 (1982), the Human Rights Committee stated that ‘The Committee has noted that the right to life has been too often narrowly interpreted. The expression “inherent right to life” cannot be properly understood in a restrictive manner and the protection of this right requires that states adopt positive measures’. Certainly, in dealing with the provision of social goods to citizens, courts in some countries with constitutional references to economic and social rights have made this link between access to adequate levels of food, shelter, clothing and other social goods, and the right to life. For example, the decisions of the Supreme Court of India in *Kbarak Singh v. State of UP* [1964] 1 SCR 322, *Mullin v. Administrator Union Territory of Dehli* AIR (1981) Supreme Court 746, 753, and *Olga Tellis v. Bombay Municipal Corporation* AIR (1986) Supreme Court 18.

<sup>160</sup> UN Human Rights Committee (2004, para. 12); UNHCR, Handbook on Procedures and Criteria for Determining Refugee Status under the 1951 Convention and the 1967 Protocol Relating to the Status of Refugees, Geneva, 1992, paras 51–53.

<sup>161</sup> McAdam, above n 144, 17. See *Soobramoney v. Minister of Health KwaZulu Natal* 1998 (1) SA 765.

<sup>162</sup> *D v. United Kingdom* (1997) 24 EHRR 423; *N v. Secretary of State for the Home Department* (2005) UKHL 31; *HLR v. France* (1997) 20 EHRR 29, para. 42. See the views of the Committee against Torture, as in *AD v. The Netherlands*, Communication No. 96/1997 (24 January 2000) UN Doc. CAT/C/23/D/96/1997, para. 7.2; The developing jurisprudence on recharacterising socio-economic violations as civil and political violations has been described as an ‘extension of an extension’: *AJ (Liberia) v. Secretary of State for the Home Department* (2006) EWCA Civ 1736, para. 12 referring to *N v. Secretary of State for the Home Department* (2004) 1 WLR 1182 (EWCA) paras 37, 46 in M Foster, ‘Non-Refoulement on the Basis of Socio-Economic Deprivation: The Scope of Complementary Protection in International Human Rights Law’ (2009) *New Zealand Law Review* 257, 266. Cited in *Ibid*.

<sup>163</sup> *Ibid* 18.

to their home. In order to effectuate this, clear ‘survival criteria’ should be developed at the national level. It is also important to note that, no internal flight alternative exists for these climate migrants.<sup>164</sup> As Walter Kälin, the UN Special Representative for the Human Rights of Internally Displaced Persons said, it should be considered ‘under what circumstances should persons displaced across borders [...] not be expected to go back to their country of origin and therefore remain in need of some form of surrogate international protection, [...] temporary or permanent’.<sup>165</sup>

International treaties, UN resolutions, UNHCR handbooks and the High Commissioners’ speeches also prohibit forcible return; only voluntary repatriation is permitted with safety and dignity.<sup>166</sup> The RSG has proposed that the appropriateness of return may be determined based on three elements: permissibility, factual possibility and the reasonableness of return. No one could be returned to situations where ‘life or limb is at risk’ under the ‘permissibility’ criterion.<sup>167</sup> The return may become factually impossible if the original home or land is submersed into water or for other technical or administrative problems.<sup>168</sup> The ‘reasonableness of return’ depends on the availability of protection and assistance according to international standards, or the existence of access to a durable solution to displacement within his or her country of origin.<sup>169</sup> Thus, these principles could be applied to govern the return of disaster victims who have sought refuge abroad.<sup>170</sup>

It is evident that the ICCPR confers obligation to all states parties to extend complementary protection irrespective of domestic codification to all people displaced by environmental conditions provided those conditions amount to inhuman or degrading treatment.<sup>171</sup> In the absence of any direct protection regime, this protection indeed provides an alternative ‘legal right to protection’ to people displaced by climate change.<sup>172</sup> Thus, the

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<sup>164</sup> For example, Immigration and Refugee Protection Act, SC 2001, c 27 (Canada) s 97(1)(b); Qualification Directive art. 8. Cited in McAdam, above n 144, 18.

<sup>165</sup> Cited Kälin in B Glahn (2009): ‘Climate refugees’? Addressing the international legal gaps—Part II, July, <<http://www.ibanet.org/Article/Detail.aspx?ArticleUid=3E9DB1B0-659E-432B-8EB9-C9AEEA53E4F6>>.

<sup>166</sup> Roberta Cohen and Megan Bradley, ‘Disasters and Displacement: Gaps in Protection’ (2010) 1 *Journal of International Humanitarian Legal Studies* 1, 26.

<sup>167</sup> Walter Kälin, *Displacement Caused by the Effects of Climate Change: Who will be Affected and What are the Gaps in the Normative Frameworks for their Protection?* 10 October 2008,

<[www.brookings.edu/papers/2008/1016\\_climate\\_change\\_kalin.aspx?p=1](http://www.brookings.edu/papers/2008/1016_climate_change_kalin.aspx?p=1)>.

<sup>168</sup> Cohen and Bradley, above n 166, 27.

<sup>169</sup> *Ibid.*

<sup>170</sup> *Ibid.*

<sup>171</sup> Zetter, above n 79, 20.

<sup>172</sup> *Ibid.*

human rights regime, the *non-refoulement* principle and complementary protection mechanisms can provide building blocks for new ways of affording protection.

#### ***4.4.2.2 Protection of Climate Change Induced Displacement: Facilitating Managed and Orderly Migration Opportunities***

Existing human rights law, including the *non-refoulement* principle, provides only temporary protection, not a right of stay. Once the degrading situation is over, the migrated people need to go back to their own country. Although Bangladesh is not going under water due to sea-level rise like small Pacific Island countries, some parts may become inhabitable, and relocation within the country may become impossible due to the density of the population and the fact that there are no vacant places in Bangladesh. In these circumstances, people may need to be relocated to other countries to lessen the population pressure.

Moreover, climate-motivated migrants may decide to move pre-emptively to secure their livelihoods in other safe places, including neighbouring countries or any country where they can find a job. If this type of migration is not regulated, there is a risk that such migration may further increase their vulnerability. They are likely to be defrauded by recruiting agents and unscrupulous middlemen. They may even become part of illegal human trafficking.

In both situations, however, managed international migration is considered a desirable durable solution for those migrants. As McAdam said:

[m]anaged international migration may provide a safer and more secure mechanism for enabling people to move away from the longer-term effects of climate change, without artificially treating people as in need of international ‘protection’ (from a persecutory or abusive State) in the traditional sense of refugee or human rights law. Managed migration pathways are also better suited to respond to slow-onset climate change impacts, which are unlikely to trigger existing (or future) temporary protection mechanisms designed for sudden disasters.<sup>173</sup>

Thus, the national laws and policies in Bangladesh need to design mechanisms to ensure planned and managed migration for climate-motivated migrants. Still, no such legislations or policies have been adopted that ensure the safe migration of persons who fear loss of homes, land and livelihoods due to progressive changes in their environment.<sup>174</sup> These climate-motivated migrants are treated in the same manner as other economic migrants.<sup>175</sup>

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<sup>173</sup> McAdam (How to Address the Protection Gaps), above n 60, 3–4.

<sup>174</sup> Martin, above n 138, 407; The German Marshall Fund of the United States, ‘Climate Change and Migration: Report of the Transatlantic Study Team’ (The German Marshall Fund of the US, 2010) 7.

<sup>175</sup> Martin, above n 138, 407.

When these migrants move across borders outside of existing labour and family migration categories, they are considered ‘irregular migrants’ and either put in prison or sent back to their home countries.<sup>176</sup>

#### ***4.4.2.3 International Resettlement: A Probable Solution to Managed Migration***

It is critically challenging to manage international relocation for climate change induced displaced persons in other countries because, at present, the scope for legal and regularised international migration is limited, especially for those who lack professional skills.<sup>177</sup> Relevant literature suggests that the international community is reluctant to relocate climate migrants from developing countries in developed nations. Generally, to receive admissions on humanitarian grounds, one has to receive refugee status under the Refugee Convention.<sup>178</sup> This requirement will deter most environmental migrants from qualifying for the legal definition of a refugee under respective national law.<sup>179</sup> Susan Martin’s examination of the policies of destination countries underscores the gaps in legal frameworks pertaining to international migration.<sup>180</sup> The immigration laws and policies of most destination countries do not envision admitting large numbers of environmental migrants unless they enter through already-existing admission categories.<sup>181</sup> Many countries have reservations in accepting ‘climate refugees’. For example, India has planned to fence off Bangladesh by erecting a 2,500 mile-long barbed-wire barrier to prevent the entry of terrorists and illegal immigrants, including ‘climate refugees’. Only a few countries have established immigration protection for those who flee environmental disasters. However, even where it exists, it is not clear what types of environmental events are covered.

Rather, most developed countries advocate that climate change induced migrants be resettled within the national boundaries of the affected countries. As most climate migrants will primarily move to neighbouring developing countries (e.g. Bangladeshis moving to India) and developing countries might not have the ability to deal with a large number of climate migrants, Bayer argued for channelling compensation from developed countries to

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<sup>176</sup> Ibid; The German Marshall Fund of the US, above n 174, 7.

<sup>177</sup> Campbell, above n 125, 39.

<sup>178</sup> Martin, above n 138, 405.

<sup>179</sup> Ibid.

<sup>180</sup> Susan F Martin, ‘Climate Change and International Migration’ (Background Paper, The German Marshall Fund of the United States, 2010) 2, <[http://www.gmfus.org/galleries/default-file/Martin\\_V3.pdf](http://www.gmfus.org/galleries/default-file/Martin_V3.pdf)>.

<sup>181</sup> The German Marshall Fund of the United States, above n 174, 7.

developing countries that extended protection to people from neighbouring climate affected countries, to ensure fairness and successful resettlement.<sup>182</sup>

#### ***4.4.2.4 Labour Migration as a Tool for Capacity Building of Climate Change Migrants***

International agencies such as the IOM and the Office for the Coordination of Humanitarian Affairs (OCHA) consider cross-border mobility for labour migration an effective strategy to address the humanitarian crises of environmental displacement.<sup>183</sup> However, there are no international or cross-border agreements that accommodate cross-border human mobility of climate change induced migrants for economic purposes.<sup>184</sup> The developed countries, assuming both legal and moral responsibilities<sup>185</sup> towards climate change induced displaced persons, may give priority to people from climate-affected areas in receiving labour migration. The developed countries may initiate the integration of climate migrants into global labour activity, resulting in a ‘win-win’ solution for both developed and industrialised countries. The developed countries would benefit from the labour of this environmental migrant, which would help their labour shortage. Conversely, climate migrants will be empowered to reduce their vulnerability. Therefore, McAdam and Saul argue, ‘managed international migration provides a safer and more secure mechanism for enabling people to move away from the effects of climate change, without artificially treating people as in need of international “protection” (from a persecutory or abusive State) in the traditional sense of refugee or human rights law’.<sup>186</sup>

However, international economic migrants who have left disaster areas are not otherwise entirely unprotected.<sup>187</sup> To protect migrants who are workers, the ILO and other organisations have established a body of laws, norms and recommendations for the protection of economic migrants (i.e. migrant workers).<sup>188</sup> Under the WTO’s General

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<sup>182</sup> Benoit Mayer, ‘The International Legal Challenges of Climate-Induced Migration: Proposal for an International Legal Framework’ (2011) 22 *Colorado Journal of International Environmental Law and Policy*, 357, 396–397.

<sup>183</sup> Leighton, above n 85, 5.

<sup>184</sup> Ibid.

<sup>185</sup> The responsibility of developed countries under international law is discussed earlier in this chapter.

<sup>186</sup> McAdam and Saul, above n 126, 282.

<sup>187</sup> Leighton, above n 85, 5.

<sup>188</sup> For example, Convention No. 117 concerning Basic Aims and Standards of Social Policy addresses migration and development, social standards and the protection against racism or xenophobia in relation to migrant workers (ILO, 1962). The ILO has concluded conventions on the rights of migrant workers (such as the UN Convention on Protection of all Migrant Workers and Members of their Families, adopted on 18 December 1990 and a series of ILO Conventions and Recommendations). However, member states (especially destination states) have not widely subscribed to these conventions.

Agreement on Trade in Services (GATS), about 100 member states have agreed to accommodate the temporary admission of foreign nationals who provide services on a short-term basis and for highly skilled professionals.<sup>189</sup> Bangladesh cannot exploit this opportunity in its fullest extent because most of the economic migrants lack the ‘high skill’ that the states require. Bangladesh mostly sends semi-skilled or low-skilled labour workers to the Middle East, Malaysia, Singapore and African countries. Moreover, highly skilled professionals are not located in areas most affected by climate change.

To date, the International Convention on the Protection of the Rights of All Migrant Workers and Members of their Families (The Convention for Migrant Workers), which was ratified by the UN General Assembly in 1990, is the most relevant framework for migrant workers. The Convention has reinforced and clarified a number of fundamental human rights that governments must safeguard irrespective of their country of origin, such as freedom from discrimination, freedom of thought and religion, and other rights related to the protection of human dignity.<sup>190</sup> The Convention provides certain rights to those who are employed in a state in which they are not a national (Article 2(1)). The Convention requires that ‘the States Parties concerned shall as appropriate consult and co-operate with a view to promoting sound, equitable and humane conditions in connection with international migration of workers and members of their families’ (Article 64). While refugees and stateless people are expressly excluded from protection under this Convention (Article 3(d)), it is possible that employment will be one among the mixed motivations for fleeing a region affected by grave environmental damage. However, the Convention also provides a ‘right of each State Party to establish the criteria governing admission of migrant workers and members of their families’ (Article 79). The Convention reaffirms many of the rights provided under other, more general, human rights instruments, including the right to life and freedom from torture or to cruel, inhuman or degrading treatment or punishment (Part III).

Thus, this Convention aims to guarantee minimum rights for migrant workers and members of their families who are in either a legal or irregular situation.<sup>191</sup> Such broad protection has a tremendous potential for the human rights protection of people who move

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<sup>189</sup> Referring in Koko Warner, ‘Climate Change and Migration: Reflections on Policy Needs’ MEA Bulletin, Guest Article No. 64, 27 February 2009, 2, <<http://www.iisd.ca/mea-1/guestarticle64.html>>; Warner (Global Environmental Change and Migration), above n 13, 404.

<sup>190</sup> Leighton, above n 85, 5.

<sup>191</sup> Martin, above n 138, 404.

from climate-affected areas across borders in search of employment.<sup>192</sup> This framework would generally apply to climate change induced migrants who engage in international labour migration.<sup>193</sup> However, it still remains uncertain how far this framework would come in aid of the protection of climate change displaced persons who flee international borders because climate change effects and arrive in another state in search of their employment.<sup>194</sup> The UN can play a substantial role in facilitating labour migration as a good form of adaptation.<sup>195</sup> The Cancun Accord in 2010 recognised migration as adaptation and emphasised the need for international cooperation for the relocation of climate change induced displacement. However, it needs financial and institutional mechanisms to facilitate this form of migration.<sup>196</sup>

#### ***4.5 Normative International Framework for Climate Change Induced Displacement***

Bangladesh, the most very vulnerable country due to the effects of climate change, plays a vital role in international climate change negotiations. Ministers, government officials and policy-makers always highlight the potential number of climate change induced displaced persons in international forums. To date, the government of Bangladesh does not have a consistent proposition or advocacy regarding international framework for climate change induced displacement. At the 2009 UN Climate Change Conference in Copenhagen, the government of Bangladesh successfully highlighted its concerns and anxieties with clarity and urged developed countries to accept millions of Bangladeshi ‘climate refugees’. It advocates redefining international law to accommodate ‘climate refugees’ within the current refugee framework. In the lead-up to the Conference, the Bangladeshi Finance Minister proposed to revise the Refugee Convention to protect the people displaced by climate change.<sup>197</sup> Bangladeshi climate specialists and others support the idea that richer nations should accept ‘climate refugees’ as land becomes scarce in the densely populated

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<sup>192</sup> Zetter, above n 79, 22.

<sup>193</sup> Leighton, above n 85, 5; Martin, above n 138, 404.

<sup>194</sup> Zetter, above n 79, 23.

<sup>195</sup> Jurgen Scheffran, Elina Marmer and Papa Sow, ‘Migration as a Contribution to Resilience and Innovation in Climate Adaptation: Social Networks and Co-development in Northwest Africa’ (2011) *Applied Geography* 1, 8.

<sup>196</sup> Ibid.

<sup>197</sup> Harriet Grant, James Randerson and John Vidal, ‘UK Should Open Borders to Climate Refugees, Says Bangladeshi Minister’, *The Guardian*, 4 December 2009,

<<http://www.guardian.co.uk/environment/2009/nov/30/rich-west-climate-change/print>>, accessed 8 December 2009. Cited in McAdam, above n 77, 6.

country.<sup>198</sup> Moreover, they maintain that it is a moral obligation of industrialised countries to accept displaced people because they are largely responsible for the greenhouse gas emissions that are the root cause of climate change.

In September 2010, Bangladeshi Prime Minister Sheikh Hasina proposed a joint South Asian initiative to mobilise international support under the UNFCCC Protocol to ensure the social, cultural and economic rehabilitation of climate change induced displaced people. However, the BCCSAP, the main official document for climate change strategies, calls for the development of a Protocol under the UNFCCC, and this claim is repeatedly placed in international forums by policy-makers and high government officials.<sup>199</sup> However, it appears that the Bangladesh Government has not outlined a framework regarding the mechanics of climate migration to foreign countries to be placed in international forum. Thus, it is critical to analyse the possible options of international frameworks and suggest the framework that might bring about the best possible outcome for climate change induced migrants in Bangladesh. Without a clear policy in place, it can be assumed that the most vulnerable—poor and largely illiterate coastal residents—will never be able to migrate to other countries for safe refuge. Rather, it is likely that politically powerful and/or highly educated urban residents will take the opportunity to migrate to developed countries as ‘climate refugees’.

As argued earlier in this chapter, climate change induced displaced persons, being an independent category of migrants, are conceptually and practically different from other forms of ‘refugees’, which deserves specific recognition and protection by the international legal framework.<sup>200</sup> Although there is partial recognition in Cancun under the adaptation framework, evidently, the international legal system and structures bear a significant gap at both the normative and especially the operational level for dealing with climate migrants.<sup>201</sup> Currently, no legal instruments or international norms are mandated to deal specifically with people displaced by environmental or climatic factors either internally a

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<sup>198</sup> Ibid; see interview with Atiq A Rahman, ‘Climate Change Migration (video)’,

<<http://www.youtube.com/watch?v=kIBsYl-m-Vg>>.

<sup>199</sup> Ibid.

<sup>200</sup> Williams, above n 3, 514.

<sup>201</sup> Jane McAdam, *Environmental Migration Governance* 3, <<http://ssrn.com/abstract=1412002>>; Docherty and Giannini, above n 29, 357; Biermann and Boas, above n 42, 12; Bruce Burson, ‘Protecting the Rights of People Displaced by Climate Change: Global Issues and Regional Perspective’ in Bruce Burson (ed.), *Climate Change and Migration South Pacific Perspective* (Institute of Policy Studies, 2010) 171; Alexander Betts, ‘Towards a “Soft Law” Framework for the Protection of Vulnerable Migrants’ (Research Paper No. 162, UNHCR, 2008) 13.

country or across borders, although existing principles of international refugee law, human rights law, humanitarian law, environmental law and laws on IDPs may provide some measure of protection.<sup>202</sup>

Thus, the status, recognition and protection of people displaced due to the effects of climate change are still in limbo under international law.<sup>203</sup> The lack of an effective global framework for climate change displacement highlights the importance of developing normative and institutional frameworks for their protection. Addressing the gaps, academics, scholars and governments suggest different governance mechanisms for the protection of climate change displaced persons; no proposal has yet received global recognition to start negotiation for implementation. In the current state of global climate politics, it is unlikely that the international community will agree to amend the Refugee Convention to expand and include ‘climate refugees’, develop a separate protocol under UNFCCC or a separate and binding international legal framework for climate change displacement.<sup>204</sup> Developing any such framework seems ‘politically difficult, lengthy, and complicated process’<sup>205</sup> because states will not want to be bound by hard-law policy instruments while uncertainty remains regarding the extent and nature of their obligations.<sup>206</sup>

With such uncertainty, it is at least certain that the international community has reached the point where there is consensus that ‘people on the move’ due to climate change need international recognition and protection. Consequently, there is a growing desire among states for clearer guidance on their human rights obligations towards those migrants.<sup>207</sup> The extent and magnitude of the danger posed by climate change induced displacement demands to pursue a more sophisticated and sustainable approach that recognises and responds to present-day challenges associated with climate change displacement.<sup>208</sup>

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<sup>202</sup> Biermann and Boas, above n 42, 12; McAdam and Saul, above n 16, 25; Zetter, above n 79, 16.

<sup>203</sup> McAdam and Saul, above n 16, 25.

<sup>204</sup> In the area of migration, states’ reluctance to engage in the development of binding norms is evident in a number of areas. The limited number of signatories and ratifying states for the UN Treaty on the Rights of Migrant Workers, the voting patterns at the UN General Assembly in relation to the outcome of the first Global Forum on Migration and Development (GFMD) and the growing use of regional consultative processes (RCPs) that bypass multilateral forums exemplify the resistance of states to agree to new norms in relation to migration.

<sup>205</sup> Burson, above n 201, 171.

<sup>206</sup> Philippe Boncour and Bruce Burson, ‘Climate Change and Migration in the South Pacific Region: Policy Perspectives’ in Bruce Burson (ed.), *Climate Change and Migration South Pacific Perspective* (Institute of Policy Studies, 2010) 21.

<sup>207</sup> Betts, above n 201, 4.

<sup>208</sup> Williams, above n 3, 524.

Therefore, instead of creating new, binding norms to address the current protection gaps, it is argued that already-existing relevant human rights norms can be predicated for the protection of climate change induced displacement. Thus, it will be more pragmatic to deal with these challenges to look into international law so far developed and consolidated until the present day.<sup>209</sup> Indeed, the existing broad range of international law generated wide-ranging principles and norms in respect to the protection of migrants, which have some normative value and are already endorsed by states by signing up to the relevant human rights instruments.

The multitude of existing international bodies, legal agreements, standards, guidelines and institutions involved in the governance of both migration and environment principally include the UN Guiding Principles on IDP, the Hyogo Framework, the UN Inter-Agency Standing Committee's Guidelines on Human Rights and Natural Disasters, the Code of Conduct for the International Red Cross and Red Crescent Movement and NGOs in Disaster Relief, and the Responsibility to Protect of the ICISS. Similarly, the Sphere Project's Humanitarian Charter and Minimum Standards in Disaster Response and the humanitarian clusters under the Humanitarian Response Review process provide significant features of protection regimes for people displaced by environmental factors.<sup>210</sup>

In addition to these normative resources, however, the international human rights regime has a fairly developed legislative, instrumental and institutional structure, norms, principles and jurisprudence that evolved over the past six decades and a significant international pledge for their protection and promotion.<sup>211</sup> It is sometimes argued that these laws and treaties were adopted back when the problem of global warming and environmental degradation was not an important issue. However, Kyung-wha Kang, the Deputy High Commissioner for Human Rights Office of the United Nations High Commissioner for

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<sup>209</sup> Roger Zetter, 'Legal and Normative Frameworks' (2008) 31 *Forced Migration Review* 62, 62. Instead of proposing a binding convention, Zetter also suggested initiating a bottom-up process based on existing already-agreed norms, which might afford firmer support for the rights of those forcibly displaced by environmental change and of those at risk of displacement but who remain behind.

<sup>210</sup> Zetter, above n 214, 63; for example, the 1948 Universal Declaration of Human Rights protects freedom of movement and other social, cultural and economic rights that can be enjoyed under international human rights law and international humanitarian law, but that might be threatened when people are forced to migrate by climate-induced environmental degradation. There are 'subsidiary' norms and instruments that afford different forms of human rights protection for migrant groups either directly or indirectly; for example, the 1966 Covenant on Economic, Social and Cultural Rights and the 1996 International Convention on Civil and Political Rights, as well as a range of international conventions dealing with specific social groups, such as the 1990 International Convention on the Protection of the Rights of All Migrant Workers, the 1989 Convention on the Rights of the Child, the 1981 Convention on the Elimination of All Forms of Discrimination against Women and the 1991 ILO Convention on the Rights of Indigenous People.

<sup>211</sup> M Rafiqul Islam, 'The Right to the Environment as a Human Right' in Mizanur Rahman (ed.) *Human Rights and Environment* (ELCOP, 2011) 5, 22.

Human Rights (OHCHR), believes that the international human rights framework still provides the most effective framework for addressing the human consequences of climate change induced displacement.<sup>212</sup> Moreover, under existing human rights treaties, the governments incur an obligation to take measures to protect the fundamental human rights of the people affected due to the effects of climate change and thus to prevent displacement.<sup>213</sup> Apart from a treaty obligation, the constant and regular concern of the international community, through its increasing number of protective documents, state action, for the protection of human rights and environment, reflect its intent to be bound by environmental and human rights protections.<sup>214</sup> Human rights and the environment are intertwined concepts, and the necessity of protecting both, including environmentally displaced persons stemming from environmental degradations as a result of climate change, has thus risen to the level of customary international law.<sup>215</sup>

The potential for these frameworks, including international human rights, humanitarian or refugee law, to offer protection to the rights of those migrating or displaced due to climate change needs to be fully explored and assessed to discover the extent to which these existing instruments may be ‘reapplied, reinterpreted and reformed’ to protect climate change induced displaced persons.<sup>216</sup> The next step towards protection requires the consolidation and application of these existing norms and principles. The 2008 International Law Commission ‘Preliminary Report on the Protection of Persons in the Event of Disasters’ will be a valuable resource in the development of guidelines.<sup>217</sup> Drawing positive experience from the UN Guiding Principles on IDPs, non-binding guidelines could be adopted for implementation and operationalisation of those norms.<sup>218</sup> A soft-law approach is more workable way to ensure the rights and protection of those migrating or displaced due to environmental factors.<sup>219</sup> Overall, a soft-law approach seems

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<sup>212</sup> Kyung-wha Kang, ‘Climate Change, Migration and Human Rights’ (Speech delivered at the Conference on Climate Change and Migration: Addressing Vulnerabilities and Harnessing Opportunities, Geneva, 19 February 2008) <<http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=9162&LangID=E>>.

<sup>213</sup> Walter Kälin, ‘Disaster Risk Mitigation—Why Human Rights Matter’, (2008) 31 *Forced Migration Review* 38, 38.

<sup>214</sup> Falstrom, above n 37, 24.

<sup>215</sup> Ibid.

<sup>216</sup> Zetter, above n 79, 16; Boncour and Burson, above n 212, 19.

<sup>217</sup> E Valencia-Ospina, *International Law Commission Preliminary Report on the Protection of Persons in the Event of Disasters*, 5 May 2008, A/CN.4/598. Cited in Cohen and Bradley, above n 166, 1.

<sup>218</sup> Betts, above n 201, 14.

<sup>219</sup> Boncour and Burson, above n 206, 21.

to offer the most potential.<sup>220</sup> The value of soft law is that this non-binding normative framework that consolidates and defines existing universal norms from other sources within a single document can provide clear and authoritative guidelines in a given area without the need to negotiate new binding norms.<sup>221</sup> This non-binding nature would mean that states does not incur any obligation to implement the guidelines and enjoy the freedom to comply or not with the interpretation of the guidelines.<sup>222</sup> Moreover, since the soft law framework does not need to be ratified, the implementation does not entirely depend on the ratification of states, which may sometimes raise national debates.<sup>223</sup> The previous experience of soft non-binding norms and principles shows that once international norms are in place, compliance is usually high.<sup>224</sup> Anne-Marie Slaughter argues that ‘soft law, provided in the form of international guidance and non-legal instruments, is emerging as an equally powerful, if not more powerful form of regulation [than hard law]’.<sup>225</sup> Soft-law agreements have thus often played a significant role in the evolution of normative structure in human rights law, environmental law and even economic law.<sup>226</sup> The proliferation of soft-law instruments, particularly in global environmental governance, reflects the preferences of negotiating states to allow gradual crystallisation of law proper on newly emerging policy challenges.<sup>227</sup>

Thus, this thesis suggests developing a code of ethics in the form of soft-law guidelines such as ‘Guidelines for the Protection of Climate Change induced Displacement’, based on the already-agreed general principles of international law,<sup>228</sup> to be followed by the international community comprising both developed and developing states, IGOs, NGOs and international civil society in dealing with climate change induced displacement. These principles could be widely borrowed from and built on existing international human rights law, international refugee law, international environmental law and international

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<sup>220</sup> Zetter, above n 26, 421.

<sup>221</sup> Betts, above n 201, 12–13; Kolmannskog and Trebbi, above n 5, 728; Mayer, above n 190, 408–409. Kolmannskog has argued elsewhere that one could follow a ‘soft-law approach’ similar to that taken in the case of internally displaced persons; that is, to investigate the protection gaps more closely and, if possible, create a synthesis (and analogy) of existing international law in the form of principles.

<sup>222</sup> Betts, above n 201, 14.

<sup>223</sup> Mayer, above n 182, 408–409.

<sup>224</sup> Abram Chayes and Antonia Handler Chayes, *The New Sovereignty: Compliance with International Regulatory Agreements* (Harvard University Press, 1998).

<sup>225</sup> Anne-Marie Slaughter, *A New World Order* (Princeton University Press, 2004) 178.

<sup>226</sup> Bharat H Desai, *Institutionalizing International Environmental Law* (Transnational, 2004) 114.

<sup>227</sup> Ibid.

<sup>228</sup> Important source of international law, according to the Statute of ICJ.

humanitarian law, range of regional frameworks, soft-law principles and guidelines that are already accepted by the international community and go even further by highlighting best practices from different countries and regions.<sup>229</sup>

As those principles would be borrowed from states' existing treaty obligations, they will not confer any new obligations on states, rather illuminate how those obligations might apply in the climate change displacement context.<sup>230</sup> Thus the guidelines would provide a comprehensive and authoritative normative framework that reflects existing standards for human rights protection of migrants.<sup>231</sup> The guidelines need to ensure that people do not lose their basic human rights because of a natural disaster or their displacement.<sup>232</sup> Rather, all of those affected by natural disasters, including those who are displaced, are entitled to the protection of all relevant human rights guarantees.<sup>233</sup> The guidelines would contain principles that identify normative and protection gaps and deliver efficient and targeted protection and assistance to be followed by the states.<sup>234</sup> As the displacement may occur, broadly, either internally or across borders, the guidelines would provide different protections conducive to their protection needs. For internal migrants, these principles would offer enhanced protection and assistance based on international cooperation.<sup>235</sup>

These principles would also provide guidance to states in dealing with cross-border movements explaining the potential scope of human rights-based *non-refoulement*.<sup>236</sup> Thus, even though these principles would not bind international actors and states, climate migrants, in particular those who moved across borders, would be given some level of protection until the political will existed to form a new legal instrument.<sup>237</sup> Thus, the guidelines would clarify the application of the existing legal and normative obligations of states towards the human rights protection of climate change induced displacement and ensure that the state practices were consistent with international human rights standards

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<sup>229</sup> Kolmannskog and Trebbi, above n 5, 728.

<sup>230</sup> McAdam (How to Address the Protection Gaps), above n 60, 3.

<sup>231</sup> Betts, above n 201, 14.

<sup>232</sup> Elizabeth Ferris, 'Internally Displaced Persons: A Neglected Issue on the International Agenda' (2008) 4 *New Routes*, 10–14, 12.

<sup>233</sup> *Ibid* 13.

<sup>234</sup> Foresight, 'Foresight: Migration and Global Environmental Change' (Final Project Report, The Government Office for Science, London, 2011) 197.

<sup>235</sup> *Ibid* 153.

<sup>236</sup> McAdam, above n 144, 57.

<sup>237</sup> Sodiqa Williams, "Do What You Can Do With What You Have Where You are"—Assessing the Plight of Climate Change Refugees and Approaches to Fill the Gaps within the International Legal Framework' (2011) 1 *Chicago-Kent Journal of Environmental and Energy Law* 103, 107.

and the needs of the climate migrants. The context of clarifying the application of existing norms to the situation of climate change induced migration could open up new possibilities for states to develop a range of efficient and equitable practices for addressing climate change induced displacement. Soft-law guidelines thus ensure recognition, protection and international cooperation for climate change induced displacement.

A similar approach is embodied in the ‘Nansen Principles’ on climate change and displacement, adopted in Oslo in June 2011 at the Nansen Conference on Climate Change and Displacement in the 21<sup>st</sup> Century to commemorate the Refugee Agency’s 60<sup>th</sup> anniversary.<sup>238</sup> The Nansen Principles call upon states, working in conjunction with the UNHCR, to develop ‘a guiding framework or instrument’ to address the protection needs of people displaced across borders due to climate change effects.<sup>239</sup> These principles will provide an outline of protective measures and the obligations of states in addressing the complex challenges posed by climate change induced displacement.<sup>240</sup> As they will be soft guidelines in nature, the success of this framework will largely depend on the willingness of the states to implement of these principles by incorporating into national legislation and policies.<sup>241</sup>

Over time, the guidelines may become hard law through states adopting them in domestic legislation, as has occurred with IDPs.<sup>242</sup> For example, the African Union Kampala Convention on Internally Displaced Persons was developed based on the Guiding Principles on IDPs setting a glaring example of how soft-law instruments can in course of time may transform into binding hard-law instruments.<sup>243</sup>

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<sup>238</sup> Margareta Wahlström and Harald Dovland, Chairpersons Summary, Nansen Conference on Climate Change and Displacement in the 21<sup>st</sup> Century, Oslo, 6–7 June 2011.

<sup>239</sup> The Nansen Principles on Climate Change and Displacement  
< [http://www.regjeringen.no/upload/UD/Vedlegg/Hum/nansen\\_prinsipper.pdf](http://www.regjeringen.no/upload/UD/Vedlegg/Hum/nansen_prinsipper.pdf)>

<sup>240</sup> ADB, ‘Climate Change and Migration in Asia and the Pacific’ (ADB, 2012) 56.

<sup>241</sup> Ibid.

<sup>242</sup> Another promising approach is one taken by the African Union (AU). In 2009, Kampala adopted the AU Convention for the Protection and Assistance of IDPs in Africa. The Kampala Convention, as it is known, is based on the Guiding Principles on Internal Displacement and is an important example of the translation of ‘soft law’ into ‘hard law’ at a regional level. Art. 4 of the Convention states that ‘State parties shall take measures to protect and assist persons who have been internally displaced due to natural or human made disasters, including climate change’. Again, this represents an important tool in the protection of those displaced because of environmental change.

<sup>243</sup> Boncour and Burson, above n 206, 21.

## **4.6 Regional Mechanism and Cooperation under SAARC**

### **4.6.1 Climate Change Induced Displacement: A Great Concern for South Asia**

Although the issue of climate change displacement is the subject of international concern, the imminent effects of trans-boundary migratory movement due to adverse climatic effects will be felt regionally because displaced persons generally move to neighbouring countries at the first instance.<sup>244</sup> South Asia, home to well over one-fifth of the world's population and one of the most densely populated areas of the world, is particularly vulnerable to the effects of climate change.<sup>245</sup> Sir Nicholas Stern says: 'From the Himalayas, which feed water to a billion people, to the coastal areas of Bangladesh, South Asian countries must prepare for the effects of global warming, even as they work to combat the human causes of climate change'.<sup>246</sup> Consequently, as the Greenpeace report concludes, about 125 million people, of which 75 million would be from Bangladesh alone, could become climate refugees by the end of this century.<sup>247</sup>

However, the forced migrants uprooted from their homes by natural disasters are 'likely to seek similar cultural, social, and environmental conditions' often available in neighbouring countries.<sup>248</sup> Thus, the region of South Asia, having an almost similar socio-cultural background, can be predicted as a future breeding ground for environmental displacement with the increasing climatic phenomena.<sup>249</sup>

### **4.6.2 Regional Framework in Managing Climate Change Induced Displacement: Prospects and Opportunities**

Given that developing an independent treaty for climate change displacement is not feasible and practicable, many scholars, including McAdam, Williams and Burson,

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<sup>244</sup> Williams, above n 3, 518.

<sup>245</sup> Sumudu Atapattu, 'Climate Change in South Asia: Towards an Equitable Legal Response within a Framework of Sustainable Development and Security' (Sustainable Development Law on Climate Change Working Paper Series No. 01, CISDL and IDLO, 2011) 5.

<sup>246</sup> Nicholas Stern, 'Climate Change in South Asia—A Conversation with Sir Nicholas Stern' The World Bank (South Asia),

<<http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/SOUTHASIAEXT/0,,contentMDK:21469804~menuPK:2246552~pagePK:2865106~piPK:2865128~theSitePK:223547,00.html>>.

<sup>247</sup> Blue Alert, 'Climate Migrants in South Asia: Estimates and Solutions—A Report by Greenpeace' (Executive Summary, 2008), <[http://www.greenpeace.at/uploads/media/blue-alertreport\\_web.pdf](http://www.greenpeace.at/uploads/media/blue-alertreport_web.pdf)>.

<sup>248</sup> Williams, above n 3, 518.

<sup>249</sup> Ibid 519.

emphasise regional cooperation as a practical solution to the climate-displacement issue.<sup>250</sup> These scholars favour localised or regional responses for the protection of climate change induced movements over international agreements so that it can consider the specific needs of a particular community.<sup>251</sup> However, Williams, building on existing geopolitical, economic, cultural and environmental relationships, proposes to cater for the challenges posed by climate change displacement by way of a regional framework operating ‘under an international umbrella framework’.<sup>252</sup>

Williams advanced a number of possible advantages in employing such a structure. First, the regional structure would facilitate the implementation of the framework on IDPs into a discourse on climate displacement.<sup>253</sup> Second, under a regional structure, good practices in managing climate change induced displacement can be established and exchanged between regional entities.<sup>254</sup> Third, the states would be able to develop required policies within a particular timeframe suitable to the relative capacity of the countries involved.<sup>255</sup> She argues that the regional system ‘better employs notions of subsidiarity that more accurately reflect the reality of state behaviour rather than installing a top-down legal framework’.<sup>256</sup> Fourth, a legal structure would effectively deal with the complicated refugee problem and provide predictable and durable solutions to the refugee problem.<sup>257</sup> In the absence of such framework, every case of cross-border mass exodus will be treated differently and determined by political considerations and bilateral negotiations.

#### ***4.6.3 SAARC and Regional Cooperation in Respect to Climate Change and Environment***

Although SAARC is yet to achieve its goals enunciated in its Charter, it is still the best option for achieving regional cooperation in dealing with the potential large number of climate change induced displaced persons in South Asia. To date, SAARC has shown a commitment to improving the wellbeing of children and the environment, as well as

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<sup>250</sup> Ibid 518; McAdam, above n 77, 4; Burson, above n 162, 173.

<sup>251</sup> Ibid.

<sup>252</sup> Williams, above n 3, 518.

<sup>253</sup> Ibid 521.

<sup>254</sup> Ibid.

<sup>255</sup> Ibid 518.

<sup>256</sup> Ibid 520.

<sup>257</sup> Gopal Krishna Siwakoti, *Refugee Regime under SAARC: An Agenda for Action*, 2 April 2010, Asia Pacific Refugee Rights Network, <<http://refugeerightsasiapacific.org/2010/04/02/refugee-regime-under-saarc-an-agenda-for-action/>>.

poverty reduction, thus providing a strong framework for the beginnings of a regional response to climate change.

Although the Charter does not make any specific mention of disaster management, it is broadly covered under its generic objectives to (a) promote the welfare of the peoples and to improve their quality of life, (b) accelerate economic growth, social progress and cultural development of the region and (c) promote active collaboration and mutual assistance among countries in the region. Disaster management figured for the first time in the SAARC when the Third SAARC Summit in Kathmandu in 1987, deeply concerned at the fast and continuing degradation of the environment leading to natural disasters, decided to commission a Study for the Protection and Preservation of the Environment and the Causes and Consequences of Natural Disasters.<sup>258</sup> This study identified that the ‘region’s ecology is such that it makes it one of the most disaster-prone regions in the world, exposed to a substantial share of the world’s flood, droughts, cyclones, landslides and earthquakes’.<sup>259</sup>

The Expert Group in 2006 developed a comprehensive framework on disaster management with a view to strengthening regional cooperation for disaster management in South Asia. The framework is aligned with the implementation of the Hyogo Framework of Action (HFA) 2005–2015: Building the Resilience of Nations and Communities to Disasters. The Framework provides a platform for South Asian countries to:

- establish and strengthen the regional disaster management system to reduce risks and to improve response and recovery management at all levels
- identify and elaborate country and regional priorities for action
- share best practices and lessons learnt from DRR efforts at national levels
- establish a regional system to develop and implement regional programmes and projects for early warning
- establish a regional system of exchanging information on prevention, preparedness and management of natural disasters

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<sup>258</sup> Accordingly, a Group of Experts with members from all SAARC Countries was constituted to prepare the study. The report was finalised in 1991 and recommended various measures for the protection and management of the environment, strengthening of the disaster management capabilities of the state and non-state actors, and it suggested mechanisms for the implementation of the recommendations of the study. The recommendations were endorsed by Heads of State or Government at their Sixth Summit (Colombo 1991). As follow-up measures, the SAARC Meteorological Research Centre was established in Dhaka in 1995, and a SAARC Coastal Zone Management Centre came up in Male in 2004.

<sup>259</sup> SAARC, ‘Regional Study on the Causes and Consequences of Natural Disasters and the Protection and Preservation of the Environment’ (SAARC, 1998) 198.

- create a regional response mechanism dedicated to disaster preparedness, emergency relief and rehabilitation to ensure immediate response
- create a regional mechanism to facilitate monitoring and evaluation of achievements towards goals and strategies.

Bangladesh has already adopted the National Plan for Disaster Management (2010–2015), which reflects the basic principles of this framework.

The Fourteenth SAARC Summit held in New Delhi in 2007 expressed ‘deep concern’ over the global climate change and called for pursuing a climate-resilient development in South Asia. The member countries pledged for immediate collective action and stronger regional cooperation for the conservation and utilisation of SAARC shared resources towards addressing the negatives of climate change. Further, the SAARC Council of Ministers, at their 29<sup>th</sup> session held in New Delhi in December 2007, adopted the SAARC Declaration on Climate Change, which reflects the collective vision of South Asia. In July 2008, SAARC established a committee to work on climate change mitigations and capacity building. SAARC Declaration and Action Plan on Climate Change 2008, acknowledging that the SAARC region is most vulnerable to climate change, resolved to cooperate on capacity building, initiate programs on adaptation and implement the SAARC Action Plan. The SAARC Action Plan emphasised the need to identify and create opportunities for activities achievable through regional cooperation and the exchange of knowledge and technology among member countries. The effective cooperation regarding ‘adaptation plans’ to climate change effects as included in the thematic areas for priority action can potentially mitigate the numbers of climate migrants in this region.

In April 2010, Leaders at the 16<sup>th</sup> SAARC Summit, expressing deep concern over the dual challenge of addressing the negative effects of climate change and pursuing socio-economic development, called for the commissioning of a SAARC Intergovernmental Climate-related Disasters Initiative, on the integration of Climate Change Adaptation with DRR.<sup>260</sup>

Thus, it is seen that a considerable understanding has been developed among member states in SAARC in respect to strengthening regional cooperation towards disaster risk management and climate change adaptation. The organisation has already made substantial progress regarding knowledge sharing and communication relating to natural disasters and disaster risks management. It has established regional centres for the exchange of

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<sup>260</sup> Thimphu Statement on Climate Change, Sixteenth SAARC Summit, 28 April 2010.

agricultural, migration, meteorological, health and human resources-related information that will be vital for adaptation efforts, particularly in resource-constrained countries. In addition, the inclusion of civil society actors in the track II dialogues has helped to facilitate collaborative research and advocacy undertaken jointly by academics, social workers, journalists and others outside the governments of the bloc countries. The inclusion of civil society actors in the SAARC process helps to make it more transparent and accountable to the populations of all countries involved.

#### **4.6.4 Regional Refugee Framework and South Asia**

The countries of South Asia, except Afghanistan, although not parties to the 1951 Refugee Convention, regularly face trans-border migration due to political, social and environmental crises. India has traditionally maintained its status as the principal refugee hosting country of South Asia, with approximately 2.9 million. Pakistan is burdened with Afghan refugees, Nepal hosts refugees mainly from Bhutan, Bangladesh is struggling with the mass exodus of Rohingya refugees from Myanmar and Sri Lanka must deal with large-scale internal displacement arising from internal conflicts.<sup>261</sup> Despite the fact that none of the South Asian countries (except Afghanistan) has signed the international refugee instruments, viz, the 1951 Convention and the 1967 Protocol, and failed to enact a domestic refugee law or procedure, the region has some interesting success stories in refugee management. For instance, over 150,000 Tibetan refugees have integrated into India and Nepal. Over 10 million Bangladeshi (East Pakistani) refugees went to eastern and north-eastern India on the eve of the Liberation War in Bangladesh. Bangladesh is still providing shelter to a large number of *Rohingya* refugees despite its limited resources.

Therefore, it is a paradox that, while countries in South Asia, including Bangladesh, have always risen to occasions to come in aid of refugees, they have always been reluctant to accept formal legal obligations to do so. Consequently, they have neither enacted national laws, nor have they adopted any regional declaration of policies concerning refugees or acceded to the 1951 Refugee Convention or the 1967 Protocol. Whatever rich cultural heritage they may have inherited, and however spiritually enlightened they may be in extending assistance to suffering humanity, the complexities of modern life and norms of international law demand that a legal framework be devised to guarantee minimum standards of the treatment of the refugees. This is for transparency in the treatment of

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<sup>261</sup> Manoj Kumar Sinha, 'Protection of Refugees through Human Rights Instruments' in *Forced Migration in the South Asian Region: Displacement, Human Rights and Conflict Resolution* Omprakash Mishra (Centre for Refugee Studies, 2004) 435.

refugees, to check administrative lapses and bureaucratic arbitrariness and to provide greater opportunities to civil society to monitor compliance with traditions, standards and norms for the safeguard of refugees. It is argued that South Asian countries have to codify their good practices regarding the treatment of refugees in order that their good tradition and culture do not fall prey to the whims of any bureaucratic organ or person.

Initially, the second half of the 1990s saw some initiatives at an unofficial level towards developing a regional refugee protection regime in South Asia. The constitution of the Eminent Persons Group (EPG) for South Asia by UNHCR in November 1994 was an important step in this direction. At its first meeting, the Group agreed to hold annual regional consultations to promote public awareness and identify mechanisms and strategies for moving towards accession or, alternatively, formulating a regional instrument adapting the Convention to the needs of the South Asian region.

The Colombo Consultation of 1995 underscored the need for a South Asian regional legal regime for refugees and a common declaration reconfirming the validity and relevance of the definitions contained in the international refugee law instruments as well as the 1969 OAU Convention and the 1984 Cartagena Declaration. Therefore, the principal focus was on the development of a regional normative framework that would address the needs of refugees, stateless persons and IDPs.

At the New Delhi Consultation of 1996, there was a strategic shift in favour of a model law for refugees that would be applicable at the national level. The consultation also emphasised the need for better public awareness-building about refugees and IDPs and concluded that national legislations would permit a better understanding of commonalities in principles, policies and practices, and would eventually enable a regional legal framework to be drawn up. Finally, the Dhaka Consultation of EPG in November 1997 approved a model national law, which was the first step in the process of building a regional consensus on preventing, managing and solving the problems accompanying refugee flows in a comprehensive and humane manner.

An important aspect of arriving at a regional regime is to debate the need for a body to oversee the implementation of the agreement. In case there is a need for such a body, its objectives, institutional structure and financial implications would need to be considered. In this respect, there is a need to examine, for example, the experience of the OAU Bureau for Refugees. Likewise, a review of the manner in which European Union countries have

coordinated their policies on refugees and allied issues would be useful.<sup>262</sup> In Europe, the Schengen (1985) and Dublin (1990) agreements were directed to develop a common strategy to deal with asylum seekers within the continent. To address their own regional needs, Latin American states opted for a non-binding Cartagena Declaration (1984), which broadened the scope of the refugee definition to include foreign aggression, internal conflicts and those fleeing a massive violation of human rights. Although the declaration was formalised by the non-governmental sector, the governments of the region tend to follow it as a matter of policy.

#### ***4.6.5 Regional Framework in Managing Climate Change Induced Displacement: The Way Forward***

Taking in view the present context of potential climate change induced displacement in South Asia, efforts should be geared towards developing a comprehensive regional mechanism and institutions that would uphold the universal principles of international refugee protection while taking into account the distinctive traits of the region. A regional approach would allow South Asia to address its specific concerns on refugee issues, help improve cooperation and solidarity among countries and improve prospects for solutions.

Generally, SAARC countries adopted soft policies on the entry of asylum seekers. On many occasions, these countries generously allowed refuge for people who were compelled to leave their own places due to a serious risk to life, liberty and livelihood for political, social, economic and other reasons.<sup>263</sup> To date, the decision of granting asylum is operated in an *ad hoc* manner. The decisions and politics have been motivated by the politics of kinship and interstate relations.<sup>264</sup> This is bound to result in inconsistency and a lack of transparency in admissions, granting of asylum, rehabilitation and repatriation.<sup>265</sup>

While South Asia is considered a breeding ground for climate change induced displacement, to date, no particular attention to environmental effects on cross-border migration has been seen within the SAARC framework. It is obvious that in the face of

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<sup>262</sup> BS Chimni, 'The Law and Politics of Regional Solution of the Refugee Problem: The Case of South Asia'. An earlier version of this paper was presented at the 'Conference of Scholars & Other Professionals Working on Refugees and Displaced Persons in South Asia', organised by the RCSS in Rajendrapur, Dhaka, Bangladesh, 9–11 February 1998), 2.

<sup>263</sup> Gopal Krishna Siwakoti, *Refugee Regime under SAARC: An Agenda for Action*, 2 April 2010, Asia Pacific Refugee Rights Network, <<http://refugeerightsasiapacific.org/2010/04/02/refugee-regime-under-saarc-an-agenda-for-action/>>.

<sup>264</sup> Ibid.

<sup>265</sup> Ibid.

environmental disasters, be it sudden or slow onset, people tend to move to neighbouring countries for survival when the options for livelihood is limited in their own country.<sup>266</sup> Globally, around 80 per cent of south-south migration occurs between countries with contiguous borders.<sup>267</sup> This cross-border movement has largely been influenced by proximity to borders, easy crossing (at night by agents), social network and historical connections—most migrants know someone at the destination—and land availability. It is obvious that, if the Bangladeshi climate victims in the future decide to cross the borders, most of the climate change induced displaced families would prefer to move to India, Nepal or Pakistan,<sup>268</sup> and often to Burma.<sup>269</sup> Within the region of South Asia, given the socio-economic and cultural ties with India, along with geographical proximity,<sup>270</sup> people facing any hardship, be it economic and environmental, will move to India provided they have better opportunities there, including job and social networks.<sup>271</sup>

In such situation, the outbreak of cross-border migration without proper planning may create unrest in the region. Thus, there should be an initiative within SAARC countries to address shared concerns through cooperation and collaboration to manage and organise the planned migration. The member states should work together to understand the cause-effects and dynamics of cross-border migration. The strengthening of disaster management under the initiatives and action plans discussed has obvious positive effects on migration scenarios. The SAARC Action Plan on Climate Change is considered a product of leadership and a collective vision towards building a ‘Climate Resilient South Asia’

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<sup>266</sup> The bordering districts of Bangladesh (Khulna, Satkhira, Bagerhat), which are also the coastal areas, were susceptible to inundation due to sea-level rises. The people from these districts already have a strong social network in India. A large number of people from these districts are working in many provinces. Moreover, people of bordering districts of both countries share more or less a common culture that facilitates regular communication through formal and informal channels. Thus, it can be easily predicted that the inundation of land would increase the flow of migration both in regular and irregular channels in India from Khulna, Satkhira and Bagerhat (Tasneem Siddiqui, *Climate Change and Population Movement: The Bangladesh Case 20*, <[http://www.rsis.edu.sg/NTS/Events/Climate\\_change/session4/Concept%20paper-Tasneem.pdf](http://www.rsis.edu.sg/NTS/Events/Climate_change/session4/Concept%20paper-Tasneem.pdf)>).

<sup>267</sup> Black et al., *Demographics and Climate Change: Future Trends and their Policy Implications for Migration* (2008) cited in Matthew Walsham, ‘Assessing the Evidence: Environment, Climate Change and Migration in Bangladesh’ (IOM, 2010) 28.

<sup>268</sup> In search for better living, many Bangladeshis have migrated to Pakistan’s coastal city, Karachi, where they live in urban slums (as illegal migrants) and work as fishing labour in deep sea fishing (Md. Shamsuddoha, ‘Climate Change Induced Forced Migrants: In Need of a Dignified Recognition under a New Protocol’ (Policy Paper, Equity and Justice Working Group, Bangladesh (EquityBD), 2009) 12).

<sup>269</sup> Ibid.

<sup>270</sup> Bangladesh’s border with India stretches more than 4,000 km and brings it into contact with five different Indian States.

<sup>271</sup> During the partition of India in 1947, millions of people crossed in both directions, and the subsequent War of Independence with Pakistan in 1971 saw more movements. Since Independence, people have continued to cross the border in both directions and for a variety of reasons, mostly economic.

through regional cooperation. The regional cooperation already developed in respect to climate change actions, adaptations, food security and disaster risk management needs to be expanded to environment-related migration. Bangladesh has already adopted the National Plan for Disaster Management, which reflects the basic principles of the SAARC Framework on Disaster Management.

Moreover, migration should not entirely be seen as a ‘problem’ and ‘security threat’; rather, migration can be considered part of the adaptation and DRR strategies. SAARC countries should work together to understand the cause-effects, patterns and dynamics of cross-border migration and raise awareness about environmental migration in the SAARC region. Multilateral dialogue can be arranged under SAARC to discuss how to address, coordinate and manage climate change and consequent human migration.<sup>272</sup> The member states need to formulate policy and legal frameworks to address climate change induced migration, as well as increasing the adaptive capacity of the people in areas where people could become displaced due to environmental and others socio-economic vulnerabilities.<sup>273</sup> Such frameworks need to coordinate both natural resource protection and climate change induced migration because many communities rely on natural resources and ecosystems for their livelihoods, and seasonal migration is already being used by communities to cope with climate variability.

Thus, depending on the political will of member states, as Williams suggests, ‘it would be advantageous to conclude, outside the formal international agreement, some form of nonbinding “Memorandum of Understanding” or “Plan of Action” whereby states can discuss strategies and techniques for implementing regional initiatives (for managing climate change induced migration)’.<sup>274</sup> Thus, the non-binding nature of agreement can help to further the discussion and development in respect to the recognition and protection of climate change displacement because states generally remain suspicious to frameworks that have a binding effect.<sup>275</sup>

However, the African model could be an example for South Asia in building regional cooperation for migration to fill the protection gaps in respect to IDPs. The OAU Convention of 1969 reflected the frame of minds of the political leadership of a continent

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<sup>272</sup> Koko Warner et al., ‘Human Security, Climate Change and Environmentally Induced Migration’ (Report, UNU-EHS, 2008) 8.

<sup>273</sup> Ibid.

<sup>274</sup> Williams, above n 3, 519.

<sup>275</sup> Ibid.

engaged in anti-colonial movements. It broadened the scope of the definition of refugees to include those fleeing apartheid, colonial oppression and generalised violence, and it emphasised voluntary repatriation as a solution to refugee problems in Africa. Based on the UN Guiding Principles on Internal Displacement, the African Union Convention for the Protection and Assistance of IDPs in Africa (Kampala Convention) was concluded in November 2009. The objective of the Convention will also include the provision of a legal framework for the protection of persons displaced including by natural disasters that have a devastating impact on human life peace, stability, security, and development. The definition of IDPs under this Convention not only covers ‘persons or group of persons who have been forced or obliged to flee or to leave their home or places of habitual residence’ as a result of events including natural or man-made disasters, but also those who do so to avoid the effects of disasters.<sup>276</sup> This convention recognises that climate change may cause internal displacement and primarily confers responsibility to extend protection to environmentally displaced persons on the national government. The national government must guarantee the freedom of movement and choice of residence by IDPs and no restrictions can be inflicted unless absolutely ‘necessary, justified and proportionate to the requirements of ensuring security for IDPs or maintaining public security, public order and public health’.<sup>277</sup> Under this convention, states are required to prevent or avoid conditions that may lead to the displacement of persons.<sup>278</sup> The convention also prohibits the return of displaced persons to areas where life is unsafe. The convention provides ‘reparations for failure to act, and encourages non-governmental and other assistance in the region for IDPs when a state affected by disaster is unable to provide full assistance’.<sup>279</sup> All member states collectively bear the responsibility to intervene regionally against any displacement associated with grave breaches of human rights and humanitarian law. It also innovatively provides for the obligation of the international community to extend protection and assistance to IDPs.<sup>280</sup>

Thus, regional cooperation in managing human movements likely to increase due to climate change may provide effective durable solutions in dealing with climate change induced displacement.<sup>281</sup> The regional migration and refugee protection agreements,

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<sup>276</sup> Art. 1(K) of the Kampala Convention.

<sup>277</sup> Art. 9(2)(f) of the Kampala Convention.

<sup>278</sup> Art. 4(1) of the Kampala Convention.

<sup>279</sup> Leighton, above n 85, 10.

<sup>280</sup> Art. 6 of the Kampala Convention.

<sup>281</sup> ADB (2012), above n 246, 56.

however, may only be considered an ancillary measure to cooperative capacity-building projects that the governments can collectively undertake to promote harmony and better livelihood opportunities in the region. While a comprehensive solution may be illusive to the problem, ‘promoting regional cooperation through dialogue and deliberation to enable knowledge sharing, risk pooling, and security provision for environment migrants—both internal and international—should therefore be on the core agenda’.<sup>282</sup>

#### **4.7 Concluding Remarks**

Bangladesh is globally well known as a ‘most vulnerable country’ due to the effects of climate change and for the overwhelming number of future ‘climate refugees’. While the term ‘climate refugee’ has succeeded in attracting attention from the media, activists and international organisations, this ‘distinct category of migrants’ is yet to receive deserving recognition and protection in an international framework. There is currently no ‘comprehensive, integrated international framework’ targeting specifically people displaced for environmental reasons.<sup>283</sup> Consequently, the status and protection of these persons are still uncertain in international law.

However, many scholars suggest a separate international treaty or protocol under the UNFCCC for the protection of climate change displacement. Such an attempt would likely to create panic and alarm developed countries, and they might get the wrong message that the developed countries will be flooded with environmental migrants from affected countries such as Bangladesh. Within the present political climate, it is unlikely that developed countries will agree to receive climate migrants from Bangladesh. In its place, Bangladesh can advocate for the soft-law principle based on international cooperation under international human rights law. Adapting existing norms is arguably the only viable way for developing some form of rights-based protection for people displaced by environmental and climate change. This thesis recommends an approach that capitalises on a complementary and mutually reinforcing application of existing international human rights law and international environmental law. Both bodies of law are elaborately codified and have been testified over past decades to the legal value and political clout of international ‘soft law’. Thus, this study recommends developing a soft ‘Guidelines for the Protection of Climate Change Induced Displacement’, buttressed by the general body of international human rights law, combining the already-existing complementary and

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<sup>282</sup> Ibid, 55.

<sup>283</sup> Foresight, above n 234, 154.

temporary protection. The range of existing human rights norms and principles needs to be exploited to address the humanitarian needs of climate change induced displaced persons.<sup>284</sup>

However, the development in the Cancun Adaptation Framework adopted as part of the Cancun Agreements at the 2010 Climate Change Conference in Cancun, Mexico, could offer scope to enhance the global governance of migration in the context of climate change. In particular, Paragraph 14(f) calls upon states to enhance their action on adaptation by pursuing a range of measures, including ‘to enhance understanding, coordination and cooperation with regard to climate change induced displacement, migration and planned relocation, where appropriate, at the national, regional and international levels’.<sup>285</sup> It must be noted that the indication of ‘planned relocation’ does not only refer to developing policy responses for migration or displacement; it also includes those ‘who are unable or unwilling to move without assistance’.<sup>286</sup> Under this scheme, the Bangladesh Government should take a leadership role and take strong demand for receiving climate change displaced persons in the form of labour migration.

The national government is primarily responsible for the protection of its citizens displaced for environmental reasons. However, Bangladesh has the least capacity to deal with the probable large number of climate change induced persons due to a lack of financial and technological resources. Thus, international cooperation, as promised in Paragraph 14(f) of the Cancun agreement, taking appropriate measures ‘to enhance understanding, coordination and cooperation with regard to climate change induced displacement, migration and planned relocation’, is urgently required. International and regional cooperation can potentially strengthen the capacity of states to manage migration induced by climate change.<sup>287</sup> Bangladesh should strongly negotiate for a separate fund for the adaptation and compensation of the climate change displaced persons under the UNFCCC secretariat.

Given the large number of people likely to be displaced due to climate change, Bangladesh should consider that international relocation is not the only solution to climate migration. Rather, Bangladesh should strengthen its own legal and policy framework for the protection of climate change induced human mobility and to utilise the benefit of the

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<sup>284</sup> Ibid.

<sup>285</sup> Para. 14(f) of the Cancun framework.

<sup>286</sup> Foresight, above n 234, 154.

<sup>287</sup> IOM, ‘Climate Change, Environmental Degradation and Migration’ (Background Paper, IOM, 2011) 5.

existing international framework. For example, Tuvalu and Vanuatu emphasise capacity building of the people. Vanuatu established the Marine Training Centre in association with Australia and New Zealand to create skilled mariner to supply to the Australian and New Zealand job markets. Thus, the adaptive potential of migration, such as temporary and circular labour migration programmes, can be arranged on a bilateral basis to support people likely to be displaced by climate change.<sup>288</sup>

Following this, signing a free-movement agreement between India and Bangladesh, similar to the one that India has with Bhutan and Nepal, could ensure effective and planned migration management in both countries. Without allowing permanent immigration for climate-related migrants, such an agreement could facilitate the process of temporary and circular migration across borders, promoting seasonal resilience by building gainful employment.<sup>289</sup>

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<sup>288</sup> Ibid.

<sup>289</sup> Ritumbra Manuvie, *Climate Change Victimization: Relooking the Refugee Convention*, EHS-UNU, <<http://www.ehs.unu.edu/file/get/5409>>.



## CHAPTER 5

# HUMAN RIGHTS IMPLICATIONS FOR CLIMATE CHANGE INDUCED DISPLACEMENT IN BANGLADESH\*

### *5.1 Introduction*

Scientists and expert bodies such as IPCC confirm that the environmental degradations due to the effects of climate change are likely to trigger mass human displacement in Bangladesh.<sup>1</sup> Consequently, the movement of people, which is mostly involuntary, involves many universally recognised human rights and humanitarian norms and standards in a myriad of ways.<sup>2</sup> Both civil and political rights and economic, social and cultural rights are likely to be affected by such displacement. Similarly, the rights of certain vulnerable groups like women, children and disabled and indigenous people are also disproportionately affected by the displacement. Apart from the effects of climate change, government strategies in response to climate change disasters or climate adaptation raise human rights concerns, especially if governments relocate large numbers of people.<sup>3</sup>

In responding to climate change, the government of Bangladesh have traditionally approached it as an ecological problem or, more recently, as an economic one. To date, the social and human rights dimensions of climate change have received little attention.<sup>4</sup> Though there are some recent studies on human and social dimensions of climate change in general, no study is found on human rights implications of climate change induced displacement in Bangladesh. Although there are deep and complex inter-linkages between climate change induced displacement and human rights, the displacement is not construed as a human rights violation in the national legal system and thus does not trigger law and

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\* An initial version of this chapter has been published in a referred journal, see M M Naser, 'Climate Change and Forced Displacement: Obligation of States under International Human Rights Law' (2010) 22(2) *Sri Lanka Journal of International Law*.

<sup>1</sup> See Chapter 2 of this thesis for a discussion of predicted climate change induced human displacement.

<sup>2</sup> Michelle Leighton, 'Climate Change and Migration: Key Issues for Legal Protection of Migrants and Displaced Persons' (Background Paper, German Marshall Fund of the United States, June 2010) 1

< [http://www.gmfus.org/galleries/default-file/Leighton\\_MAH\\_EditsV2.pdf](http://www.gmfus.org/galleries/default-file/Leighton_MAH_EditsV2.pdf)>.

<sup>3</sup> Ibid.

<sup>4</sup> See Sara Aminzadeh, 'A Moral Imperative: The Human Rights Implications of Climate Change' (2007) 30 *Hastings International and Comparative Law Journal* 231, 231; Maria Stavropoulou, 'The Right Not to Be Displaced' (1994) 9 *American University Journal of International Law & Policy* 689, 689.

policy responses in an adequate and coherent manner.<sup>5</sup> The main focus was on developing DRR strategies, rescue operations, improving rescue operations, providing emergency relief assistance, and undertaking initiatives in recovery and reconstruction processes.<sup>6</sup> Fathoming the human rights implications of disasters and improving protection mechanism for disaster victims was sidelined.<sup>7</sup>

Thus, the staggering predictions of climate change induced displacement, together with consequent potential human rights implications, raise important questions about how well existing national instruments actually protect the rights of people at risk of displacement in Bangladesh. This study found that significant limitations exist in national laws and policies in Bangladesh in responding to the human rights dimension of climate change induced displacement. It is certain from various reports and studies that most people displaced by climate change in Bangladesh will remain within the borders of the country. They are IDPs, as defined in the Guiding Principles, and entitled to the full range of rights and responsibilities included therein.<sup>8</sup> These people are also entitled to a range of human rights guaranteed under the Constitution of Bangladesh, as well as norms and principles developed under international human rights law.

However, Bangladesh does not have any legal framework or normative protection for refugees or IDPs.<sup>9</sup> There remains a gap in the interpretation of how existing human rights standards apply to the displaced situation; that is, before, during and after displacement. It is mostly managed by executive orders and administrative regulations that are mostly ad hoc in nature. However, human rights norms oblige the government to enact appropriate laws and policies and adopt other necessary measures, including evacuation and possible temporary or permanent relocation of affected persons to ensure the protection of human rights of the climate-related displacement.<sup>10</sup> Legal framework is essential because

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<sup>5</sup> Stavropoulou, above n 4, 689; Roberta Cohen and Megan Bradley, 'Disasters and Displacement: Gaps in Protection' (2010) 1 *Journal of International Humanitarian Legal Studies* 1, 3; Foreword, Inter-Agency Standing Committee, *IASC Operational Guidelines on Human Rights and Natural Disasters*, Brookings-Bern Project on Internal Displacement, June 2006, 5.

<sup>6</sup> Cohen and Bradley, above n 5, 3.

<sup>7</sup> Ibid.

<sup>8</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998).

<sup>9</sup> Roger Zetter, 'Protecting Environmentally Displaced People: Developing the Capacity of Legal and Normative Frameworks' (Research Report, Refugee Studies Centre, 2011) 44.

<sup>10</sup> Elizabeth Ferris, 'Internally Displaced Persons: A Neglected Issue on the International Agenda' (2008) 4 *New Routes*, 10–14; Leighton, above n 2, 2; Elizabeth Ferris, 'Displacement, Natural Disasters, and Human Rights' (Speech delivered at Ten Years of the Guiding Principles on Internal Displacement—Achievements and Future Challenges, Oslo, Norway, 17 October 2008)

<[http://www.brookings.edu/speeches/2008/1017\\_natural\\_disasters\\_ferris.aspx](http://www.brookings.edu/speeches/2008/1017_natural_disasters_ferris.aspx)>.

experience has shown that an effective response to displacement almost always requires legislative action and it is unlikely that all reasonable precautionary steps will be taken in the absence of dedicated legal and policy frameworks.

Since most climate change induced displacement in Bangladesh is likely to be local within its territory, in line with the obligation under human rights treaties, the government is obliged to take measures to protect the fundamental human rights of the people displaced due to effects of climate change.<sup>11</sup> Under international human rights law, individuals rely first and foremost on their own states for the protection of human rights, and they have the right to request and receive such protection and assistance from the government.<sup>12</sup> Recognising that states have different capacities, human rights laws require states to carefully diagnose domestic human rights challenges and develop laws and policies adequate to address the human rights protections of these people. The existing body of international human rights norms, principles and jurisprudence, such as the UN Guiding Principles, IASC Operational Guidelines and Hyogo Framework, can provide guidelines for framing such legal framework for the protection of human rights of climate change induced displaced persons.<sup>13</sup>

In this context, this chapter:

- illustrates the interrelationship between climate change induced displacement and human rights;
- provides a brief overview of the human rights norms that are likely to be violated due to climate change induced displacement;
- discusses the obligations of the national government under international human rights treaties to protect and fulfil human rights of climate change displaced people. It argues that the displaced persons remain citizens of Bangladesh and hence entitled to the protection of all guarantees of human rights norms and standards provided by the Constitution of Bangladesh. In no way can these displaced people be deprived of the rights guaranteed for all the citizens of Bangladesh.<sup>14</sup> Rather, the

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<sup>11</sup> See Walter Kälin, 'Disaster Risk Mitigation—Why Human Rights Matter' (2008) 31 *Forced Migration Review* 38.

<sup>12</sup> Brookings-Bern Project on Internal Displacement, 'Protecting Persons Affected by Natural Disasters: IASC Operational Guidelines on Human Rights and Natural Disasters' (IASC, June 2006) 10; Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship between Climate Change and Human Rights, UN Doc. A/HRC/10/61 (2009) 24 para. 72.

<sup>13</sup> Zetter, above n 9, 56.

<sup>14</sup> Ibid.

displaced people have specific needs and rights, distinct from those of the non-affected population, which call for specific assistance and protection measures.<sup>15</sup> It is argued that the human rights lens can be helpful in approaching and managing climate change displacement;

- focuses on strategies, instruments and practical measures under international human rights law to be pursued for protection of human rights of the climate change displaced persons in Bangladesh. Then it argues for framing rights based on legal framework and examines the potential benefits of a human rights-based approach in tackling challenges posed by climate change displacement. It also analyses how human rights standards can provide principled guidance to finding solutions for the displaced people, and submits that the application of human rights principles and norms can bring a range of benefits to international and national efforts to respond to climate change induced displacement.

## ***5.2 Human Rights Dimensions of Climate Change Induced Displacement in Bangladesh***

The climate change displaced persons may encounter serious violations of human rights both before and after the displacement.<sup>16</sup> Before displacement, the life, liberty and security are at risk in the face of natural disasters such as floods, cyclones and tsunamis. There is also a serious risk of human rights violations when the displaced persons cannot return to their homes or find new ones after along protracted timeframe.<sup>17</sup> The longer displacement lasts, discrimination and violations of economic, social and cultural rights can become more entrenched in the context of natural disasters. The violations may vary in ‘degree of seriousness and significance for the person affected depending on the circumstances’.<sup>18</sup> The connection between climate change displacement and human rights can be more conceptualised focusing on the plethora of rights that will be affected adversely by climate change. The Operational Guidelines stress that human rights encompass not only civil and political rights but also economic, social and cultural rights.<sup>19</sup>

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<sup>15</sup> Ibid.

<sup>16</sup> Stavropoulou, above n 4, 735.

<sup>17</sup> Walter Kälin, ‘A Human Rights Perspective for Major Natural Disasters’ (Speech delivered at the Brookings-Bern Project on Internal Displacement Seminar, 14 January 2008) <[http://www.brookings.edu/speeches/2008/0114\\_disasters\\_kalin.aspx](http://www.brookings.edu/speeches/2008/0114_disasters_kalin.aspx)>.

<sup>18</sup> Stavropoulou, above n 4, 738.

<sup>19</sup> The Operational Guidelines divide human rights into four groups, namely:

(a) rights related to physical security and integrity (e.g. protection of the right to life and the right to be free of assault, rape, arbitrary detention, kidnapping and threats to these rights);

### 5.2.1 Civil and Political Rights Affected by Climate Change Induced Displacement

The ICCPR that contains the guarantee package of civil and political rights was originally envisioned to protect individual rights from arbitrary governmental interference and to guarantee participatory rights in civil society.<sup>20</sup> The application of ICCPR to the global climate change issue, especially climate change induced displacement, is not a straightforward task. The rights contained in ICCPR must be reinterpreted to encompass a situation that might arise due to climate change displacement.

Climate change induced displacement likely to threaten the life,<sup>21</sup> liberty, property<sup>22</sup> and security of the displaced—rights, which are guaranteed in both UDHR and ICCPR and also in interpretation and judgment of human rights bodies and regional human rights instruments such as the European Convention on Human Rights (ECHR), the African Charter on Human and Peoples' Rights (ACHR) and the American Declaration on the Rights and Duties of Man (American Declaration) and the judgment of their judicial

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(b) rights related to basic necessities of life (e.g. the rights to food, drinking water, shelter, adequate clothing, adequate health services and sanitation);

(c) rights related to other economic, social and cultural protection needs (e.g. the rights to be provided with or have access to education, to receive restitution or compensation for lost property and to work); and

(d) rights related to other civil and political protection needs (e.g. the rights to religious freedom and freedom of speech, personal documentation, political participation, access to courts and freedom from discrimination).

<sup>20</sup> The *ICCPR* provides the protection of the family (art 10); the right to an adequate standard of living, shelter and food (art 11); the right to physical and mental health (art 12); the right to work (art 6); the right to education (art 13); the right to pursue freely one's own economic, social and cultural development (art 1); the right to participate in cultural life (art 15). All of the above rights are inevitably violated to a greater or lesser degree when forced displacement occurs.

<sup>21</sup> *Universal Declaration of Human Rights (UDHR)*, GA Res 217A (III) (10 December 1948). Art. 3 of the *UDHR* provides 'everyone has the right to life, liberty and security of person'. Art. 6(1) of *ICCPR* provides 'every human being has the inherent right to life. This right shall be protected by law. No one shall be arbitrarily deprived of his life'.

<sup>22</sup> *UDHR* proclaims that 'everyone has the right to own property alone, as well as in association with others; and no one shall be arbitrarily deprived of his property', see the *Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)* arts 15–16 and *ILO Convention 169 Concerning Indigenous and Tribal Peoples in Independent Countries*. ECHR provides that: 'every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principle of international law' (*Convention for the Protection of Human Rights and Fundamental Freedoms* 4 November 1950, 213 UNTS 221 protocol 1 art 1). The African Charter art 14 provides 'the right to property shall be guaranteed. It may only be encroached upon in the interest of public need or in the general interest of the community and in accordance with the provisions of appropriate laws', see *African [Banjul] Charter on Human and Peoples' Rights*, adopted 27 June 1981, OAU Doc. CAB/LEG/67/3 rev 5, 21 ILM 58 (1982), entered into force 21 October 1986. The *American Declaration on the Rights and Duties of Man* includes the right to 'own such private property as meets the essential needs of decent living and helps to maintain the dignity of the individual and of the home', see *American Convention on Human Rights*, OAS Treaty Series No. 36, 1144 UNTS 123 art 21, entered into force 18 July 1978, reprinted in *Basic Documents Pertaining to Human Rights in the Inter-American System*, OEA/Ser.L.V/II.82 doc 6 rev 1 at 25 (1992).

bodies. The ICCPR also guarantees the right to freedom of residence and movement<sup>23</sup> and the right to protection of privacy, family and home.<sup>24</sup>

The potential severe effects of climate change are likely to impinge upon the right to life and property of the people in Bangladesh who are forced to leave their home in search of food, shelter and livelihood. The climatic effects cause death and severe injury to person and property by the destruction of people's home, agricultural land and basic infrastructure for livelihood. The sea-level rise is likely to cause permanent inundation or submersion of land under water, which may result in the deprivation of property without compensation, particularly in coastal areas.<sup>25</sup>

Moreover, the life of the displaced people is always at risk because of a specific vulnerability associated with displacement. The vulnerability is exacerbated due to lack of basic amenities, including food, fresh water, shelter and medical support, which are necessary to human survival. Moreover, disease arising from contaminated water is also likely to undermine the right to life. The recurrent floods, typhoons and other natural calamities interfered with right to homes and family life, the freedom of movement and deny the right to choose place of residence.<sup>26</sup>

### ***5.2.2 Economic, Social and Cultural Rights Affected by Climate Change Induced Displacement***

It is argued that the violation of economic social and cultural rights is not an equal threat to the violation of civil and political rights.<sup>27</sup> This argument does not seem convincing. First, the principle of universality and interdependence of all human rights would not support such an approach. Second, if persons lack basic food, water, shelter and health and cannot live a life in dignity anymore, such a situation can be as equally serious as a violation of civil and political rights.

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<sup>23</sup> ICCPR art 12(1) provides that every person lawfully within the territory of a state has 'the right to liberty of movement and freedom to choose his residence' within that state.

<sup>24</sup> ICCPR art 17(1) states 'no one shall be subjected to arbitrary or unlawful interference with his privacy, family, home or correspondence'.

<sup>25</sup> Roger Zetter, 'The Role of Legal and Normative Frameworks for the Protection of Environmentally Displaced People', in Frank Laczko and Christine Aghazarm (eds), *Migration, Environment and Climate Change: Assessing the Evidence* (2009) 408.

<sup>26</sup> Ibid.

<sup>27</sup> See Margit Hammer, 'The Legal Status of "Climate Refugees" under International Human Rights and Refugee Law', 23 April 2010.

Climate change displacement has wide-ranging effects on the realisation of ESC rights, because it infringes on a number of rights, including right to food, water, health, housing and adequate standard of living<sup>28</sup> guaranteed in ICESCR, as well as other international human rights instruments.<sup>29</sup>

### 5.2.2.1 *Right to Food*<sup>30</sup>

The sea-level rise, higher temperatures, changing weather patterns, shifting rainfall patterns and water scarcity are likely to accelerate grain sterility and disrupt agriculture rendering previously productive land infertile and reduce crop and livestock yields.<sup>31</sup> Thus, the displaced poor people who are particularly vulnerable due to their disproportionate

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<sup>28</sup> *UDHR* art 25 of states that ‘everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing...’, see *ICCPR* art 1(2); *ICESCR* art 1(2). It states: ‘in no case may a people be deprived of its own means of subsistence’. International human rights law also protects every person’s right to an adequate standard of living. Both *ICCPR* and *ICESCR* specify that this right includes the right to adequate food, clothing, housing, the continuous improvement of living conditions, and the right not to be deprived of means of subsistence.

<sup>29</sup> For example, the *CRC* recognises the special needs and vulnerabilities of the child, and therefore affords a greater level of protection for many of the child’s economic, social and cultural rights. (The Preamble of the *CRC* recalls that ‘the child, by reason of his physical and mental immaturity, needs special safeguards and care ...’) Similarly, the *CEDAW* recognises the contribution of women to society and the welfare of the family, and emphasises and expands upon certain economic, social and cultural rights accordingly.

<sup>30</sup> *UDHR* art 25 (right to adequate standard of living, including food); the Rome Declaration on World Food Security, Heads of State and Government ‘reaffirm[ed] the right of everyone to have access to safe and nutritious food, consistent with the right to adequate food and the fundamental right of everyone to be free from hunger’. In addition to the right to adequate food, *ICESCR* also enshrines ‘the fundamental right of everyone to be free from hunger’, see *ICESCR* art 11, para. 2. Elements of the right to food include the availability of adequate food (including through the possibility of feeding oneself from natural resources) and accessibility to all individuals under the jurisdiction of a state. The right to food is concerned not only with the individual’s lack of food, but also a lack of access to food because of physical or economic reasons. See Committee on Economic, Social and Cultural Rights (CESCR), *General Comment No. 12: Substantive Issues Arising in the Implementation of the International Covenant on Economic, Social and Cultural Rights*, 20<sup>th</sup> sess., UN Doc. E/C.12/1999/5 (General Comments) (12 May 1999) para. 13.

The UN Special Rapporteur on the Right to Food defines the right as follows:

The right to adequate food is a human right, inherent in all people, to have regular, permanent and unrestricted access, either directly or by means of financial purchases, to quantitatively and qualitatively adequate and sufficient food corresponding to the cultural traditions of people to, which the consumer belongs, and, which ensures a physical and mental, individual and collective fulfilling and dignified life free of fear. (Jean Ziegler, *Report by the Special Rapporteur on the Right to food to the Commission on Human Rights*, 57<sup>th</sup> sess., UN Doc. E/CN.4/2001/53, 2 <<http://daccessdds.un.org/doc/UNDOC/GEN/G01/110/35/PDF/G0111035.pdf?OpenElement> 04 April 2009>.)

<sup>31</sup> According to IPCC AR4 Report, crop productivity is projected to decrease as a consequence of climate change, increasing the risk of hunger and food insecurity in the poorer regions of the world. See Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2007: Effects, Adaptation and Vulnerability. Working Group II Contribution to the Intergovernmental Panel on Climate Change Fourth Assessment Report* (Cambridge University Press, 2007) 48.

dependence on climate-sensitive resources for their food and livelihoods are likely to face severe food insecurity.<sup>32</sup>

#### **5.2.2.2 Right to Health<sup>33</sup>**

The IPCC projects that climate change related exposures such as heat waves, floods, storms, fires and droughts cause wide-ranging consequences for human health through increased instances of deaths and injury and spread of malnutrition, infectious, diarrhoeal and cardio-respiratory diseases like malaria, dengue, cholera and yellow fever.<sup>34</sup> These health issues more grievously create significant stress and adverse effects for those forced to leave their communities.<sup>35</sup> Reduction in the availability of freshwater may affect people's health, because many will be bound to use unclean water and there may be more epidemics in the near future. In Bangladesh, climate change displaced people incur more health related hazards, undermining the basic amenities of health, including clean water, safe housing and sanitation facilities.

#### **5.2.2.3 Right to Housing<sup>36</sup>**

Observed and projected effects of climate change, such as sea-level rise and extreme weather events, are likely to undermine the enjoyment of the right to housing in Bangladesh.<sup>37</sup> The human settlement located in close proximity to the coast may be shattered by sea-level rise and storm surges, leaving many of coastal inhabitants homeless and displaced. Every year, severe flooding damages all the basic amenities for life, including electricity, water supply, and sanitation, which are also essential elements of the

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<sup>32</sup> It is predicted that Bangladesh will lose about 8 per cent of its rice and 32 per cent of its wheat production by the year 2050, due to the effects of climate change.

<sup>33</sup> *UDHR* art 25(1) states: 'Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family'. *ICESCR* art 12(a) recognises the right of everyone to 'the enjoyment of the highest standard of physical and mental health'.

<sup>34</sup> See Neil Adger et al., 'Summary for Policymakers' in IPCC, above n 30.

<sup>35</sup> The combination of higher temperatures and potential increased summer rain and flooding could create the conditions for greater intensity or spread of many infectious diseases, such as cholera, diarrhoea, dysentery, malaria and typhoid. According to the World Health Organization (WHO) submission, 'forced displacement is associated with a range of health issues, including social isolation and mental disorders and, in many cases, reduced socioeconomic status and associated health problems'. See WHO, 'Protecting the Health of Vulnerable People from the Humanitarian Consequences of Climate Change and Climate related Disasters', Submission to 6<sup>th</sup> Session of the Ad Hoc Working Group on Long-Term Cooperative Action under the Convention (AWG-LCA 6). Bonn, 1–12 June 2009, 4.

<sup>36</sup> See *UDHR* art 25(1); *ICESCR* art 11; *ICERD* art 5(e)(iii); *CEDAW* art 14(2); *CRC* art 27 para. 3; *ICRMW* art 43 para. 1(d); *CRPD* art 9 para. 1(a) and art 28 paras 1–2(d); Committee on Economic, Social and Cultural Rights (CESCR), *General Comment No. 4: The Right to Adequate Housing*, 6<sup>th</sup> sess., UN Doc. E/1992/23 (General Comments) (13 December 1991) para. 7.

<sup>37</sup> Report of the OHCHR, above n 12, 13 para. 36.

right to adequate housing and forces thousands of people to leave their shelter to become homeless. Consequently, these displaced people are compelled to build informal settlements in hazardous areas for their shelter.<sup>38</sup> Many people live in slums in Dhaka, fragile hillsides in Chittagong or flood-prone river-banks and face acute vulnerability to extreme climate events.

#### ***5.2.2.4 Right to Water***<sup>39</sup>

Climate change displaced persons may be deprived of access to water due to disruptions of water supply arising from reduction of freshwater lenses. As a result of climate change, there will be lower and more erratic rainfall and this will be exacerbated by the recession of the Himalayan glaciers, which flow in into the Ganges and Brahmaputra rivers, two main sources of freshwater in Bangladesh.<sup>40</sup> Weather extremes, such as draught and flooding, will also affect water supplies.<sup>41</sup> The consequent water shortages will make access to safe drinking water difficult. The situation will substantially endanger the health of the displaced persons.

#### ***5.2.3 Collective or Group Rights Affected by Climate Change Induced Displacement***

The vulnerability associated with climate change displacement is perceived more acutely by those sections of the population who are already in vulnerable situations due to factors such as poverty, gender, age, minority status and disability and require special consideration.<sup>42</sup> The displaced situation aftermath of natural disasters exacerbate pre-existing inequalities and patterns of discrimination and affect the rights of children, women, minorities and indigenous people.

##### ***5.2.3.1 Women's Rights***

Women are especially exposed to climate change related risks due to existing gender discrimination, inequality and inhibiting gender roles. Statistically, the death rate of

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<sup>38</sup> Ibid.

<sup>39</sup> Committee on Economic, Social and Cultural Rights (CESCR), General Comment No. 15: Substantive Issues Arising in the Implementation of the International Covenant on Economic, Social and Cultural Rights (The Right to Water, arts 11, 12 of the International Covenant on Economic, Social and Cultural Rights), 29<sup>th</sup> sess., UN Doc. E/C.12/2002/11 (General Comments) (20 January 2003) para. 3. General comment No. 15 provides further guidance on the normative contents of the right to water and related obligations of states.

<sup>40</sup> See Alan Dupont and Graeme Pearman, 'Heating up the Planet: Climate Change and Security' (Lowy Institute Paper 12, 2006) 34 <<http://www.lowyinstitute.org/Publication.asp?pid=391>>.

<sup>41</sup> IPCC, above n 31, 48–49.

<sup>42</sup> Tina Acketoft, 'Environmentally Induced Migration and Displacement: A 21<sup>st</sup> Century Challenge' (Report of Committee on Migration, Refugees and Population, Parliamentary Assemblée, Council of Europe, 2008) 2.

women is markedly higher than that of men during natural disasters.<sup>43</sup> As an illustration, death rates among women were almost four times greater than those among men in the 1991 cyclone disasters that killed 140 000 people in Bangladesh.<sup>44</sup> Higher death rates for women as a result of natural disasters are directly linked to the socio-economic status of women in affected societies and the degree to which women enjoy economic and social rights.<sup>45</sup>

It is established that women, particularly elderly women and girls, are affected more severely and are more at risk during all phases of environmental displacement: on way to shelter, sanitation, relief distribution and relocation. Women are more susceptible to gender-based violence, including sexual violence and exploitation during natural disasters and also during migration, limiting their ability to travel to receive aid. Vulnerability is exacerbated by factors such as behavioural restrictions, unequal rights to property, exclusion from decision-making, poor access to information and financial services.<sup>46</sup> All these obstacles can directly affect women's chances of survival during a natural disaster or its aftermath.<sup>47</sup> As a result, climate-related displacement put women's rights to food, life, security and health particularly at risk.

### **5.2.3.2 Children's Rights**

Like women, children have a higher mortality rate as a result of weather-related disasters and are more susceptible to injury and drowning during relocation. Children are also at greater risk of death as a result of diseases such as malaria, dengue and diarrhoea. In the 1991 cyclone in Bangladesh, death rates among children under 10 years of age were more than six times greater than those of adult men.<sup>48</sup>

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<sup>43</sup> International Organization on Migration (IOM), 'Migration, Climate Change and the Environment' (IOM Policy Brief, IOM, 2009) 2.

<sup>44</sup> C Bern et al., 'Risk Factors for Mortality in the Bangladesh Cyclone of 1991' (1993) 71(1) *Bull World Health Organ*, 73–78; IOM, above n 43, 2.

<sup>45</sup> Often linked to reasons such as: women are more likely to be looking after children and to be wearing clothes that inhibit movement, and are less likely to be able to swim. Their role as the main caregivers in many societies also means that women tend to look after their children's safety before their own; see IOM, above n 43, 2.

<sup>46</sup> Yianna Lambrou and Regina Laub, *Gender Perspectives on the Conventions on Biodiversity, Climate Change and Desertification* (7–8 October 2004) < [http://www.fao.org/sd/dim\\_pe1/pe1\\_041002\\_en.htm](http://www.fao.org/sd/dim_pe1/pe1_041002_en.htm)>.

<sup>47</sup> IOM, above n 43, 2.

<sup>48</sup> Bern et al., above n 44, 73–78.

### ***5.2.3.3 Minority and Indigenous Peoples' Rights***

Minority and indigenous peoples are among the worst affected by the effects of the changing climate, since they have a close interaction with natural resources in their livelihoods and cultures.<sup>49</sup> The destruction of lands and forced relocation of indigenous communities due to the effects of climate change are thus likely to impinge upon the rights guaranteed by international instruments for minorities and indigenous people.<sup>50</sup> In particular, forced relocation due to the effects of climate change may lead to forced assimilation, which the right to culture is intended to prevent.

### ***5.2.3.4 Persons with Disabilities***

Persons with disabilities, chronic illnesses and the elderly often have extra needs with respect to diet, water consumption and medical treatment, and may be too immobilised to move to safer places or to use collective cooking, washing or toilet facilities. Traumatized persons may not be able to cope with the challenges of life in displacement settings unless they receive appropriate treatment.

## ***5.3 Obligation of the Government of Bangladesh under Human Rights Regime***

Since the adoption of the UDHR in 1948, the international community has developed a number of conventions, covenants and monitoring instruments that define and protect an increasing array of civil, political, economic, social and cultural rights, and the corollary duties and obligations of states and international actors. The major human rights instruments<sup>51</sup> received almost universal ratification and become part of customary international law. A notable feature of this process has been the increasing attention given to specific social groups, for example women, children, indigenous people and different

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<sup>49</sup> Kate Raworth, 'Climate Wrongs and Human Rights—Putting People at the Heart of Climate-Change Policy' (Oxfam Briefing Paper No. 117, Oxfam International, 2008) 7.

<sup>50</sup> Ben Saul et al., 'Climate Change and Human Rights', Submission to the Office of the United Nations High Commissioner for Human Rights on the Relationship Between Climate Change and Human Rights, September 2008, 2 <<http://www.law.usyd.edu.au/scil/pdf/Sub-ClimateChangeHRSept08.pdf>>.

<sup>51</sup> The 1948 *Universal Declaration of Human Rights* protects freedom of movement and other social, cultural and economic rights that can be enjoyed under international human rights law and international humanitarian law, but that might be threatened when people are forced to migrate by climate-induced environmental degradation. There are 'subsidiary' norms and instruments that afford different forms of human rights protection for migrant groups either directly or indirectly. For example, the 1966 *Covenant on Economic, Social and Cultural Rights* and the 1996 *International Convention on Civil and Political Rights*, as well as a range of international conventions dealing with specific social groups, such as the 1990 *International Convention on the Protection of the Rights of All Migrant Workers*, the 1989 *Convention on the Rights of the Child*, the 1981 *Convention on the Elimination of All Forms of Discrimination Against Women* and the 1991 *ILO Convention on the Rights of Indigenous People*.

categories of migrants.<sup>52</sup> In some cases, the implementation of these instruments is monitored by treaty bodies, which have refined the scope of rights enshrined in these conventional instruments.<sup>53</sup>

Article 25 of the Constitution obliges Bangladesh to be respectful to international law and the principles enunciated in the UN Charter.<sup>54</sup> Bangladesh has signed and ratified most of the international human rights conventions and the universal human rights and norms are incorporated in the Constitution of Bangladesh.<sup>55</sup> Part III of the Constitution, drawing heavily from the international human rights discourse, guarantees a series of fundamental human rights, including right to life and personal liberty;<sup>56</sup> safeguards from arbitrary arrest and detention;<sup>57</sup> prohibition of forced labour;<sup>58</sup> right of fair trial;<sup>59</sup> freedom of movement,<sup>60</sup> assembly,<sup>61</sup> association;<sup>62</sup> freedom of expression,<sup>63</sup> profession or occupation,<sup>64</sup> religion;<sup>65</sup> and the right to property.<sup>66</sup>

Evidently, a number of human rights recognised in international human rights instruments, as well as in the Constitution of Bangladesh, are likely to be significantly threatened by the climate change displacement. Human rights law sets out basic standards of protection, which oblige states to respect, protect and fulfil the rights of people within its territory.<sup>67</sup> Thus, both international human rights law and national constitutional framework impose primary responsibility on the national government to provide protection and assistance to

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<sup>52</sup> Zetter, 'Protecting Environmentally Displaced People', above n 9, 15.

<sup>53</sup> Ibid.

<sup>54</sup> Art. 25 of the *Constitution* states that 'the State shall base its international relations on the principles of respect for ... international law and the principles enunciated in the United Nations Charter'.

<sup>55</sup> However, not all of these treaties have been implemented or incorporated into domestic law.

<sup>56</sup> *Constitution of Bangladesh* art 32.

<sup>57</sup> *Constitution of Bangladesh* art 33.

<sup>58</sup> *Constitution of Bangladesh* art 34.

<sup>59</sup> *Constitution of Bangladesh* art 35.

<sup>60</sup> *Constitution of Bangladesh* art 36.

<sup>61</sup> *Constitution of Bangladesh* art 37.

<sup>62</sup> *Constitution of Bangladesh* art 38.

<sup>63</sup> *Constitution of Bangladesh* art 39.

<sup>64</sup> *Constitution of Bangladesh* art 40.

<sup>65</sup> *Constitution of Bangladesh* art 41.

<sup>66</sup> *Constitution of Bangladesh* art 42.

<sup>67</sup> *ICCPR* art 2 states that 'each State Party to the present Covenant undertakes to respect and to ensure to all individuals within its territory and subject to its jurisdiction the rights recognized in the present Covenant'.

people displaced within their own territory.<sup>68</sup> The obligation also entails that the government must adopt laws and policies and other necessary measures to respect, protect and fulfil the human rights of climate change induced displaced people.<sup>69</sup>

Therefore, the government needs to adopt legal measures to coordinate and manage climate change induced displacement. The international human rights laws and standards can be used by governments to construct the legal, policy and institutional frameworks required to ensure that the impinged rights related to climate change displacement are fully respected, protected and fulfilled.<sup>70</sup>

#### ***5.4 Rights-based Legal Framework for Climate Change Induced Displacement in Bangladesh***

The primary responsibility to provide protection and assistance to internally displaced people lies with the national authorities in Bangladesh.<sup>71</sup> To date, all climate change initiatives in Bangladesh have been limited to adaptation programmes only. Presently, there is no clearly articulated and agreed national policies for the protection of climate change induced displaced persons in Bangladesh.<sup>72</sup> Moreover, the migration issues are not mainstreamed into current environmental, disaster management or climate change policies. This is partly due to the traditional approach of the government in viewing migration as a failure to adopt and partly due to a lack of seriousness or priority setting of the

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<sup>68</sup> Zetter, 'Protecting Environmentally Displaced People', above n 8, 15; Brookings-Bern Project on Internal Displacement, above n 11, 10. Sovereignty entails not only the right of each state to conduct its own affairs but also the primary duty and responsibility to provide protection and assistance without discrimination to its population, including the internally displaced, in accordance with international human rights and humanitarian law (UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principle 3.1).

While those displaced within their own country remain entitled to the full protection of rights available to the population in general, displacement gives rise to particular vulnerabilities on the part of those affected. Therefore, and in order to ensure that the displaced are not deprived of their human rights, states are obligated to provide special measures of protection and assistance to IDPs that correspond to these vulnerabilities in order to ensure that IDPs are treated equally with respect to non-displaced citizens (UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principles 1.1, 4.).

<sup>69</sup> Raworth, above n 49, 10; Leighton, above n 2, 2; Scott Leckie, *Climate Change Displaced Persons and Housing Land and Property Rights: Preliminary Strategies for Rights-based Planning and Programming to Resolve Climate-induced Displacement*, Displacement Solutions 26 <[http://displacementsolutions.org/files/documents/DS\\_Climate\\_change\\_strategies.pdf](http://displacementsolutions.org/files/documents/DS_Climate_change_strategies.pdf)>.

<sup>70</sup> Kyung-wha Kang, 'Climate Change, Migration and Human Rights' (Speech delivered at the Conference on Climate Change and Migration: Addressing Vulnerabilities and Harnessing Opportunities, Geneva, 19 February 2008) 1 <<http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=9162&LangID=E>>.

<sup>71</sup> See Brookings-Bern Project on Internal Displacement (IASC Operational Guidelines), above n 11, 10.

<sup>72</sup> See Tahera Akter, 'Climate Change and Flow of Environmental Displacement in Bangladesh' (Unnayan Onneshan—The Innovators, 2009) 12.

government. Given that climate change induced displacement has serious social and human rights implications, the use of governance approaches that can more humanely address the needs of persons moved for environmental reasons is imperative. Human rights-based policy orientation is imperative, under which activities in respect to climate change induced displacement in Bangladesh are managed and implemented.

The existing laws and policies in Bangladesh to combat environmental change tend to be driven by a DRR, emergency relief and humanitarian discourse. Migration likely to result from climate change is not the main focus and not effectively mainstreamed with environmental, disaster management or climate change policies.<sup>73</sup> The National Plan of Action (NAPA) and national strategies (BCCSAP) for climate change recommend capacity building of victims of climate change (who are likely to be displaced if adaptation fails), but do not deal with the human rights protection of climate change induced displaced persons.

However, in the current climate migration discourse, protection of migration is considered part of adaptation. Thus, the national law on climate change induced displacement will be complementary to such already developed adaptation framework. Such well-developed framework would ensure international cooperation and receive international funding from adaptation funds developed under UNFCCC framework. Since there is still no legal framework for refugees or IDP, the legal framework for climate change induced displacement may be the pioneer motivating enactment of laws for other types of displacement.

Human rights are of particular importance in addressing climate change, disasters and displacement. The human rights discourse is essential because the vulnerability and sufferings associated with climate change related displacement and its human rights implications expose it as a human rights issue. The international human rights regime invokes the principle of the inherent dignity of every human person and ensures that ‘rights should not be violated by displacement’.<sup>74</sup> Such an approach provides remedies and solutions to human rights that are either threatened or violated.<sup>75</sup> It offers the means of addressing the needs of migrants who are forced to leave their familiar surroundings and

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<sup>73</sup> Matthew Walsham, ‘Assessing the Evidence: Environment, Climate Change and Migration in Bangladesh’ (IOM, 2010) xiv.

<sup>74</sup> Roger Zetter, ‘Legal and Normative Frameworks’ (2008) 31 *Forced Migration Review* 62.

<sup>75</sup> Zetter, ‘The Role of Legal and Normative Frameworks’, above n 25, 433.

enter new environments with new rights entitlement and protection needs.<sup>76</sup> Human rights will also apply to those who remain in the place of the disaster, since climate change will not necessarily always lead to displacement. In reality, the majority of affected people will probably not migrate; rather, they stay at their original place.<sup>77</sup> Therefore, a rights-based approach offers protection and support for the adaptation and resilience strategies for those who remain, thereby also reducing the effects of climate change and the propensity to migrate.<sup>78</sup>

### ***5.5 Benefits of Human Rights-based Policy Orientation***

The human rights-based approach to dealing with climate change induced displacement benefits policy outcome in various ways, some of which are outlined below.

#### ***5.5.1 Humanises the Issue***

The international debate on climate change issues is clearly based upon scientific projections and measurements based on parts, per million, degrees, centigrade or centimetres.<sup>79</sup> The international community, including both states and institutions, has so far largely focused on the environmental and economic implications of climate change.<sup>80</sup> Still, human dimensions of climate change, specifically the human rights implications of climate change displacement, are largely ignored. The ‘human rights lens’ helps shift the normative focus of international debate on climate change more directly onto individuals, placing the individual ‘at the centre of inquiry’<sup>81</sup> and the effects of climate change on their lives.<sup>82</sup> That is, all human rights perspectives focus on ‘the dignity and worth of the human person’, which should guide legal and policy outcomes.<sup>83</sup> As the International Law

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<sup>76</sup> Ibid.

<sup>77</sup> Ibid.

<sup>78</sup> Ibid.

<sup>79</sup> Marc Limon, ‘Human Rights and Climate Change: Constructing a Case for Political Action’ (2009) 33 *Harvard Environmental Law Review* 439, 451.

<sup>80</sup> Aminzadeh, above n 4, 259.

<sup>81</sup> Lavanya Rajamani, ‘The Increasing Currency and Relevance of Rights-Based Perspectives in the International Negotiations on Climate Change’ (2010) 22(3) *Journal of Environmental Law* 391, 394.

<sup>82</sup> Rajamani, above n 81, 414; Kyung-wha Kang, ‘Climate Change and Human Rights’ (Speech delivered at the Conference of the Parties to the United Nations Framework Convention on Climate Change and its Kyoto Protocol, Bali, Indonesia, 3–14 December 2007)

<<http://www.unhcr.ch/hurricane/hurricane.nsf/view01/013DC0FAA475EC87C12573B10074796A?opendocument>>.

<sup>83</sup> Preamble, *Charter of the United Nations* 26 June 1945, entered into force 24 October 1945 1 UNTS XVI.. See Jane McAdam, ‘How to Address the Protection Gaps—Ways Forward’ (Paper presented at the Nansen

Commission (ILC) has noted in the context of protection from disasters, the principle of humanity is ‘the cornerstone for the protection of persons in international law since it place[s] the affected person at the centre of the relief process and recognize[s] the importance of his or her rights and needs’.<sup>84</sup>

If any evacuation during natural disasters or relocation measures lead to a violation of human rights, international human rights law prohibits such relocation. Before such measures, human rights law requires the fulfilment of certain prerequisite safeguards or conditions.<sup>85</sup> Thus, humanising climate change creates an ethical imperative to act that can, with time, translate into legal obligations.<sup>86</sup>

### **5.5.2 Fosters International Cooperation**

It is the national government who is primarily responsible for protection of people in its territory from threats to human rights, including displacement, which may arise due to the effects of climate change.<sup>87</sup> If it fails to provide adequate protection due to unwillingness or inability, the international community needs to support and supplement the efforts of the government and local authorities.<sup>88</sup> The international human rights framework extends the obligation of states to those beyond their territory and reinforces the humanitarian obligation of states to cooperate and assist governments less able to fulfil the human rights of people in their territory.<sup>89</sup> Thus, the human rights framework has the potential to ensure international cooperation for the protection of the human rights of climate change displaced persons. Both the UN Charter<sup>90</sup> and the International Bill of Human Rights<sup>91</sup> contain language that stresses international cooperation required to address social and economic rights fulfilment of people affected due to climate change displacement.<sup>92</sup> It is to

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Conference: Climate Change and Displacement in the 21<sup>st</sup> Century, Oslo, 5–7 June 2011) 6 < <http://d2530919.hosted213.servetheworld.no/expose/global/download.asp?id=2267&fk=1626&thumb=>>.

<sup>84</sup> Report of the International Law Commission, 62<sup>nd</sup> session (3 May–4 June and 5 July–6 August 2010), UN Doc. A/65/10 para. 310.

<sup>85</sup> Stavropoulou, above n 4, 735–36.

<sup>86</sup> Limon, above n 79, 451.

<sup>87</sup> Stavropoulou, above n 4, 693.

<sup>88</sup> Ibid; Ferris, *Displacement, Natural Disasters, and Human Rights*, above n 10.

<sup>89</sup> Leighton, above n 2, 3.

<sup>90</sup> *Charter of the United Nations* art 1 para. 3.

<sup>91</sup> The International Bill of Human Rights is an informal name for the *Universal Declaration of Human Rights*, *ICCPR* and *ICESCR*.

<sup>92</sup> The importance of such cooperation is explicitly stated in provisions of the *International Covenant on Economic, Social and Cultural Rights*, the *Convention on the Rights of the Child*, the *Convention on the Rights of Persons with Disabilities* and in the *Declaration on the Right to Development*. The *ICESCR*

be noted that existing international human rights standards apply not only to nationals of a country, but also to non-nationals, irrespective of their legal status. In the context of climate change displacement, it is especially relevant to recall that the Committee on Economic, Social and Cultural Rights (CESCR), the treaty body that monitors the implementation of ICESCR, has clearly specified that:

states parties have a joint and individual responsibility, in accordance with the Charter of the United Nations and relevant resolutions of the United Nations General Assembly (UNGA) and of the World Health Assembly, to cooperate in providing disaster relief and humanitarian assistance in times of emergency, including assistance to refugees and internally displaced persons.<sup>93</sup>

The OHCHR report on the relationship between climate change and human rights published in January 2009 concludes that human rights law places duties on states concerning climate change, which include international cooperation.<sup>94</sup> The OHCHR notes, ‘climate change can only be effectively addressed through cooperation of all members of the international community’ and ‘international cooperation is important because the effects and risks of climate change are significantly higher in low-income countries’.<sup>95</sup> The international cooperation is also illustrated in the context of climate change in article 4(7) of the UNFCCC.

Linking international human rights law in respect to climate change, the UNHCR recognises ‘international human rights law complements the United Nations Framework Convention on Climate Change by underlining that international cooperation is not only expedient but also a human rights obligation’.<sup>96</sup> The international organisations such as UN agencies, international and national non-governmental organisations, and civil society also have a responsibility to ensure that their approaches and programmes incorporate a human rights focus and support the national governments.<sup>97</sup> For example, UNHCR encourages the international community to clarify responsibilities and ‘to adopt an approach based on

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stipulates that developing countries should use international assistance firstly to attend to social and economic needs at home.

<sup>93</sup> See *ICESCR General Comment No. 14*, cited in Leighton, above n 2, 3.

<sup>94</sup> John H Knox, ‘Linking Human Rights and Climate Change at the United Nations’ (2009) 33 *Harvard Environmental Law Review*, 477.

<sup>95</sup> Report of the OHCHR, above n 12, 84.

<sup>96</sup> *Ibid* 30 para. 99.

<sup>97</sup> Ferris, *Displacement, Natural Disasters, and Human Rights*, above n 10.

respect for human rights and international cooperation’, in particular with regard to the ‘international protection regime’.<sup>98</sup>

### **5.5.3 Protects Vulnerable Groups**

While climate change affects everyone, those who are already in a situation of vulnerability because of factors such as age, gender and socio-economic status will be disproportionately affected.<sup>99</sup> This underlines the importance of effective human rights guarantees to reduce the vulnerability of this group who are compelled to leave their home in search of a new shelter. The human rights framework obliges states to take immediate affirmative steps to identify and protect those who are most vulnerable and disproportionately affected by climate change—the poor, marginalised and vulnerable people (including women, children, indigenous groups and the elderly).<sup>100</sup> The protection support and relocation measures should take into consideration the special vulnerability linked to the most disadvantaged or vulnerable group of people according to the prohibited grounds of discrimination; for example, race, colour, sex or national origin.<sup>101</sup> Thus, ‘equal protection of human rights for vulnerable migrants and citizens enhances social cohesion and integration’.<sup>102</sup>

### **5.5.4 Sets Minimum Standard**

Human rights approaches provide minimum standards or benchmarks of treatment that states must afford to individuals in protection of climate change induced displacement, including when managing such displacement through relocation. No one is allowed to go beneath the ‘moral thresholds’ or line/s against which actions can be evaluated.<sup>103</sup> As

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<sup>98</sup> UNHCR, ‘Climate Change, Natural Disasters and Human Displacement: A UNHCR Perspective’ (UNHCR, 2009) 9 <<http://www.unhcr.org/4901e81a4.html>>.

<sup>99</sup> OHCHR, *A Human Rights Approach to Tackling Climate Change* (December 2008) United Nations Human Rights <<http://www.ohchr.org/EN/NEWSEVENTS/Pages/TackingClimateChange.aspx>>.

<sup>100</sup> Limon, above n 79, 451.

<sup>101</sup> John Von Doussa QC, Allison Corkery and Renee Chartres, ‘Human Rights and Climate Change, Background Paper, Human Rights: Everyone, Everywhere, Everyday’ (Human Rights and Equal Opportunity Commission [HREOC], 2008) 15 <[http://www.hreoc.gov.au/pdf/about/media/papers/hrandclimate\\_change.pdf](http://www.hreoc.gov.au/pdf/about/media/papers/hrandclimate_change.pdf)>.

<sup>102</sup> Global Migration Group (GMG), ‘Mainstreaming Migration into Development Planning: A Handbook for Policy-makers and Practitioners’ (IOM, 2010) 11.

<sup>103</sup> S Caney, ‘Climate Change, Human Rights and Moral Thresholds’ in S Humphreys (ed.), *Human Rights and Climate Change* (Cambridge University Press 2009) 69; S Caney, ‘Human Rights, Climate Change and Discounting’ (2008) 17 *Environmental Politics* 536; S Caney, ‘Global Justice, Rights and Climate Change’ (2006) 19 *Canadian Journal of Law & Jurisprudence* 255; S Caney, ‘Cosmopolitan Justice, Responsibility and Global Climate Change’ (2005) 18 *Leiden Journal of International Law* 747; Shue n 124, cited in Rajamani, above n 81, 417.

Rajamani comments, ‘human rights approaches provide benchmark against which states’ actions can be evaluated and they offer the possibility of holding authorities to account’.<sup>104</sup>

#### ***5.5.5 Facilitates Policy Coherence, Legitimacy and Accountability***

A human rights approach has the potential to contribute, qualitatively, to the construction of effective policy responses at both the national and international level for climate change displacement, since it focuses on individuals and combines a set of internationally agreed values.<sup>105</sup> It is important to recognise that persons forcibly displaced by the effects of climate change have special needs and vulnerabilities to be addressed specifically at the operational level. The human rights framework obliges states to take into consideration these special needs in the context of climate change displacement. This includes the obligation to provide better housing located away from hazardous zones; improved access to sanitation, safe drinking water and healthcare; access to adequate food; effective participation in planning and decision-making; accountability; as well as access to information and justice. It must ensure that these basic rights and entitlements help to prevent displacement or migration related to climate change.<sup>106</sup>

Along with the human factor, human rights introduce an accountability framework that is an essential element of the promotion and protection of human rights itself. International human rights law apply to the governments if they fail to act according to their human rights obligations in protection of climate change displacement.<sup>107</sup> This obligation is reinforced by international human rights instruments and treaty bodies, including the Human Rights Committee (established to monitor implementation of ICCPR), the Inter-American Commission and Court of Human Rights and the European Court of Human Rights. These bodies in many cases issue legal decisions regarding the states’ positive obligation to take precautions against foreseeable harm, including environmental harm, and to support persons forced to move away from high-risk zones.<sup>108</sup> It holds governments and the duty-bearers accountable to reducing the vulnerability of their citizens, assisting them in adapting to the consequences, and thus prevents displacement. Human rights principles and rules place emphasis on accountability mechanisms in relocation and other necessary measures.

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<sup>104</sup> Rajamani, above n 81, 395.

<sup>105</sup> Limon, above n 79, 452.

<sup>106</sup> Kang, ‘Climate Change, Migration and Human Rights’, above n 70.

<sup>107</sup> Leighton, above n 2, 7.

<sup>108</sup> Report of the OHCHR, above n 12, 24, cited in Leighton, above n 2, 7.

### **5.5.6 Ensures Procedural Fairness**

Addressing the effects of displacement as a rights-based challenge inevitably demands that affected populations are fully involved in developing response strategies, and that advocacy tools and processes are enhanced to promote their rights.<sup>109</sup> Rights-sensitive policy-making encourages not only policy responses directed towards the fulfilment of substantive socio-economic rights, but also requires a rights-sensitive policy-making process.<sup>110</sup> This entails the active and effective participation of those affected individuals and communities, as well as civil society actors, in a policy-making process that is transparent and accountable.<sup>111</sup> A human rights perspective ensures and guarantees procedural rights, particularly access to information and access to decision-making and access to effective administrative and judicial remedies of affected individuals and communities, which are critical to the evolution of effective, legitimate and sustainable policy responses.<sup>112</sup> A successful procedure requires information sharing<sup>113</sup> and participation.<sup>114</sup>

## **5.6 Concluding Remarks**

It is certain from various reports and studies that most people displaced by climate change in Bangladesh will remain within the borders of the country. They are IDPs as defined in the UN Guiding Principles and entitled to the full range of rights and responsibilities included therein. These people are also entitled to a range of human rights guaranteed under the Constitution of Bangladesh, as well as norms and principles developed under international human rights law.<sup>115</sup> There is a growing recognition that forced displacement

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<sup>109</sup> Zetter, above n 74, 63.

<sup>110</sup> Bruce Burson, 'Protecting the Rights of People Displaced by Climate Change: Global Issues and Regional Perspective' in Bruce Burson (ed.), *Climate Change and Migration South Pacific Perspective* (Institute of Policy Studies, 2010) 170.

<sup>111</sup> Under international human rights law, participatory rights derive from *ICCPR* art 25. Art. 25(a) sets out the general formulation of the right: 'Every citizen shall have the right and the opportunity, without any of the distinctions mentioned in art. 2 and without unreasonable restrictions ... To take part in the conduct of public affairs, directly or through freely chosen representatives'. Ensuring effective participation depends on the guaranteeing of other *ICCPR* rights such as the right to freedom of belief (art 18), the right to freedom of expression including the right to receive and impart information (art 19) and the right to freedom of assembly (art 21). Without these ancillary rights also being guaranteed, any right of participation in public affairs would simply become no more than an exercise in the rubber-stamping of executive will.

<sup>112</sup> Limon, above n 79, 452.

<sup>113</sup> *Convention on Access to Information, Public Participation in Decision-Making, and Access to Justice in Environmental Matters (Aarhus Convention)* 38 ILM 517 (1999) art 5.

<sup>114</sup> *Aarhus Convention* art 7.

<sup>115</sup> For a detailed discussion on human rights norms and principles relating to climate change induced displacement, see Chapter 4 of this Thesis.

by climate change should be perceived as a human rights issue and policy framework should be developed to protect, respect and promote the human rights of the affected people.<sup>116</sup> The existing body of international human rights norms, principles and jurisprudence can provide guidelines for constructing such legal framework.

International human rights law is a cohesive, developed and accepted body of international law, which provides a wider range of remedies and mobilises the international community to assist the developing and poor countries for the protection of the human rights of the climate change displaced people.<sup>117</sup> The vast majority of nations are parties to the core human rights treaties, including the ICCPR and ICESCR.<sup>118</sup> These treaties imply obligations to state parties to respect, protect and fulfil the rights contained therein; each state can put the principles into operation based on their resources and cultural integrity. These obligations are binding on every state party and must be given effect to good faith.

The problem with the policy framework for displacement lies with its failure to take account of the human dimension of displacement. Therefore, it is argued that already existing relevant human rights norms can be predicated and tailored to national laws and policies for the protection of climate change induced displacement. Any new protection framework for climate changes displaced persons should consider the principles of international human rights law.<sup>119</sup> Indeed, the international human rights regime has a fairly developed legislative, instrumental and institutional structure, norms, principles and jurisprudence evolved over the past six decades and significant international pledge for their protection and promotion.<sup>120</sup>

Human rights principles should be considered fundamental relating to all humanitarian work pertaining to climate change displacement management, including the relocation of displaced people. Thus, viewing forced climate displacement as a human rights issue, the governments should adopt more caring, practical and concrete measure required to protect

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<sup>116</sup> Stavropoulou, above n 4, 716.

<sup>117</sup> Dana Zartner Falstrom, 'Stemming the Flow of Environmental Displacement: Creating a Convention to Protect Persons and Preserve the Environment' (2001) 1 *Colorado Journal of International Environmental Law and Policy*, 1, 26.

<sup>118</sup> For status of ratification of core human rights treaties, see <http://www2.ohchr.org/english/bodies/docs/status.pdf>.

<sup>119</sup> Falstrom, above n 117, 26.

<sup>120</sup> M Rafiqul Islam, 'The Right to the Environment as a Human Right' in Mizanur Rahman (ed.) *Human Rights and Environment* (ELCOP, 2011) 5, 22.

the rights of the climate change displacement people.<sup>121</sup> There is an urgent call for states, and the international community, to articulate and address the protection of peoples' rights, in relation to climate change displaced person. A human rights-oriented approach to dealing with climate change induced displacement will go a long way in mitigating the sufferings and vulnerability of the displaced people in a more humane way.

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<sup>121</sup> Scott Leckie, 'Climate-Related Disasters and Displacement: Homes for Homes, Lands for Lands' (Report prepared for Expert-Group meeting on Population Dynamics and Climate Change, Displacement Solutions, 2009) 1-2.

## CHAPTER 6

# CLIMATE CHANGE INDUCED DISPLACEMENT IN BANGLADESH: LEGAL AND POLICY RESPONSES

### *6.1 Introduction*

According to the IPCC projections, there is a ‘high agreement’ and ‘much evidence’ that global emission will continue to grow over the next few decades.<sup>1</sup> With all attempts for the reduction of carbon emissions, the effects of climate change are obvious. Many studies and reports published by national and international organisations recognise Bangladesh as one of the most affected countries, and confirm that a large number of people will be displaced within the country in the face of those effects. The global climate change and consequent potential migration poses a number of multifarious challenges and is becoming an increasingly important policy issue for Bangladesh.<sup>2</sup> Therefore, the policy responses need to deal with diverse issues, including SD, climate change adaptation, labour migration and humanitarian assistance, to address the future challenges posed by climate change and consequent human displacement.<sup>3</sup> The policy responses need to operate on several tracks at once, in different timeframes. While humanitarian assistance of basic services such as food, shelter and health could be provided for people who flee natural disasters and are already displaced as a short-term strategy; in the long run adaptation strategies need to be strengthened for building capacity resilience to drastic changes in the environment.<sup>4</sup> In increasing the capacity of the people vulnerable to climate change, migration itself could be considered a good form of adaptation.

Thus, there is no simple and straightforward solution to the challenges posed by climate change induced displacement and a ‘one-size-fits-all’ approach will not effectively resolve

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<sup>1</sup> Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2007: Effects, Adaptation and Vulnerability. Working Group II Contribution to the Intergovernmental Panel on Climate Change Fourth Assessment Report* (Cambridge University Press, 2007), 44.

<sup>2</sup> Matthew Walsham, ‘Assessing the Evidence: Environment, Climate Change and Migration in Bangladesh’ (IOM, 2010) vii.

<sup>3</sup> Foresight, ‘Foresight: Migration and Global Environmental Change’ (Final Project Report, Government Office for Science, London, 2011) 25.

<sup>4</sup> Kathleen Newland, ‘Climate Change and Migration Dynamics’ (Migration Policy Institute, 2011) 1.

the complex nature, and patterns, of population displacement.<sup>5</sup> Since protection of climate change displacement needs to deal with so many diverse issues, it does not seem feasible that a single legal instrument or even instruments of a single type can address this issue efficiently.<sup>6</sup> Rather than a particular single approach, a multifarious, comprehensive, proactive and coherent policy approach is imperative for managing climate change induced migration in an orderly and humane way.<sup>7</sup> A flagship national policy and law can be devised to link the different instruments, legal regimes and subject areas and inspire the development of new laws where required. The policies can be more flexible and more easily adopted and implemented than laws, while remaining equally important and having similar legal influence.

Based on the available data, prediction and evidence on environment, climate change and migration,<sup>8</sup> a range of policy tools and approaches are suggested in this thesis. Recognising the differences in migration patterns and typologies of climate change induced displacement, this thesis classifies climate migrants into three groups for providing protections and policy responses; namely, forced climate migrants, pre-emptive or climate-motivated migrants and potential climate migrants. It also sets out a roadmap showing how the policy interventions could contribute to better integrating the full spectrum of migration issues and concerns into overall environmental and developmental policy and vice-versa within Bangladesh.

In this context, this chapter explains the importance of developing regulatory framework for climate change induced displacement. It also examines how far existing laws and policies in Bangladesh address the issue of climate change induced displacement. It suggests mainstreaming climate change displacement into existing laws and policies.

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<sup>5</sup> Jane McAdam and Ben Saul, 'Displacement with Dignity: International Law and Policy Responses to Climate Change Migration and Security in Bangladesh' (2010) 53 *German Yearbook of International Law* 234, 236, 286.

<sup>6</sup> See David Fisher, 'Legal Implementation of Human Rights Obligations to Prevent Displacement Due to Natural Disasters' in Walter Kälin et al. (eds), *Incorporating the Guiding Principles on Internal Displacement into Domestic Law: Issues and Challenges* (Brookings and ASIL, 2010) 551, 566.

<sup>7</sup> Global Migration Group (GMG), 'Mainstreaming Migration into Development Planning: A Handbook for Policy-makers and Practitioners' (IOM, 2010) 109; See McAdam and Saul, 'Displacement with Dignity', above n 5, 236, 286.

<sup>8</sup> See Chapter 2 for a detailed discussion.

## ***6.2 Towards Multifarious Policy Responses for Climate Change Induced Displacement***

For effective and sustainable protection of climate change induced displacement, root causes of displacement and the protection needs of affected people who have either already been displaced or vulnerable to displacement due to the effects of climate change need to be identified. Accordingly, those needs should be promoted through national laws and policies for protection of climate change induced displacement.<sup>9</sup> However, existing national laws and policies are not sufficient to protect climate change induced migrants.<sup>10</sup> There should be multi-track policy approaches to filling the protection gaps. National policy on climate change induced displacement need to be designed in such a way so that the life and livelihood of the climate victims are protected and they do not feel compelled to flee their original place. There should be proactive policy and early action to strengthen adaptation programmes and local capacity building, bilateral and regional cooperation, and multi-stakeholder partnerships involving civil society.<sup>11</sup> In this way, climate change displacement may be better recognised, and their needs more appropriately responded by a national framework.<sup>12</sup>

In reality, the effects of climate change result in diverse patterns of human movement which require different policy responses.<sup>13</sup> The policy framework in Bangladesh needs to consider existing migration pattern and socio-economic conditions in Bangladesh.<sup>14</sup> Although people generally migrate as a last resort in Bangladesh, no consistent migration pattern is observed to date. However, in response to natural disasters, people migrate in a large and dynamic continuum between forcedness and voluntariness.<sup>15</sup> In the same situation of climatic effects, such as storm surge and salinity due to sea-level rise, flooding and cyclone, people behave differently in their reactive responses. Some people, either due to their strong resilience capacity struggle with adverse situation and try to cope with it, or

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<sup>9</sup> McAdam and Saul, 'Displacement with Dignity', above n 5, 269.

<sup>10</sup> See Tahera Akter, 'Climate Change and Flow of Environmental Displacement in Bangladesh' (Unnayan Onneshan—The Innovators, 2009).

<sup>11</sup> International Organization for Migration, *Discussion Note: Migration and the Environment*, MC/INF/288, 94<sup>th</sup> sess., 1 November 2007, 7.

<sup>12</sup> Angela Williams, 'Turning the Tide: Recognizing Climate Change Refugees in International Law' (2008) 30(4) *Law & Policy*, 502, 512.

<sup>13</sup> Elizabeth Ferris, 'Protection and Planned Relocations in the Context of Climate Change' (UNHCR, 2012) 8.

<sup>14</sup> See Chapters 2 and 3 of this Thesis for a detailed discussion on migration patterns and socio-economic conditions in Bangladesh.

<sup>15</sup> Benoit Mayer, 'Environmental Migration in Asia and the Pacific: Could We Hang Out Sometimes?' (Earth System Governance, Working Paper No. 22, Earth System Governance Project, 2012) 19.

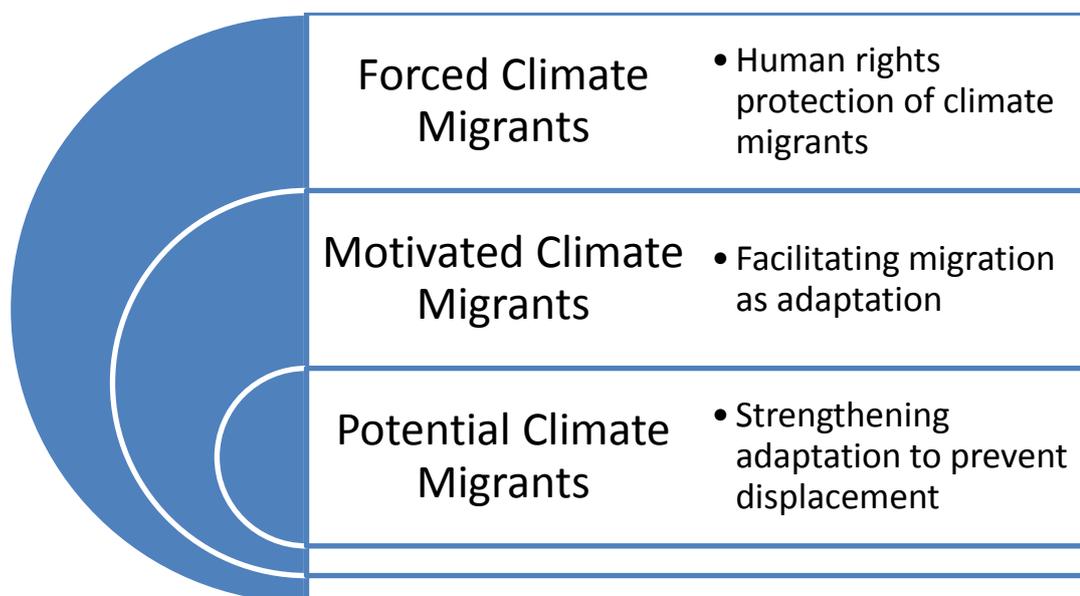
are trapped in the affected areas and remain there reluctantly to suffer; others choose migration as part of adaptive strategy and leave their place and move to cities or other safe places because they have some sort of skill, education and resources. However, all face adversity due to impending climatic disasters. It will not be fair to discriminate because all are victims of the same climatic phenomenon. It remains a challenge to national authorities to develop DRR and climate change adaptation as preparedness measures, as these can affect all types and patterns of future movements. Taking this scenario into context, the policy framework should be developed in such a way so that all are included under its protection.

A protection policy on climate change induced displacement is pertinent to define the national perspectives in respect to these people. It will be strategic in nature and will describe the broad national objectives and strategies for managing climate change induced displacement in practice. The principal objective of this national policy will be opening up a range of options for durable solutions to displacement caused by climate change induced displacement, and reduce vulnerability in the short, medium and long terms. This study anticipates three different scenarios likely to be seen in the context of climate change induced displacement and accordingly proposes to extend different types of protection to each group of people. They are: climate change induced forced migrants, climate change motivated migrants and potential climate migrants. Each group has different protection needs requiring distinct kinds of protection. Thus, a comprehensive approach to climate change induced migration requires the policy responses to pursue three broad objectives:

- 1) preventing forced migration and displacement as much as possible,
- 2) where forced migration does occur, providing assistance and protection to those that are being and will be displaced and
- 3) facilitating migration as an adaptation strategy to environmental change.<sup>16</sup>

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<sup>16</sup> See UNESCO, IOM, UNFPA, UNHCR, UNITAR, 'Cooperation—the Key to an Effective Policy Response to Global Environmental Change, Migration and Youth' (Briefing paper, Global Migration Group, 2011) 1; IOM, 'Climate Change, Environmental Degradation and Migration' (Background Paper, IOM, 2011) 1.



**Box 6: Multifarious policy responses to different categories of climate change induced displacement**

**6.2.1 Providing Human Rights Protection to Forced Climate Migrants**

Given the limitation of adaptation to a certain extent, when people have no other choice but to leave their home because of severe environmental problems, an adequate protection mechanism should be in place to mitigate their sufferings. Recent experience in Cyclone Aila and Sidr and recurring floods shows that immediately after the natural event, a large number of people are compelled to leave their home, shelter and community to save their life. These people suffer immense distress during and after displacement. Most of them will be displaced within national borders and fall under the legal system of Bangladesh in the same manner as they did before being displaced. The displaced people are entitled to receive special protection due to their vulnerability stemming from the displacement. The national government is responsible for protecting these persons according to its obligations under international human rights law.<sup>17</sup> The government should take measures to protect their rights during their displacement. The UN Guiding Principles have provisions for such protection. To guide the government on the protection of IDPs, the former UN Secretary-General Representative on IDP, Francis M Deng, developed the Guiding Principles on Internal Displacement in 1998. These Guiding Principles, which were adopted by the UN, explain how states should protect IDPs against, during and after displacement. The Principles are mainly based on existing international human rights law and international

<sup>17</sup> See Chapter 5 of this Thesis for a detailed discussion on the obligation of national government towards climate-induced displacement under international human rights law.

humanitarian law. Since they apply to all persons who are forced to move within national borders, irrespective of the cause of the flight (principle 2), they also apply to internal climate change induced displacement. A number of effective measures should be taken by the government to minimise the displacement and, if the displacement occurs, the necessary assistance and protection should be provided to the affected people.<sup>18</sup>

Thus, framing guidelines specifically for forced climate migrants would provide the basis in which actions and protective measures can be undertaken consistently.<sup>19</sup> It would also create obligations and responsibilities on authorities, including ministries, local governments and NGOs. The objectives of the Guiding Principles will be a) to define climate change induced displacement for establishing their protection; b) to provide humanitarian assistance to those forced migrants; c) to provide durable solution for their effective management and d) to establish an institutional framework for protection and management of climate change induced displacement.<sup>20</sup>

### ***6.2.2 Strengthening Adaptation to Prevent Displacement***

The policy framework should first of all strengthen adaptation through capacity building and SD to support people who remain and make them resilient to adverse climatic changes. Indeed, the policy responses will play a catalyst role in determining the extent to which the people facing adverse environmental changes will rely on migration for survival.<sup>21</sup> According to the IPCC Report, ‘maintaining and enhancing both resilience and adaptive capacity for weather related hazards are critically important policy and management goals’.<sup>22</sup> Many authors note that even if disasters become more frequent in the future, political efforts and measures of protection will be able to lessen the need to emigrate, provided that the necessary financial means are made available. The Stern Review explains this as ‘the exact number who will actually be displaced or forced to migrate will depend on the level of investment, planning and resources’.<sup>23</sup> Therefore, government responses need to incorporate best practice and international standards that can help to ensure that

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<sup>18</sup> Chapter 7 provides an outline of national legal framework in light of international human rights law, including Guiding Principles to be adopted for Bangladesh.

<sup>19</sup> The contents of the guidelines are discussed in Chapter 7.

<sup>20</sup> Details of this framework are discussed in Chapter 7.

<sup>21</sup> Koko Warner, ‘Assessing Institutional and Governance Need Related to Environmental Change and Human Migration’ (Background Paper, German Marshall Fund of the United States, June 2010) 4, 8 <[http://www.gmfus.org/galleries/default-file/Warner\\_MAH\\_EditsV2.pdf](http://www.gmfus.org/galleries/default-file/Warner_MAH_EditsV2.pdf)>.

<sup>22</sup> IPCC, above n 1, 344.

<sup>23</sup> Nicholas Stern, *The Economics of Climate Change: The Stern Review* (Cambridge University Press, 2006) 112.

adaptation programmes appropriately and more successfully meet the needs of affected victims.

### **6.2.3 Facilitating Migration as Adaptation**

It is very common practice in Bangladesh that people, in response to environmental deterioration, adopt migration as a coping strategy for security of livelihood. With the evidence of mounting climate change effects such as sea-level rise, salinity intrusion and drought, people may fear impending disasters and start migration pre-emptively to adapt to the changed circumstances. The policy responses need to address this phenomenon and facilitate this sort of migration as a good adaptation strategy.<sup>24</sup> Thus, planned relocation and voluntary labour migration with safety and dignity may be a good adaptation strategy to manage the risks associated with climate change.<sup>25</sup>

### **6.3 Mainstreaming Climate Change Induced Displacement through Multi-sectorial Policy Interventions**

Climate change induced displacement, though caused primarily by the interaction of environmental change, the associated drivers, such as economic, political, social and demographic factors, have implications for a wide range of policy areas. It is therefore important that policy-makers need to find ‘solution beyond just “migration” or “environment” policy areas’.<sup>26</sup> The migration climate change induced decisions and strategies, whether they will move as a family or individually, temporarily or permanently, internally within states or across borders, are determined based on a number of socio-economic and political considerations.<sup>27</sup> The government responses to disasters, including DRR activities, adaptation programmes and the overall human rights situation, obviously influence the decision for migration. Thus, climate change induced migration is related to broader development policy, emergency preparedness, urban and rural planning and land-use policy apart from environmental and migration policies.<sup>28</sup> At the same time, migration has obvious influential effects on the individuals and communities of both the places of

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<sup>24</sup> See Koko Warner, *Climate and Environmental Change, Human Migration and Displacement: Recent Policy Developments and Research Gaps* (UN Secretariat, 12 February 2011) 5

<<http://www.un.org/esa/population/meetings/ninthcoord2011/p10-unu.pdf>>.

<sup>25</sup> Ibid.

<sup>26</sup> Foresight, above n 3, 125.

<sup>27</sup> See ibid.

<sup>28</sup> IOM, ‘Climate Change, Environmental Degradation and Migration’ (Background Paper, IOM, 2011) 5.

origin and destination.<sup>29</sup> The Foresight Report (2011) on ‘Migration and Global Environmental Change’ explains this:

If policy options towards migration are drawn from only a narrow range of policies, particularly if restricted to options specifically in the field of migration policy, there is a risk that interventions will not address the root causes of migration flows, and be limited in effectiveness. It is therefore important to consider not only future policy interventions that are concerned with migration, but also their coherence with policies that might affect migration but, which are only indirectly concerned with it.<sup>30</sup>

Thus, along with the enactment of a new set of laws and policies, integrating climate change displacement issues into existing laws is also required. Simultaneously, effective connections between diverse areas of policy should also be established, since the range of possible interventions is very wide, and there is a risk that policies affecting migration can become fragmented and incoherent.<sup>31</sup>

In Bangladesh, existing laws and policies are mostly sectorial and not integrated and attuned to deal with challenges posed by climate change. Specifically, migration likely to arise out of such environmental change is not the main focus. For example, policies to combat environmental change tend to be driven by a DRR, emergency relief and humanitarian discourse. Migration likely to arise from environmental change is not effectively mainstreamed with the environmental, disaster management or climate change policies.<sup>32</sup> Even in some cases, the policy discourse identifies migration as ‘failure of adaptation’<sup>33</sup> and so attempts to resist migration.<sup>34</sup> Such an approach largely hinders developing more proactive policy measure for increasing adaptive capacity of people likely to be displaced from climate change affected areas.<sup>35</sup> Migration issues need to be integrated into existing laws and policies of other areas.

### ***6.3.1 Mainstreaming Climate Change Induced Displacement in Environmental and Climate Change Related Laws and Policies***

The main source of environmental law are the constitution, statutory laws and by-laws, customs, traditional perceptions and practices, international conventions, treaties and protocols. There is no right to environment under the Constitution of Bangladesh.

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<sup>29</sup> Ibid.

<sup>30</sup> Ibid.

<sup>31</sup> Foresight, above n 3, 126.

<sup>32</sup> Walsham, above n 2, xiv; Akter, above n 10, 11.

<sup>33</sup> See the detailed discussion on this issue in Chapter 8.

<sup>34</sup> Walsham, above n 2, xiv.

<sup>35</sup> Ibid.

However, the recent 15<sup>th</sup> amendment to the Constitution included a provision on conservation and development of environment.<sup>36</sup> This provision imposes an obligation on the State to protect and develop the environment and to ensure conservation and security of natural resources, biodiversity, wetlands, forests and wild life. It does not establish a right to a safe environment for the individuals, rather it is proclaimed as one of the fundamental principles of state policies, which can be used as a guideline in interpretation of the Constitution and of the other laws of Bangladesh.<sup>37</sup> This constitutional duty to protect the environment can be borne by the State, its agencies, individuals and legal persons. However, it does not create any corresponding right to people who are displaced or at risk of displacement due to failure of duty to protect environment by government agencies to challenge such inactions of government bodies.

Climate change induced displacement should be integrated into strategic environmental actions plans and national conservation strategies. Bangladesh has in recent years adopted a number of laws and policies to combat frequent natural disasters and the adverse effects of climate change. Although there is a direct interrelationship between climate change, environmental degradations and migration,<sup>38</sup> migration has been given very little weight in those environmental and climate change laws and policies. The most important legislations that were adopted for environmental protection include the Environmental Policy 1992, Bangladesh Environment Conservation Act 1995 and The Environmental Conservation Rules 1997. The Government of Bangladesh also adopted a number of supplementary policies where environment and development issues have been addressed. Important policy documents in this respect are the Forest Policy (1994), the Fisheries Policy (1998), the Water Policy (1998), the New Agriculture Extension Policy (1995) and the Energy Policy (1995). Besides these sectorial policies, as guiding strategies on the environment the National Conservation Strategy (NCS), the National Capacity Self-Assessment (NCSA) for Global Environmental Management (2007) and especially the National Environmental Management Action Plan 1995 (NEMAP) have been formulated to provide action plans to respond to environmental issues and promote SD.<sup>39</sup> These documents although deal with current environmental degradations and their challenges in Bangladesh, only few

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<sup>36</sup> *Constitution of Bangladesh* 18A. 'The State shall endeavour to protect and improve the environment and to preserve and safeguard the natural resources, bio-diversity, wetlands, forests and wild life for the present and future citizens.'

<sup>37</sup> *Constitution of Bangladesh* art 8(2).

<sup>38</sup> See Chapter 2 for a detailed discussion on such interrelationship.

<sup>39</sup> Walsham, above n 2, 33.

instruments make specific references to the migration effects of environmental change and degradation.<sup>40</sup> For instance, it is written in the Coastal Zone Policy 2005 that susceptibilities of coastal communities will be addressed because these people are very dependent on natural resources for their livelihood.<sup>41</sup> However, there is no action plan with a timeframe in the national policy to indicate how the sufferings of the people likely to be displaced from coastal areas will be addressed.<sup>42</sup>

Regarding climate change, the two key documents are the National Adaptation Plan of Action (NAPA) and the BCCSAP (2009). The Government formulated the NAPA in 2005 to guide, coordinate and manage all the national and international responses and processes to integrate climate risk into development plans and processes. It has prioritised 15 specific projects. NAPA is a well-articulated document providing a framework of various programmes and their linkage with climate change issues. It articulates the links between climate change resilience and vulnerability to natural disasters. The NAPA provides a vivid description of the main effects of climate change in Bangladesh and offers a number of adaptation strategies to cater the challenges posed by climate change.<sup>43</sup> It is well articulated in NAPA that the ‘high depth of standing water is preventing crop cultivation during Kharif<sup>44</sup> season, affecting jobs and livelihoods and leaving limited food sources, leading to migration to cities for jobs and livelihoods’.<sup>45</sup> Moreover, it identified climate change induced migration as ‘a negative “livelihood impact” of environmental threats (specifically saline intrusion and floods, which are linked to a potential increase in urban migration)’ and does not recognise the adaptation potential of migration.<sup>46</sup> However, the NAPA lacks a long-term planning vision, and suffers from a lack of wide acceptability, because it was drawn up with little participation or endorsement by affected communities.<sup>47</sup>

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<sup>40</sup> Ibid.

<sup>41</sup> Akter, above n 10, 11.

<sup>42</sup> Ibid.

<sup>43</sup> Walsham, above 2, 33.

<sup>44</sup> The wet season (typically March to October) characterised by monsoon rain and high temperatures (NAPA, 2005).

<sup>45</sup> Ministry of Environment and Forest Government of the People’s Republic of Bangladesh, *National Adaptation Programme of Action (NAPA) Final Report* (2005) 35, cited in Susan F Martin, ‘Climate Change, Migration and Adaptation’ (Background Paper, German Marshall Fund of the United States, June 2010) 2 <[http://www.gmfus.org/galleries/defaultfile/SMartinAdaptation\\_V3.pdf](http://www.gmfus.org/galleries/defaultfile/SMartinAdaptation_V3.pdf)>.

<sup>46</sup> Walsham, above n 2, 33.

<sup>47</sup> In the NAPA process, prominence should be given to community-level input as an important source of information, recognising that grassroots communities are the main stakeholders. See AM Kamaluddin et al.,

In 2009, the BCCSAP has been developed for the long-term planning of both adaptation and mitigation and management and knowledge sharing on climate change. The BCCSAP is considered to be a very important document for the country's future and covers a comprehensive range of factors, such as mitigation, disaster management and capacity building. The BCCSAP identified six priority areas: social protection and health; comprehensive disaster management; infrastructure; research and knowledge management; mitigation and low carbon development and capacity building and institutional strengthening.<sup>48</sup> Significantly, population displacement, an important omission in the 2005 plan, is acknowledged in this latest document.<sup>49</sup> The BCCSAP cites the potential effects of climate change on human migration in many places. Importantly, the BCCSAP does not only identify threats, but also supported both the autonomous and planned adaptation strategies of climate change induced migrants.<sup>50</sup> It calls for more monitoring of internal and external migration of adversely affected population and, crucially, 'support to them through capacity building for their rehabilitation in new environment'.<sup>51</sup> It emphasises the need to 'strengthen coastal polders to prevent coastal outmigration and the potential for river bank erosion and saline intrusion to displace large numbers of people'.<sup>52</sup> A specific long-term action plan is set out to address and cross-border migration with three key elements:

A1. Development of a monitoring mechanism of internal and external migration

A2. Development of a protocol to provide adequate support for their re-settlement and rehabilitation

A3. Building of capacity through education and training to facilitate their re-settlement in new environment.<sup>53</sup>

However, the main criticism posed against this document is that it has the same defect as the NAPA—non-involvement of communities. This document embodies a roadmap for implementation of climate change related action plans, which have considerable

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'Climate Resilient Development: Country Framework to Mainstream Climate Risk Management and Adaptation' (Climate Change Cell, 2006), cited in Campaign for Sustainable Rural Livelihoods (CSRL), 'Climate Change Adaptation Financing: Managing a Transparent and Pro-poor Fund in Bangladesh' (Briefing Note, CSRL, 2008) 4.

<sup>48</sup> *Bangladesh Climate Change Strategy and Action Plan 2009 (BCCSAP 2009)*, Ministry of Environment and Forests, Government of the People's Republic of Bangladesh (2009) 2

< [http://www.moef.gov.bd/climate\\_change\\_strategy2009.pdf](http://www.moef.gov.bd/climate_change_strategy2009.pdf)>.

<sup>49</sup> Ibid 59.

<sup>50</sup> Ibid 59.

<sup>51</sup> Ibid.

<sup>52</sup> Walsham, above n 2, 33.

<sup>53</sup> BCCSAP, above n 48, 59.

implications for government policies and programmes. However, it will require active involvement of all stakeholders—local, as well as national government, communities themselves, civil society organisations and NGOs, the private sector and the country’s development partners for effective implementation of action plans.<sup>54</sup>

It is evident that while objectives are set out to address people endangered by climate hazards in the laws and policies, migration and displacement issues are not featured prominently in the NAPA. It is necessary to review the NAPA and BCCSAP to determine the extent to which and how displacement issues and protection of human rights of these people are addressed. A national adaptation plan is assumed a vital ingredient in an overall national planning process that respects and protects the human rights of climate change displaced persons.

### ***6.3.2 Mainstreaming Climate Change Induced Displacement in Development Agenda and Poverty Reduction Strategies***

There is always an obvious link between the number of environmentally displaced persons and the level of poverty in a particular area.<sup>55</sup> However, susceptibility to climate change mostly depends on the extent to which people are dependent on natural resources and ecosystems. The more people are dependent on natural resources, susceptibility to climate change tends to rely less on economic or social resources. Consequently, they are at risk in the environmental degradations due to climate change and the declining natural resources. Moreover, the different degrees of force and the complex set of influencing factors make the study of environmental migration difficult.<sup>56</sup>

In Bangladesh, two main reasons for the human movement can be identified; that is, poverty and environment factors. In most cases, these two reasons play a concomitant role in people’s migration decisions. For example, human movement from rural areas apparently for poverty and unemployment has roots in environmental factors. Sometimes, environmental degradation and natural events made people homeless and jobless. Conversely, the apparent environmental migration has a structural root connection in poverty and unemployment. The poor people have less adaptive capacity and resilience to

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<sup>54</sup> Walsham, above n 2, 34.

<sup>55</sup> Hermen J Ketel, ‘Global Warming and Human Migration’ in Antoaneta Yotova, *Climate Change, Human Systems and Policy* (Eolss Publishers, 2004) 2 <<http://www.eolss.net>>.

<sup>56</sup> Tina Acketoft, ‘Environmentally Induced Migration and Displacement: A 21<sup>st</sup> Century Challenge’ (Report of Committee on Migration, Refugees and Population, Parliamentary Assemblée, Council of Europe, 2008) 2.

environmental events because those who have resources, including money and knowledge, can build resilience to environmental effects.

Apart from the effects of climate change on the vulnerability of poor countries:

[a] combination of poor socio-economic conditions (including high debt levels, failing economies, a malfunctioning of the rule of law, poor governance, corruption, and transnational organised crime); natural resource and space limitations (including population growth, ecosystem degradation, and competition for limited resources); and the impact of natural hazards such as tsunamis and storms, (aggravate the situation) and make it difficult for states to adapt to climate change.<sup>57</sup>

For example, Bangladesh is more vulnerable and less resilient to the effects of climate change because of its population density, small size, fragile economy, developmental inequality and low adaptive capacity. The costs involved for adaptation programmes, including building infrastructure and settlement protection, are beyond its financial capacity.

Moreover, the ability of individuals or different groups in society to respond to extreme climatic events is by no means uniform for any of these hazardous events.<sup>58</sup> In the context of Bangladesh, for example, while the devastating cyclone destroy all shattering kuchcha<sup>59</sup> houses of the poor people living in sea-side villages, low-lying char lands and unprotected islands, the concrete homes of the wealthy people are least affected.<sup>60</sup> Thus, the varying influence of human behaviour, difference in pattern of responses to environmental effects, and level of poverty and governance in a particular area over environmental migration thwarts the attempts of its conceptualisation.

Bangladesh, a low-income country with 156 million inhabitants and a per capita Gross National Income (GNI) of US\$450, has one of the highest population densities in the world.<sup>61</sup> While poverty and overpopulation exacerbate the country's major environmental problems such as deforestation, deteriorating water quality, land degradation, salinity, unplanned urbanisation, discharge of untreated sewage and industrial wastes, environmental degradations also cause the prostration of capital resources, sustainable

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<sup>57</sup> Jane McAdam and Ben Saul, 'An Insecure Climate for Human Security? Climate-Induced Displacement and International Law' (Sydney Centre Working Paper No. 4, Sydney Centre for International Law, 2008) 6. See also Jon Connell, 'Environmental Change, Economic Development, and Emigration in Tuvalu' (1999) 22 *Pacific Studies* 1.

<sup>58</sup> NJ Ericksen, QK Ahmad and AR Chowdhury, 'Socio-Economic Implications of Climate Change for Bangladesh' (Briefing Document No. 4, Bangladesh Unnayan Parishad, 1997) 5.

<sup>59</sup> Houses made of bamboos, and wood.

<sup>60</sup> Ericksen, Ahmad and Chowdhury, above n 59, 5.

<sup>61</sup> Gonzalo Griebenow and Sunanda Kishore, 'Mainstreaming Environment and Climate Change in the Implementation of Poverty Reduction Strategies' (The World Bank, 2009) 17.

livelihood and displacement.<sup>62</sup> Climate change poses a significant threat to the fight against poverty in Bangladesh.<sup>63</sup> A Joint Loss and Damage Assessment Team of the Government and international experts estimated that the total damage and losses caused by cyclone Sidr was Tk.115.6 billion (US\$1.7 billion).<sup>64</sup> Monies that might have been used for social investment and food security had to be to replace and renovate bridges and cyclone centres that would not be destroyed by next year's floods or cyclones.

Since its independence in 1971, the economy of Bangladesh has relied largely on agriculture, as the most part of the country lies in the fertile floodplain of the Ganges, Brahmaputra, and Meghna. However, climate change is causing periodic flooding and draught events to increase in frequency, posing new environmental threats.<sup>65</sup> The effects of increased flooding resulting from climate change will be the greatest problem faced by Bangladesh.<sup>66</sup>

The prevailing high incidence of poverty and population density makes Bangladesh more vulnerable to climate change.<sup>67</sup> Climate change and variability have already affected the life and livelihoods of the people in the coastal areas and in the arid and semi-arid region of Bangladesh.<sup>68</sup> A significant proportion of the population could be displaced in Bangladesh through climate change induced flooding, tropical cyclones and storm surges.<sup>69</sup> More significantly, climate change and consequent displacement can have negative effects on the success of poverty reduction so far achieved, and increase poverty.<sup>70</sup>

Therefore, development in the climate-affected areas that may produce future migration would provide a sustainable solution to migration. However, current policy debates focus on humanitarian assistance and legal protection of displaced people, ignoring the root causes of problem. The ADB, in its recently published report, urges strengthening of the resilience of communities and frames the climate change induced human displacement

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<sup>62</sup> See Ibid.

<sup>63</sup> Government of the People's Republic of Bangladesh, 'Moving Ahead: National Strategy for Accelerated Poverty Reduction II (FY 2009–11)' (Government of the People's Republic of Bangladesh, 2008) 5.

<sup>64</sup> Ibid 4.

<sup>65</sup> Griebenow and Kishore, above n 61, 18.

<sup>66</sup> Ibid.

<sup>67</sup> Government of the People's Republic of Bangladesh, 'National Strategy for Accelerated Poverty Reduction II', above n 63, 5.

<sup>68</sup> Ibid.

<sup>69</sup> Ibid.

<sup>70</sup> Asian Development Bank (ADB), 'Addressing Climate Change and Migration in Asia and the Pacific (Final Report)' (ADB, 2012) 44.

issue in a development agenda.<sup>71</sup> It also suggests incorporating the potential effects of climate change and environmental degradation in poverty reduction strategies, since successful implementation of poverty reduction programmes can potentially mitigate climate change effects and migration.<sup>72</sup>

Bangladesh's overall development strategies are set out in the revised second National Strategy for Accelerated Poverty Reduction Financial Years 2009 to 2011 (NSAPR-II), as well as in the five-year development plan (2011 to 2016) and Vision 2021. These plans and strategies place poverty reduction at the centre of national policy—including the achievement of the MDGs. NSAPR-II emphasises mainstreaming and strengthening climate change adaptation across various sectors—improved crop, watershed and coastal zone management, including afforestation, cyclone shelters, embankments, salinity control measures, public awareness, climate research and data collection.<sup>73</sup> More significantly, adequate attention is given to migration issues; it includes a specific section on 'foreign employment', which sets a number of long-term strategies for expanding access to overseas labour markets.<sup>74</sup> This strategy paper identified the challenges of climate change and took into account the environmental concerns in setting strategic goals on international migration, which include undertaking a special initiative for exporting labourers from *monga* and other ecologically vulnerable areas.<sup>75</sup>

Bangladesh has also initiated a long-term development plan namely Bangladesh Perspective Plan (2012 to 2021), which is also termed Vision 2021, that becomes the stepping stone and guideline for all sectorial and yearly development plans and public investment. Vision 2021 clearly states the need for integration of DRR and climate change adaptation in all development plans. As a part of Vision 2021, the Sixth Five Year Plan (SFYP) developed, which made a specific recommendation to consider disaster risks in sectorial investments and plans.

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<sup>71</sup> Ibid, 41.

<sup>72</sup> Ibid 45.

<sup>73</sup> Government of the People's Republic of Bangladesh, 'National Strategy for Accelerated Poverty Reduction II', above n 63, 5.

<sup>74</sup> Walsham, above n 2, 33.

<sup>75</sup> Government of the People's Republic of Bangladesh, 'National Strategy for Accelerated Poverty Reduction II', above n 63, 5.

### **6.3.3 Mainstreaming Climate Change Induced Displacement in Disaster Management Policies**

The states' obligation to provide support to disaster victims, including displaced persons, is affirmed in the declaration adopted by delegates to the World Conference on Disaster Reduction in 2005: 'We affirm that states have the primary responsibility to protect the people and property on their territory from hazards, and thus, it is vital to give high priority to disaster risk reduction in national policy, consistent with their capacities and the resources available to them'.<sup>76</sup> Thus, states have the primary responsibility to protect the people and property in their territory from natural disasters through measures including the integration of risk reduction into development policies and the adoption or modification of legislation.<sup>77</sup> Effective DRR mechanisms can be catalysed as a means of combating the effects of natural disasters on the right to freedom of movement in particular and other human rights generally.<sup>78</sup> In accordance with the Hyogo Declaration and Framework for Action of the 2005 World Conference on Disaster Reduction, as well as environmental conventions, such measures should be taken on the basis of dedicated national legislation and plans that are based on the informed participation of affected communities.<sup>79</sup>

While some states have adopted constitutional provisions that expressly provide for an obligation on governments to reduce the risk of disasters,<sup>80</sup> the Constitution of Bangladesh does not impose any such obligation to provide support to displaced persons during natural disasters. However, Part III of the Constitution contains a list of fundamental rights that provides guarantee of protection of certain human rights to all people in general.

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<sup>76</sup> *Hyogo Declaration*, World Conference on Disaster Reduction (2005) para. 4

<<http://www.unisdr.org/wcdr/intergover/official-doc/L-docs/Hyogo-declaration-english.pdf>>.

<sup>77</sup> *Hyogo Declaration*, World Conference on Disaster Reduction (2005) para. 4; Hyogo Framework for Action 2005–2015 para. 16.

<sup>78</sup> J Oloka-Onyango, 'Movement-Related Rights in the Context of Internal Displacement' in Walter Kälin et al. (eds), *Incorporating the Guiding Principles on Internal Displacement into Domestic Law: Issues and Challenges* (Brookings and ASIL, 2010) 46.

<sup>79</sup> *Hyogo Declaration*, World Conference on Disaster Reduction (2005), paras 2–4; Hyogo Framework for Action 2005–2015. See also *United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification (UNCCD)* 33 ILM 1328 (1994) art 5; *Aarhus Convention on Access to Information, Public Participation in Decision-Making, and Access to Justice in Environmental Matters (Aarhus Convention)* 38 ILM 517 (1999).

<sup>80</sup> For example, Ethiopia's *Constitution* provides that the 'Government shall take measures to avert any natural and man-made disasters', see *Constitution of Ethiopia* art 89(3). Likewise, Uganda's *Constitution* commits the state to 'institute an effective machinery for dealing with any hazard or disaster arising out of natural calamities or any situation resulting in general displacement of people or serious disruption of their normal life', see *Constitution of Uganda* art 23. Macedonia's *Constitution* includes among its 'fundamental values of the *Constitutional* order' 'proper urban and rural planning to promote a congenial human environment, as well as ecological protection and development', see *Constitution of the Former Yugoslav Republic of Macedonia* art 8.

The most relevant policy document for disaster management in Bangladesh is the National Plan for Disaster Management (2010–2015). This plan reflects the basic principles of the SAARC Framework on Disaster Management. This plan makes reference to displacement and specific vulnerabilities related to migration, such as problems facing families left behind when people move to other places following an event. However, it does not contain any detailed strategies or plan of action for longer-term migration likely to arise due to environmental degradations, particularly from slow-onset disasters.<sup>81</sup>

Bangladesh also has ‘standing orders’ on disaster management,<sup>82</sup> but, as McAdam and Saul termed, ‘they are discretionary, malleable and unenforceable’.<sup>83</sup> The standing orders also lack specificity and human rights protections the climate change induced displacement requires.<sup>84</sup> For example, while the authority have rehabilitated certain sections of displaced persons due to natural disasters through allocation of *khas* land, *Adarshya Gram* and *Abashan* projects, these measures provide little detail on the rights that are guaranteed, or the timeframes or processes by which protection or assistance will occur.

Bangladesh has a Participatory Disaster Management Programme (PDMP) with a focus on disaster management and prevention, and a Comprehensive Disaster Management Plan (CDMP) with a greater emphasis on disaster preparedness and risk reduction. CDMP has a number of disaster management components, among them to establish an integrated approach to climate change and disaster management, expanding risk reduction approaches across a broader range of hazards, with specific reference to climate change.<sup>85</sup> However, linkages between relief assistance, DRR, rehabilitation and development are poorly addressed in these policies and programmes. The main reason is the low priority still given to long-term considerations.

Although Bangladesh is ranked as number one in the world in terms of stress from cyclone, and number six in terms of stress from flood, there is no comprehensive disaster

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<sup>81</sup> Walsham, above n 2, 33.

<sup>82</sup> Bangladesh Ministry of Disaster Management and Relief (Disaster Management Bureau), ‘*Standing Orders on Disaster*’ (1999).

<sup>83</sup> McAdam and Saul, ‘Displacement with Dignity’, above n 5, 272.

<sup>84</sup> *Ibid.*

<sup>85</sup> There are three main areas of focus:

- i. capacity building for the Ministry of Environment and the Department of Environment to coordinate and mainstream climate change into their existing activities;
- ii. strengthening existing knowledge and information accessibility on impact prediction and adaptation;
- iii. awareness raising, advocacy and coordination to promote climate change adaptation into development activities.

management legislation.<sup>86</sup> The proposed disaster management act (DMA) is being drafted to enforce disaster management rules, regulations and mechanisms and standing orders, which will enable Bangladesh to better address these issues. Government should soon pass this draft as legislation. Rights-sensitive response frameworks need to be developed, providing a detailed guideline to deal holistically with DRR, relief and recovery. For example, Indonesia's 2005 Law on Disaster Management provides that 'the Republic of Indonesia has the responsibility of protecting all people of Indonesia and their entire native land in order to protect life and livelihoods, including from disaster'.<sup>87</sup>

Therefore, the Government needs to integrate the displacement issue in national legislation and must ensure that programmes for displaced persons respect human rights and do not increase risk and vulnerability to hazards.<sup>88</sup> The Hyogo Declaration adopted at the World Conference on Disaster Reduction held in Kobe, Japan, in 2005 should be adapted into local legislation.<sup>89</sup> A pro-people DMA is crucial for Bangladesh to uphold the rights of the disaster affected people. However, taking into account the potentially large number of displacements likely to arise out of natural disasters, the new act should incorporate human migration concerns.<sup>90</sup> Simultaneously, a proactive policy on migration and disasters is needed.

#### ***6.3.4 Climate Change Induced Migration, DRR and Poverty Reduction Strategies: An Integrated Approach***

Poverty-disaster-migration interface in Bangladesh is quite perplexing. Disasters have had an adverse long-term effect on the economic and social activities of the poor. Additionally, the poor are more vulnerable to any kind of disaster due to: a) depletion of assets, b) income erosion due to loss of employment, c) increased indebtedness and d) out-migration. Moreover, the cost to cope with disasters is disproportionately higher for the poor. Thus, the most vulnerable people who lead subsistence livelihoods in the highly risk-prone areas are left unprotected without any government support. Therefore, it seems more practicable to build the capacity of people strengthening adaptation programmes so that people can stay in their original place coping with adverse environmental situation. There may be

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<sup>86</sup> McAdam and Saul, 'Displacement with Dignity', above n 5, 272.

<sup>87</sup> Law Concerning Disaster Management (2005), prelim art 6 (Indonesia) (unofficial translation).

<sup>88</sup> Michelle Leighton, 'Climate Change and Migration: Key Issues for Legal Protection of Migrants and Displaced Persons' (Background Paper, German Marshall Fund of the United States, June 2010) 2 <[http://www.gmfus.org/galleries/default-file/Leighton\\_MAH\\_EditsV2.pdf](http://www.gmfus.org/galleries/default-file/Leighton_MAH_EditsV2.pdf)>.

<sup>89</sup> Oloka-Onyango, above n 78, 46.

<sup>90</sup> Walsham, above n 2, 46.

some extreme situations when it is impossible for them to continue a livelihood there. In such a situation, either people need to be relocated to new areas or the adaptation programme itself should support migration as a part of its coping strategy.

The policy responses need to take into consideration inter-linkages between the poverty, social and economic vulnerability of people to natural disasters and migration. The DRR should not only be responsive to sudden natural disasters. Rather, long-term DRR strategies and poverty reduction programmes need to be combined into adaptation programmes to ensure improved capacity and increased resilience in facing natural disasters. Thus, the DRR strategies with a strong emphasis on SD could reduce forced migration and help people to stay in their original place.<sup>91</sup> The remittances sent by migrants to their families may play a critical role in the capacity building of the community.

Both adaptation and DRR programmes have serious implications for migration. Displacement can be reduced by successful implementation of both types of measures. While adaptation refers to ‘initiatives and measures to reduce the vulnerability of natural and human systems against actual or expected climate change effects’,<sup>92</sup> DRR involves ‘systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events’.<sup>93</sup> Both adaptation and DRR can be used as a tool to build the capacity of the people so that people do not need to rely on migration for alternative livelihood, or it can facilitate migration as an adaptation or risk reduction strategy that allows a community or household to attain livelihood security to cope with changes in environment.<sup>94</sup> A study on the 1998 flood found that well-coordinated relief efforts with sufficient compensation and assistance in post-flood period have a direct causal link with a reduction in migration decisions.<sup>95</sup>

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<sup>91</sup> IOM, ‘Climate Change, Environmental Degradation and Migration’ (Background Paper, IOM, 2011) 6.

<sup>92</sup> IPCC, *IPCC Fourth Assessment: Working Group II Report, Effects, Adaptation and Vulnerability* (2007) 869, <<http://www.ipcc.ch/pdf/assessment-report/ar4/wg2/ar4-wg2-app.pdf>>.

<sup>93</sup> UN International Strategy for Disaster Reduction (UNISDR), ‘Terminology on Disaster Risk Reduction’ (2009), <[www.unisdr.org/eng/terminology/terminology-2009-eng.html](http://www.unisdr.org/eng/terminology/terminology-2009-eng.html)>.

<sup>94</sup> Susan Martin, ‘Climate Change, Migration, and Governance’ (2010) 16 *Global Governance* 397, 399.

<sup>95</sup> Bimal Kanti Paul, ‘Relief Assistance to 1998 Flood Victims: A Comparison of the Performance of the Government and NGOs’ (2003), cited in Walsham, above n 2, 11.

Therefore, this chapter suggests a convergence between adaptation and DRR. DRR needs to be mainstreamed into adaptation policies in order to prevent displacement. DRR and adaptation to climate change strategies are both aimed at enhancing sustainability, resilient societies and human security.

#### **6.4 Reform of Land-use Law and Policy**

While a large portion of land is at risk of submersion in Bangladesh due to sea-level rise, scarcity of land and an overwhelming population has been adding to the risks. The resultant shrinking of arable land (losing 1 per cent of agricultural land every year), is threatening food security and triggering influx of urban migrants. Bangladesh will be left with only 0.07 acres (283 sqm or 3049 sqft) of agricultural land per person by the year 2051. This is based on the assumption that urban areas remain unchanged between now and 2051, which from all probability scenario might not be the case.

The main concerns for resettlement of climate migrants will be to provide a settlement location and appropriate infrastructure. The authorities should allocate land for their new settlement. Larger tracts of land will be needed to enable the relocated communities to build houses, have access to subsistence and agricultural activities. The Government policy of settling public *khas* lands on landless people through leases is a process that can be related to relocation. In a densely populated country like Bangladesh, it is a great challenge to secure such *khas* lands for resettlement of large number of people likely to be displaced.<sup>96</sup>

However, McAdam and Saul argue that the scarcity of land is not the main reason for lack of available land for resettlement; rather, illegal occupation and mismanagement of public lands leave the displaced people landless.<sup>97</sup> McAdam and Saul cited the fact that ‘up to 88 per cent of such *khas* land, and 95 per cent of *khas* water bodies, are under illegal possession of the powerful elites and other vested interest groups’.<sup>98</sup> The present scenario is that the people who have might and political influences occupy the reclaimed land with the assistance of forest and local officials. Notwithstanding, it can be argued that the available public land remains insufficient for the resettlement of a large number of people.

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<sup>96</sup> It is predicted that almost 30 million people will be displaced by 2050.

<sup>97</sup> McAdam and Saul, ‘Displacement with Dignity’, above n 5, 275.

<sup>98</sup> Ibid.

All these problems add a significant dimension to the land usage issues in Bangladesh. Nevertheless, there should be an effective land management system. The khas lands, which are in illegal possession, should be recovered and distributed to climate migrants on fair process. The land laws should be updated, securing the provisions for distribution of land that is reclaimed from the sea and river. The reclaimed land should be distributed to climate victims.

Given the limited land area and higher density of population in Bangladesh, the authorities need to ensure equitable distribution of land among the landless people, which necessitates a revision of land-use policy. Section 54 of the Land Management Manual (1990) establishes the priority in the distribution of Government *khas* lands.<sup>99</sup> It gives the highest priority to the families of farmers whose land has been washed away or eroded by rivers. According to Section 56 of the manual, the first in the category of distribution of Government *khas* lands are those agricultural families whose land had been under cultivation. Thus, those in occupation of cultivated land rendered uninhabitable as a result of rising sea levels would fall into such a category and would get first preference to acquire Government *khas* lands.<sup>100</sup> Again, the objectives of the 2001 land-use policy ensure optimal utilisation of char land reclaimed from the sea for landless people.<sup>101</sup> However, the landless poor people who are likely to lose their shelter and livelihood by climatic effects are not adequately addressed in either the policy or manual. While section 10 discusses reclamation of land from sea, landless climate change induced displaced people may be resettled there in a managed and planned way with safety and dignity. Land-use planning and control for rational and optimisation of land use is crucial for effective SD, with due consideration of disaster management and climate change adaptation.

### ***6.5 Funding for Managing Climate Change Induced Displacement***

Bangladesh requires a substantial amount of climate change financing, especially adaptation financing, for implementation of its climate change related programmes, policies and plan of action.<sup>102</sup> Given the range of effects of climate change and extensive

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<sup>99</sup> D Freestone, M Farooque and SR Jahan, 'Legal Implications of Global Climate Change for Bangladesh' (Briefing Document No. 5, Bangladesh Unnayan Parishad, CEARS, CRU, University of East Anglia, 1993) 6.

<sup>100</sup> Ibid.

<sup>101</sup> Ibid s 2(c).

<sup>102</sup> Ziaul Hoque Mukta and Khalid Hossain, 'Climate Change Adaptation Financing: Managing a Transparent and Pro-poor Fund in Bangladesh' (Briefing Note, Campaign for Sustainable Rural Livelihoods [CSRL], 2008) 3.

costs associated with addressing displacement related aspects, ranging from the allocation of land and housing for resettlement to compensation and skills training for those relocated, Bangladesh needs a sizeable amount of money, which is far beyond the capacity of the Government to manage from its own resources.<sup>103</sup> The allocation of a mere 0.03 per cent in the national budget in 2008 to 2009 to address climate change effects reflects the huge resource constraints of the Government.<sup>104</sup> If Bangladesh allocates fewer resources to important sectors by diverting more resources to climate change, there is a strong possibility that the country will fail to achieve the MDGs by 2015. Therefore, there is even more of a moral obligation for development partners of Bangladesh to come forward with immediate and urgent financial support to address climate change effects.<sup>105</sup> The contribution of development partners to assist Bangladesh in achieving the MDGs and address climate change must be additional to their current development assistance commitments.<sup>106</sup>

In the context of climate change induced vulnerabilities, Bangladesh is already spending a significant proportion of its development budgets on disaster relief and programmes that address climate-related risks to welfare and development. Given the uncertainty and inadequacy of adaptation finance from the multilateral mechanisms, as well as the complicity of accessing funds from the bilateral sources, the Government of Bangladesh has taken an exemplary initiative to finance climate change adaptation measures from its own revenue income. For funding of climate-related projects and programmes stated in NAPA and BCCSAP,<sup>107</sup> the Government established a ‘Climate Change Trust Fund’ under the Climate Change Trust Act, 2010 (Law No VII of 2010) and a ‘Bangladesh Climate Change Resilience Fund’ with \$US125 million grant funds in 2010. In the 2010 to 2011 financial year, the government allocated BDT7 billion (around \$US100 million). The main aims and objectives of both the funds are to initiate measures for building resilience and adaptation of the climate change affected people and implement DRR measures and the projects on climate change adaptation and mitigation as identified in the BCCSAP.<sup>108</sup>

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<sup>103</sup> Displacement Solutions, ‘Meeting Report on Climate Change, Human Rights and Forced Human Displacement’ (Displacement Solutions, 2008) 7; CSRL, ‘Climate Change Adaptation Financing: Managing a Transparent and Pro-poor Fund in Bangladesh’ (Briefing Note, CSRL, 2008) 3.

<sup>104</sup> Mukta and Hossain, above n 102, 3.

<sup>105</sup> Ibid 4.

<sup>106</sup> Ibid.

<sup>107</sup> *Climate Change Trust Act 2010* (Law No. VII of 2010) s 7.

<sup>108</sup> *Climate Change Trust Act 2010* (Law No. VII of 2010) s 5–6.

Although the Government of Bangladesh is always flagging in international forums, the emerging threat of a vast number of ‘climate refugees’ in near future, this issue (of climate change induced migration management) did not take place with the aims and objective of a climate change trust fund, which is the main body for disbursement of funding received from national and international sources for climate change.<sup>109</sup> So far the Trust has approved 62 projects under various thematic areas, including food security, social protection and health, comprehensive disaster management, infrastructure development, research and knowledge management, mitigation and low carbon development for establishment of solar panel, river dredging and the removal of deposited polythine and other wastes from *Haikker Khal*. Though in new migration governance mechanisms migration is considered an adaptation strategy, there is no specific programme that directly relates to climate change induced migration management. Integrating migration into the process, resources and funds could be allocated more efficiently to help more people in more sustainable ways.<sup>110</sup>

However, for the successful implementation of laws and policies, huge funding is needed from government and international bodies. Bilateral funding arrangements need to be made with developed and donor countries. Alternative funding resources also need to be sought, without relying exclusively on climate change related mechanisms. However, the Government should ensure transparency and accountability in the use of these funds. Human rights groups in Bangladesh have urgently stressed the transparent and effective use of climate trust funds for ensuring availability of funds from the donors in the future and to avoid accusations of suspected misuse. They called upon the Government to form a separate autonomous board under the Ministry of Environment and Forests to manage the Bangladesh Climate Change Trust Fund. However, Transparency International Bangladesh (TIB) confirmed that they will monitor the disbursement of fund.

### ***6.6 Strengthening the Knowledge Base***

While the effects of climate change will continue to threaten people’s lives and property significantly in the country, and the consequent implications for migration within and across borders is likely to be enormous,<sup>111</sup> the interaction between climate change and

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<sup>109</sup> *Climate Change Trust Act 2010* (Law No. VII of 2010) s 15.

<sup>110</sup> Francois Gemenne, Diana Reckien and Jonathan Hill, ‘Policy Options to Support Climate-Induced Migration in Asia and the Pacific’ (Paper presented at the International Conference on Rethinking Migration: Climate, Resource Conflicts and Migration in Europe, 13–14 October, 2011) 11 < <http://www.network-migration.org/rethinking-migration-2011/2/papers/Gemenne.pdf>>.

<sup>111</sup> See Chapter 2 for a discussion of predicted climate change induced human displacement.

migration is poorly understood in Bangladesh. While scientists are increasingly confident about the negative effects of environmental change, there is still a lack of capacity to accurately predict the results for human populations likely to be displaced due to the effects of climate change. While data on climate change is available, there is a general absence of migration data.<sup>112</sup> Nevertheless, there is a need to assess social dimensions of environmental change: What happens if people are resettling? What are the effects on displacement? Sometimes the vulnerable populations remain outside national protection mechanisms simply because they are not accounted for within national databases.<sup>113</sup> For example, people living in *char* areas in Bangladesh are not included in national censuses.<sup>114</sup>

Environmental migration is a complex phenomenon.<sup>115</sup> Migration decisions are influenced by social, economic and political factors, as well as by individual characteristics such as age, gender, education, skills, risk-taking capacity and capacity to face new situations. The extents to which environmental factors determine migration depend on the underlying adaptive capacities of individuals, communities and countries. A need exists to better understand how people cope with the ‘shocks and stresses’ of climate change and climate variability and, in particular, the extent to which migration forms part of the adaptation strategy.<sup>116</sup> In this regard, it is important to note that there is a lack of contemporary empirical studies on how perceptions of climate change have influenced migration decisions made by individuals, households and communities. However, it is clear that not everyone can use migration as an adaptation strategy; it depends on resources, information and other social and personal factors. Often, it is precisely the most vulnerable and most severely affected who are not in a position to migrate.

There is a lack of coordination among organisations to effectively address the problem of the climate change induced displacement. The total number of displaced population by multiple natural disasters is yet to emerge. In this regard, a study conducted by researcher

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<sup>112</sup> (Contribution of Atiq Rahman and Tasneem Siddiqui) Refugee and Migratory Movement Research Unit (RMMRU), ‘Bangladesh, Low Elevation Coastal Zones and Islands’ (Migration and Global Environmental Change, Foresight, 2011) 21.

<sup>113</sup> ADB, ‘Addressing Climate Change’, above n 70, 53.

<sup>114</sup> Ibid.

<sup>115</sup> See Chapter 2 for a detailed discuss on the complex relationship between climate change, environmental degradation and migration.

<sup>116</sup> Dominic Kniveton et al., ‘Climate Change and Migration: Improving Methodologies to Estimate Flows’ (International Organization for Migration Research Series, Geneva, Switzerland, 2008) 37.

James Pender on Bangladesh estimated 51 million to 97 million people by 2080;<sup>117</sup> IPCC predicts 15 to 20 million people by 2050. However, most of these diverse forecasts of potential population displacement are made by international experts without any reliable methodology. There is no national estimation and prediction on environmental displacement, although Prime Minister Sheikh Hasina warned the world of a possible outbreak of 30 million ‘climate refugees’ in Bangladesh.<sup>118</sup> Consequently, in absence of exact data, the policy responses and normative frameworks that address environmental migration remain scattered, highly inadequate and unfeasible. A key reason for this vacuum is the lack of reliable quality data on the nature and extent of population movements related to environmental changes.<sup>119</sup> In particular, little is known about the factors that induce some of those people affected by climate change to migrate while others stay behind.

The effects of climate change on migration are also not fully understood, partly due to uncertainty surrounding the onset of climate change effects.<sup>120</sup> Second, substantial gaps exist in the research base on climate change induced migration. With regard to data, two main gaps exist. First, there is a serious lack of data and research on migration in general and climate change induced migration specifically. The result is a deficit of historical knowledge of environmental migration and future projections of migration related to environmental change, and a lack of clarity on how to prepare for environmental change induced migration and displacement. As a result, the lack of information and credible data presents a considerable challenge to national planners and policy-makers and, until recently, the issue had received much less attention from both scholars and policy-makers.<sup>121</sup>

However, it appears that most of the policy responses research and literature are on a global context. There is some research on Bangladesh, most conducted by experts from

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<sup>117</sup> James S Pender, ‘What is Climate Change? And How it will Effect Bangladesh’ (Briefing Paper (Final Draft), Church of Bangladesh Social Development Programme, 2008) 38.

<sup>118</sup> See, for example, ‘PM Warns of Climate Refugee Crisis’, *The Daily Star*, 22 September 2010, <[http://www.thedailystar.net/newDesign/latest\\_news.php?nid=26005](http://www.thedailystar.net/newDesign/latest_news.php?nid=26005)>, cited in Jane McAdam, above n 118, 2, 18.

<sup>119</sup> MZ Hossain, ‘Rural-Urban Migration in Bangladesh: A Micro-Level Study’ 3  
< [http://www.iussp.org/Brazil2001/s20/S28\\_P02\\_Hossain.pdf](http://www.iussp.org/Brazil2001/s20/S28_P02_Hossain.pdf)>.

<sup>120</sup> Jon Sward, ‘Migration and Climate Change: How will Climate Shifts Affect Migration Trends?’ (Briefing No. 12, Development Research Centre on Migration, Globalisation and Poverty, 2008) 3.

<sup>121</sup> Walsham, above n 2, 6; ADB, ‘Climate Change and Migration in Asia and the Pacific’ (ADB, 2011) 3.

industrialised countries, ‘sometimes without field studies’.<sup>122</sup> These reports and policy papers may not be suitable in the socio-economic and environmental context of Bangladesh and may prove contradictory. While some foreign experts, including Norman Myers, predict mass cross-border displacement due to the direct effects of climate change,<sup>123</sup> McAdam and Saul termed those predictions as ‘alarmist’, and their field research does not find any substantial cross-border migration from Bangladesh as a result of climatic disasters. They find it ‘difficult to isolate “climate change” as a cause of movement’.<sup>124</sup> Thus, there must be local and national empirical research based on appropriate methodology regarding causes, pattern and number of climate change induced displacements. As the ADB report explained:

Local expertise needs to be better mobilized and research capacities need to be improved. There is a great need to train local researchers about this issue so that it can be studied with local expertise. Setting up local observatories, for example, could provide monitoring of climate change induced migration in the long run.<sup>125</sup>

It would be useful to policy-makers to have spatially and temporally specific data about the location, extent, timing and nature of climate change and its likely effects.<sup>126</sup> Similarly, it would be important to have sex-disaggregated data to inform gender-responsive adaptation and migration policies.<sup>127</sup> It would also be helpful to have accurate, detailed information on patterns of internal and international migration. Investment in research, analysis and modelling at the national and sub-national levels can help generate better quality data.<sup>128</sup> Such an authoritative estimate will help the Government in making a viable plan for the relocation of climate change affected persons.<sup>129</sup>

The policy-makers need to support more in-depth qualitative and quantitative research for their own interest, since it would provide the knowledge base required for more nuanced policy decisions.<sup>130</sup> The authorities should support the collection of necessary

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<sup>122</sup> ADB, ‘Addressing Climate Change’, above n 71, 54.

<sup>123</sup> Norman Myers, ‘Environmental Refugees in a Globally Warmed World’ (1993) 43(11) *BioScience* 752; Norman Myers, ‘Environmental Refugees: An Emergent Security Issue’, 13<sup>th</sup> Economic Forum, Prague, 23–27 May 2005; Castles, above n 11, 2–3; Black, above n 11, 2–8.

<sup>124</sup> McAdam and Saul, ‘Displacement with Dignity’, above n 5, 238.

<sup>125</sup> ADB, ‘Addressing Climate Change’, above n 71, 54.

<sup>126</sup> Graeme Hugo et al., ‘Climate Change and Migration in Asia and the Pacific’ (Draft Edition) (ADB, 2011) 62.

<sup>127</sup> *Ibid.*

<sup>128</sup> *Ibid.*

<sup>129</sup> Akter, above n 10, 12.

<sup>130</sup> See Sward, above n 120, 3.

demographic, socio-economic and environmental data (such as through a census). The authorities should also support research to understand the different patterns and scenarios of climate change, migration and displacement in specific areas. For effective policy responses, the policy-makers need sufficient knowledge and databases regarding the following areas:

1. how slow-onset environmental changes affect migration patterns;
2. economic, social and political circumstances in which migration takes place;
3. factors influencing the decision to leave—including, critically, whether the move was voluntary or not;
4. the effect of climate change on migration behaviours of men and women;
5. tipping points of migration;
6. effects of climate change on labour conditions;
7. how migrants and vulnerable communities are perceived and
8. patterns of migration.

Important dimensions of patterns of movement include:

1. types of movements, be they permanent, temporary,;
2. status of the migrants (regular or irregular);
3. extent to which migrants' rights are protected;
4. planned or unplanned nature of the flows;
5. whether migrants move with their families or alone, and the circumstances of household members left behind (for example, arrangements made for the care of children);
6. numbers in question (migration is a different phenomenon when it concerns a small percentage of a population moving over a lengthy period of time, compared to a mass movement of people over a short period of time) and
7. socio-economic background of the migrants and gender, age, and marital status.

The authentic and accurate data on the number, migration pattern, locations and their specific needs and vulnerabilities would facilitate implementing legislation and policies in a manner that meets the needs for protection of climate change induced displacement. Such data can be used to initiate programmes for strengthening adaptation for climate migrants or facilitate migration as an adaptive strategy.<sup>131</sup> Proceeding with the implementation of laws and policies without a sound base of information on climate change induced human displacement presents the risk that scarce resources will be allocated to protection and assistance measures that people do not need. Given that the absence of an internationally agreed definition complicates research and data collection, a standardised definition would facilitate improvement of research on climate change induced migration.<sup>132</sup>

### ***6.7 Strengthening Institutions***

The institutional capacity, including human resource quality, is weak in Bangladesh in dealing with an emerging large number of climate change induced displaced persons. The capacity of relevant institutions in providing appropriate support for the extent and nature of challenges and demands remains inadequate.<sup>133</sup> The institutions can play a catalyst role in protecting and minimising different forms of migration that may take place with degree of intensity of natural disasters.<sup>134</sup> There is a need to improve institutional linkages between disaster preparedness and disaster response, and it is important to strengthen linkages between emergency planning and long-term development practices and projects. Institutions need to be established or strengthened so as to adequately respond to the challenges posed by climate change induced displacement.<sup>135</sup> An organisational coordination and consultation mechanism is needed for overseeing the entire migration mainstreaming process. A responsible agency or institution could be designated to coordinate migration and resettlement in response to disaster and mainstream migration into adaptation planning and DRR programmes.

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<sup>131</sup> Walsham, above n 2, 6.

<sup>132</sup> IOM, 'Climate Change, Environmental Degradation and Migration' (Background Paper, IOM, 2011) 4.

<sup>133</sup> Roger Zetter, 'The Role of Legal and Normative Frameworks for the Protection of Environmentally Displaced People', in Frank Laczko and Christine Aghazarm (eds), *Migration, Environment and Climate Change: Assessing the Evidence* (2009) 387, 403.

<sup>134</sup> Warner, 'Assessing Institutional and Governance', above n 21, 8.

<sup>135</sup> Government of the People's Republic of Bangladesh, General Economics Division and Planning Commission (2005), cited in Arnoldo Matus Kramer, 'Adaptation to Climate Change in Poverty Reduction Strategies' (Human Development Report 2007/2008 No. 2007/34, UNDP, 2007) 14.

The protection of climate change induced displacement is a cross-cutting issue, which requires the involvement of multi-level stakeholders comprising government, non-government, voluntary and other institutions. Coordination among these stakeholders would ensure sustainable and durable solutions to climate change induced migration. The Ministry for Food and Disaster Management, through its Disaster Management Bureau (DMB), is responsible for coordinating national disaster management interventions across all agencies. It is also responsible for providing food and other humanitarian assistance to affected people during natural disasters. In 2000, the Government published ‘Standing Orders on Disaster’, which provides a detailed institutional framework for DRR and emergency management, and defines the roles and responsibilities of different agencies. Elsewhere in government, the Home Ministry provides security of life and property. The Ministry of Environment and Forests has a critical role for protecting the environment and climate challenges, including international negotiations. The Local Government and Rural Development (LGRD) Ministry is responsible for building infrastructure and capacity-building projects; the Labour and Expatriates Ministry has an increasing role to facilitate labour migration as a part of an adaptation strategy and the Ministry of Foreign Affairs represents and coordinates the participation of Bangladesh in international climate change negotiations. For better coordination among the ministries involved in managing climate change induced displacement, an inter-ministerial committee could be formed to deal with climate change induced human mobility in a planned way.

A separate institution could be established that would define, decide, implement and monitor climate displacement related activities and engage those who have a stake in the issue—government agencies, international donors, civil society and research institutions. The institution would be ultimately responsible to the national government, who must decide whether the process is worth engaging in, decide its strategic priorities and ensure it meets overarching development goals, including respect for and protection of human rights.<sup>136</sup>

The institution will monitor to ensure that the existing provisions of climate displacement related laws and policies are being fully and consistently implemented and to identify gaps in those provisions and other areas in which national protection activities need to be organised and implemented.<sup>137</sup>

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<sup>136</sup> GMG, above n 7, 20.

<sup>137</sup> See Williams, above n 12, 31.

The role of the National Human Rights Commission (NHRC) is significant in ensuring that the human rights of climate change induced displaced persons are protected.<sup>138</sup> Although ‘addressing climate change and environmental issues’ are included in the Strategic Plan of the NHRC (2010 to 2015) adopted in May 2011, it is not clear whether human dimensions of climate change induced migration is the main focus of the Commission. So far, no activities have been undertaken by the NHRC for the human rights protection of climate change displaced persons. The NHRC has an important potential to undertake the ‘real-time’ monitoring of humanitarian assistance. The NHRC can also assist government in drafting relevant laws and policies and can monitor the extent to which the rights of disaster victims are protected. After the Indian Ocean tsunami, the Sri Lankan NHRC took up hundreds if not thousands of cases of persons with human rights problems, while India’s Commission sent out special rapporteurs to look into the human rights concerns of those affected by disasters in Orissa and Gujarat. The commissions, however, need increased resources, staff and training. Local NGOs can help mobilise national awareness in respect to rights of climate migrants in disasters.

Civil society is the counterpart of state apparatus in the promotion and protection of human rights. Bangladesh has an active and highly developed civil society structure.<sup>139</sup> Civil society is particularly vibrant and often seems to eclipse the role of the Government.<sup>140</sup> The promotion of human rights is partly embedded in this developmental agenda, but civil society is much less active in directly promoting, advocating and defending human rights on a broader front or at a national level.<sup>141</sup>

The engagement and empowerment of civil society actors to provide rights-based awareness and advocacy on behalf of communities vulnerable to environmental displacement should be a priority for national governments.<sup>142</sup> At the same time, national governments should explore ways of strengthening the independent monitoring and reporting of its compliance with human rights protection, which would also include the rights of environmentally displaced people.

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<sup>138</sup> McAdam and Saul, ‘Displacement with Dignity’, above n 5, 268.

<sup>139</sup> Roger Zetter, ‘Protecting Environmentally Displaced People: Developing the Capacity of Legal and Normative Frameworks’ (Research Report, Refugee Studies Centre, 2011) 35.

<sup>140</sup> Ibid.

<sup>141</sup> Ibid.

<sup>142</sup> Ibid 60.

NGOs play a catalyst role in Bangladesh for poverty alleviation and the development of rural and urban communities. Therefore, NGOs may immensely contribute to adaptation to climate change. Around 10 000 NGOs are currently working in Bangladesh. The primary focus of NGOs has been on economic and social development and also disaster relief, complemented by an increasing voice in rights-based advocacy. NGOs are frequently in partnership with international non-governmental organisations (INGOs) and international development actors, plays a crucial role in the country.<sup>143</sup> Widespread population displacement induced by climate change has been a particularly significant area for human rights activists and NGOs who advocate for the recognition of a special status for these people, perhaps numbering 1 million a year.<sup>144</sup>

### **6.8 Concluding Remarks**

While climate change induced displacement in Bangladesh does exist in media and speeches of leaders and policy-makers, it does not feature appropriately in national laws and policies. There is yet to develop any legal and institutional framework for climate change induced displacement. Similarly, this issue is not mainstreamed and integrated into laws and policies relating to the environment, climate change, DRR, development and land management. It is urgently needed to promote the development of adequate and appropriate protection instruments to safeguard the rights, needs and human security of climate change induced displaced populations.<sup>145</sup> The institutions need to be developed and strengthened for better protection of these persons.<sup>146</sup>

In this context, this chapter highlighted the importance of a national regulatory framework for the protection of climate change induced displacement. It examined existing laws and policies on how far they address the issue of climate change induced displacement. It suggested the development of a national legal framework, as well as the mainstreaming of climate change displacement into others laws and policies. It is important to determine how to use existing and new legal apparatuses to provide protection for climate change induced displacement.<sup>147</sup>

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<sup>143</sup> Ibid 35.

<sup>144</sup> Ibid.

<sup>145</sup> Camillo Boano, Roger Zetter and Tim Morris, 'Environmentally Displaced People: Understanding the Linkages Between Environmental Change, Livelihoods and Forced Migration' (Forced Migration Policy Briefing No. 1, Refugee Studies Centre, 2008) 31.

<sup>146</sup> Zetter, 'The Role of Legal and Normative Frameworks', above n 133, 403.

<sup>147</sup> Ibid.



## CHAPTER 7

# PROTECTION OF FORCED CLIMATE MIGRANTS: HUMAN RIGHTS-BASED POLICY FRAMEWORK

### *7.1 Introduction*

Although the people of Bangladesh are generally very adaptable and resilient to changing environmental conditions, the resilience capacity has its own limit and there are thresholds of adaptable environmental change within which people can survive.<sup>1</sup> When this threshold is exceeded due to adverse climatic changes, or adaptive options are diminished, people are forced to migrate.<sup>2</sup> It is certain from various reports and studies that most people displaced by climate change in Bangladesh will remain within the borders of the country. They are IDPs as defined in the Guiding Principles, and thus entitled to full range of rights and responsibilities included therein. They are also entitled to a range of human rights guaranteed under the Constitution of Bangladesh, as well as norms and principles developed under international human rights law.<sup>3</sup> The human rights of these people are generally violated by displacement, as well as inappropriate policies. These violations could be avoided provided the policies and protection framework are based on relevant human rights guarantees recognised under international human rights instruments. Indeed, adherence to human rights approaches and principles could help immensely in developing proactive principles and guidelines to protect both civil and political and economic, social and cultural rights of climate change induced forced migrants.<sup>4</sup>

However, Bangladesh does not have any legal framework or normative protection for refugees or internally displaced persons.<sup>5</sup> There remains a gap in the interpretation of how existing human rights standards apply to the displaced situation; that is, before, during and after displacement. It is mostly managed by executive orders and administrative

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<sup>1</sup> Tasneem Siddiqui, *Climate Change and Population Movement: The Bangladesh Case* 20 <[http://www.rsis.edu.sg/NTS/Events/Climate\\_change/session4/Concept per cent20paper-Tasneem.pdf](http://www.rsis.edu.sg/NTS/Events/Climate_change/session4/Concept_per_cent20paper-Tasneem.pdf)>.

<sup>2</sup> Ibid.

<sup>3</sup> For a detailed discussion on human rights implications of climate change induced displacement, see Chapter 4.

<sup>4</sup> Roger Zetter, 'Protecting Environmentally Displaced People: Developing the Capacity of Legal and Normative Frameworks' (Research Report, Refugee Studies Centre, 2011) 56.

<sup>5</sup> Ibid 44.

regulations, which are mostly *ad hoc* in nature. However, human rights norms oblige the government to enact appropriate laws and policies and adopt other necessary measures, including evacuation and possible temporary or permanent relocation of affected persons to ensure the protection of human rights of the climate-related displacement.<sup>6</sup> The relevant human rights instruments, such as the UN Guiding Principles, IASC Operational Guidelines and Hyogo Framework, may provide guideline in this regard. The dedicated national framework for forced climate migrants would play a catalyst role for human rights protection of the displaced people and thus mitigate the sufferings motivating to return to their home.

In this context, this chapter, drawing heavily from existing soft-law principles relating to internal displacement, disasters and human rights, argues for a rights-based legal framework for the protection of people forced to migrate due to emergency environmental situations. It also analyses how human rights standards can provide principled guidance to finding solutions for the forced climate migrants. Finally, it provides an outline of a rights-based national framework for climate change induced forced migrants.

### ***7.2 Development of a Soft Policy Framework for Forced Climate Migrants***

In framing legal framework to address climate change induced forced migrants, the adherence to the most important human rights treaties, laws and principles most effectively ensure respect for human rights.<sup>7</sup> As noted by the Deputy High Commissioner on Human Rights:

States have a positive obligation to protect individuals against the threat posed to human rights by climate change, regardless of the causes. The most effective means of facilitating this is to adopt a ‘human rights-based approach’ to policy and legislative responses to climate change; an approach that is normatively based on international human rights standards and that is practically directed to promoting and protecting human rights.<sup>8</sup>

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<sup>6</sup> Elizabeth Ferris, ‘Internally Displaced Persons: A Neglected Issue on the International Agenda’ (2008) 4 *New Routes* 10–14, 13; Michelle Leighton, ‘Climate Change and Migration: Key Issues for Legal Protection of Migrants and Displaced Persons’ (Background Paper, German Marshall Fund of the United States, June 2010) 2 <[http://www.gmfus.org/galleries/default-file/Leighton\\_MAH\\_EditsV2.pdf](http://www.gmfus.org/galleries/default-file/Leighton_MAH_EditsV2.pdf)>; Ferris, *Displacement, Natural Disasters, and Human Rights*, above n 6.

<sup>7</sup> Philippe Boncour and Bruce Burson, ‘Climate Change and Migration in the South Pacific Region: Policy Perspectives’ in Bruce Burson (ed.), *Climate Change and Migration South Pacific Perspective* (Institute of Policy Studies, 2010) 19; Scott Leckie, ‘Climate-Related Disasters and Displacement: Homes for Homes, Lands for Lands’ (Report prepared for Expert-Group meeting on Population Dynamics and Climate Change, Displacement Solutions, 2009) 9.

<sup>8</sup> Kyung-wha Kang, ‘Climate Change and Human Rights’ (Speech delivered at the Conference of the Parties to the United Nations Framework Convention on Climate Change and its Kyoto Protocol, Bali, Indonesia, 3–14 December 2007)

<<http://www.unhcr.ch/hurricane/hurricane.nsf/view01/013DC0FAA475EC87C12573B10074796A?opendocument>>.

It is argued that there are established human rights norms and principles, which provide exhaustive guidelines for the protection of climate change induced displacement. Kyung-wa Kang, the Deputy High Commissioner for Human Rights Office of the United Nations High Commissioner for Human Rights (OHCHR), believes that the international human rights framework provides the most effective framework for addressing the human consequences of climate change induced displacement.<sup>9</sup>

Apart from general human rights norms and treaties, international migration law offers a compendium of international legal instruments dealing with the human rights of migrants generally that policy-makers in this area can draw on to guide 'rights-sensitive' policy-making.<sup>10</sup> Sources for guidance include decisions of national and supranational courts and judicial bodies.<sup>11</sup> Several soft-law instruments, including UN Guiding Principles on IDPs, Hyogo Framework, IASC Operational Guidelines, the London Declaration of International Law Principles on Internally Displaced Persons, the African Union Convention for the Protection and Assistance of Internally Displaced Persons, provide a comprehensive rights-based framework for dealing with climate change induced displacement.<sup>12</sup> These soft-law instruments draw on or are supported by a wide range of international human rights instruments may potentially shape the legal response.<sup>13</sup>

### **7.2.1 UN Guiding Principles on IDPs**

Since most of the climate change induced displacement will be internal, scholars consider the UN Guiding Principles on IDPs<sup>14</sup> as the most relevant framework for the protection of climate change induced displacement.<sup>15</sup> The Guiding Principles have so far received

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<sup>9</sup> Kyung-wa Kang, 'Climate Change, Migration and Human Rights' (Speech delivered at the Conference on Climate Change and Migration: Addressing Vulnerabilities and Harnessing Opportunities, Geneva, 19 February 2008) <<http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=9162&LangID=E>>.

<sup>10</sup> Bruce Burson, 'Protecting the Rights of People Displaced by Climate Change: Global Issues and Regional Perspective' in Bruce Burson (ed.), *Climate Change and Migration South Pacific Perspective* (Institute of Policy Studies, 2010) 169.

<sup>11</sup> Ibid.

<sup>12</sup> Ibid 170.

<sup>13</sup> Roger Zetter, 'Legal and Normative Frameworks' (2008) 31 *Forced Migration Review* 62, 63; Burson, above n 10, 170.

<sup>14</sup> The Guiding Principles were developed by the Special Representative of the Secretary General on the human rights issues related to internally displaced persons and submitted to the Human Rights Commission in 1998. These Principles has been unanimously recognised by the 2005 World Summit Outcome (A/RES/60/1) 'as an important international framework for the protection of internally displaced persons', UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998).

<sup>15</sup> Zetter, 'Protecting Environmentally Displaced People', above n 4, 21.

almost ‘universal recognition’ as the most important normative framework for dealing with internal displacement.<sup>16</sup> The heads of state and government assembled in September 2005 in New York for the World Summit recognised the principles as an ‘important international framework for the protection of IDPs’, an endorsement reiterated by the General Assembly on several occasions.<sup>17</sup> The UN Guiding Principles outline a coherent statement of the matrix of human rights and humanitarian protections inherent in and derived from international human rights and humanitarian laws, which could afford rights protection to all IDPs.<sup>18</sup> It also provides the foundation for developing normative frameworks to fill the protection gaps.<sup>19</sup> Thus, these principles reflect existing norms and rules and clarify how they apply to internal displacement settings, instead of creating new obligations.<sup>20</sup> This approach has facilitated rapid international acceptance of the Guiding Principles, as reflected in their increasingly common application in the domestic order of displacement-affected countries. One of the most encouraging signs of international acceptance of the Guiding Principles on IDPs has been the proposal, adoption and implementation of numerous laws, policies, and decrees addressing internal displacement in all regions of the world.<sup>21</sup> Almost 20 countries have enacted laws and policies explicitly based on the Guiding Principles to date, while other countries have acted to regulate specific problems related to displacement in a manner consistent with their international obligations without necessarily referencing the Guiding Principles.<sup>22</sup>

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<sup>16</sup> Rodry C Williams, ‘Protecting Internally Displaced Persons: A Manual for Law and Policymakers’ (Brookings Institution—University of Bern, 2008) 3.

<sup>17</sup> See the 2005 World Summit Outcome document A/RES/60/1 para. 132, as well as, for example, A/RES/62/153 (2007) para. 10 and A/HRC/RES/6/32 (2007) para. 5.

<sup>18</sup> Guiding Principles on Internal Displacement, United Nations Publication E/CN.4/1998/53/Add.2 (1998): ‘internally displaced persons are persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human –made disasters, and who have not crossed an internationally recognized State border’. See Walter Kälin, ‘Climate Change, Natural Disasters, and Internal Displacement’ (Speech delivered on 24 June 2008, Brookings) <[http://www.brookings.edu/speeches/2009/0624\\_internal\\_displacement\\_kalin.aspx](http://www.brookings.edu/speeches/2009/0624_internal_displacement_kalin.aspx)>; UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998).

<sup>19</sup> Zetter, ‘Protecting Environmentally Displaced People’, above n 4, 59.

<sup>20</sup> The provisions of international human rights and humanitarian law providing the normative basis of each of the principles are described in Walter Kälin, *Guiding Principles on Internal Displacement: Annotations*, 2nd ed., Studies in Transnational Legal Policy 38 (American Society of International Law and Brookings Institution, 2008) <[www.asil.org/pdfs/stlp.pdf](http://www.asil.org/pdfs/stlp.pdf)>.

<sup>21</sup> Williams, above n 16, 4.

<sup>22</sup> For a compilation of national laws and policies on internal displacement, see <[www.brookings.edu/projects/idp/Laws-and-Policies/idp\\_policies\\_index.aspx](http://www.brookings.edu/projects/idp/Laws-and-Policies/idp_policies_index.aspx)>. For a searchable database, see <[www.idpguidingprinciples.org](http://www.idpguidingprinciples.org)>.

At the regional level, the 2006 Pact on Security, Stability and Development in the Great Lakes Region of Africa includes a protocol obliging signatory states to enact national legislation to incorporate the Guiding Principles in their legal frameworks.<sup>23</sup> Other regional organisations, including the African Union, the Organization of American States and the Council of Europe, have called upon their member states to use the Guiding Principles and incorporate them into their domestic laws and policies.<sup>24</sup>

The Guiding Principles define IDPs as:

people forced to leave their homes as a result of, or in order to avoid, (a) the effects of armed conflict; (b) situations of generalised violence; (c) violations of human rights; or (d) natural or human made disasters, and who have not crossed a state border'.<sup>25</sup> Manifestly, the term 'natural or human made disasters' envisages that victims of natural disasters as a result of climate change would be covered by such protection provided that they are within their country of origin.<sup>26</sup>

The Guiding Principles follow a distinctive approach of restating and tailoring the international human rights norms and guarantees that are relevant to the protections of displaced persons.<sup>27</sup> As the first principle, the principles affirm that IDPs shall enjoy the same rights and freedoms as other persons in the country, and that national authorities, in cooperation with international organisations, are obliged to assist and protect them (principle 3) and take appropriate measures (principle 27). Principle 8 says 'displacement shall not be carried out in a manner that violates the right to life, dignity, liberty and security of those affected'.<sup>28</sup> The Guiding Principles spell out the guarantees protecting displaced persons against displacement, during displacement and rights relevant in the post-displacement phase when return or other durable solutions become impossible.<sup>29</sup>

The Guiding Principles, although not legally binding, they draw on binding rules from international refugee and human rights law to provide guidelines to states in shaping

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<sup>23</sup> International Conference of the Great Lakes Region, 'Protocol on the Protection and Assistance to Internally Displaced Persons' (30 November 2006) art 6.3; See <[www.icglr.org/](http://www.icglr.org/)>.

<sup>24</sup> In 1999, the Commission of the Organization of African Unity (OAU), now reconstituted as the African Union (AU), formally acknowledged and expressed appreciation for the Guiding Principles. The AU is presently (in 2008) in the process of drafting a binding convention on internal displacement in Africa. See also Organization of American States, General Assembly Resolution 2277 (2007) and Council of Europe Recommendation 6 (2006) of the Committee of Ministers to member states on internally displaced persons.

<sup>25</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998).

<sup>26</sup> See Angela Williams, 'Turning the Tide: Recognizing Climate Change Refugees in International Law' (2008) 30(4) *Law & Policy* 502–529, 512; Leighton, above n 6, 6.

<sup>27</sup> Roberta Cohen and Megan Bradley, 'Disasters and Displacement: Gaps in Protection' (2010) 1 *Journal of International Humanitarian Legal Studies* 1, 4.

<sup>28</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principle 8.

<sup>29</sup> See Walter Kälin, 'A Human Rights Perspective for Major Natural Disasters' (Speech delivered on 14 January 2008, Brookings) <[http://www.brookings.edu/speeches/2008/0114\\_disasters\\_kalin.aspx](http://www.brookings.edu/speeches/2008/0114_disasters_kalin.aspx)>.

national laws and policies to the predicament of the IDPs.<sup>30</sup> Thus, the Guiding Principles offer a valuable set of legal norms, which could afford rights protection to climate change induced displaced people at all stages of displacement—before displacement, during displacement and in the return and recovery phases of displacement.<sup>31</sup> McAdam and Saul argue in favour of incorporating these principles in framing national laws for the protection of climate change induced displacement, identifying the specific needs of the displaced—‘the Guiding Principles could provide Bangladesh with a blueprint for assisting and protecting people displaced internally by climate effects, within a rule of law and human rights-based framework’.<sup>32</sup> Such full-fledged human rights-based national legal framework would replace long-standing *ad hoc* schemes of temporary protection available only during emergency situation.<sup>33</sup> It is now important to operationalise the Guiding Principles domestically through appropriate laws, policies and institutions.<sup>34</sup>

### ***7.2.2 IASC Operational Guidelines on Human Rights and Natural Disasters***

Many of the human rights violations that are recognised in case of internal conflict situations in international frameworks are also experienced by victims of natural disasters. However, their human rights are too often ignored. This realisation led the Inter-Agency Standing Committee (IASC), the main forum for major humanitarian agencies to ensure inter-agency decision-making in response to complex emergencies, to frame the Operational Guidelines on Human Rights and Natural Disasters (2006) to better illustrate how human rights are applicable before, during and after natural disasters.<sup>35</sup> The Operational Guidelines reflect rules stemming from international human rights and humanitarian law, but take account of the Guiding Principles. The Operational Guidelines stress that persons threatened by natural disasters have the same human rights as other

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<sup>30</sup> See Jane McAdam and Ben Saul, ‘Displacement with Dignity: International Law and Policy Responses to Climate Change Migration and Security in Bangladesh’ (2010) 53 *German Yearbook of International Law* 234, 270; Williams, ‘Turning the Tide’, above n 26, 512; Khalid Koser, ‘Gaps in IDP Protection’ (2008) 31 *Forced Migration Review* 17; Boncour and Burson, above n 7, 21.

<sup>31</sup> See McAdam and Saul, above n 30, 270.

<sup>32</sup> Ibid.

<sup>33</sup> Ibid 282.

<sup>34</sup> Volker Türk, ‘Can Protection of Environmentally Displaced Persons be Found in Existing Protection Regimes? What are the Next Steps from a Protection Perspective?’ (Speech delivered at the Nansen Conference in the 21<sup>st</sup> Century, Oslo, 7 June 2011) 3 <<http://www.unhcr.org/4def8e3c9.pdf>>.

<sup>35</sup> See IASC (2006) ‘*Operational Guidelines on Human Rights and Natural Disasters*’, Brookings-Bern Project on Internal Displacement, drafted by the Special Representative of the SG on the Human Rights of IDPs. See also IASC (2008) ‘*Field Manual on Human Rights Protection in Situations of Natural Disaster*’, Brookings-Bern Project on Internal Displacement.

persons in the same country and should not be discriminated against (principle 1).

According to the Operational Guidelines:

[p]ersons—, including evacuees—who have been ordered or forced to flee or to leave their homes or places of habitual residence as a result of a natural disaster or its effects, or have left in order to avoid them, and have not crossed an internationally recognised State border should be treated as belonging to the category of internally displaced persons covered by the 1998 Guiding Principles on Internal Displacement.<sup>36</sup>

The Operational Guidelines identify actions national authorities and international humanitarian organisations should take in order to implement a rights-based approach to humanitarian action in the context of natural disasters, which is also relevant for climate change related disasters.<sup>37</sup> The governments can use the principles in the Operational Guidelines as a ‘checklist’ during a natural disaster to ensure proper response and protection.<sup>38</sup>

The Operational Guidelines are developed to prevent the potential human rights violation of all affected during and in the aftermath of natural disasters, including the displaced.<sup>39</sup> However, protection is not merely limited to merely securing the survival and physical security of people affected by natural disasters; rather it covers all relevant guarantees—civil and political, as well as economic, social and cultural rights—attributed to them by international human rights and humanitarian law.<sup>40</sup> With the proclamation of the list of the rights of persons enunciated in international law, the Operational Guidelines provides a guideline to humanitarian actors to implement a rights-based approach to humanitarian action in the context of natural disasters.<sup>41</sup> Without being circumscribed to a ‘core mandate’ provided by law, the Guidelines urge humanitarian actors to have a holistic vision of the needs of the people of their concern.<sup>42</sup> While these guidelines have been drafted in the context of (sudden) natural disasters, most of them are also relevant in preparation for slow-onset environmental degradations, such as sea-level rise, salinity and

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<sup>36</sup> Brookings-Bern Project on Internal Displacement, ‘Protecting Persons Affected by Natural Disasters: IASC Operational Guidelines on Human Rights and natural Disasters’ (IASC, June 2006) 11 art A.1.5.

<sup>37</sup> IASC, 2006, above n 35.

<sup>38</sup> Ibid.

<sup>39</sup> Elizabeth Ferris, Humanitarian Perspectives on ‘Protection of Persons in the Event of Disasters’ (Speech delivered on 21 April 2009, Brookings)

< [http://www.brookings.edu/speeches/2009/0421\\_natural\\_disasters\\_ferris.aspx](http://www.brookings.edu/speeches/2009/0421_natural_disasters_ferris.aspx)>.

<sup>40</sup> Brookings-Bern Project on Internal Displacement, ‘Protecting Persons Affected by Natural Disasters: IASC Operational Guidelines on Human Rights and natural Disasters’ (IASC, June 2006) 10.

<sup>41</sup> Ibid 9.

<sup>42</sup> Ibid.

draught.<sup>43</sup> These Operational Guidelines reiterate the need to ensure non-discriminatory humanitarian assistance, as well as the need to consult with the affected people to ensure accountability and transparency.<sup>44</sup>

### 7.2.3 *The Hyogo Framework for Action (2005)*

The Hyogo Framework for Action 2005-2015 (Hyogo Framework), though not binding, does affirm the duty of states to try to reduce the risk of disasters and indicates priorities for risk reduction in both natural and human-made disasters.<sup>45</sup> Under this framework, additional vulnerabilities of developing countries to natural disasters are recognised and so preventive measures such as disaster risk reduction programs, early-warning systems, and public safety awareness and preparedness are suggested to reduce vulnerability.<sup>46</sup> The Hyogo Framework asks:

[g]overnments to develop ‘national platforms’ to facilitate coordination across sectors; enact or revise special national legislation and policy frameworks; allocate appropriate resources to risk reduction activities; ensure the active participation of potentially affected communities; gather relevant statistical information; promote dialogue and education on disaster risk; integrate a gender perspective in risk reduction activities; and promote ‘diversified income options’ for communities living in high-risk areas.<sup>47</sup>

For the reduction of disaster risks, the Hyogo Framework of Action emphasises five priorities for action.<sup>48</sup>

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<sup>43</sup> Ibid.

<sup>44</sup> Ibid 11.

<sup>45</sup> See United Nations International Strategy for Disaster Reduction (UNISDR), *Hyogo Framework for Action 2005–2015: Building the Resilience of Nations and Communities to Disasters*, Extract from the final report of the World Conference on Disaster Reduction, A/CONF.206.6 <[http://www.icsu-asiapacific.org/resource\\_centre/ISDR\\_Hyogo-framework-for-action\\_HFA.pdf](http://www.icsu-asiapacific.org/resource_centre/ISDR_Hyogo-framework-for-action_HFA.pdf)>. Its principles have been supported by the 2006 *Operational Guidelines on Human Rights and Natural Disasters*, adopted by the Inter-Agency Standing Committee of humanitarian agencies established by the United Nations to help countries coordinate disaster reduction and relief, and the International Committee of the Red Cross (ICRC) *Guidelines for the Domestic Facilitation and Regulation of International Disaster Relief and Initial Recovery Assistance*, see Leighton, above n 6, 3.

<sup>46</sup> Leighton, above n 6, 2. Probably the most widely known international instrument on the prevention of disasters is the Hyogo Framework for Action (the Hyogo Framework), which was adopted at an international conference and later approved by the UN General Assembly in 2005. Building upon a previous international consensus document (the *Yokohama Strategy for a Safer World: Guidelines for Natural Disaster Prevention, Preparedness and Mitigation and its Plan of Action of 1994*).

<sup>47</sup> See Hyogo Framework, above n 45, 16–19, cited in David Fisher, ‘Legal Implementation of Human Rights Obligations to Prevent Displacement due to Natural Disasters’ in Walter Kälin et al. (eds), *Incorporating the Guiding Principles on Internal Displacement into Domestic Law: Issues and Challenges* (Brookings and ASIL, 2010) 551, 560.

<sup>48</sup> The Hyogo Framework sets out the following five priority areas of action for governments and other stakeholders for the period of 2005–2015:

1. Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation;

Evidently, there is no normative gap, as such, to address internal displacement related to the effect of climate change. States should adhere to the Guiding Principles and other relevant soft laws, and strengthen their implementation when addressing internal displacement in this context.<sup>49</sup> However, some common obstacles and challenges remain to the implementation of the provisions of the Guiding Principles and other soft-law principles in respect to protection of victim of environmental events at the national level.<sup>50</sup> The challenges include the lack of criteria to distinguish clearly between voluntary population movements and forced displacement with regard to slow-onset disasters and environmental degradation.<sup>51</sup> Second, finding the resources needed for such far-reaching measures is another crucial issue. The scarcity of domestic funds for assistance programs may deter the government to take large-scale programmes protecting victim of disasters.

### ***7.3 Guiding Principles for the Protection of Forced Climate Migrants***

This chapter proposes to develop ‘Guiding Principles for the Protection of Forced Climate Migrants’ for the protection of persons who have been forced to migrate due to direct effects of climate change. It is argued that there are a number of non-binding soft-law instruments, including Guiding Principles, the Operational Guidelines and Hyogo Framework, that provide normative guidelines for development of such binding national legal framework. Those norms and principles need to be tailored to the cultural and socio-political context of Bangladesh. The essential features of the ‘Guiding Principles for the Protection of Forced Climate Migrants’ are outlined as follows.

#### ***7.3.1 Definition of Forced Climate Migrants***

The guiding principles must formulate a comprehensive, accepted and concrete definition of climate change induced forced migrants to identify clearly the people who come under the protection of this framework. This chapter proposes to include under this framework only those who are forced to leave their home for a safe refuge in other areas due to the

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2. Identify, assess and monitor disaster risks and enhance early warning;
  3. Use knowledge, innovation and education to build a culture of safety and resilience at all levels;
  4. Reduce the underlying risk factors; and
  5. Strengthen disaster preparedness for effective response at all levels.

<sup>49</sup> *Report of the Representative of the Secretary-General on the Human Rights of Internally-Displaced Persons*, UN Doc. A/64/214 64<sup>th</sup> sess. item 71 (b) provisional agenda 7.

<sup>50</sup> David Fisher, ‘The Right to Humanitarian Assistance’ in Walter Kälin et al., above n 47, 47, 85.

<sup>51</sup> *Report of the Representative of the Secretary-General on the Human Rights of Internally-Displaced Persons*, UN Doc. A/64/214 64<sup>th</sup> sess. item 71 (b) provisional agenda 7.

direct effects of climate change. Thus, this study provides a definition of ‘forced climate migrants’ as persons or a group of persons who are forced to leave their homes, temporary or permanently, predominantly for reasons of sudden or gradual changes in the environment as a result of climate change (to which humans more likely than not contributed), that put their existence at risk or seriously affect their lives or living conditions.

Climate change increases the frequency and magnitude of both sudden-onset and slow-onset disasters. Based on the pace of change in the environment, the nature and extent and, more importantly, vulnerability of displacement may become significantly different.<sup>52</sup> While victims of rapid-onset disasters most often seek to return home shortly after disasters occur or when it is safe to do so, people migrating from slow-onset disasters may seek to settle permanently in other areas or countries as a means of coping with degrading environmental situations.<sup>53</sup> Since the forced migration from sudden disruption and from gradual disruption both require humanitarian responses, so the definition of disaster should apply to migration caused by either or both.<sup>54</sup>

### ***7.3.2 Status Determination and Registration Process***

Although the forced climate migrants remain citizens of the country and so entitled to protection and assistance on that basis alone, the registration process would help to identify who are the displaced persons requiring protections for administrative reasons.<sup>55</sup> Such procedures can allow authorities to improve their response by establishing the number, location and key demographic characteristics of displaced populations and preventing fraudulent access to scarce humanitarian assistance by persons who do not need it.<sup>56</sup>

Bangladesh has experience of registration and providing identification card to people vulnerable due to poverty; for example, Vulnerable Group Feeding (VGF) and Vulnerable Group Development (VGD) cards under the Social Welfare and Food and Prevention of Natural Disaster ministries in Bangladesh. In March 2012, the Ministry of Fisheries and Livestock, under the project of ‘Registration of Fishermen and Providing them Identity Cards’ decided to register 1.3 million fisherman in the country and provide them separate

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<sup>52</sup> Koko Warner, ‘Global Environmental Change and Migration: Governance Challenges’ (2010) 20 *Global Environmental Change* 402, 404; Leighton, above n 6, 5.

<sup>53</sup> Leighton, above n 6, 5.

<sup>54</sup> Ibid.

<sup>55</sup> Williams, above n 16, 13.

<sup>56</sup> Ibid 14.

identity cards in addition to a national identity card so that government can extend assistance to fishermen during natural disasters.<sup>57</sup>

However, the registration processes should be ‘non-discriminatory, open, fair, and transparent, based on clear and specific status determination criterion for applications and timelines for decisions’.<sup>58</sup> The procedure for issuance of identity card and decision-making process should be swift and speedy, giving full opportunity to claimants to demonstrate eligibility.<sup>59</sup>

### **7.3.3 Protection of Life: Minimising Numbers of Death and Personal Injury**

The ICCPR obliges states to protect a bundle of rights that forced climate migrants are deprived of. Among those rights, the Human Rights Committee (HRC) describes the right to life as the ‘supreme right’, which is ‘basic to all human rights’.<sup>60</sup> It is a right from which no derogation is permitted, even in time of public emergency.<sup>61</sup> The right to life requires that humans are not arbitrarily deprived of their lives and are able to achieve a decent quality of life by having the means available for subsistence and an adequate standard of life.<sup>62</sup> The states have positive obligations under the international human rights instruments, including ICCPR and the Convention on the Rights of the Child (CRC), to protect and fulfil the right to life of all people within their jurisdiction. Even if the states concerned do not have treaty obligations, the human right to life may be enforceable as *erga omnes*.<sup>63</sup> Focusing on environmental aspects, the Special Rapporteur on Human Rights and Environment concludes that the right to life imposes strict duties on a state to

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<sup>57</sup> *Bdnews24.com* (online) <<http://bdnews24.com/bangla/details.php?id=189194&cid=2&aoth=1>>.

<sup>58</sup> Williams, above n 16, 15.

<sup>59</sup> *Ibid* 15.

<sup>60</sup> Office of the High Commissioner for Human Rights, *General Comment No. 14: Nuclear Weapons and the Rights to Life (Art 6)*, 23<sup>rd</sup> sess., CCPR General Comments No. 14 (General Comments) (9 November 1984) para. 1; Office of the High Commissioner for Human Rights, *General Comment No. 06: The Rights to Life (Art 6)*, 16<sup>th</sup> sess., CCPR General Comments No. 06 (General Comments) (30 April 1982) para. 1. In its General Comment on the right to life, the UN HRC warns against interpreting the right to life in a narrow or restrictive manner. It also clarifies that the right to life imposes an obligation on states to take positive measures for its protection, including taking measures to reduce infant mortality, malnutrition, and epidemics and increase individuals’ ‘life expectancy’. See UN Human Rights Committee, *General comment No. 06: The Rights to Life* (1982) UN Doc. HRI/Gen/1/Rev.7, 128, paras 1, 5.

<sup>61</sup> *Ibid*.

<sup>62</sup> AAC Trindade, ‘The Contribution of International Human Rights Law to Environmental Protection, with Special Reference to Global Environmental Change’ in Edith Brown Weiss, *Environmental Change and International Law: New Challenges and Dimensions* (United Nations University Press, 1992) 271, 272.

<sup>63</sup> In international law, it has been used as a legal term describing obligations owed by states towards the community of states as a whole. An *erga omnes* obligation exists because of the universal and undeniable interest in the perpetuation of critical rights (and the prevention of their breach).

prevent and safeguard against the occurrence of environmental hazards that threaten the lives of human beings.<sup>64</sup> The ECHR, in two recent cases of *Oneryildiz v. Turkey*<sup>65</sup> and *Budayeva and others v. Russia*,<sup>66</sup> clarifies the human rights obligation of states in relation to deaths caused by a man-made or natural disaster.<sup>67</sup> In both cases, the Court held the concerned governments responsible for violation of their duty to protect life, having failed to take preventive measures, and ordered them to pay substantial compensation to relatives of the victims.<sup>68</sup> The Court based the decision on recognition of ‘the positive obligation’ of state to take appropriate steps to safeguard the lives of those within their jurisdiction. The positive obligation to take all appropriate steps to safeguard life ‘entails above all a primary duty on the state to put in place a legislative and administrative framework designed to provide effective deterrence against threats to the right to life’.<sup>69</sup> According to the Court, failure to take feasible measures that would have prevented or mitigated the consequences of foreseeable disasters amounts to a violation of the right to life and therefore incurs the responsibility of the state under international law.<sup>70</sup>

During and in the aftermath of natural disasters, the authorities must take all initiatives to save the life of the climate victims. The protection of right to life entails the obligation to ensure living standards for all forced internal displacement.<sup>71</sup> The evacuation and relocation process must respect the rights to life, dignity, liberty and security of those affected.<sup>72</sup> The authorities should take all appropriate measures to limit the numbers of

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<sup>64</sup> See Fatma Zohra Ksentini, *Report of the Special Rapporteur on Human Rights and the Environment*, UN Doc. E/CN.4/Sub.2/1994/9 (6 July 1994), 47.

<sup>65</sup> European Court of Human Rights, *Öneryilziz v. Turkey*, Application 48939/99, judgment of 30 November, 2004, 39 Eur. H.R. Rep 12 (2004), 89, 90.

<sup>66</sup> Applications nos 15339/02, 21166/02, 20058/02 and 15343/02, judgment of 20 March 2008.

<sup>67</sup> Referred to in Walter Kälin and Claudine Haenni Dale, ‘Disaster Risk Mitigation—Why Human Rights Matter’ (2008) 31 *Forced Migration Review* 38. (While the Court in the *Öneryilziz* case recognised such a duty in the context of risks created by industrial and other ‘dangerous activities’, it expands this approach to cover natural disasters in the *Budayeva* case.)

<sup>68</sup> *Ibid.*

<sup>69</sup> *Öneryilziz v. Turkey*, above n 74, 128, 129.

<sup>70</sup> *Öneryilziz v. Turkey*, above n 74, 89, 90, cited in Kälin, above n 76, 38.

<sup>71</sup> HRC, *Addendum: General Comment No. 27 (67): Freedom of Movement (Art 12)*, UN Doc. CCPR/C/21/Rev.II/Add.9 (1 November 1999) 7. According to art. A.1.7 of *Operational Guidelines*, ‘Unless it is necessary for the protection of affected persons against very serious and imminent threats to their lives, their physical integrity or health, evacuations against their will, or prohibitions against their return, should not be supported by organizations providing protection and assistance to persons affected by natural disasters, even if they have been ordered by the competent authorities. Such organizations should not become involved in involuntary evacuations in any manner’.

<sup>72</sup> The *Operational Guidelines* also affirm ‘the evacuations should be carried out in a manner that fully respects the rights to life, dignity, liberty and security of those affected’. Art. A.1.3 of *Operational Guidelines*, cited in *Brookings-Bern Project on Internal Displacement*, above n 40, 18.

deaths during natural disasters through early-warning systems, DRR programmes and rescue to rehabilitation centres. Even aftermath of natural disasters, many people die because of lack of adequate medical treatment, food and other necessary support services. The authorities need to extend all essentials supports and services both during and in the aftermath of natural disasters so that the ‘right to life’ of the forced climate migrants is protected.

#### **7.3.4 Access to Basic Services and Humanitarian Assistance**

The Constitution of Bangladesh confers ‘fundamental responsibility’ on the State to secure its citizens through ‘the provision of the basic necessities of life, including food, clothing, shelter, education and medical care’ and to provide social security and public assistance ‘in cases of undeserved want arising from unemployment, illness or disablement, or suffered by widows or orphans or in old age, or in other such cases’.<sup>73</sup> Indeed, the situation of forced displacement during natural disasters can be interpreted as ‘special cases’ deserving public assistance. The forced climate migrants require humanitarian assistance for the meaningful exercise of rights to adequate food, water, housing, essential medical services and, ultimately, life. The Guiding Principles should clearly provide a guarantee of access to basic services (for example health, education, water and sanitation) and livelihoods to forced climate migrants. Certain entitlements to humanitarian assistance, such as rights to life, food, clothing, shelter, emergency medical care and other necessities, are implicit in the provisions of international human rights<sup>74</sup> and humanitarian law,<sup>75</sup> guaranteeing a minimum level of subsistence.<sup>76</sup>

Although the term ‘humanitarian assistance’ is not defined by any of the major humanitarian or human rights instruments, the nature and extent of the right to humanitarian assistance can be analysed with the help of the Guiding Principles on IDPs that contain a number of provisions stressing on ‘humanitarian assistance’.<sup>77</sup> The Guiding

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<sup>73</sup> *Constitution of Bangladesh* art 15.

<sup>74</sup> In particular, *ICESCR* arts 11–12.

<sup>75</sup> *Fourth Geneva Convention* arts 49(3), 55; *First Additional Protocol to the Geneva Conventions* arts 54(2), 69; *Second Additional Protocol to the Geneva Conventions* arts 14, 17(1).

<sup>76</sup> Fisher, above n 50, 48.

<sup>77</sup> See *ibid* 47, 48. For example, Principle 18 sets out the right to an adequate standard of living, including essential food and potable water, basic shelter and housing, appropriate clothing and essential medical services, and sanitation. Principle 19 sets out the right to medical care, including psychological and social services and efforts to prevent contagious and infectious diseases. Pursuant to Principle 4(1), the right to humanitarian assistance is to be applied ‘without discrimination of any kind, such as race, colour, sex, language, religion or belief, political or other opinion, national, ethnic or social origin, legal or social status, age, disability, property, birth, or on any other similar criteria’.

Principles on IDPs are emphatic that it is the primary duty and responsibility of governments to provide humanitarian assistance to IDPs, stating so in both principles 3(1) and 25(1). Principle 3 of the Guiding Principles is intended to protect the right of IDPs to humanitarian assistance necessary to ensure their survival and the fulfilment of their basic needs.<sup>78</sup> Principle 25 sets out the primary responsibility of the national authorities to provide humanitarian assistance, both through their own efforts and by facilitating the work of international humanitarian organisations.<sup>79</sup>

However, Indonesia's recently adopted law on disaster management provides that 'every person affected by a disaster [defined broadly to include "events that threaten and disrupt lives and livelihoods caused either by natural and/or non-natural and man-made factors to claim a toll, environmental damage, loss of assets, and psychological impact"] is entitled to assistance fulfilling basic needs'.<sup>80</sup> Following this framework, the term humanitarian assistance in these guiding principles will imply all basic needs essential to survival, such as food, water, housing, emergency medical care and supplies, clothing and related protection.<sup>81</sup>

#### ***7.3.4.1 Access to Adequate Food***

The primary challenge for the Government of Bangladesh in managing the people displaced by climatic factors is to ensure adequate food. In the post-disaster period, it is a challenging task to ensure a food supply chain to the affected people. A study on Cyclone Aila in March 2011 found that local agriculture production dropped to 3 per cent in the post-Aila period, and people's access to food was affected due to the price hike of essential

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<sup>78</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principle 3:

1. National authorities have the primary duty and responsibility to provide protection and humanitarian assistance to internally displaced persons within their jurisdiction.
2. Internally displaced persons have the right to request and to receive protection and humanitarian assistance from these authorities. They shall not be persecuted or punished for making such a request.

<sup>79</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principle 25:

1. The primary duty and responsibility for providing humanitarian assistance to internally displaced persons lies with national authorities.
2. International humanitarian organizations and other appropriate actors have the right to offer their services in support of the internally displaced. Such an offer shall not be regarded as an unfriendly act or an interference in a State's internal affairs and shall be considered in good faith. Consent thereto shall not be arbitrarily withheld, particularly when authorities concerned are unable or unwilling to provide the required humanitarian assistance.

3. All authorities concerned shall grant and facilitate the free passage of humanitarian assistance and grant persons engaged in the provision of such assistance rapid and unimpeded access to the internally displaced.

<sup>80</sup> Indonesia, *Law Concerning Disaster Management* (2007) arts 1(1), 26(2).

<sup>81</sup> Referred to in Fisher, above n 50, 47.

materials, less purchasing capacity, bad roads and less capital in hand to invest.<sup>82</sup> The existing GOB's safety net programme consisted of the VGF, employment scheme, food for works and test relief needs to be strengthened to ensure food security for disaster affected people.

If individuals are unable to enjoy the right to food for reasons beyond their control, such as natural disasters due to climate change effects, the ICESCR obliges the government to ensure access to adequate food to these victims of natural disasters and people living in disaster-prone areas.<sup>83</sup> The Special Rapporteur to the Human Rights Commission on the Right to Food has recently stated:

to fulfil the right to food, the states must use the maximum of its available resources, including the resources available from international cooperation and assistance, and in every circumstance it has the obligation to ensure, at the very least, the satisfaction of the minimum essential level required to be free from hunger.<sup>84</sup>

According to the Guiding Principles on IDPs, the right to adequate food applies throughout displacement since the fulfilment of the right to adequate food also is a key precondition for achieving durable solutions.<sup>85</sup> In order to ensure that forced climate migrants can exercise their right to adequate food during and after displacement, the authorities must use the maximum of their available resources to ensure food for all forced climate migrants.

#### **7.3.4.2 Access to Essential Medical Services**

The Government of Bangladesh has a general obligation under article 12 of the ICESCR to pursue appropriate steps towards reduction of infant mortality, the healthy development of the child and the prevention, treatment and control of all preventable diseases.<sup>86</sup> The

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<sup>82</sup> Oxfam, *Recovery Needs Assessment Report for Cyclone Aila March 2011* 10

<[http://www.lcgbangladesh.org/derweb/Needs per cent20Assessment/Reports/Recovery per cent20Needs per cent20Assessment per cent20Report\\_Cyclone per cent20Aila\\_Final\\_07 per cent20April per cent202011.pdf](http://www.lcgbangladesh.org/derweb/Needs%20Assessment/Reports/Recovery%20Needs%20Assessment%20Report_Cyclone%20Aila_Final_07%20April%202011.pdf)>.

<sup>83</sup> Committee on Economic, Social and Cultural Rights (CESCR), *General Comment No. 12: Substantive Issues Arising in the Implementation of the International Covenant on Economic, Social and Cultural Rights-The Right to Adequate Food*, 20<sup>th</sup> sess., Agenda Item 7, UN Doc. E/C.12/1999/5 (General Comments) (12 May 1999) para. 13; Committee on Economic, Social and Cultural Rights (CESCR), *General Comment No. 12*, above n 87 para. 15; Jean Ziegler, Special Rapporteur, *Economic, Social and Cultural Rights: Report of the Special Rapporteur on the Right to Food*, 61<sup>st</sup> sess., Agenda Item 10, UN Doc. E/CN.4/2005/47/Add.1 (8 February 2005) para. 19.

<sup>84</sup> Ziegler, above n 83.

<sup>85</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principle 18(2)(a).

<sup>86</sup> ICESCR art 12. However, Art. 24 of the *CRC* further emphasises the rights of the child to the highest attainable standard of health, stating that 'State Parties shall take appropriate measures...to ensure the provision of necessary medical assistance and health care to all children'.

Guiding Principles on IDPs direct to ensure that IDPs are provided, at a minimum, with essential medical services.<sup>87</sup>

The protection of right to health of forced climate migrants requires comprehensive measures addressing the health consequences of climate change, including death, injury, disease, disability and mental illness arising from natural disasters.<sup>88</sup> As part of the obligation to fulfil the right to health, the government is obliged to improve people's adaptive capacity to cope with health hazards. Simultaneously, the exposure of health hazards needs to be prevented.<sup>89</sup>

#### ***7.3.4.3 Access to Adequate Housing and Shelter***

Shelter is the most critical basic need at the time of displacement. Shelter provides safety and security to family members and the affected people may initiate alternative livelihood utilising homestead and other assets. A study on Aila found that around 10 906 families are still living on embankments and outside of the ring embankment in temporary houses made with plastic sheeting.<sup>90</sup> In a recent report, the Special Rapporteur on Adequate Housing, Miloon Kothari, concluded that international human rights law imposes an obligation on states to respond to the threat of climate change and specifically to improve access to housing located away from hazardous zones.<sup>91</sup> According to the Guiding Principles on IDPs, the authorities should ensure 'proper accommodation' to those affected, including satisfactory conditions of nutrition, health and hygiene,<sup>92</sup> and all IDPs should have the

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<sup>87</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principles 18 and 19.

<sup>88</sup> *Report of the Office of the United Nations High Commissioner for Human Rights (OHCHR) on the relationship between climate change and human rights*, UN Doc. A/HRC/10/61 (2009), 13 para. 34; World Health Organization (WHO), 'Protecting the Health of Vulnerable People from the Humanitarian Consequences of Climate Change and Climate related Disasters', Submission to 6<sup>th</sup> Session of the Ad Hoc Working Group on Long-Term Cooperative Action under the Convention (AWG-LCA 6), Bonn, 1–12 June 2009, 8.

<sup>89</sup> The states must ensure provision of health care, the appropriate training of doctors and medical personnel, provision of a sufficient number of medical facilities, and equal access to the underlying determinants of health. See Committee on Economic, Social and Cultural Rights, General Comment No. 14: The right to the highest attainable standard of health, UN ESCOR, 2000 para. 43 (c).

<sup>90</sup> Oxfam, *Recovery Needs Assessment Report for Cyclone Aila March 2011* 15 <[http://www.lcgbangladesh.org/derweb/Needs per cent20Assessment/Reports/Recovery per cent20Needs per cent20Assessment per cent20Report\\_Cyclone per cent20Aila\\_Final\\_07 per cent20April per cent202011.pdf](http://www.lcgbangladesh.org/derweb/Needs%20Assessment/Reports/Recovery%20Needs%20Assessment%20Report_Cyclone%20Aila_Final_07%20April%202011.pdf)>.

<sup>91</sup> See Miloon Kothari, Report of the Special Rapporteur on Adequate Housing as a Component of the Right to an Adequate Standard of Living, 2008, cited in Submission of Maldives, above n 30, 51.

<sup>92</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principle 7(2).

right to voluntary return (housing, land and property restitution), without discrimination, to the homes from which they were displaced.<sup>93</sup>

Apart from the general obligation to ensure right to housing, the government needs to pursue the following list of actions to ensure right to housing of forced climate migrants.

- (a) The authority should respect migrants' rights to adequate housing through the provision of safe and habitable emergency shelter during displacement away from hazardous zones.
- (b) The victims of natural disasters should not be forcefully evicted from their place in the name of relocation without exploring all possible alternate avenues for adaptation.<sup>94</sup> The scheme of relocation or resettlement should only be pursued as a last resort after exhausting all available options and avenues.<sup>95</sup> If the resettlement is considered the only remaining option, there is a growing acceptance of the principle that permanent relocation should never result in homelessness.<sup>96</sup> Each and every relocated person should be provided with alternative accommodation, which complies with international human rights standards on adequate housing as a matter of rights.<sup>97</sup> The authority must arrange adequate consultation before such relocation and full community participation should be ensured in the reconstruction process.<sup>98</sup>
- (c) The right to voluntary return for all displaced persons to the homes from which they were displaced without discrimination and recover their former homes and lands should they so wish.<sup>99</sup>

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<sup>93</sup> In this regard, UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principle 18 provides that 'at the minimum, regardless of the circumstances, and without discrimination, competent authorities shall provide internally displaced persons with and ensure safe access to: ... basic shelter and housing'.

<sup>94</sup> Scott Leckie, *The Human Rights Implications of Climate Change Where Next?* (UNDP Maldives, 5 March 2008) 6 <[http://www.mv.undp.org/Images/Leckie per cent20Paper per cent20 per cent20The per cent20Human per cent20Rights per cent20Implications per cent20of per cent20Climate per cent20Change.pdf](http://www.mv.undp.org/Images/Leckie%20Paper%20The%20Human%20Rights%20Implications%20of%20Climate%20Change.pdf)>.

<sup>95</sup> Ibid.

<sup>96</sup> Ibid.

<sup>97</sup> Ibid.

<sup>98</sup> Scott Leckie, 'Human Rights Implications' (2008) 31 *Forced Migration Review* 18; Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship between Climate Change and Human Rights, UN Doc. A/HRC/10/61 (2009) 14 para. 38.

<sup>99</sup> Leckie, above n 98, 19.

### 7.3.4.5 Access to Safe Drinking Water and Sanitation

Under both ICCPR and ICESCR, the government incurs obligation to ensure access to safe drinking water and sanitation for forced climate migrants.<sup>100</sup> Principle 18(2)(a) of the Guiding Principles is meant to ensure that IDPs have secure and non-discriminatory access at all times to sufficient safe potable water for personal and domestic uses and to sanitation services, both of which are crucial for the wellbeing, health and even survival of the displaced.<sup>101</sup> That right applies throughout displacement and constitutes a precondition for enjoyment of the right to adequate food, the right to adequate housing and the right to health.

In order to preserve life and health, the authorities must act immediately to ensure access to safe drinking water for affected populations. The authority must take appropriate measures to secure that migrants have access to the minimum essential amount of safe water that is sufficient for personal and basic household needs, including drinking, cooking, and hygiene to prevent disease, through provision of water facilities and services at a reasonable distance from each household.<sup>102</sup> In all situations, the authority has an immediate obligation to ensure adequate water facilities and services to migrants without discrimination of any kind, including on the grounds of displacement or residence in informal settlements (whether they are located in camps or dispersed in urban and rural areas).<sup>103</sup>

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<sup>100</sup> The 2007 OHCHR report issued pursuant to Human Rights Council (HRC) decision 2/104 addresses the scope and content of human rights obligations related to safe drinking water and sanitation under both *ICCPR* and *ICESCR*. The report concludes, ‘the United Nations High Commissioner for Human Rights believes that it is now time to consider access to safe drinking water and sanitation as a human right’. Submission of the Maldives to the OHCHR, above n 95, 55.

<sup>101</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principle 18:

1. All internally displaced persons have the right to an adequate standard of living.
2. At the minimum, regardless of the circumstances, and without discrimination, competent authorities shall provide internally displaced persons with and ensure safe access to:
  - (a) ... potable water;
  - [...]
  - (d) ... sanitation.
3. Special efforts should be made to ensure the full participation of women in the planning and distribution of these basic supplies.

<sup>102</sup> UNCESCR General Comment 15 para. 37 (a), (c).

<sup>103</sup> *ICESCR* art 2(2); UNCESCR General Comment 15 paras 13–16, 37(b).

### 7.3.5 Non-discrimination

Discrimination is a major barrier to displaced persons in obtaining humanitarian assistance. The principle of equal treatment is fundamental to the approach to displacement, which is paramount in the Guiding Principles and other human rights instruments.<sup>104</sup> In no way should the displaced persons suffer discrimination in the enjoyment of human rights compared with other people.<sup>105</sup> The humanitarian assistance and relocation measures must not discriminate against certain ethnic, religious or other groups. However, non-discrimination may require that distinctions are made to consider special protection needs. Three types of such distinction are anticipated in the context of dealing with forced climate migrants.

First, during displacement, pre-existing patterns of discrimination are often exacerbated, putting vulnerable groups at further risk of human rights abuses, such as unequal access to humanitarian assistance, sexual and gender-based violence or difficulties with compensation for lost property.<sup>106</sup> Second, the poor, marginalised minorities, female and child-headed households, chronically ill persons, persons with disabilities and older people without family support are often the least resilient and thereby most affected groups in a disaster. These persons need special protection. Third, displacement itself consistently results in specific, severe vulnerabilities and harms for those affected in a greater way in relation to non-displaced persons, such as the loss of homes, livelihoods and social networks.

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<sup>104</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principle 1: ‘Internally displaced persons shall enjoy, in full equality, the same rights and freedoms under international and domestic law as do other persons in their country. They shall not be discriminated against in the enjoyment of any rights and freedoms on the ground that they are internally displaced.’

UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principle 29: ‘1. Internally displaced persons who have returned to their homes or places of habitual residence or who have resettled in another part of the country shall not be discriminated against as a result of their having been displaced ...’

UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principle 4:

1. These Principles shall be applied without discrimination of any kind, such as race, colour, sex, language, religion or belief, political or other opinion, national, ethnic or social origin, legal or social status, age, disability, property, birth, or on any other similar criteria.
2. Certain internally displaced persons, such as children, especially unaccompanied minors, expectant mothers, mothers with young children, female heads of household, persons with disabilities and elderly persons, shall be entitled to protection and assistance required by their condition and to treatment, which takes into account their special needs.

<sup>105</sup> See Williams, above n 16, 16.

<sup>106</sup> See IASC Operational Guidelines.

The Government needs to address such distinct vulnerabilities as a direct result of being displaced by climate change, as well as the specific vulnerabilities arising due to difference in capacity and situation through positive measures in the form of specific protection and assistance. To prevent both types of discriminations and in order to place displaced people back on an even footing with the non-displaced population, the authorities need to provide specific and targeted measures of assistance and protection of a nature and scope corresponding to the needs and vulnerabilities resulting from displacement. This approach is supported by numerous rules of international human rights law that prescribe positive or special measures in favour of vulnerable groups. Although such measures result in differential treatment, they are not prohibited as being discriminatory; rather, they are required by the basic principle that what is different must be treated differently, as long as they respond to genuine vulnerabilities and do not last longer than necessary to address them.

The principles of non-discrimination may operate in respect to authorities' treatment of displaced vis-à-vis the non-displaced population within displaced populations.<sup>107</sup> Some factors may necessitate providing differential treatment, which include cause of displacement, location of displacement and inherent vulnerability. While some particular natural events may demand a special kind of protection, some areas and location may be especially vulnerable; some populations are inherently more vulnerable to the risks posed by displacement and natural disasters. As a result, it is necessary to identify such groups and take measures to address their vulnerability. For example, the northern part of Bangladesh (Rangpur, Dinajpur) is particularly vulnerable to monsoons and so natural disasters are felt more acutely in those areas, which demand a special kind of protection.

### ***7.3.6 Protection of Vulnerable Groups***

In any internal displacement situation, the protection needs of inherently vulnerable groups should receive particular attention. Within the overarching framework of international human rights law, states have a range of obligations to this vulnerable group. Some of the groups that raise the greatest concern include single parents, particularly women-headed households; unaccompanied women; pregnant or lactating women; minors, especially when unaccompanied; older persons, especially when unaccompanied or otherwise without family support; persons with disabilities, chronic illnesses; traumatised persons; members of ethnic or religious minorities and indigenous peoples. Mainly, economically and

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<sup>107</sup> Williams, above n 16, 17.

socially marginalised groups within society are generally worst affected during natural disasters. Such groups rarely have the financial and informational resources required for migration at their disposal. As a result, they rarely have the capacity to move in order to leave hazardous or unsustainable conditions. It is also difficult for these groups, especially, women, children, elderly and disabled persons, to access humanitarian assistance.

Under international human rights law, the authorities are legally bound to address the vulnerabilities of disadvantaged groups of people in accordance with the principle of equality and non-discrimination.<sup>108</sup> All protection mechanisms should take full account of the needs of especially vulnerable or marginalised groups, including ethnic minorities, children, elderly and disabled persons.<sup>109</sup> Principle 9 of the Guiding Principles imposes an obligation to take appropriate measures to protect against the displacement of indigenous peoples, minorities, peasants, pastoralists and other groups with a special dependency on and attachment to their lands.

All vulnerable and marginalised groups should be a priority concern in disaster response, and governments should design programmes to ensure their protection. The Guiding Principles need to strengthen humanitarian assistance programs to ensure that the special needs of vulnerable groups such as women, children, the elderly and disabled are met.

### ***7.3.6.1 Protection of Women***

International human rights standards and principles underscore the need to adequately assess and address the gender-differentiated effects of climate change.<sup>110</sup> The resettlement measures should ensure that women and girls do not suffer direct or indirect discrimination as a result of the relief and reconstruction efforts. According to CEDAW, women are entitled to ‘enjoy adequate living conditions, particularly in relation to housing, sanitation, electricity and water supply, transport, and communications’.<sup>111</sup> Taking into context the vulnerability of women during natural disasters, the Operational Guidelines urges governments to adopt appropriate measures as early and as quickly as possible to protect affected populations, especially women and children, against trafficking, forced labour and contemporary forms of slavery, such as sale into marriage, forced prostitution and sexual

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<sup>108</sup> Report of the OHCHR, above n 88, 15 para. 42.

<sup>109</sup> Leckie, ‘The Human Rights Implications of Climate Change’, above n 98, 6.

<sup>110</sup> Report of the OHCHR, above n 102, 16 para. 47.

<sup>111</sup> CEDAW art 14(2).

exploitation.<sup>112</sup> It also directs to deploy law enforcement personnel to areas at risk after natural disasters to prevent break down of law and order—including sexual and gender-based violence to women.<sup>113</sup>

Women generally face more constraints to their mobility than men due to their prevailing gender roles, which means it is more difficult for them to make a conscious choice to relocate as a result of climate change induced events. Therefore, it is imperative to empower women to have greater access to and control over productive resources—and to invest in building women’s adaptive capacity and disaster preparedness—particularly where men are migrating in larger numbers and gender roles are subsequently evolving. In contexts where women are migrating, it is essential to provide mechanisms that minimise women’s exposure to physical and sexual violence and trafficking during transit, and in temporary and new locations, make available reproductive health services and supply basic water and sanitation to alleviate the added work burden on women. It is also important to be mindful of, and respond to, gender dimensions of psychological stress, which comes from overcrowding, lack of privacy and disrupted routines.

#### **7.3.6.2 Protection of Children**

Like women, children have a higher mortality rate as a result of weather-related disasters and are more susceptible to injury and drowning during relocation. Children are also at greater risk of death as a result of diseases such as malaria, dengue and diarrhoea. In the 1991 cyclone in Bangladesh, death rates among children under 10 years of age were more than six times greater than those of adult men.<sup>114</sup>

Article 6 of CRC provides specific protection for the right to life, survival and protection of children.<sup>115</sup> Accordingly, states must take all appropriate measures to the maximum of its resources available to protect the survival and development of the child from the threats of climate change displacement.<sup>116</sup> According to the Committee on the Rights of the Child, the right to survival and development must be implemented in a holistic manner, ‘through

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<sup>112</sup> Art. A.3.3 of the Operational Guidelines, Brookings-Bern Project on Internal Displacement, above n 40, 19.

<sup>113</sup> A.3.2. of the Operational Guidelines, Brookings-Bern Project on Internal Displacement, above n 40, 19.

<sup>114</sup> C Bern et al., ‘Risk Factors for Mortality in the Bangladesh Cyclone of 1991’ (1993) 71(1) *Bull World Health Organ* 73–78.

<sup>115</sup> Under art. 6.2 of the *CRC*, a State Party must ensure not only the survival, but also the development of the child ‘to the maximum extent possible’. The *CRC* explicitly links the right to life to the obligation of States ‘to ensure to the maximum extent possible the survival and development of the child’.

<sup>116</sup> Submission of the Maldives to the OHCHR, above n 95, 44.

the enforcement of all other provisions of the Convention, including rights to health, adequate nutrition, social security, an adequate standard of living, a healthy and safe environment'.<sup>117</sup>

### **7.3.6.3 Protection of Minority and Indigenous People**

Minority and indigenous peoples are among the worst affected by the effects of the changing climate, since they have a close interaction with natural resources in their livelihoods and cultures.<sup>118</sup> The destruction of lands and forced relocation of indigenous communities, due to the effects of climate change, are thus likely to impinge upon the rights guaranteed by international instruments for minorities and indigenous people.<sup>119</sup> In particular, it has been argued that forced relocation due to the effects of climate change may lead to forced assimilation, which the right to culture is intended to prevent.

The United Nations Declaration on the Rights of Indigenous Peoples and other core human rights treaties set out several rights and principles of relevance to threats posed by climate change.<sup>120</sup> According to ICCPR, ethnic, religious, linguistic or indigenous minorities must be allowed to enjoy their own culture, practise their own religion and use their own language.<sup>121</sup> The Dana Declaration on Mobile Peoples and Conservation, leading to the UN General Assembly Resolution in 2007,<sup>122</sup> exemplifies how protection norms have been

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<sup>117</sup> Committee on the Rights of the Child, *General Comment No. 7: Implementing Child Rights in Early Childhood*, 40<sup>th</sup> sess., UN Doc. CRC/C/GC/7/Rev.1 (20 September 2006) para. 10.

<sup>118</sup> Kate Raworth, 'Climate Wrongs and Human Rights- Putting People at the Heart of Climate-Change Policy' (Oxfam Briefing Paper No. 117, Oxfam International, 2008) 7.

<sup>119</sup> Ben Saul et al., 'Climate Change and Human Rights' (2008), Submission to the Office of the United Nations High Commissioner for Human Rights on the Relationship Between Climate Change and Human Rights, September 2008, 3 <<http://www.law.usyd.edu.au/scil/pdf/Sub-ClimateChangeHRSept08.pdf>>.

<sup>120</sup> Key provisions included in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) are: the right to effective mechanisms for prevention of, and redress for, actions, which have the aim or effect of dispossessing them of their lands, territories or resources (art 8); the principle of free, prior and informed consent (art 19), the right to the conservation and protection of the environment and indigenous lands and territories (art 29), the right to maintain, control, protect and develop their cultural heritage and traditional knowledge and cultural expressions (art 31), the right to practice and revitalise their cultural traditions and customs (art 11), to maintain their distinctive and spiritual relationship with traditional lands and waters (Art 25), enjoy legal rights in land (art 26). Core international human rights treaties also provide for protection of indigenous peoples, in particular with regard to the right to self-determination and rights related to culture. See the provisions on cultural rights in art. 27 of *ICCPR*, and art. 15 of *ICESCR*. According to art. 27 of *ICCPR*, 'persons belonging to ethnic, religious, or linguistic minorities shall not be denied the right, in community with other members of their group, to enjoy their own culture'. The rights of indigenous peoples are also enshrined in ILO Convention No. 169 (1989) concerning Indigenous and Tribal Peoples in Independent Countries. Human rights bodies have also been particularly willing to protect indigenous peoples' rights adversely affected by environmentally harmful activities, because of the strong interdependence between indigenous welfare and the health of their environment.

<sup>121</sup> *ICCPR* art 27.

<sup>122</sup> United Nations General Assembly Resolution, *Declaration on the Rights of Indigenous Peoples*, 61<sup>st</sup> General Assembly UN Doc. GA/10612 (13 September 2007).

extended to another specific category of migrant. The Fourth Assessment Report (AR4) of IPCC observes, ‘incorporating indigenous knowledge into climate change policies can lead to the development of effective adaptation strategies that are cost-effective, participatory and sustainable’.<sup>123</sup> The indigenous people should be consulted before any relocation measures.<sup>124</sup> Their traditional knowledge should be taken into account in framing adaptation and relocation schemes.<sup>125</sup>

#### ***7.3.6.4 Protection of Persons with Disabilities***

The UN Convention on the Rights of Persons with Disabilities states that states should take ‘all necessary measures to ensure protection and safety of persons with disabilities in situations of risk, including situations of armed conflict, humanitarian emergencies and the occurrence of the natural disasters’.<sup>126</sup> The authorities need to take special care and assistance for protection of persons with disabilities during natural disasters.

#### ***7.3.7 Protection from Arbitrary Displacement***

The international human rights standards guarantee that in all situations, displaced persons should enjoy the right to freedom of movement and choice of residence, including the right to remain where they are, unless involuntary movement is (1) undertaken in a manner provided for by law; (2) necessary to protect national security, public order (ordre public), public health or morals or the rights and freedoms of others and (3) consistent with other recognised human rights.<sup>127</sup> Forced evacuations and relocations are not absolutely prohibited under international law. Rather, the right to freedom of movement can be limited under certain strict conditions by the authority in order to take life-saving measures.

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<sup>123</sup> IPCC, *IPCC Fourth Assessment: Working Group II Report, Effects, Adaptation and Vulnerability* (2007) <<http://www.ipcc.ch/pdf/assessment-report/ar4/wg2/ar4-wg2-app.pdf>>.

<sup>124</sup> See Permanent Forum on Indigenous Issues, *Report on the Seventh Session*, 07<sup>th</sup> sess., Economic and Social Council, Official Records 2008, Supplement No. 23, E/C.19/2008/13, 21 April-2May 2008, para. 4. The Permanent Forum also recommended that a mechanism be put in place for the participation of indigenous peoples in climate change negotiations under *UNFCCC* (para. 30).

<sup>125</sup> Permanent Forum on Indigenous Issues, above n 128, para. 4.

<sup>126</sup> *UN Convention on the Rights of Persons with Disabilities* art 11.

<sup>127</sup> *UDHR* art 13; *ICCPR* art 12. Those rights may be temporarily suspended in cases of officially proclaimed public emergency. See *ICCPR* art 4. The *UDHR* provides clear guidance in art. 13 that ‘everyone has the right to freedom of movement and residence within the borders of each state’. Art. 12 of the *ICCPR* affirms that ‘everyone lawfully within the territory of a State shall, within that territory, have the right to liberty of movement and freedom to choose his residence’. Of course, the *ICCPR* provides some exceptions that allow States to provide restrictions on freedom of movement on certain grounds of national security, public order or for protection of rights and freedoms of others.

Forced evacuation or relocation in the context of natural disasters is arbitrary ‘unless the safety and health of those affected requires their evacuation’.<sup>128</sup> The Guiding Principles on IDPs state that ‘the authorities concerned shall ensure that all feasible alternatives are explored in order to avoid displacement altogether. Where no alternatives exist, all measures shall be taken to minimize displacement and its adverse effects’.<sup>129</sup> In doing so, the following generic requirements must be adhered to:

1. Since the measures of evacuation and relocation would be a limitation of the freedom of movement, it must be clearly regulated in law. Such laws have to be accessible, in particular in areas that can be affected by their implementation, and understandable. This enhances transparency, and the population can make plans themselves.
2. The evacuation, relocation or prohibition of return must be necessary and proportional to the end of ensuring the safety and health of the affected concerned.<sup>130</sup>
3. The evacuation or relocation must be a measure of last resort; all feasible alternatives must have been explored in order to avoid displacement altogether.<sup>131</sup>
4. Whenever possible, the free consent of persons concerned must be sought before ordering such measures.
5. In cases of permanent relocations, return can only be prohibited in very exceptional cases in which the area of return is indeed one with high and persistent risks for life or security, the remaining resources are inadequate for survival of returnees, the enjoyment of basic human rights cannot be guaranteed, all other available adaptation measures are exhausted and the situation in the area of return can no longer be alleviated by protective measures.<sup>132</sup>
6. Once the emergency is over, persons displaced by the natural disaster should be granted the opportunity to choose freely without any restriction whether they want

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<sup>128</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) A. 6.2.d

<sup>129</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998).

<sup>130</sup> *Report of the Representative of the Secretary-General on the Human Rights of Internally-Displaced Persons*, UN Doc. A/64/214 64<sup>th</sup> sess. item 71 (b) provisional agenda 8.

<sup>131</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) art 7.1.

<sup>132</sup> *Report of the Representative of the Secretary-General on the Human Rights of Internally-Displaced Persons*, UN Doc. A/64/214 64<sup>th</sup> sess. item 71 (b) provisional agenda 8.

to return to their homes and places of origin, to remain in the area to which they have been displaced, or to resettle in another part of the country.<sup>133</sup>

7. Under any circumstances, they should not be forced to return to or resettle in any place where their life, safety, liberty and/or health would be at further risk.<sup>134</sup>
8. All evacuations, whether with or without the consent of those affected, must be carried out in a way that respects the rights to life, dignity, liberty and security of those affected.<sup>135</sup>
9. The authorities must make real efforts to implement other adaptation measures, including DRR, to make the areas safe enough so that people can choose to stay.

### **7.3.8 Protection at All Phases of Displacement**

In the situation of climate-related disasters, there is immense potential for serious violations of human rights both before and after the displacement.<sup>136</sup> Before displacement, the life, liberty and security are at risk in the face of natural disasters, such as floods and cyclones. There is also a serious risk of human rights violations when the displaced persons cannot return to their homes or find new ones after protracted period of disasters.<sup>137</sup> The longer displacement lasts, the discrimination and violations of economic, social and cultural rights can become more entrenched in the context of natural disasters.

The Guiding Principles on IDPs stress that states bear the primary duty and responsibility to provide assistance and protection in all phases of internal displacement; namely, to prevent displacement, to protect persons displaced by the effects of climate change and to find durable solutions for the displaced, in particular those who cannot be allowed or expected to return to their homes or places of habitual residence considered too dangerous for inhabitation.<sup>138</sup>

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<sup>133</sup> Art. A.1.6 of Operational Guidelines, cited in Brookings-Bern Project on Internal Displacement, above n 40, 18. There should not be any restriction except when it is necessary to protect national security, the safety and security of affected populations, public order, safety, public health or morals and the rights and freedoms of others.

<sup>134</sup> According to art. A.1.7 of Operational Guidelines, Brookings-Bern Project on Internal Displacement, above n 40, 19.

<sup>135</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principle 8, A.1.3

<sup>136</sup> Maria Stavropoulou, 'The Right Not to Be Displaced' (1994) 9 *American University Journal of International Law & Policy* 689, 735.

<sup>137</sup> Kälín, 'A Human Rights Perspective', above n 29.

<sup>138</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principle 3.

The evidence of current practice of government actions in response to environmental disasters exposes that the protective actions and measures are extended only during displacement.<sup>139</sup> There are serious protection gaps by the government authorities in providing protection during pre-displacement and post displacement period.<sup>140</sup> The authority must strive to find out a durable solution to the displacement caused by the effects of climate change.<sup>141</sup> Thus, the Guiding Principles need to consider extending protection at three stages—before, during and after displacement, including resettlement.<sup>142</sup>

### **7.3.8.1 Protection in Pre-displacement Period**

The Guiding Principles on IDPs oblige states to ensure both substantive and procedural human rights for any type of displacement. Accordingly, before any decision on displacement, authorities need to ensure that the basic human rights including right to life, liberty, security and dignity of the persons likely to be affected by the displacement are respected; they have access to appropriate information and, more importantly, they are consulted and their concerns taken into consideration. They have the right to an effective remedy.<sup>143</sup>

In furtherance of these principles, the authority can ensure implementation of early-warning systems, development of awareness strategies to assist people to prepare for displacement.<sup>144</sup> The authorities should identify vulnerable areas and assess and monitor the potential hazards and vulnerabilities to anticipate displacement.<sup>145</sup> Accordingly, they should provide information to local people to prepare them for facing the potential dangers.<sup>146</sup> McAdam and Saul suggest the allocation of government resources to match

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<sup>139</sup> Zetter, 'Protecting Environmentally Displaced People', above n 4, 58.

<sup>140</sup> Zetter, 'Protecting Environmentally Displaced People', above n 4, 58.

<sup>141</sup> The UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) also state that 'the authorities concerned shall ensure that all feasible alternatives are explored in order to avoid displacement altogether. Where no alternatives exist, all measures shall be taken to minimize displacement and its adverse effects'.

<sup>142</sup> Three solutions are proposed (return, local integration, resettlement in another part of country)—in all those cases participation has to be secured (art 28.2); right to be protected against forcible return/resettlement to places where life, health, at risk (art 15.d). Compensation for property/land lost and assistance in resettling is stipulated (art 28f).

<sup>143</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principles 7–9.

<sup>144</sup> Jane McAdam and Ben Saul, 'Displacement with Dignity: International Law and Policy Responses to Climate Change Migration and Security in Bangladesh' (2010) 53 *German Yearbook of International Law* 271.

<sup>145</sup> *Ibid.*

<sup>146</sup> *Ibid.*

local needs and develop further strategies to improve their lives based on indigenous traditional community knowledge and coping mechanisms.<sup>147</sup> They should also build storage systems at district levels to effectively dispatch material resources for relief and rehabilitation.

### **7.3.8.2 Protection during Displacement**

The Guiding Principles on IDPs oblige the national authorities to protect and respect a wide range of civil, political, economic, social and cultural rights through providing humanitarian assistance during displacement.<sup>148</sup> Further, some scholars have suggested the need for an institutional rapid response mechanism to provide logistical support to the displaced.<sup>149</sup> Since people tend to stay in their homes until the last moment, which increases threats to life and property, teams of volunteers could be mobilised to assist with evacuation to pre-determined places where there is food, shelter, healthcare, sanitation and water on hand.<sup>150</sup> Mobile medical units could respond to emergencies (including by being equipped to deal with the outbreak of diseases), and mobile schools could also be established to reach displaced children.<sup>151</sup> The authorities should determine temporary shelter and facilitate the displaced people with transport to come to the shelter area.

### **7.3.8.3 Durable Solutions: Return, Integration and Relocation<sup>152</sup> or Planned Resettlement<sup>153</sup>**

The durable solution is achieved only when displaced persons no longer require any specific assistance and protection needs that are connected with their displacement.<sup>154</sup> The Guiding Principles on IDPs recognise that IDPs can move freely in order to avoid unsafe

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<sup>147</sup> Ibid.

<sup>148</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principle 25.

<sup>149</sup> McAdam and Saul, above n 148, 272.

<sup>150</sup> Ibid.

<sup>151</sup> Ibid.

<sup>152</sup> John Campbell defines the term 'relocation' as the 'permanent (or long-term) movement of a community (or a significant part of it) from one location to another, in which important characteristics of the original community, including its social structures, legal and political systems, cultural characteristics and worldviews, are retained: the community stays together at the destination in a social form that is similar to the community of origin'. See John Campbell, 'Climate-induced Community Relocation in the Pacific: The Meaning and Importance of Land', in McAdam (ed.), *Climate Change and Displacement* 58–59.

<sup>153</sup> Planned relocations can be defined as the movement of people, typically in groups or whole communities, as part of process led by the state or other organisation, to a predefined location. See Foresight, 'Foresight: Migration and Global Environmental Change' (Final Project Report, Government Office for Science, London, 2011) 176.

<sup>154</sup> IOM, 'Disaster Risk Reduction and Climate Change Adaptation in IOM's Response to Environmental Migration' (IOM, 2012) 3.

situations or undertake other necessary travel.<sup>155</sup> Accordingly, upholding their freedom of movement, the Guiding Principles spell out three potential durable solutions: return to the place of former residence, local integration at the site of displacement, or resettlement to a third location within the country.<sup>156</sup> The Guiding Principles on IDPs also stress that the authorities should ensure that displaced people choose the durable solution—return to original place, local integration or resettlement—voluntarily, in safety and with dignity.<sup>157</sup> The forced climate migrants should in principle be able to choose where to live while displaced and to voluntarily reassess such decisions once the reasons for their displacement or barriers to their voluntary return have ceased to exist. There should be information sharing and a consultation process, which is truly representative and participation inclusive, so that the displaced people are able to participate fully in the planning and management of their return, or resettlement and subsequent integration.<sup>158</sup>

The authorities must take concrete measures—restoring the rights of freedom of movement, allowing displaced people a free choice and providing sufficient information, consultation and appropriate assistance in either returning home, local integration or resettlement permanently elsewhere—so that migrants can make a voluntary and informed choice to find a durable and sustainable solution to their displacement.<sup>159</sup> The authorities are also obliged to provide physical security, access to humanitarian assistance, transportation, access to the law, economic and social integration and restoration and recovery of property and possessions, and compensation for loss.<sup>160</sup> These measures help those people make a free and voluntary decision on whether to return, integrate locally

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<sup>155</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principles 14, 15, and 28(1).

<sup>156</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principle 28; Williams, above n 16, 36.

<sup>157</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principle 28.

<sup>158</sup> *Ibid.*

<sup>159</sup> Williams, above n 16, 83; UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principle 28 : ‘1. Competent authorities have the primary duty and responsibility to establish conditions, as well as provide the means, which allow internally displaced persons to return voluntarily, in safety and with dignity, to their homes or places of habitual residence, or to resettle voluntarily in another part of the country. Such authorities shall endeavour to facilitate the reintegration of returned or resettled internally displaced persons.’

<sup>160</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principle 29; Williams, above n 16, 84.

where they had been displaced or evacuated to, or to relocate and integrate elsewhere in the country.<sup>161</sup>

#### **7.3.8.3.1 Return to Original Place**

Past evidence of displacement out of natural disasters in Bangladesh shows that most of the people who took shelter to neighbouring areas in the face of sudden-onset disasters, such as floods, storms and cyclones, returned to their original place once the danger was over. The disaster management actions had a catalyst role to play in this regard. Prompt action should be taken to enable displaced people to return home and contingency plans should be in place for, for example, the reconstruction of embankments. Given that there is very limited area for resettlement in Bangladesh, the mostly densely populated country in the world, the authority should adopt remedial measures to the extent possible so that the displaced people can return to their original place. The authority needs to ensure safety to return to areas from effects of secondary hazards and recurrent disasters.<sup>162</sup> Proper measures should be taken to reconstruct the affected area and facilitate resettlement in their original place, providing necessary support of food, shelter and livelihood to secure their stay.

However, the forced climate migrants, under any circumstances, should not be required to return to areas in which their life, safety, liberty and/or health would be at further risk.<sup>163</sup> In 2005, the United Nations Sub-Commission on the Promotion and Protection of Human Rights endorsed the UN Principles on Housing Property Restitution for Refugees and Displaced Persons.<sup>164</sup> These become known as the Pinheiro Principles. They highlight the right of refugees and displaced people to return not only to their country but also to their

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<sup>161</sup> *Report of the Representative of the Secretary-General on the Human Rights of Internally-Displaced Persons*, UN Doc. A/64/214 64<sup>th</sup> sess. item 71 (b) provisional agenda 10.

<sup>162</sup> *Ibid.*

<sup>163</sup> Operational Guidelines, Brookings-Bern Project on Internal Displacement, above n 40, A 1.7. The Operational Guidelines and Field Manual on Human Rights Protection in Situations of Natural Disaster, issued by the UN Emergency Relief Coordinator and the Secretary General's Representative on Internally Displaced Persons, makes clear that: 'the return of persons displaced by the disaster to their homes and places of origin should only be prohibited if these homes or places of origin are in zones where there are real dangers to the life or physical integrity and health of the affected persons. Restrictions should only last as long as such dangers exist and only be implemented if other, less intrusive, measures of protection are not available or possible'.

<sup>164</sup> ADB, 'Climate Change and Migration in Asia and the Pacific' (ADB, 2012) 49.

land and home.<sup>165</sup> They provide an international standard and rights-based approach that should also apply to those displaced by environmental changes.<sup>166</sup>

#### **7.3.8.3.2 Local Integration or Relocation<sup>167</sup>**

There may be certain situations when environmental conditions are degraded in such a way that it is impossible to continue lives in affected areas, or when displaced people cannot return to their original areas because of adverse environmental situations, such as river-bank erosion and salinity intrusion due to sea-level rise. In those situations, those people either need to be assimilated into the displaced areas or government may need to relocate them to safer places. However, such local integration or resettlement measures need to be consistent with the Guiding Principles on IDPs.<sup>168</sup> In such situations, forced relocations should be avoided; rather, the authorities must ensure alternative housing and land in consultation with displaced people.<sup>169</sup> Such relocation, if properly managed, can be a good adaptation strategy for the affected people.

#### **7.3.9 Procedural Guarantees**

The durable solutions, including return, integration and relocation process, and all mechanisms for the protection of human rights of forced climate migrants must ensure procedural fairness, including access to information, participation in decision-making and access to justice. Procedural rights—the right to know, the right to participate in decision-making and the right to have access to justice in environmental matters—were also formulated in principle 10 of the Rio Declaration.<sup>170</sup> Under international human rights law, access to information is implied in the rights to freedom of expression and opinion articulated in article 19 of both UDHR and ICCPR.<sup>171</sup> The Convention on Access to Information, Public Participation in Decision-Making, and Access to Justice in Environmental Matters (Aarhus Convention) obliges states to actively compile periodic reports on environmental risks, update them systematically and make them available to the

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<sup>165</sup> Ibid.

<sup>166</sup> Ibid.

<sup>167</sup> The suggested measures for planned relocation or resettlement are discussed in Heading 8.6 of Chapter 8.

<sup>168</sup> Susan F Martin, ‘Climate Change, Migration and Adaptation’ (Background Paper, German Marshall Fund of the United States, June 2010) 5 <[http://www.gmfus.org/galleries/defaultfile/SMartinAdaptation\\_V3.pdf](http://www.gmfus.org/galleries/defaultfile/SMartinAdaptation_V3.pdf)>.

<sup>169</sup> *Report of the Representative of the Secretary-General on the Human Rights of Internally-Displaced Persons*, UN Doc. A/64/214 64<sup>th</sup> sess. item 71 (b) provisional agenda 10.

<sup>170</sup> Declaration of the United Nations Conference on the Human Environment (adopted 14 June 1992) UN Doc A/CONF.151/26, vol I (12 August 1992) (Rio Declaration)

<sup>171</sup> UDHR art 19; ICCPR art 19. The ICCPR states explicitly that ‘this right [to freedom of expression] shall include freedom to seek, receive, and impart information and ideas of all kinds’.

public proactively.<sup>172</sup> Under UNFCCC, the states have an obligation to promote public access to information on climate change, and specifically the development of educational and public awareness programmes.<sup>173</sup> Jurisprudence of regional human rights courts also underlines the importance of access to information in relation to environmental risks.<sup>174</sup>

The importance of public participation has also been addressed in numerous international environmental instruments, often in connection to the principle of SD.<sup>175</sup> The right to participation in decision-making is also implied in article 25 of ICCPR, which guarantees the right to take part in the conduct of public affairs. The Rio Declaration on Environment and Development includes the principle that states shall facilitate and encourage public awareness and participation by making information widely available.<sup>176</sup> Article 7 of the Aarhus Convention also concerns public participation: ‘Each party shall make appropriate practical and/or other provisions for the public to participate during the preparation of plans and programmes relating to the environment, within a transparent and fair framework, having provided the necessary information to the public’.<sup>177</sup> UNFCCC also requires public participation in addressing climate change and its effects and developing adequate responses.<sup>178</sup>

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<sup>172</sup> Art. 5 of the *Aarhus Convention on Access to Information, Public Participation in Decision-Making, and Access to Justice in Environmental Matters*. The *Aarhus Convention* recognises not only the right of the public to receive information upon request (art 4), but also the duty of the government to collect and disseminate information (art 5).

<sup>173</sup> UNFCCC art 6.

<sup>174</sup> See, for example, *Guerra and Others v. Italy*, ECHR 14967/89; Inter-American Court of Human Rights, Case of *Claude Reyes et al. v. Chile*. Merits, Reparations and Costs, Series C, No. 151, cited in Report of the OHCHR, above n 102, 26 para. 78.

<sup>175</sup> Including but not limited to: the *World Charter for Nature* UN GA Res 37/7 (1982) principle 23; the *United Nations Convention to Combat Desertification in Those Countries Experiences Serious Drought and/or Desertification* (14 October 1994) art 3; the *Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade* (10 September 1998) art 15(2); the *Cartagena Protocol on Biosafety to the Convention on Biological Diversity* (Montreal, 29 January 2000) 39 ILM 1027 art 23; the UN Conference on Environment and Development, Agenda 21 A/CONF.151/4(Part III) chap 23 paras 23.1, 23.2.

<sup>176</sup> It includes the principle that ‘environmental issues are best handled with the participation of all concerned citizens... At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities ... States shall facilitate and encourage public awareness and participation by making information widely available’. See *Rio Declaration on Environment and Development* principle 10. See also the *Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters*, opened for signature 28 June 1998, 2161 UNTS 447 (entered into force 30 October 2001); *UDHR* arts 19, 21; *International Covenant on Civil and Political Rights*, opened for signature 19 December 1966, 999 UNTS 171 (entered into force 23 March 1976) arts 19, 22, 25.

<sup>177</sup> *Aarhus Convention*.

<sup>178</sup> UNFCCC art 6(a)(iii).

These procedural rights, based upon existing human rights, have obvious implications for the processes by which government make decisions about their response strategies both nationally and internationally, particularly in the context of the governments' efforts to relocation and resettlement of climate forced migrants.<sup>179</sup> According to the Guiding Principles on IDPs, internally displaced people have a right to be informed, consulted and to participate in decisions affecting them.<sup>180</sup>

Participation in decision-making is of key importance in efforts to manage climate change displacement. However, adequate participation can only be achieved if information on global warming is made publicly available. It is crucial to include the people affected in the decision-making process to determine how to respond to these threats, and the displaced people themselves need to be given the opportunity to participate in decisions that affect their lives.<sup>181</sup> For example, adequate and meaningful consultation with affected persons should precede decisions to relocate people away from hazardous zones.<sup>182</sup> The participation of the public can legitimise the decisions taken in response to climate change. Decisions following a process of public deliberation are more likely to be sound and sustainable.<sup>183</sup>

The participation of the affected communities during natural disasters reduces dependency and facilitates reintegration. The involvement in decision-making can empower the affected people to take steps on their own to mitigate and end their displacement. By clearly identifying the problems that they face, migrants can be encouraged to not only suggest what state responses would be most appropriate but also to develop their own complementary responses. In many cases, that might involve self-organisation, which could begin as a response to very basic needs, but it could provide a platform for the assumption of more important roles over time.

However, the 'Guiding Principles for the Protection of Forced Climate Migrants' must set out a process of consultation with the affected populations. The authorities responsible for resettlement should involve those affected, particularly women, in the planning and

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<sup>179</sup> See Laura Horn, 'The Implications of the Concept of Common Concern of a Human kind on a Human Rights to a Healthy Environment' (2004) 1 *Macquarie Journal of International and Comparative Environmental Law* 233, 257.

<sup>180</sup> See in particular UNHCR, *Guiding Principles on International Displacement* E/CN.4/1998/53/Add.2 (1998) 7.3.c, d, 18.3, 22.1, 28.2, 29.1.

<sup>181</sup> Ferris, 'Internally Displaced Persons', above n 6, 13.

<sup>182</sup> Report of the OHCHR, above n 102, 26 para. 79.

<sup>183</sup> Submission of the Maldives, above n 95, 64.

management of their relocation.<sup>184</sup> Therefore, there should be intensive public consultations and participation with affected communities currently or likely to be affected in the future by rising sea levels or other consequences of climate change, with a view to developing viable and practical plans to protect the rights of forced climate migrants.<sup>185</sup>

In the context of finding durable solutions for persons displaced by natural disasters, the following key procedural principles were classed as important in the Operational Guidelines on Human Rights in Situations of Natural Disasters:<sup>186</sup>

- a) the right of the displaced to freely choose whether they want to return, integrate at the location where they were displaced to, or start a new life in another part of the country. Of course, a real choice is only possible once return becomes possible;
- b) the right of the displaced to be informed and consulted about their future and the options available;
- c) the primary responsibility of authorities to create conditions that allow for return in dignity, that is, conditions allowing returnees to have access to adequate housing, and other services such as health and education, and to gainful employment or other means of livelihoods.<sup>187</sup> The affected and the population at risk should be consulted and invited to participate in the process from the start, including in exploring intervention measures to help them remain and/or to move, and in evacuation, relocation, resettlement and return decisions and design. Most often rights are violated not because of conscious intention but because of the lack of rights-based planning (Operational Guidelines). The national authority should collect reliable and relevant data on climate change displacement; disseminate information on likely climate change displacement, and closely consult with and actively involve potential or actual climate change displacement.

The authorities, in consultation with the population at risk, may reach the decision not to pre-emptively and permanently relocate to another area, but rather put efforts into enhancing other emergency preparedness, including making plans, securing resources and capacity and clarifying roles and responsibility for evacuation in the event of an actual disaster. The affected and the population at risk should be consulted and invited to

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<sup>184</sup> Martin, above n 171, 6.

<sup>185</sup> Displacement Solutions, 'Meeting Report on Climate Change, Human Rights and Forced Human Displacement' (Displacement Solutions, 2008) 7.

<sup>186</sup> Kālin, 'A Human Rights Perspective', above n 29.

<sup>187</sup> Ibid.

participate in the process from the start, including exploring intervention measures to help them remain or move, and in evacuation, relocation, resettlement and return decisions and design. After a disaster has struck and people have either fled on their own initiative or have

been evacuated, the State can, in consultation with the affected population, implement resettlement to another area as a durable solution to the initial displacement (the other solutions being return and local integration). Authorities should start participatory planning as far ahead as possible.

### ***7.3.10 Compensation for Loss of Property during Natural Disasters***

The right to property is guaranteed by international human rights instruments and various judicial decisions coming from international and regional courts.<sup>188</sup> Principles 21 and 29 of the UN Guiding Principles oblige states to ensure that property and possessions left behind by IDPs, such as homes and lands, are protected from destruction and appropriation during displacement and restored to their owners or lawful possessors in the context of durable solutions.<sup>189</sup>

It is still doubtful whether the constitutional guarantee to right to property<sup>190</sup> is meant to oblige the government to protect property from the effects of climate change.<sup>191</sup> Thus, compensation for property lost due to environmental events, such as sea-level rise and river-bank erosion, and resettlement for families displaced by environmental degradations have not yet recognised as a matter of legal rights. Therefore, the government does not incur a strict legal duty to compensate the lost property and resettle homeless people due to sea-level rise. However, the government has an obligation to respect the right to property and to ensure that people are not arbitrarily deprived of this right through displacement. If people need to leave their land and property due to a government-initiated relocation programme, they should be given adequate compensation and resettlement assistance.

The forced climate migrants who are badly affected by climatic effects and so relocated in new areas should receive compensation for property and land lost, as well as assistance

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<sup>188</sup> See *ICCPR* art 47; *ICESCR* art 25.

<sup>189</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principles 21, 29.

<sup>190</sup> See *Constitution of Bangladesh* art 42.

<sup>191</sup> See D Freestone, M Farooque and SR Jahan, 'Legal Implications of Global Climate Change for Bangladesh' (Briefing Document No. 5, Bangladesh Unnayan Parishad, CEARS, CRU, University of East Anglia, 1993) 7.

in resettling and re-establishing their livelihoods and residence elsewhere.<sup>192</sup> If it is a permanent relocation, principles used in the development sector could also apply by analogy. In Bangladesh, most of the sectorial laws governing development activities lay down conditions for compensation for land and other interests. For example, section 28 of the Embankment and Drainage Act, 1952, states that ‘whenever any land, or any right of fishery, right of drainage, right to the use of water or other right of property shall have been injuriously affected by any act done or work executed under this Act, the person in whom such property or right is vested may claim compensation’. Similar provisions can be found in other laws, like section 23 of the Agricultural and Sanitary Improvement Act, 1920. The World Bank’s Operational Policy 4.12 on Involuntary Resettlement of January 2002

requires that all affected persons should have incomes and standards of living that are at least equivalent to their pre-project condition. While resettlement after a disaster should also be based on principles of restorative justice, it may not always be possible to identify precisely the extent and value of land that has been lost or destroyed as a result of the disaster. A solution may be to offer standardised access to land and housing for all resettled persons.

However, compensation and relocation for families displaced by environmental degradation has not yet developed as a matter of legal right. Nor has any law yet been enacted to ensure relocation if compensation is not paid in such cases. Since the Government is likely to receive funds from the climate change fund as compensation, the people who lost land due to sea-level rise should be compensated with that fund. While these people preferably deserve the money, it would be unjustified to expend the money for purposes other than the protection of victims of climate change.

#### ***7.4 Concluding Remarks***

Given the vulnerability of the forced climate migrants, the authorities need to ensure basic needs and provide adequate support for livelihood as part of durable solutions, so that they can restart normal lives and fully integrate at the location of their choice.<sup>193</sup> Provision of proper housing and services, such as health care or education, is essential and continued access to livelihoods is critical. If access to former livelihoods is not possible, the creation

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<sup>192</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principles 28, 29; *Report of the Representative of the Secretary-General on the Human Rights of Internally-Displaced Persons*, UN Doc. A/64/214 64<sup>th</sup> sess. item 71 (b) provisional agenda 10.

<sup>193</sup> Williams, above n 16, 36.

of new livelihood opportunities is vital.<sup>194</sup> Indeed, the extent of the rights of victims who are at risk of displacement and the corresponding obligations of states is dynamic and complex.<sup>195</sup>

However, the problem with the policy framework for displacement lies with its failure to take account of the human dimension of displacement. Any new protection framework for climate migrants should consider principles of international human rights law.<sup>196</sup> The international human rights norms, including UN Guiding Principles on IDPs and the Operational Guidelines, guide and assist national governments, international humanitarian agencies and NGOs to better discharge their responsibilities in protecting and assisting the people who have been forcibly displaced in their country.<sup>197</sup> The Special Representative on Human Rights of IDPs has emphasised incorporating the IDP Guiding Principles into national legislation to expand implementation and increase accountability.<sup>198</sup>

Human rights principles should be considered fundamental, relating to all humanitarian work pertaining to climate change displacement management, including relocation of displaced people. Viewing forced climate displacement as a human rights issue, the governments should adopt more caring, practical and concrete measures to protect the rights of the climate change displacement people.<sup>199</sup> It is an urgent call for states, and the international community, to articulate and address the protection of peoples' rights, in relation to climate change displaced persons. A human rights-oriented approach to dealing with climate change induced displacement will mitigate the sufferings and vulnerability of the displaced people in a more humane way.

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<sup>194</sup> *Report of the Representative of the Secretary-General on the Human Rights of Internally-Displaced Persons*, UN Doc. A/64/214 64<sup>th</sup> sess. item 71 (b) provisional agenda 10.

<sup>195</sup> Leighton, above n 6, 2.

<sup>196</sup> Dana Zartner Falstrom, 'Stemming the Flow of Environmental Displacement: Creating a Convention to Protect Persons and Preserve the Environment' (2001) 1 *Colorado Journal of International Environmental Law and Policy*, 1–28, 26.

<sup>197</sup> Walter Kälin, 'Renewed Effort Needed to Help the Displaced' (Speech delivered on 30 October 2008, Brookings) <[http://www.brookings.edu/opinions/2008/1030\\_internal\\_displacement\\_kalin.aspx](http://www.brookings.edu/opinions/2008/1030_internal_displacement_kalin.aspx)>.

<sup>198</sup> *Report of the Representative of the Secretary General on Human Rights of Internally Displaced Persons*, Walter Kalin, Addendum: High-Level Conference, 4–5, cited in Leighton, above n 6, 9.

<sup>199</sup> Leckie, 'Climate-Related Disasters and Displacement', above n 7, 2.



# CHAPTER 8

## PROTECTION OF CLIMATE MOTIVATED MIGRANTS IN BANGLADESH: FACILITATING MIGRATION AS AN ADAPTATION STRATEGY

### 8.1 Introduction

Migration in response to environmental degradations and changes may occur in a large continuum and depend on different degrees of force and timeframes. Generally, during natural disasters people decide to leave their own place when it is impossible to continue their life there because of a lack of sufficient protection and assistance.<sup>1</sup> These people are ‘forced climate migrants’ who are compelled to take refuge in other areas.<sup>2</sup> Others may leave their home and start moving to safer areas due to a perceived threat of impending natural disasters and/or they expect better protection and assistance in other places within or outside their own country, especially when they believe their home may be flooded due to sea-level rise or river-bank erosion, their lands may become less tenable for agriculture or their livelihood, such as fishing and farming, may be in jeopardy due to natural hazards.<sup>3</sup>

However, migration, in many cases, is also used as an adaptation strategy to respond to changes in the environment. Generally, the decision for any form of migration, be it local, national or international, is dependent on many other interrelated factors, such as social, economic and political.<sup>4</sup> The degree of compulsion or coercion involved in the displacement has important implications in determining the status of ‘migrants’ in international refugee law. Most of the literature on ‘environmental or climate refugees’ makes a sharp distinction between voluntary and forced migration and the scholars suggest extending protection to persons forced to relocate due to certain environmental events.<sup>5</sup> The individuals who moved pre-emptively due to prior information or experiences of

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<sup>1</sup> Walter Kälin, ‘Displacement Caused by the Effects of Climate Change: Who Will Be Affected and What Are the Gaps in the Normative Framework for their Protection?’ (10 October 2008, Brookings) 4 <[http://www.brookings.edu/papers/2008/1016\\_climate\\_change\\_kalin.aspx](http://www.brookings.edu/papers/2008/1016_climate_change_kalin.aspx)>.

<sup>2</sup> The protection of these forced climate migrants are discussed in Chapter 7.

<sup>3</sup> See Kälin, above n 1.

<sup>4</sup> See Chapters 2 and 3 of this thesis for a detailed discussion on this issue.

<sup>5</sup> Bonnie Docherty and Tyler Giannini, ‘Confronting a Rising Tide: A Proposal for a Convention on Climate Change Refugees’ (2009) 33 *Harvard Environmental Law Review* 349, 364.

repeated natural disasters are classified as voluntary migrants and so denied the required protection.<sup>6</sup> However, the distinction between voluntary and involuntary migration is not as easy as it appears.<sup>7</sup> As Speare points out:

[i]n the strictest sense migration can be considered to be voluntary only when a person is physically transported from a country and has no opportunity to escape from those transporting him. Movement under threat, even the immediate threat to life, contains a voluntary element, as long as there is an option to escape to another part of the country, go into hiding or to remain and hope to avoid to persecution.<sup>8</sup>

The international organisations dealing with refugees and migrants, including UNHCR and IOM, advocate considering migration as adaptation strategy in national policy responses.<sup>9</sup> However, Fabrice Renaud and his co-authors in a 2007 United Nations University report articulate three categories of environmental migrants: environmentally motivated migrants, who may leave a steadily deteriorating environment; environmentally forced migrants, who ‘have to leave’ in order to avoid the worst and environmental refugees, who flee the worst, including natural disasters.<sup>10</sup> Renaud et al defines ‘environmentally motivated migrants’ as those ‘who “may leave” a steadily deteriorating environment in order to preempt the worst’.<sup>11</sup> The concept of climate change motivated migrants in this thesis is developed based on this idea of ‘environmentally motivated migrants’. The climate-motivated migrants are yet to face any environmental emergency and so not under compulsion to leave their home as a last resort; rather, in apprehension of a ‘continuously deteriorating environment’ they ‘may decide to move in order to avoid further deterioration of their livelihoods’.<sup>12</sup>

In such types of migration, along with natural disasters such as cyclones, floods and tidal waves, others socio-economic factors, such as poverty and unemployment, motivate people to move from place to place in search of seasonal harvesting and employment. For example, farmers and fishermen in Bangladesh who observe a steady decline in land

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<sup>6</sup> Ibid.

<sup>7</sup> Graeme Hugo, ‘Environmental Concerns and International Migration’ (1996) 30(1) *International Migration Review* 105, 106.

<sup>8</sup> A Speare, ‘The Relevance of Models of Internal Migration for the Study of International Migration’ in G Tapinos (ed.), *International Migration: Proceedings of a Seminar on Demographic Research in Relation to International Migration* (1974) 84, 89.

<sup>9</sup> UNHCR, ‘Summary of Deliberations on Climate Change and Displacement’ (2011) 23(3) *International Journal of Refugee Law* 561, 573.

<sup>10</sup> Fabrice Renaud et al., ‘Control, Adapt or Flee: How to Face Environmental Migration?’ (Intersections No. 5/2007, United Nations University: Institute for Environment and Human Security [UNU-EHS] 2007) 29–30.

<sup>11</sup> Fabrice G Renaud et al., ‘A Decision Framework for Environmentally Induced Migration’ (2011) 49 (S1) *International Migration* e6, e15.

<sup>12</sup> Ibid.

productivity due to salinity intrusion as a result of sea-level rise would be exposed to increased poverty. In such a situation, these vulnerable persons may decide to move to cities and urban areas for work, or at least send a family member to other regions or countries in order to generate new income through remittances.<sup>13</sup>

The difference between climate-motivated migrants and climate forced migrants is very subtle. Climate-motivated migration, if not managed, would exacerbate further vulnerability and may lead to forced migration. Migrants might be defrauded by unscrupulous dalals, recruiting agencies, or become victims of illegal trafficking. Therefore, the authorities need to facilitate this type of migration as a part of adaptation. However, current environmental migration discourses often expose the vulnerability of environmental migrants requiring protection and refuge in other countries and presume mass cross-border movements of ‘climate refugees’. Such assumptions are opposed to reality, since taking cross-border journeys requires money, resources and education.

Given the density of the population and existing level of poverty in Bangladesh, the options for relocation with an alternative livelihood within the country are very limited. Therefore, unplanned and unmanaged migration may result in conflicts between original residents and new settlers, leading to further migrations. In response to multifarious challenges posed by climate change on human migration, organised and planned, both internal and international migration can play a significant role.<sup>14</sup> In this context, this chapter argues for viewing migration itself as part of adaptation strategies, not simply a failure of adaptation. It also analyses a range of possible policy responses to be adopted by the government of Bangladesh to facilitate climate-motivated migration.

## ***8.2 Is Migration a Failure of Adaptation?***

There are wide-ranging differing views on whether migration can be considered adaptation and whether institutions and policy should support human mobility as adaptation.<sup>15</sup> The current pattern of migration discourse treats environmental/climate migration negatively as an ‘emerging catastrophe’, which is a reactive response of last resort beyond adaptation. This only happens due to the incapacity of local people to cope with changing environmental conditions and the failure of all forms of protection for adaptation and

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<sup>13</sup> Ibid.

<sup>14</sup> See Tasneem Siddiqui, *Climate Change and Population Movement: The Bangladesh Case* <[http://www.rsis.edu.sg/NTS/Events/Climate\\_change/session4/Concept per cent20paper-Tasneem.pdf](http://www.rsis.edu.sg/NTS/Events/Climate_change/session4/Concept%20paper-Tasneem.pdf)>.

<sup>15</sup> Koko Warner, ‘Global Environmental Change and Migration: Governance Challenges’ (2010) 20 *Global Environmental Change* 402, 403.

resilience.<sup>16</sup> The staggering predictions of environmental migration ranging from 200 million to 1 billion by 2050 reflect a failure to adapt to environmental changes; all migrants will follow similar paths of emergency pursuit, moving to unspecified destinations, especially crossing international borders.<sup>17</sup> Thus, migration is still considered ‘a worst case scenario’.<sup>18</sup>

Policymakers are concerned about the increased number of climate change induced migrants because it is believed that migration implies risks to migrants themselves and the inhabitants of areas they intend to move to.<sup>19</sup> Therefore, they prefer to limit the human movement in response to climate change as much as possible.<sup>20</sup> Thus, the policy debates on protection of climate change induced displacement still rely on misconceptions and xenophobia suggesting that unless such potential large migration is managed at a local level, it may become a great threat to international peace and security.<sup>21</sup>

However, this view is ‘empirically limited, epistemologically flawed, morally questionable, and a poor basis for making policy’.<sup>22</sup> This assumption fails to recognise migration as a result of a choice and the capacity of people to respond positively to natural or man-made disasters in diverse ways, including migration.<sup>23</sup> Throughout human history, migration is considered the best coping and adapting strategy in response to environmental degradation and changing living circumstances that easily prepares people to adjust with the changed circumstances and does not necessarily signal a failure to adapt.<sup>24</sup> The decision on migration depends upon many interrelated factors, including the severity, frequency and intensity of natural disasters in home areas, scope and opportunities

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<sup>16</sup> Ibid.

<sup>17</sup> Cecilia Tacoli, ‘Crisis or Adaptation? Migration and Climate Change in a Context of High Mobility’ (2009) 21 *Environment and Urbanization* 513, 513.

<sup>18</sup> Warner, ‘Global Environmental Change and Migration’, above n 15, 412.

<sup>19</sup> Ibid 403.

<sup>20</sup> Jon Barnett and Natasha Chamberlain, ‘Migration as Climate Change Adaptation: Implications for the Pacific’ in Bruce Burson (ed.), *Climate Change and Migration South Pacific Perspective* (Institute of Policy Studies, 2010) 51.

<sup>21</sup> See *ibid* 57.

<sup>22</sup> Ibid.

<sup>23</sup> See Benoît Mayer, *Migration as a Sustainable Adaptation Strategy* (2011) 3 <<http://www.icarus.info/wp-content/uploads/2011/06/Mayer.pdf>>.

<sup>24</sup> Warner, ‘Global Environmental Change and Migration’, above n 15, 403; UNESCO, IOM, UNFPA, UNHCR, UNITAR, ‘Cooperation – the Key to an Effective Policy Response to Global Environmental Change, Migration and Youth’ (Briefing paper, GMG, 2011) 3; Jurgen Scheffran, Elina Marmer and Papa Sow, ‘Migration as a Contribution to Resilience and Innovation in Climate Adaptation: Social Networks and Co-development in Northwest Africa’ (2011) *Applied Geography* 1.

possibilities for livelihood in destination areas, and available resources for migration.<sup>25</sup> Thus, population mobility is a normal part of adaptation to environmental change adopted by communities as a ‘means of escaping danger and increasing resilience’.<sup>26</sup>

Therefore, Warner argues for new governance approaches that consider the role of migration in adaptation.<sup>27</sup> This approach of considering migration itself as adaptation has developed in three contexts:

First, some countries see migration as a way to reduce population pressures in places with fragile eco-systems. Second, countries recognize that resettlement of some populations may be inevitable, but should be accomplished with proper planning. Third, migrants already living outside of vulnerable areas are seen as potential resources to help communities adapt and respond to climate change.<sup>28</sup>

In the current climate change context, the worsening effects of slow-onset climate change in social-ecological systems are likely to affect people’s perceptions of the risks and benefits of staying compared with migrating. Given that climate change exacerbates morbidity and mortality, reduces incomes and decreases access to important forms of natural capital, people may be more likely to choose to migrate to places they perceive as offering a better life; such migration takes many forms.<sup>29</sup> Therefore, although migration is generally characterised as acute vulnerability, ‘it can be part of coping strategy since it can help to reduce risk to lives, livelihoods and ecosystems; contribute to income diversification; enhance overall capacity of households and communities to cope with the adverse effects of environmental and climate change’.<sup>30</sup> For example, in Bangladesh, people living on chars often need to move regularly to another char as a coping strategy, though knowing that these are places of extreme environmental vulnerability.<sup>31</sup> However,

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<sup>25</sup> Elizabeth Ferris, ‘Protection and Planned Relocations in the Context of Climate Change’ (UNHCR, 2012) 7.

<sup>26</sup> Jane McAdam, ‘Swimming Against the Tide: Why A Climate Change Displacement Treaty is not the Answer’ (2011) 23(1) *International Journal of Refugee Law* 2; See also, UNESCO, IOM, UNFPA, UNHCR, UNITAR, above n 24, 3.

<sup>27</sup> Warner, ‘Global Environmental Change and Migration’, above n 15, 412.

<sup>28</sup> German Marshall Fund of the United States, ‘Climate Change and Migration: Report of the Transatlantic Study Team’ (German Marshall Fund of the United States, 2010) 5.

<sup>29</sup> Asian Development Bank (ADB), ‘Climate Change and Migration in Asia and the Pacific’ (ADB, 2011) 11.

<sup>30</sup> IOM, ‘Disaster Risk Reduction and Climate Change Adaptation in IOM’s Response to Environmental Migration’ (IOM, 2012) 4.

<sup>31</sup> ADB, above n 29, 46.

these vulnerable individuals and communities rarely receive government support and assistance for their migration to adapt with changed circumstances.<sup>32</sup>

In response to climate change, especially slow-onset climatic disasters, managed migration is an appropriate pathway to secure life and livelihood of affected people with dignity since they have least possibility to receive (temporary) protection from authority as often received by victim of sudden-onset disasters.<sup>33</sup> McAdam and Saul suggest viewing migration ‘as a normal form of adaptation—as a path to a more dignified life—rather than as a sign that adaptation has failed’.<sup>34</sup> Since migration can serve as a way of coping with climate change, as well as a mechanism to reduce poverty and increase resilience in affected areas, it is questionable whether migration, in the context of climate change, should be characterised as solely a failure of adaptation.<sup>35</sup> Migration should not only be viewed as an adaptation failure; rather, planned migration can be a means to ‘achieve security and attain human rights’.<sup>36</sup>

### **8.3 Policy Responses Facilitating Climate Motivated Migration**

In Bangladesh, people vulnerable to environmental changes and stresses in many cases adopt migration as a coping strategy.<sup>37</sup> In particular, the victims of RBE who lost their home, land and livelihood move to cities for work. Migration should not be seen as only a problem; in fact, it might increase the adaptive capacity of people.<sup>38</sup> However, the policy-makers still view migration as a threat and it is generally preferred by governments that populations remain in their original areas.<sup>39</sup> Thus, environmental migration is not yet accepted as a legitimate adaptation strategy in policies, legal instruments and adaptation strategies related to environmental and climate change; those instruments emphasise more

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<sup>32</sup> Jane McAdam and Ben Saul, ‘Displacement with Dignity: International Law and Policy Responses to Climate Change Migration and Security in Bangladesh’ (2010) 53 *German Yearbook of International Law* 234, 274.

<sup>33</sup> *Ibid* 282.

<sup>34</sup> McAdam and Saul, above n 32, 269.

<sup>35</sup> Philippe Boncour and Bruce Burson, ‘Climate Change and Migration in the South Pacific Region: Policy Perspectives’ in Bruce Burson (ed.), *Climate Change and Migration South Pacific Perspective* (Institute of Policy Studies, 2010) 16; ADB, above n 29, vi.

<sup>36</sup> McAdam and Saul, above n 32, 235; Matthew Walsham, ‘Assessing the Evidence: Environment, Climate Change and Migration in Bangladesh’ (IOM, 2010) 40; See Barnett and Chamberlain, above n 20, 52.

<sup>37</sup> See Chapter 3 for climate-induced migration pattern in Bangladesh.

<sup>38</sup> See Boncour and Burson, above n 35, 17.

<sup>39</sup> ‘For a densely populated country like Bangladesh, any further concentration of population in relatively safe areas will not be desirable’. See Government of the People’s Republic of Bangladesh, *Bangladesh Climate Change Strategy and Action Plan* (2009), 59.

local adaptation programmes.<sup>40</sup> Thus, Bangladesh has invested a considerable amount of its resources in adaptation, although those adaptation programmes are sometimes ill-equipped to deal with migration issues. Big challenges remain to mainstream migration issues into adaptation policies. In reality, the attempts to resist migration might exacerbate people's vulnerability to environmental degradations rather than alleviate their sufferings.<sup>41</sup>

In response to growing climate change effects in Bangladesh, experts placed the idea of 'transforming migration into a logical and legitimate livelihood diversification strategy' as opposed to more static approach of trying to improve coping in current locations to current climate conditions.<sup>42</sup> In the 2010 Cancun Conference of Parties (COP), the UNFCCC for the first time acknowledged the possibility that:

planned relocation may be part of future adaptation scenarios' and specifically called on all parties to undertake 'measures to enhance understanding, coordination, and cooperation with regard to climate change induced displacement, migration, and planned relocation where appropriate at national, regional, and international levels.'<sup>43</sup>

In cases where movement of human populations is the best or possibly only adaptation strategy, effective policy interventions are required to strengthen the adaptive capacity of the people through migration and to ensure that movements are orderly and safe.<sup>44</sup> The policy tools can support the people from environmentally vulnerable areas who choose to migrate even at early stages of environmental degradation, by increasing the human, financial, and social capital required for migration to be able to adapt to climate change.<sup>45</sup> To achieve this, government should provide necessary information, a strengthening of remittance channels and reduction of costs for transactions, protection against human security risks and longer-term skills development in environmentally vulnerable areas.<sup>46</sup> Such a capacity building will empower the people in affected areas to diversify their livelihood strategies, which in turn make them more resilient to environmental change and degradations.<sup>47</sup>

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<sup>40</sup> McAdam, 'Swimming Against the Tide', above n 26, 22; Siddiqui, above n 14, 8.

<sup>41</sup> Boncour and Burson, above n 35, 16.

<sup>42</sup> See Foresight, 'Foresight: Migration and Global Environmental Change' (Final Project Report, Government Office for Science, London, 2011) 183.

<sup>43</sup> Paragraph 14(f) of Cancun Framework. Koko Warner, *Climate and Environmental Change, Human Migration and Displacement: Recent Policy Developments and Research Gaps*, UN Secretariat, 12 February (2011) 5 < <http://www.un.org/esa/population/meetings/ninthcoord2011/p10-unu.pdf>>.

<sup>44</sup> Warner, 'Climate and Environmental Change', above n 43, 5.

<sup>45</sup> Barnett and Chamberlain, above n 14, 58; Boncour and Burson, above n 35, 16–17.

<sup>46</sup> Walsham, above n 36, 35.

<sup>47</sup> Foresight, above n 42, 174.

Any policy measure targeting environmental migration should consider the benefits of migration for areas of origin and destination.<sup>48</sup> Therefore, policies need to assess the effect of migration on affected communities; how far migration ensures long-term resilience and, above all, the potential costs of migration.<sup>49</sup> Government, donors and international organisations and civil society should shift their reactive attitude to a positive and proactive attitude to migration and must adopt a more strategic, long-term approach. Larger and more structured opportunities for migration should be mainstreamed into strategies of adaptation to climate change. NAPA and DRR should give adequate consideration to migration.<sup>50</sup> Adaptation may properly involve planned resettlement options for those whose displacement is ultimately unavoidable.<sup>51</sup>

In recent years, migration is increasingly being used within Bangladesh as a coping mechanism in the face of environmental and economic challenges.<sup>52</sup> The BCCSAP's national strategies for climate change identified migration as an adaptation strategy and set out three long-term action points to address internal and cross-border migration:

A1. Development of a monitoring mechanism of internal and external migration.

A2. Development of a protocol to provide adequate support for their re-settlement and rehabilitation.

A3. Building of capacity through education and training to facilitate their re-settlement in new environment.<sup>53</sup>

Indeed, elsewhere in the plan it is noted that, because of existing population pressure on an already densely populated Bangladesh, 'migration must be considered a valid option for the country. Preparations in the meantime will be made to convert this population into trained and useful citizens for any country'.<sup>54</sup>

However, the policies facilitating migration as adaptation need be designed carefully, otherwise unplanned and unmanaged migration is bound to result a serious risk to human

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<sup>48</sup> See Walsham, above n 36, 22.

<sup>49</sup> Foresight, above n 42, 174.

<sup>50</sup> Siddiqui, above n 14, 8.

<sup>51</sup> McAdam and Saul, above n 32, 269.

<sup>52</sup> See Rita Afsar, 'Internal Migration and the Development Nexus: The Case of Bangladesh' in Tasnim Siddiqui (ed.), *Migration and Development: Pro-poor Policy Choices* (The University Press, 2005); Tasnim Siddiqui, 'International Migration as a Livelihood Strategy of the Poor: The Bangladesh Case' in Tasnim Siddiqui (ed.), *Migration and Development: Pro-poor Policy Choices* (The University Press, 2005).

<sup>53</sup> Bangladesh Climate Change Strategy and Action Plan 2009 (BCCSAP 2009), Ministry of Environment and Forests, Government of the People's Republic of Bangladesh (2009) 59,

<[http://www.moef.gov.bd/climate\\_change\\_strategy2009.pdf](http://www.moef.gov.bd/climate_change_strategy2009.pdf)>

<sup>54</sup> Ibid 17.

security leaving people more vulnerable to environmental changes.<sup>55</sup> The policies must be respectful to international human rights standards. No one can be compelled to migrate against their consent.

#### **8.4 Migration as Adaptation Strategy**

Adaptation to climate change means a response to avoid or adjust to an undesirable outcome so that people are not worse off. The capacity of people to adapt to climate change depends on several factors, including their access to financial and social capital, education, infrastructure, and technology.<sup>56</sup> Migration can potentially help people to achieve many of these essential determinants of adaptive capacity.<sup>57</sup> Experience shows in Bangladesh that families in rural areas who have a labour migrant either in cities or abroad have a better capacity to adapt to climate change. In some situations, the ability to migrate will be part of the adaptive capacity, and migration itself will be an adaptive strategy.<sup>58</sup> As the IOM observes:

While migration can be a manifestation of acute vulnerability, it can also represent a logical and legitimate livelihood diversification and adaptation strategy ... Migration can help reduce risks to lives, livelihoods and ecosystems, and contribute to income diversification and enhance overall capacity of households and communities to cope with the adverse effects of environmental and climate change.<sup>59</sup>

Apart from personal benefits to migrants, migration brings many positive effects to protection of environmental and improving socio-economic conditions in areas of origin.<sup>60</sup> For instance, in a densely populated country like Bangladesh, migration entails less stress on land and less competition in local labour market, which has positive effects on the environment and economic progression of that particular area.<sup>61</sup>

In Bangladesh, the poverty-ridden people from rural areas often adopt circular migration to cities as a livelihood strategy.<sup>62</sup> However, environmental stress on human life and

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<sup>55</sup> ADB, above n 29, 47.

<sup>56</sup> Barnett and Chamberlain, above n 20, 54.

<sup>57</sup> Ibid.

<sup>58</sup> ADB, above n 29, 10.

<sup>59</sup> International Organization on Migration (IOM), *Migration, Climate Change and the Environment: A Complex Nexus* (IOM) <<http://www.iom.int/jahia/Jahia/complex-nexus>>.

<sup>60</sup> Global Migration Group (GMG), 'Mainstreaming Migration into Development Planning: A Handbook for Policy-makers and Practitioners' (IOM, 2010) 109.

<sup>61</sup> Ibid.

<sup>62</sup> Foresight, above n 42, 183.

livelihood may contribute to increasing the numbers of such migrants.<sup>63</sup> For example, following Cyclone Aila in 2009, the number of temporary migration for work has been increased from 1 per cent before the cyclone to a current level of 7 per cent.<sup>64</sup>

Rather than drawing a line between ‘adaptation’ and ‘migration’, the authority should situate migration within a spectrum of adaptive possibilities.<sup>65</sup> However, migration as an adaptation strategy implies being able to leave. It is often not a viable adaptation strategy for those marginalised and vulnerable groups who are not in the physical or material position to migrate, and are therefore forced to stay—for example the elderly, children or sick people.

### ***8.5 Migration as Development Strategy***

Migration in response to adverse environmental events is a simple adaptive strategy that has been followed for millennia to cope with environmental effects, as well as to secure livelihood.<sup>66</sup> The remittances sent by migrants have significant implications for the development of home areas of migrants.<sup>67</sup> Temporary/circular migrants returned with new ideas, technologies or land-use practices they could replicate in their home areas through the transfer of ideas, training and capacity-building activities.<sup>68</sup>

For example, the migrant people who moved to areas of new land along rivers or in coastal zones sometimes took action to speed up the process of converting new sediment deposits into agriculturally productive land.<sup>69</sup> Though slum dwellers in the city are mostly identified as a problem, almost 70 per cent of the workforce is in the informal sector and the economy of Bangladesh’s cities is highly dependent upon its poorer residents.<sup>70</sup> Thus, migrant people potentially contribute to urban workforce and development. As Biermann

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<sup>63</sup> Ibid.

<sup>64</sup> Ibid.

<sup>65</sup> Tess Burton and David Hodgkinson, *Towards a Convention for Persons Displaced by Climate Change: A Discussion Note on an Ethical Response to the Human Effects of Climate Change and its Implications for the Relationship between Adaptation and Displacement* (The Hodgkinson Group: Climate Change and Aviation Advisors) 4

<[http://www.hodgkinsongroup.com/documents/Draft per cent20Discussion per cent20Note per cent20Adaptation per cent20and per cent20Displacement.pdf](http://www.hodgkinsongroup.com/documents/Draft%20Discussion%20Note%20per%20Adaptation%20and%20Displacement.pdf)>.

<sup>66</sup> Grame Hugo et al., ‘Climate Change and Migration in Asia and the Pacific’ (Draft Edition) (ADB, 2011) 63.

<sup>67</sup> Ibid.

<sup>68</sup> Ibid.

<sup>69</sup> Walsham, above n 36, xii.

<sup>70</sup> Ibid xiii.

and Boas explains, '[t]he protection of climate refugees is therefore essentially a development issue that requires large-scale, long-term planned resettlement programs for groups of affected people, mostly within their own territory'.<sup>71</sup>

However, there has been a dominant paradigm shift in last decades regarding migration and development. In the past, 'out-migration' and emigration was considered a 'brain drain', inevitably diminishing the development potential of the country of origin.<sup>72</sup> However, current policy discourse considers migration an opportunity to contribute to the development of home areas through sending remittances and investment after return with newly acquired skills.<sup>73</sup> Thus, migration could be a powerful driver of development both for migrants and their households.<sup>74</sup> Based on the evidence, it is argued that migration, viewed as a livelihood diversification strategy, may be used as a positive and proactive diversification and development strategy amidst a range of other options that household, individuals and sometimes whole communities adopt to improve their lives, increase household income and reduce risk and vulnerability. Planned migration can be a means to achieve human security and ensure human rights.<sup>75</sup>

There is an urgent need to view and adopt more creative approaches to human migration and its complex interaction with climate change induced events.<sup>76</sup> The policy responses should facilitate the role of migration as a development strategy for climate change. For example, skilled people can be provided with micro-credit so that they can start their own businesses. Migration does not only benefit the migrants themselves but contributes to the development of the socio-economic conditions of the receiving locations.<sup>77</sup> In particular, labour migration helps to fill up skill shortages in key industries and public services.<sup>78</sup>

Migrants' remittances sent back home can be a livelihood strategy for migrants and their families left behind.<sup>79</sup> The remittances used for the education of migrants' family members

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<sup>71</sup> Frank Biermann and Ingrid Boas, 'Protecting Climate Refugees: The Case for a Global Protocol' (2008) November–December *Environment* <[http://www.environmentmagazine.org/Archives/Back per cent20Issues/November-December per cent202008/Biermann-Boas-full.html](http://www.environmentmagazine.org/Archives/Back%20per%20cent20Issues/November-December%202008/Biermann-Boas-full.html)>.

<sup>72</sup> Hugo et al., above n 66, 63.

<sup>73</sup> Ibid.

<sup>74</sup> GMG, above n 60, 12.

<sup>75</sup> McAdam and Saul, above n 32, 269.

<sup>76</sup> Walsham, above n 36, xiii.

<sup>77</sup> Foresight, above n 42, 174.

<sup>78</sup> Ibid.

<sup>79</sup> GMG, above n 60, 17.

contribute to enhance the ability of family members.<sup>80</sup> A 2009 Human Development Report of the UNDP drew attention to potential human development gains from migrating by the migrants, their left behind family members, communities and members of destination societies. The UN Global Forum on Migration and Development (2009) recommendation and the Symposium of Global Migration Group (GMG) (May 2010) gave the highest importance to the incorporation of migration into development strategies.

Given the necessity to increase the adaptive capacity of people to environmental change, the Bangladesh Government needs to mainstream migration and climate change in its development policies and strategies. However, the prospects of environmental migration are not adequately addressed in its Fifth Five Year National Plan (2011 to 2015). However, the National Strategy for Accelerated Poverty Reduction (NSAPR-II) outlined migration programmes for people from monsoon-affected regions.<sup>81</sup> Proper planning and the commitment of decision makers are required to minimise the risk of environmental migration. More importantly, migration should not only be perceived as a failure to adapt, but also as a legitimate adaptation strategy, which can be used to promote adaptation and improve people's lives.<sup>82</sup> Accordingly, recognising the potential for labour migration, development policies should facilitate skilled and semi-skilled, internal and international migration to achieve its developmental goals.<sup>83</sup>

### ***8.6 Planned Relocation/Resettlement***

The IPCC confirms, with an increasing trend of river-bank erosion and sea-level rise, that some parts of coastal areas in Bangladesh, almost 18 per cent of total land, may submerge under water. Some areas may become unliveable in the near future due to salinity intrusion, draught and scarcity of water resources consequent to melting Himalayan glaciers. In such circumstances, for people who have lost homes and livelihoods and have already been displaced, emergency measures for evacuation and relocation and resettlement to safer places are adaptive measures.<sup>84</sup> In other circumstances, where people are yet to leave but likely to be displaced in near future because the areas are likely to become uninhabitable due to impending degradations in environment, the authorities need

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<sup>80</sup> Ibid 11.

<sup>81</sup> Walsham, above n 36, 35.

<sup>82</sup> Walsham, above n 36, xiii.

<sup>83</sup> Foresight, above n 42, 183.

<sup>84</sup> See Daniel Paul Riva, 'A Place of Environmental Refugees: Adaptation to Climate and Environmental Change in South Asia' (2010) Columbian College of Arts and Sciences of the George Washington University, 96.

to plan organised and managed relocation measures.<sup>85</sup> The protection of these people requires ‘large-scale, long-term planned resettlement programs’ so that they do not fall into further distress due to abrupt and unorganised displacement.<sup>86</sup> Without characterising affected people as a refugee-like vulnerable group, the planned relocation of these people with safety and dignity may be considered the best adaptation strategy.<sup>87</sup> Planned relocation is recognised as a form of adaptation by the COP to the UNFCCC in 2010.<sup>88</sup> There is an urgent need to adopt pre-emptive adaptive resettlement for those populations most vulnerable to the effects of climate change, necessitating immediate relocation.<sup>89</sup> The planned and managed relocation can prevent a sudden influx of human movement in response to natural disasters and avoid disruption, and loss of life and property.

### ***8.6.1 No Resettlement Programmes for Climate Migrants Yet***

Except for the resettlement of people displaced by development projects such as building power plants or bridges, no other successful resettlement programmes have been observed to date. However, Bangladesh is not completely devoid of experience in policymaking for people in distress due to natural or man-made disasters who were forced to leave or dispose of their land for reasons beyond their control.<sup>90</sup> Few instances of resettlement are found in the past, which were mainly initiated in response to a particular problem. These occasions provided the opportunity to experience resettlement of large-scale displacement.

First, the relocation of Muslim migrants from various parts of India to Pakistan, including East Pakistan (later Bangladesh), after the partition in 1947 was given a legal mandate.<sup>91</sup> The Displaced Persons (Land Settlement) Act and the Displaced Persons (Compensation and Rehabilitation) Act were adopted in 1958 to compensate persons for the losses suffered by them on account of expropriation by the Government of India of their rights over property in India or in any area occupied by India.<sup>92</sup> Second, the Disturbed Persons

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<sup>85</sup> Ibid.

<sup>86</sup> Biermann and Boas, above n 71.

<sup>87</sup> See McAdam and Saul, above n 32, 273–77.

<sup>88</sup> 2010 UN Climate Change Conference in Cancun, Mexico, 29 November–10 December 2010, Report of the Conference of the Parties on its Sixteenth Session, Addendum—Part Two: Action Taken by the Conference of the Parties at its Sixteenth Session <<http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf>>.

<sup>89</sup> David Hodgkinson et al., ‘Copenhagen, Climate Change “Refugees” and the Need for a Global Agreement’ (2009) 4(2) *Public Policy* 155, 167.

<sup>90</sup> Ibid.

<sup>91</sup> D Freestone, M Farooque and SR Jahan, ‘Legal Implications of Global Climate Change for Bangladesh’ (Briefing Document No. 5, Bangladesh Unnayan Parishad, CEARS, CRU University of East Anglia, 1993) 7.

<sup>92</sup> Ibid.

(Rehabilitation) Ordinance, 1964 was enacted for the protection of persons affected by the civil disturbances in then East Pakistan in January 1964, and for the protection of the immovable property of minority communities.<sup>93</sup> Third, in 1976, the Alienation of Land (Distressed Circumstances) (Restoration) Ordinance was passed to give special treatment to the property rights of the people who had forced villagers to sell land at below the market price simply to buy food for their starving families after the famine of 1974.<sup>94</sup> This legislation allowed the repurchasing of agricultural land sold for reasons of economic distress during the famine, at the price for which it had been transferred.<sup>95</sup>

Fourth, in a different scenario, under a Government resettlement programme for the landless people, 400 000 to 600 000 people moved within the country to the CHT in the 1980s.<sup>96</sup> In the same decade, a large number of people were resettled to CHT from other parts of Bangladesh, which was politically motivated to make an artificial demographic change in the region to curb tribal insurgency. However, the conflict between the original indigenous people and new settlers is yet to be fully resolved, though the CHT Peace Treaty was signed in 1997. Fifth, there are some initiatives of planned resettlement programmes through inter-district relocation of landless families. In 1988, ‘cluster villages’ were established on government *khas* lands with multi-dimensional objectives.<sup>97</sup> For effective organisation of cluster villages, the optimum use of local resources and materials was ensured for ensuring effective utilisation of land and maintenance of hygiene and sanitary conditions.<sup>98</sup> However, the Land Reform Ordinance, 1984 gave priority to landless people in allotting *khas* government land. However, this provision is yet to be utilised for the rehabilitation of the landless people.<sup>99</sup> Sixth, there are some instances of resettlement on locally available chars. Technical problems with relocation to emerging char lands include poor land quality and slow accretion rates, delays in land title provisions, political inequalities and local power disputes.<sup>100</sup> Serious violence may erupt also due to conflicts of interest between elite land owners, illegal occupiers and landless people.

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<sup>93</sup> Ibid 8.

<sup>94</sup> Ibid.

<sup>95</sup> Ibid.

<sup>96</sup> Dan Smith and Janani Vevekananda, *A Climate of Conflict: The Links Between Climate Change, Peace and War* (International Alert, 2007).

<sup>97</sup> Freestone, Farooque and Jahan, above n 91, 8.

<sup>98</sup> Ibid.

<sup>99</sup> Ibid.

<sup>100</sup> Riva, above n 84, 99.

McAdam and Saul identified two main reasons for Bangladesh not having a successful relocation/resettlement programme. First, the government plans and programmes completely focus on in situ adaptation and programmes, and providing support and assistance to people to maintain their lands and livelihood.<sup>101</sup> Second, State policy does not dictate individual freedom for movement, which is mainly based on previous experience of resettlement in the Chittagong Hill Tracts (CHT).<sup>102</sup> However, previous initiatives of inter-district relocation resulted with disputes and conflicts between local people and new settlers.<sup>103</sup> According to statistics on the nature of cases in Bangladeshi courts, land disputes presently account for 80 per cent of the country's legal suits.<sup>104</sup> These problems highlight the dynamic relationship between environmental deterioration, social structure and adaptation in the most isolated vulnerable areas.<sup>105</sup>

Thus, no substantial national measures, including coordinated national resettlement, relocation and rehabilitation planning for the people displaced by climate change effects have been seen to date.<sup>106</sup> No government department or institution is specifically responsible for dealing with displaced people, whatever may be the causes, conflict, climate change or poverty.<sup>107</sup> The Standing Orders on Disaster Management only provide support during emergency situations, which is mostly temporary, and do not provide any durable solutions such as 'planned relocation or rehabilitation' for people who have lost home due to environmental degradations.<sup>108</sup>

### **8.6.2 Long-term and Visionary Resettlement Policy**

Given the potential large number of climate change induced displaced persons and scarcity of land in Bangladesh, the government needs to devise a long-term plan for the relocation of victims of environmental deteriorations. Although the relocation of people affected due to climatic effects is new idea, some instances can be found in Bangladesh and other countries. For example, Indonesia operated transmigration programs as early as the 19<sup>th</sup>

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<sup>101</sup> McAdam and Saul, above n 32, 275.

<sup>102</sup> Ibid.

<sup>103</sup> Ibid.

<sup>104</sup> Emily Wax, 'In Flood-prone Bangladesh, a Future that Floats', *The Washington Post* (online), 27 September 2007,

<<http://www.washingtonpost.com/wpdyn/content/article/2007/09/26/AR2007092602582.html>>.

<sup>105</sup> Riva, above n 84, 99.

<sup>106</sup> McAdam and Saul, above n 32, 274.

<sup>107</sup> Ibid.

<sup>108</sup> Ibid.

century, under which people from islands with high population density were relocated to those with more ample land and natural resources.<sup>109</sup> However, this relocation programme was accused by indigenous community of being an excuse to extend governmental authority through its population redistribution policies, and it resulted in environmental hazards and violent conflict among new settlers and original residents.<sup>110</sup> The government of Ethiopia, in the midst of massive food shortages in 1985, announced its intention to resettle 1.5 million people from drought-affected areas to more fertile regions of the country.<sup>111</sup> Both programmes were criticised for the way in which the relocations occurred, as well as the human rights violations of the affected populations.<sup>112</sup> The planning process should pay particular attention to the restoration of livelihoods in the new location, provision of housing, security of persons and other needs related to effective integration.<sup>113</sup>

However, there are many instances of the resettlement of affected people as an adaptation strategy to mitigate the harm accompanying climate change, particularly flooding and rising sea levels in various countries.<sup>114</sup> Sao Tome and Principe, for example, established an infrastructure project titled Displacement of Local Communities, under which fishermen and farmers are at risk of forced displacement because of the interruption of their livelihoods due to torrential rains, floods and rising sea levels.<sup>115</sup> Under this scheme, at risk coastal populations will be resettled into safer places and compensation will be provided for losses incurred during natural disasters.<sup>116</sup> Samoa also adopted a similar adaptation strategy, providing support and assistance for the relocation of affected communities.<sup>117</sup> A scheme titled ‘Implement Coastal Infrastructure Management Plans for Highly Vulnerable Districts Project’ was entrusted to ensure the increasing relocation of affected populations and government assets outside coastal hazard zones.<sup>118</sup> Similarly, one project, titled Human Settlement the Solomon Islands, recognises relocation as a main adaptation and focuses on relocating at-risk populations, enhancing the capacity for

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<sup>109</sup> Susan F Martin, ‘Climate Change, Migration and Adaptation’ (Background Paper, German Marshall Fund of the United States, June 2010) 4 <[http://www.gmfus.org/galleries/defaultfile/SMartinAdaptation\\_V3.pdf](http://www.gmfus.org/galleries/defaultfile/SMartinAdaptation_V3.pdf)>.

<sup>110</sup> Ibid.

<sup>111</sup> Ibid.

<sup>112</sup> Ibid.

<sup>113</sup> Ibid 5.

<sup>114</sup> Ibid 3.

<sup>115</sup> Ibid.

<sup>116</sup> Ibid.

<sup>117</sup> Ibid.

<sup>118</sup> Ibid.

communities to manage the effects of climate change and sea-level rise and be able to plan for adaptation.<sup>119</sup>

Provided the displacement out of slow-onset disasters occurs over long time, Government needs to adopt long-term planning for the resettlement of the people likely to be displaced due to climate change immediately, since the planned relocations might take long time. As Zaman argues, a national policy for anticipatory resettlement would require that the government frame relocation itself as a development project.<sup>120</sup> From a political standpoint, this would satisfy the condition of socio-economic adaptation and development.<sup>121</sup>

Planned resettlement also has a long history in the development field. The World Bank and the regional development banks, including the Asian Development Bank (ADB), African Development Bank, Inter-American Development Bank, the European Bank for Reconstruction and Development and the International Finance Corporation (IFC) have developed policies and guidelines to be followed during resettlement measures. These will be usually undertaken when managing large-scale development programmes financed by the agencies to reduce the negative effects of development projects on affected populations.<sup>122</sup> These guidelines could be predicated and applied in the management of permanent relocation in the environmental context by analogy.<sup>123</sup> The ADB identifies three key planning concepts for resettlement, to include development of a policy framework, definition of entitlements, eligibility, identification of vulnerable groups and establishment of a budget and timeline.<sup>124</sup> Gender planning is highlighted, along with social preparation, to determine whether the needs of indigenous peoples and vulnerable groups are met.<sup>125</sup> However, the World Bank's Operational Policy 4.12 on Involuntary Resettlement of January 2002 requires that all of the affected persons have incomes and standards of living that are at least equivalent to their pre-project condition. While resettlement after a disaster should also be based on principles of restorative justice, it may not always be possible to identify precisely the extent and value of land that has been lost or destroyed due to the

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<sup>119</sup> Ibid.

<sup>120</sup> MQ Zaman, 'Development and Displacement in Bangladesh: Toward a Resettlement Policy' (1996) 36(7) *Asian Survey* 691, 691–703.

<sup>121</sup> Riva, above n 84, 99.

<sup>122</sup> Susan Martin, 'Climate Change, Migration, and Governance' (2010) 16 *Global Governance* 397, 403.

<sup>123</sup> Ibid.

<sup>124</sup> Asian Development Bank (ADB), *Handbook on Resettlement: A Guide to Good Practice* (ADB, 1998).

<sup>125</sup> Ibid.

disaster. A solution may be to offer standardised access to land and housing for all resettled persons. To summarise the underlying principles for development-related displacement:

- Involuntary relocation and resettlement should be avoided wherever possible.
- Where it is not feasible to avoid relocation and resettlement, the scale of displacement should be minimised and resettlement activities should be conceived and executed as full-fledged SD programs.
- Meaningful consultation with the populations to be displaced should be an integral part of the process.
- Displaced persons should be assisted to regain their productive activities and to restore and improve their livelihoods and incomes, at least to the levels they enjoyed before the displacement.<sup>126</sup>

In the context of Bangladesh, many challenges are involved in the relocation process. Since there is no internationally accepted definition of climate change induced displacement, it is difficult to design a guidance for relocation of the people who cannot sustain their life because the living areas are determined as inhabitable (or at risk of becoming such that relocation is necessary) as a result of the effects of climate change.<sup>127</sup> The new framework for the relocation of climate change displaced may incorporate the lessons learned from past experiences of resettlement in other fields (for example, development-induced displacement).<sup>128</sup> The policy framework for relocation should ensure alternative livelihoods and standards of living. The relocation should not diminish the standard of living the people were enjoying before. Given that displaced persons' human rights could be violated by the policy framework itself, the guidelines need to comply basic human rights principles and uphold dignity in resettling communities affected by climate change, reducing their risks of impoverishment.<sup>129</sup> The guidelines need to incorporate the following basic principles.<sup>130</sup>

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<sup>126</sup> Elizabeth Ferris, 'Protection and Planned Relocations in the Context of Climate Change' (UNHCR, 2012) 15.

<sup>127</sup> *Ibid* 5.

<sup>128</sup> See Elizabeth Ferris, Michael M Cernea and Daniel Petz, 'On the Front Line of Climate Change and Displacement: Learning from and Within Pacific Island Countries' (The Brookings Institution—London School of Economics Project on Internal Displacement, 2011) 32.

<sup>129</sup> See *ibid*.

<sup>130</sup> Elizabeth Ferris recently provided a normative framework for planned resettlement in the name of 'Preliminary Understandings for Planned Relocation of Populations as a Result of Climate Change'. See in detail, Ferris, above n 126, 26–30.

### 8.6.3 Capacity Building and Employment of Climate Motivated Migrants

The relocation itself is not enough for the protection of climate migrants; rather, authorities should arrange employment for them. In Bangladesh, some European supported relocation programmes established ‘ideal villages’ (Adarsha gram) for settlement of up to 100 displaced people in rural areas.<sup>131</sup> While there was investment in building houses, such measures failed, largely because sufficient measures were not taken for the creation of livelihood opportunities and the provision of basic services such as water, sanitation, education and health at these ‘ideal villages’.<sup>132</sup> As a result, the relocated people sold their new land and moved elsewhere.<sup>133</sup> For similar reasons, various attempts at relocation programmes in tsunami-affected countries failed since in several cases after relocation, as fishing families encountered further vulnerability since no adequate alternative livelihoods were available or made available.<sup>134</sup>

It is evident that in order to make the measures for return, resettlement or local integration both durable and sustainable, authorities need to resolve the root causes of the vulnerabilities of displaced persons.<sup>135</sup> Therefore, laws and policies on displacement should aim at ensuring that protection and assistance programs are geared towards capacity building of climate migrants, which is needed for self-sufficiency. During displacement, assistance programmes should aim not only to address the immediate material assistance needs of climate migrants, but also to increase their capacity to begin to meet their own needs again as quickly as possible. In all situations, the goal of laws and policies guiding national responses during displacement should be to encourage reintegration. Where people are unable to return to previous sources of livelihood, appropriate measures, including provision of re-training opportunities or micro-credits, should be taken.<sup>136</sup>

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<sup>131</sup> McAdam and Saul, above n 32, 277.

<sup>132</sup> Ibid.

<sup>133</sup> Ibid.

<sup>134</sup> See Walter Kälin, ‘Protection of Internally Displaced Persons in Situations of Natural Disasters’, *Report of the Representative of the Secretary-General on the Human Rights of Internally Displaced Persons*, Walter Kälin, to the Human Rights Council, A/HRC/10/13/Add.1 10<sup>th</sup> sess., 5 March 2009.

<sup>135</sup> Rodry C Williams, ‘Protecting Internally Displaced Persons: A Manual for Law and Policymakers’ (Brookings Institution—University of Bern, 2008) 36.

<sup>136</sup> A. 4.2. of Operational Guidelines, Brookings-Bern Project on Internal Displacement, ‘Protecting Persons Affected by Natural Disasters: IASC Operational Guidelines on Human Rights and Natural Disasters’ (IASC, June 2006) 10.

#### **8.6.4 Consultation with Affected Communities**

There are many challenges associated with resettlement. It is not easy to move people from one place to another. It needs consultation and consent. The affected people may refuse to leave the place, because people, especially older people, do not want to leave their original place due to emotional attachment with the land. Conversely, the host communities, including land owners and resource owners, may resist the new resettlement fearing competition over limited resources and livelihoods is likely to increase with new settlement. The vulnerability and sufferings of the displaced people can be minimised substantially if both the displaced people and the host community are involved in the relocation process. Therefore, it is imperative to engage the relocating people and the host community at the very early stage of planning. Such engagement and continuous dialogue will ensure the long-term sustainability of this programme. For this, local community should be involved in assessing key vulnerabilities and adaptation options, strategies and measures. Such a consultation process will help determine the effectiveness of any relocation strategy.

#### **8.6.5 Urbanisation and Building New Cities**

In Bangladesh, very large rural-urban migration has been observed in recent years. The push factors seem stronger than the pull factors behind such migration.<sup>137</sup> The main factor that motivates large numbers of people to leave their homes in rural areas is the frequent recurrence of natural disasters, which affect their agriculture and livelihood.<sup>138</sup> Increasingly, these displaced people are moving to unplanned settlements and increased density in urban areas. This leads to the expansion of non-agricultural sectors, industry and services in cities, which promises jobs and high household incomes.<sup>139</sup> In Bangladesh, the social services are centralised in cities and, more specifically, in capital Dhaka. The climate migrants moving from rural areas at first choose cities for short- and long-term employment. According to IOM, about 70 per cent of slum dwellers in Dhaka experienced some kind of environmental shocks. They start their life in slums and work as day labourers or rickshaw pullers. For example, in the northern part of country, Rangpur, Nilphamari districts are burdened with monga-affected people, where no considerable industrialisation has been seen to date. As a result, majority of the people are dependent on

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<sup>137</sup> Michael Herrmann and David Svarin, 'Environmental Pressures and Rural-Urban Migration: The Case of Bangladesh' (Munich Personal RePEc Archive, 2009) 1.

<sup>138</sup> See *ibid* 4–6.

<sup>139</sup> See *ibid* 10–12.

agriculture for their livelihood. In the summer season when there is no agricultural work, people fall into unemployment and start moving to cities for work.

However, such random migration from rural to existing cities will only increase the vulnerability of both migrants and residents of cities. The continuing movement towards cities is likely to increase urban poverty, since it creates pressure on limited natural resources like land and water. Given the increasing frequency and intensity of natural disasters and the likely scale of climate change induced migration in future, the majority of existing cities may not be sufficiently equipped to respond effectively to new adaptation challenges while absorbing further large populations. Therefore, new urban development and the expansion of cities may be a sustainable answer to planned migration and resettlement and could ensure standards of living for migrants and local populations. Moreover, such expansion and extension of existing cities will lessen the population pressure there.<sup>140</sup> The SD and spatial planning will limit the exposure of communities to continuing environmental change and hazards.<sup>141</sup> Consider the environmental effect of human settlements, in particular in the area of urban planning, and in anticipation of potential increases in rural-urban migration, as a result of environmental factors. Indeed, environmental impact assessments are useful tools to ensure the sustainability of human living conditions.

### ***8.7 Facilitating Labour Migration: Migration with Dignity<sup>142</sup>***

Migration is generally viewed as a livelihood diversification and risk management strategy that facilitates the development of migrants on a number of different levels—the development of the migrants themselves, the development of their households and the development of the communities and countries they leave and the communities and countries they join.<sup>143</sup> Circular and temporary labour migration, both internal and international, is a very common adaptation strategy in Bangladesh to cope with adverse situations.

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<sup>140</sup> Foresight, above n 42, 130.

<sup>141</sup> Ibid.

<sup>142</sup> The theme of meeting of the Ministers of the Colombo Process member countries held in Dhaka, Bangladesh on the 20<sup>th</sup> and 21<sup>st</sup> April, 2011, was ‘Migration with Dignity’; Draft Dhaka Declaration of Colombo Process Member Countries, The Ministers of the Colombo Process member countries gathered in Dhaka, Bangladesh on the 20<sup>th</sup> and 21<sup>st</sup> April 2011 in the 4<sup>th</sup> Labour Migration Ministerial Consultations for Countries of Origin in Asia <<http://www.iom.int/jahia/webdav/shared/shared/mainsite/microsites/rcps/colombo/Colombo-Process-Dhaka-Declaration.pdf>>.

<sup>143</sup> See Foresight, above n 42, 183; McAdam, ‘Swimming Against the Tide’, above n 26, 24.

While both internal and international migration can have significant benefits, international labour migration comparatively brings more benefits to migrants.<sup>144</sup> International labour migration is an integral part of current global economy. Many countries see international labour migration as an integral part of national development and take advantage of global employment opportunities and foreign remittances. A study found that the localities in Bangladesh in which at least one family member is abroad as a labour migrant are comparatively economically and financially secure.

The remittances contribute to the development of the adaptive capacity of communities and areas of origin.<sup>145</sup> Remittances are in many ways more reliable capital flows than official development assistance (ODA) or foreign direct investment (FDI). Remittances ensure access to basic needs such as food, health and shelter during adverse situations, such as livelihood shock due to draught. To cope with such stresses and pressures, remittance can be used to finance the acquisition of human, social, physical and natural capital that increases adaptive capacity.<sup>146</sup>

International migration is a prominent livelihood option and an important strategy for long-term economic growth in Bangladesh.<sup>147</sup> According to the Bangladesh Economic Review 2011, ‘overseas employment and remittances play an important role in speeding up the economic development by reducing unemployment problem creating new jobs, eradicating poverty and increasing the foreign exchange reserve’.<sup>148</sup> A sizeable number of the Bangladeshi labour force is employed in different parts of the world. In the 2010 to 2011 financial year, a total of 419 000 Bangladeshi workers went abroad for employment.<sup>149</sup> Bangladesh earned US\$11.65 billion in 2010 to 2011 from its overseas migrants, which is more than 6 per cent of the average of the last year.<sup>150</sup> In the same financial year, remittances were 10.53 per cent of GDP and 50.82 of total export.<sup>151</sup>

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<sup>144</sup> See Foresight, above n 42, 183.

<sup>145</sup> Ibid.

<sup>146</sup> Ibid.

<sup>147</sup> Walsham, above n 36, 30. See also, Government of the People’s Republic of Bangladesh, ‘Moving Ahead: National Strategy for Accelerated Poverty Reduction II (FY 2009–11)’ (Government of the People’s Republic of Bangladesh, 2008) 43, 252.

<sup>148</sup> Government of Bangladesh, *Bangladesh Economic Review 2011*, 31.

<sup>149</sup> Ibid.

<sup>150</sup> Ibid.

<sup>151</sup> Ibid 32.

In the face of climatic effects, human mobility will generally be determined by the usual past trend of destination. In Bangladesh, there are, generally, three broad trends of overseas migration; namely, regional migration (primarily migration to India), labour migration (to the Gulf States and other major destinations) and other forms of permanent overseas migration (for example to the Europe, UK and US). The most common destination for labour is Middle Eastern and South East Asian countries; however, recently labourers are exploring new destinations in East Europe and Africa. Bangladesh already has considerable international labour migration in Saudi Arabia, UAE, Kuwait, Oman, Malaysia and Singapore.<sup>152</sup> Further, new employment opportunities have been created for Bangladeshi workers in Bahrain, Qatar, Jordan, Lebanon, South Korea, Brunei, Mauritius, the UK, Ireland and Italy, among other countries.<sup>153</sup> Such emigrants work predominantly in ‘semi- and low-skilled jobs on temporary contracts’, meaning permanent settlement is virtually impossible.<sup>154</sup> However, domestic migration laws and bilateral agreements generally entrench low-skilled work. Such migration is mostly temporary, because most workers have to return home once the job contract expires.

In contrast to the destinations for low- or semi-skilled labour migrants, long-term, permanent or skilled migrants are more likely to immigrate to Europe, in particular the UK, and the US, Canada and Australia under point-based skilled worker programmes. Current around half a million Bangladeshis live in both Britain and the US. It is unlikely that they would return to their home country because of a lack of security or sustainable livelihoods there. Thus, only rich and affluent people with education largely adopt long-term permanent migration.<sup>155</sup>

Other climate change affected countries around the world followed the path of international labour migration to cope with adverse climatic effects. People from areas adversely affected by climate change increasingly access labour markets around the world. For example, the volume of remittances may be double the volume of ODA, and remittances currently exceed aid flows in many countries in the Pacific region, who are at

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<sup>152</sup> Ibid 33.

<sup>153</sup> Ibid 33.

<sup>154</sup> McAdam and Saul, above n 32, 283.

<sup>155</sup> Ibid.

risk of submersion due to sea-level rise.<sup>156</sup> Remittances account for approximately 15 per cent of GDP in Kiribati, 25 per cent in Samoa and 40 per cent in Tonga.<sup>157</sup>

Thus, organised and well-managed labour migration has enormous potential for governments, communities, migrants, employers and other stakeholders in countries of origin and destination. Therefore, McAdam and Saul argue, ‘managed international migration provides a safer and more secure mechanism for enabling people to move away from the effects of climate change, without artificially treating people as in need of international “protection” (from a persecutory or abusive State) in the traditional sense of refugee or human rights law’.<sup>158</sup>

### **8.7.1 Policy Responses for Facilitating Labour Migration as a Coping Strategy**

There are a number of laws and rules adopted by the Government and certain institutional frameworks to govern labour migration. In 2001, a separate ministry named the Ministry of Expatriates’ Welfare and Overseas Employment was established, under which the Bureau of Manpower, Employment and Training (BMET) now operates. The functions of BMET include the creation and implementation of legislation regarding migrant workers, as well as the regulation of labour recruitment institutions. The Ministry also oversees the Wage Earners Welfare Fund, which was established in 1990. In 2002, the government framed an additional three rules under the 1982 Ordinance—the Emigration Rules, the Rules for Conduct and Licensing Recruiting Agencies and the Rules for Wage Earner’s Welfare Fund, and in 2006 the Overseas Employment Policy was issued in recognition of the contribution made by migration to development and the need to strengthen the sector. However, a specialised bank titled ‘*Probashi Kalyan Bank*’ has been recently established to provide soft term loan and other financial assistance to the aspirant migrant workers and returnees.<sup>159</sup>

Although around half a million people go abroad for work, there is still no substantial evidence of overseas migration by the people displaced by climatic effects in Bangladesh.<sup>160</sup> Partially the reason is that climate change displacement and labour

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<sup>156</sup> Barnett and Chamberlain, above n 20, 55.

<sup>157</sup> Ibid.

<sup>158</sup> McAdam and Saul, above n 32, 282.

<sup>159</sup> *Bangladesh Economic Review 2011*, above n 148, 31.

<sup>160</sup> See Walsham, above n 36, 31.

migration are not presently ‘conceptually linked in Bangladesh’.<sup>161</sup> However, the existing regulatory framework for labour migration makes no reference to environmental/climate change migration.<sup>162</sup> The institutions also do not deal with environmental/climate change migrants in particular.<sup>163</sup> However, the BCCSAP 2009 noted an explicit link between climate change induced displacement and overseas labour migration and recognised such migration as an adaptation strategy.<sup>164</sup>

Taking into context the density of population and income differences between local employment and international employment, the Government should facilitate the international migration of the skilled people. Appropriate policy interventions can ensure benefits of labour migration in increasing the adaptive capacity of the affected people.<sup>165</sup> The Government should adopt long-term policies to support potential migrants from environmentally vulnerable regions.<sup>166</sup> The Overseas Employment Policy should incorporate provisions to facilitate international labour migration from potential climate change affected areas.<sup>167</sup> The support includes preparing them as skilled labour, development of language skills, assistance with visas, networking with other migrants, understanding public services such as the taxation and health care systems and transferring money to home countries to the benefit of themselves, their families and their communities.<sup>168</sup> Those people who may pursue labour migration partly in response to actual or perceived future climate change effects at home may require assistance to minimise the costs of moving.<sup>169</sup>

The ministry that manages migration should be linked with the ministries in charge of managing the environment so that vulnerable groups can benefit from planned migration programmes.<sup>170</sup> Thus, the population movement threat of climate change can be

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<sup>161</sup> McAdam and Saul, above n 32, 282.

<sup>162</sup> Walsham, above n 36, 32.

<sup>163</sup> Siddiqui, above n 14, 8.

<sup>164</sup> See BCSSAP, 56.

<sup>165</sup> See Barnett and Chamberlain, above n 20, 56.

<sup>166</sup> Walsham, above n 36, 31; John Campbell, ‘Climate Change and Population Movement in Pacific Island Countries’ in Bruce Burson (ed.), *Climate Change and Migration South Pacific Perspective* (Institute of Policy Studies, 2010) 44.

<sup>167</sup> Siddiqui, above n 14, 8.

<sup>168</sup> Walsham, above n 36, 31; Campbell, above n 168, 44; Jon Barnett and Michael Webber, ‘Accommodating Migration to Promote Adaptation to Climate Change’ (Policy Brief, The Commission on Climate Change and Development, 2009) 30.

<sup>169</sup> Barnett and Webber, above n 168, 30.

<sup>170</sup> See Siddiqui, above n 52, 8.

transformed into a source of opportunity in the adaptation process of climate change induced displacement.<sup>171</sup> International labour migration as a livelihood strategy will maximise the adaptive capacity of the people from climate vulnerable areas and minimise the social conflicts likely to arise due to competition over limited natural resources.<sup>172</sup>

However, evidence of current international labour migration patterns in Bangladesh shows that the most affluent people who are not vulnerable to climate change effects are the ones generally taking the opportunity for international migration; even if affected, they have alternative livelihood solutions. The poor who are disproportionately affected by the effects of climate change are devoid of such scope. Therefore, the most vulnerable groups could be the focus of international migration policies. The authorities need to support the people most vulnerable to climate change effects, particularly isolated, resource-dependent communities, through capacity building and ensuring access to financial and social capital so that they can adopt migration as a form of adaptation.<sup>173</sup>

#### ***8.7.1.1 Capacity Building through Training and Generating Skills***

The Government bodies, including the Labour and Expatriate Ministry, need to provide extensive support and assistance to the potential labour migrants. Government should initiate long-term skills development programmes for people in environmentally vulnerable regions. The authorities need to provide training for skills that are scarce in developed countries for enhancing the benefits of labour migration.<sup>174</sup> Such skilled people should be brought under ‘temporary and circular labour migration schemes’, such as the programme for people from munga-affected regions outlined in the NSAPR-II.<sup>175</sup> The capacity of public and private technical training centres needs to be expanded to produce skilled human resource.<sup>176</sup> Special funds need to be created to finance migration. The climate-motivated migrants who opt for international labour migration need to be provided with financial assistance and loans without collaterals. The migrants’ remittances should be linked with environment friendly development ventures.<sup>177</sup>

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<sup>171</sup> Ibid.

<sup>172</sup> See Barnett and Webber, above n 168, 30.

<sup>173</sup> Barnett and Chamberlain, above n 20, 56.

<sup>174</sup> Ibid.

<sup>175</sup> Walsham, above n 36, 35.

<sup>176</sup> Siddiqui, above n 52, 8.

<sup>177</sup> Ibid 9.

### *8.7.1.2 Skilled Permanent Immigration*

Many developing countries, including the Philippines, Indonesia and Nepal, followed the path of sending labour migration to developed countries to lessen population pressure and the vulnerability of the people in climate change affected areas. Similarly, some Pacific Island countries, notably Kiribati, adopted the strategy to send people to neighbouring developed countries like Australia and New Zealand to settle there permanently. Once the networks are established, others can follow the predecessor following the worsening of the situation—submersion of their homes due to sea-level rise. Although the ‘sinking scenario’ is not present in the context of Bangladesh, following the same path, Bangladesh can send its educated and skilled people to developed countries to lessen its population pressure and burden on economy, as well as mitigating vulnerability in environmentally vulnerable areas. The networks established there may bring more Bangladeshi to those countries.

With repeated demands from the Prime Minister and Finance Minister of Bangladesh to developed countries to receive ‘climate refugees’ from Bangladesh, recognising their responsibility to the victims of climate change, no country has responded to this appeal positively. It is very unlikely that this will change in the near future in the current political climate. However, there is a huge demand for skilled labour in developed countries. Unlike Middle Eastern countries, the developed countries, including Canada and Australia, provide permanent residence and citizenship to people who have certain professional and vocational skills and proficiency in English language. Bangladesh generating those skills to its citizens may provide the opportunity to send many people abroad who may assist their family leaving during disasters and contribute to the economy by sending remittances.

Although there is still no evidence that environmental factors play any significant role in permanent skilled immigration, the authorities need to initiate a plan for long-term skills development for people from areas affected by climate change to prepare them as skilled workers to be sent to various international destinations.<sup>178</sup> However, given the ever more stringent requirements for skilled workers in many countries of destination, this would certainly be a long-term undertaking and there would be considerable difficulties in ensuring that the benefits of such an approach were genuinely targeted at environmentally vulnerable households and communities.<sup>179</sup>

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<sup>178</sup> Walsham, above n 36, 31.

<sup>179</sup> Ibid.

### ***8.7.1.2.1 Strengthening Multilateral and Bilateral Mechanisms***

The government of Bangladesh could seek bilateral migration agreements with neighbouring and developed countries so that the Bangladeshi people, over the next few decades, could migrate in response to rising sea levels.<sup>180</sup> Such initiatives would help address ‘underlying problems relating to scarce resources, overcrowding, rapid urbanisation and environmental degradation’.<sup>181</sup> For example, Australia and Canada have a shortage of agricultural labour, so a scheme now exists that offers temporary working visas to labourers from Bangladesh. In July 2012, Australia will launch the Seasonal Worker Program on a three-year trial basis. The programme will permit Australian firms in the horticulture and tourism sectors to hire workers from Kiribati, Nauru, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu and Vanuatu. Employers will be required to demonstrate that they have a commitment to employing Australian job seekers as a first priority, employ seasonal workers in accordance with Australian work standards and contribute to the workers’ travel costs.<sup>182</sup>

The US is receiving agricultural labour under the H2A and H2B visa programme for temporary agricultural work. While Bangladesh is an agriculture-centric country and most of the people are engaged in agricultural work, Bangladesh is not included in the list that contains 57 countries, including developed countries Switzerland, Canada and Australia. Mainly, a lack of awareness and proper initiatives from the Government is responsible for this.<sup>183</sup> Sri Lanka and the Philippines have well-planned policies and very proactive approaches to labour migration.<sup>184</sup> The Philippines licenses recruitment agencies and markets its workers worldwide.<sup>185</sup> The country has signed 56 bilateral agreements with receiving countries.<sup>186</sup> The concerned authorities for migration arrange pre-departure seminars, and provide contact points for its migrants at the embassies in the destination countries.<sup>187</sup>

However, Bangladesh is a member of the Colombo Process, which aims:

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<sup>180</sup> McAdam, ‘Swimming Against the Tide’, above n 26, 26; Siddiqui, above n 42, 9.

<sup>181</sup> McAdam, ‘Swimming Against the Tide’, above n 26, 26.

<sup>182</sup> Referred to in ADB, above n 29, 58.

<sup>183</sup> *Daily Amader Shomoy* (online), 7 February 2012

<<http://www.amadershomoy2.com/content/2012/02/07/news0094.htm>>.

<sup>184</sup> ADB, above n 29, 57.

<sup>185</sup> *Ibid.*

<sup>186</sup> *Ibid.*

<sup>187</sup> *Ibid.*

‘to provide a forum for Asian labour sending countries to share experiences, lessons learned and best practices on overseas employment; consult on issues faced by overseas workers, labour sending and receiving states, and propose practical solutions for the well being of vulnerable overseas workers; optimise development benefits from organised overseas employment, and enhance dialogue with countries of destination; and review and monitor the implementation of the recommendations and identify further steps for action’.<sup>188</sup>

The Dhaka Declaration of Colombo Process adopted in 2011 emphasises the protection of the human rights of all migrant workers and their families, strengthening services and capacity building and enhanced dialogue and cooperation. The Colombo Process stresses cooperation among member countries to strengthen information exchange and sharing of best practices on labour management; to promote enhanced dialogue and cooperation among countries of origin, destination and transit to address issues of concerning migrant workers and to encourage participation in regular bilateral, regional, and multilateral consultations on labour migration issues.<sup>189</sup>

Moreover, the scope for seasonal labour migration into neighbouring countries, particularly India, could be explored so that the poor can exploit the opportunity to meet labour shortages there.<sup>190</sup> Both countries could establish ‘greater cooperation towards a more mobile and flexible regional labour market’ to ensure and enhance prosperity.<sup>191</sup> For example, a large number of Indian professionals are already working in the garments and airline industries.<sup>192</sup> However, India built a 4000 km-long fence of barbed wire along its border from Bangladesh to prevent any illegal migration.<sup>193</sup>

While some of the climate change induced displaced persons need a more permanent solutions, strengthening temporary protection scheme through bilateral relations could be a viable option in the face of sudden natural disasters. It could obtain more international

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<sup>188</sup> IOM, Ministerial Consultations on Overseas Employment and Contractual Labour for Countries of Origin in Asia (Colombo Process) <<http://www.iom.int/jahia/Jahia/policy-research/pid/820>>.

<sup>189</sup> *Dhaka Declaration on Colombo Process*

<<http://www.iom.int/jahia/webdav/shared/shared/mainsite/microsites/rcps/colombo/Colombo-Process-Dhaka-Declaration.pdf>>.

<sup>190</sup> McAdam, ‘Swimming Against the Tide’, above n 26, 24.

<sup>191</sup> *Ibid.*

<sup>192</sup> According to Bangladesh home ministry officials, there are around half a million Indians illegally staying and working in Bangladesh. These Indians are mostly working in garments, NGO, IT and other sectors. Some even have shops and illegal medical practices. Not only do they not pay any tax, but they also send millions of dollars’ worth of money to India through illegal smuggling channels. There are also illegals from Pakistan and Sri Lanka, but they are very few in numbers. Indians who seek jobs in Bangladesh mostly enter by abusing short-term tourist and on-arrival visa facilities. In a secretary level meeting with India, Bangladesh raised this issue in 2007, but the Indians declined to comment. According to intelligence agencies, Indians in Bangladesh have been used by Indian RAW for its subversive activities in Bangladesh.

<sup>193</sup> See, for example, Lisa Friedman, ‘A Global “National Security” Issue Lurks at Bangladesh’s Border’, *E&E Publishing: Bhomra* (online), 23 March 2009 <<http://www.scribd.com/doc/13651961/India-Fence-Along-Bangladesh>>.

support within a rights-based framework for assistance and protection, since it does not require states to resettle permanently.<sup>194</sup>

### **8.8 Concluding Remarks**

When any area is likely to become uninhabitable due to climate change effects such as sea-level rise and salinity, people need to be relocated to safer places. Since the international policy framework is yet to recognise such type of migrants as ‘refugees’ and eligible for protection in another country, those people need to be relocated internally within Bangladesh. However, there is risk of violating human rights during relocation. The authorities need to arrange employment and capacity building for those relocated people.

Although government policy responses view migration as something negative, traditionally people in the face of environmental change adopt migration as a coping strategy. Current labour migrants who send most of the remittances, have very limited resources for choosing migration as a livelihood strategy.<sup>195</sup> The authorities need to facilitate such migration in order to relieve the population pressure in the climate-affected areas and to improve the capacity of the people and build resilience against the natural disasters. The BCCSAP considers migration as an adaptation, but no policy framework is observed to be facilitating migration as an adaptation.

Although there is no considerable amount of cross-border movements of climate victims yet, in urgent situations like a foreseeable loss of inhabitable territory resulting from sea-level rise or massive floods and cyclones, managed and planned relocation to other countries may need to be considered necessary. This is provided that Bangladesh becomes unable to cope with the situation and protect the basic human rights of the climate migrants due to its high demographic pressure and recurring poverty.

People in the face of natural disasters may move for employment internally or abroad as labour migrants. However, global labour migration is not the solution for everyone. It can be argued that the persons who receive the opportunity to go abroad and send remittances are not the people who are most affected by climate change. The poorest people affected by climate change who lack necessary skill for international migration cannot adopt this ‘mobility pathway’ for alternative livelihood.<sup>196</sup> That is why, the authorities need to adopt

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<sup>194</sup> McAdam and Saul, above n 32, 282.

<sup>195</sup> Ibid 283.

<sup>196</sup> McAdam, ‘Swimming Against the Tide’, above n 26, 24.

multifarious policy responses to manage climate change displacement in an effective and sustainable manner.



## CHAPTER 9

# PROTECTING POTENTIAL CLIMATE MIGRANTS THROUGH ADAPTATION ASSISTANCE

### *9.1 Introduction*

Bangladesh is often highlighted in world media as a victim of recurrent natural disasters in recent decades. The people of Bangladesh, particularly those who are living in coastal areas, cope with recurring natural disasters such as cyclones and storm surges. To clarify, natural disasters themselves do not displace people. Rather, the natural events create certain situations that motivate people to move to other places. Whether climate change will lead to massive displacement does not depend exclusively on the nature of the change but on the adaptive capacity of the affected population.<sup>1</sup> Thus, the ‘decision to move’ depends on many factors, such as poverty, adaptive capacity, infrastructure, government support and disaster management immediately after natural disasters, and above all the means of livelihood.

Past disasters have shown that largely the poorest people who lose their home, land or means of livelihood during natural disasters fall into the displacement scenario. Thus, there is a large continuum in environmental displacement. Mostly the level of adaptive capacity of a particular household determines the decision of movement. Increasing adaptive capacity and resilience of people through strengthening adaptation programmes may play a potential role in preventing displacement. Moreover, it seems that the reference of ‘planned relocation’ in paragraph 14(f) of the Cancun Framework not only indicates developing policy responses for migration or displacement, but includes also those ‘who are unable or unwilling to move without assistance’.<sup>2</sup>

While the people of Bangladesh are susceptible to climatic changes due to their poverty and fragile socio-economic structure, they are typically ‘very adaptable and resilient to changing environmental conditions’.<sup>3</sup> Appropriate governance interventions and policy

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<sup>1</sup> Gaim Kibreab, ‘Climate Change and Human Migration: A Tenuous Relationship?’ (2010) 20 *Fordham Environmental Law Review* 357, 373.

<sup>2</sup> Foresight, ‘Foresight: Migration and Global Environmental Change’ (Final Project Report, Government Office for Science, London, 2011) 154.

<sup>3</sup> Tasneem Siddiqui, *Climate Change and Population Movement: The Bangladesh Case* 20

measures can further potentially enhance resilience and the adaptive capacity of people faced with environmental degradations.<sup>4</sup> Such adaptive measures may, effectively, ‘increase the quality and quantity of alternatives available to people’, preventing human displacement from becoming a ‘humanitarian crisis’.<sup>5</sup> As the IPCC has observed, ‘while physical exposure can significantly influence vulnerability for both human populations and natural systems, a lack of adaptive capacity is often the most important factor that creates a hotspot of human vulnerability’.<sup>6</sup>

The level of policy intervention and implementation of those policies and institutions will largely determine whether environmental factors, including climate change, motivate or force migration.<sup>7</sup> It is an urgent necessity to consider how a rights-based adaptation programme might support those who are at risk of displacement but remain in their original place. Linking the protection through adaptive measures to climate change induced displacement and strengthening adaptation programmes are essential for supporting the potentially very large numbers of people forced to move, as well as those who stay behind. The success of such adaptive measures will largely determine ‘the degree to which migration is a form of adaptation, or an indicator of a failure to adapt’.<sup>8</sup>

In this context, this chapter discusses the importance of adaptation strategies to prevent displacement. In this respect, it suggests alternative adaptation measures and strategies that may have positive effects in increasing resilience to environmental changes. National strategies can help provide a framework for coordinating adaptation activities, enabling informed decision-making, mobilising national and international support and developing appropriate institutional structures for adaptation.

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<[http://www.rsis.edu.sg/NTS/Events/Climate\\_change/session4/Concept\\_per\\_cent20paper-Tasneem.pdf](http://www.rsis.edu.sg/NTS/Events/Climate_change/session4/Concept_per_cent20paper-Tasneem.pdf)>.

<sup>4</sup> Koko Warner, ‘Global Environmental Change and Migration: Governance Challenges’ (2010) 20 *Global Environmental Change* 402, 410–11.

<sup>5</sup> Koko Warner, ‘Assessing Institutional and Governance Need Related to Environmental Change and Human Migration’ (Background Paper, German Marshall Fund of the United States, June 2010) 8 <[http://www.gmfus.org/galleries/default-file/Warner\\_MAH\\_EditsV2.pdf](http://www.gmfus.org/galleries/default-file/Warner_MAH_EditsV2.pdf)>.

<sup>6</sup> Intergovernmental Panel on Climate Change (IPCC), *Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, 2007) 317.

<sup>7</sup> Warner, ‘Assessing Institutional and Governance Need’, above n 5, 8.

<sup>8</sup> *Ibid.*

## 9.2 Protecting Those Who Remain to Prevent Displacement

There are two common assumptions related to climate change induced displacement that significantly manipulate the estimates of likely displacement: first, all the people in the affected areas will eventually decide to migrate, and second, they will migrate permanently.<sup>9</sup> Such assumptions do not consider the variable diverse coping strategies people adopt in response to disastrous changing environments.<sup>10</sup> It is evident that the effects of climate change are likely to affect the lives of millions of people in Bangladesh. Among them, economically and socially marginalised groups within society will be worst affected. In response to changes in their environment, people will adopt a range of diverse livelihood strategies to cope with the adverse situations.<sup>11</sup> However, the increased frequency and intensity of natural events are posing a great challenge to traditional coping strategies.<sup>12</sup> While some who have skills, money and strength will succeed to cross borders to avert the dangers of climate change, most who have comparatively less skills, money, strength and social networks will move within borders.

However, it is the poorest population who are more vulnerable to climate change effects. There is, Kniveton et al emphasise, ‘a broad theoretical consensus that it is generally not the poorest people who migrate overseas because international migration is an expensive endeavour that demands resources for the journey and for the crossing of borders’.<sup>13</sup> In the face of environmental degradations, often they are ‘trapped’ in affected areas and forced to stay there to suffer since they cannot migrate. Even if they decide to migrate, their movement is limited to short distances because they need resources and capital for distant migration. According to an ADB report, migrating over long distances requires capital in a number of forms:

- (i) Financial capital: income, savings, insurance, access to loan opportunities, and borrowing capacity.

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<sup>9</sup> Katha Kartiki, ‘Climate Change and Migration: A Case Study from Rural Bangladesh’ (2011) 19(1) *Gender & Development* 23, 31.

<sup>10</sup> Ibid.

<sup>11</sup> Roger Zetter, ‘The Role of Legal and Normative Frameworks for the Protection of Environmentally Displaced People’ in Frank Laczko and Christine Aghazarm (eds), *Migration, Environment and Climate Change: Assessing the Evidence* (2009) 387, 402.

<sup>12</sup> Jane McAdam and Ben Saul, ‘Displacement with Dignity: International Law and Policy Responses to Climate Change Migration and Security in Bangladesh’ (2010) 53 *German Yearbook of International Law* 234.

<sup>13</sup> Dominic Kniveton et al., ‘Climate Change and Migration: Improving Methodologies to Estimate Flows’ (International Organization for Migration Research Series, Geneva, Switzerland, 2008) 29. See also ADB, ‘Climate Change and Migration in Asia and the Pacific’ (ADB, 2012) 46.

- (ii) Social capital: social networks between origin and destination areas, information on job opportunities, presence of recruiting agencies.
- (iii) Human capital: marketable skills, entrepreneurship.
- (iv) Cultural capital: language, experience with customs in destination area.
- (v) Political capital: legal status, visa issues.<sup>14</sup>

Field research in Bangladesh confirmed that the lack of sufficient ‘capital’ and access to resources deprive the poorest people of migration options.<sup>15</sup> While commonly poverty is assumed as an important triggering factor for migration, it also plays significant role in limiting migration.<sup>16</sup> Thus, in many cases, the natural disasters may not result in migration at all. People may remain in the affected areas mainly for two reasons. First, people who have strong resilience capacity and ability to adapt to changing environmental conditions may choose to stay in their own place, adopting protective measures to save their life and property.<sup>17</sup> With all vulnerabilities and dangers that might arise in near future, these people decide to remain because they are not entirely helpless, and are able to adapt to changing environmental conditions and have a strong resilience capacity.<sup>18</sup> Moreover, with all difficult conditions, people generally do not want to leave because of an affinity to land and emotional attachment or ties to ancestral homes and family graveyards.<sup>19</sup> The remaining may be a positive choice—a strategy of adaptation and resilience for some.

Second, people who are ‘trapped’ and unable to leave are likely to suffer humanitarian emergencies.<sup>20</sup> It is almost certain that the majority who are under ‘forced to leave’ scenarios will be ‘forced’ to remain in their original place with all the suffering and obstacles because they lack the opportunities, education or vocational skills, resources and social networks to migrate; most of them are children, women, aged and disabled people.<sup>21</sup> As a result, the poorest of the poor rarely have the capacity to move in order to leave

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<sup>14</sup> ADB, above n 13, 47–48.

<sup>15</sup> Ibid 46; Kartiki, above n 9, 31.

<sup>16</sup> Ibid.

<sup>17</sup> Foresight, above n 2, 120–121; Warner, ‘Assessing Institutional and Governance Need’, above n 5, 5.

<sup>18</sup> Warner, ‘Global Environmental Change and Migration’, above n 4, 410; Warner, ‘Assessing Institutional and Governance Need’, above n 5, 5.

<sup>19</sup> Refugee and Migratory Movement Research Unit (RMMRU), ‘Bangladesh, Low Elevation Coastal Zones and Islands’ (Migration and Global Environmental Change, Foresight, 2011) 11.

<sup>20</sup> Foresight, above n 2, 121.

<sup>21</sup> Roger Zetter, ‘Legal and Normative Framework’ (2008) 31 *Forced Migration Review* 62; Warner, ‘Global Environmental Change and Migration’, above n 4, 410.

hazardous or unsustainable conditions. Similarly, it must be considered that the persons who remain are in no way less vulnerable than the people who move.

The general trend of migration in Bangladesh shows that people decide to migrate as a last resort. For example, one study on Cyclone Aila affected areas found that affected people did not start migration immediately after the cyclone hit the areas.<sup>22</sup> They tried to survive in the areas for at least one week afterwards.<sup>23</sup> However, when water scarcity and food crisis arose, they had to migrate to the nearby cities and urban areas.<sup>24</sup>

The current academic and political discourse predominantly focuses on the protection of those forced to migrate because of environmental factors over the equally important rights and protection of people that remain behind—who have resilience capacity or do not have opportunity to move.<sup>25</sup> The current international frameworks for displaced people, including the Refugee Convention, is premised on the concept that ‘people have to be forced to move’ to be considered eligible for protection. However, extreme environmental events like floods, cyclones and storms generally cause depletion of household capital, which is necessary for migration. Thus, those who are most affected by environmental stress, and most vulnerable to future shocks and stresses, are least able to migrate. There is a gap in the governance of human mobility with an exclusive focus on rights of the displaced people, ignoring the rights of the much larger majority who will not, or cannot, migrate.<sup>26</sup> Such protection gaps ignoring those larger remaining groups who are more vulnerable to human rights abuses must be ‘self-defeating’.<sup>27</sup> The policy-makers should understand that there is a deep interconnection between migration and the level of protective measures for remaining people. The numbers of environmental migration substantially depends on the measures taken by authorities for the protection of affected people.

To extend the protection to those vulnerable people who are at risk of displacement, policy responses should focus on protection mechanisms also for the people who remain either voluntarily or not. If the whole concentration is on only people who have moved, the vast

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<sup>22</sup> Hasan Mehedi, AK Nag and S Farhana, ‘Climate Induced Displacement: Case Study of Cyclone Aila in the Southwest Coastal Region of Bangladesh’ (Humanitywatch, 2010) 15–16.

<sup>23</sup> Ibid.

<sup>24</sup> Ibid.

<sup>25</sup> Warner, ‘Global Environmental Change and Migration’, above n 4, 410.

<sup>26</sup> Ibid.

<sup>27</sup> Zetter, ‘The Role of Legal and Normative Frameworks’, above n 11, 402.

majority of distressed people will be left unprotected. The ADB report on climate change migration also endorses such a view, noting that ‘any policy intervention aimed at addressing climate change induced migration should care not only for those who leave but also for those who stay, as they are often the most vulnerable’.<sup>28</sup>

It can be argued that these people are protected under some other relevant laws, policies and programmes, including international human rights law frameworks. However, the protection of these people who presently remain in affected place but at risk of displacement has obvious implications for future climate change induced displacement. Their displacement depends on the adaptive measures by the authorities. The UN Guiding Principles also stress taking concrete steps to prevent and mitigate displacement and advocate protection at three stages of displacement; before, during and after displacement.<sup>29</sup> The policy framework should link displacement to adaptation. It must recognise that targeted assistance with adaptation would reduce displacement in the future.

Rather than simply providing humanitarian aid and relief in the affected area, policy responses need to view displacement ‘within the spectrum of adaptive possibilities’ and accordingly provide assistance to address the needs of those most vulnerable to climate change who are unwilling or unable to move without such assistance in the face of impending climate change threats.<sup>30</sup> Thus, adaptive measures undertaken by authorities would make people more resilient to climatic effects and may prevent displacement.

### ***9.3 Vulnerability, Resilience and Adaptation***

Vulnerability is the degree to which a community or system is susceptible to, or unable to cope with, the negative effects of climate change. Thus, the vulnerability of people to climate change will largely depend on the exposure, including character, magnitude and speed of climate change, as well as the adaptive capacity and availability of resources to cope with the effects of such exposure.<sup>31</sup> Thus, vulnerability is determined by a broad

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<sup>28</sup> ADB, above n 13, 46.

<sup>29</sup> UNHCR, *Guiding Principles on International Displacement*, E/CN.4/1998/53/Add.2 (1998) principle 5: ‘All authorities and international actors shall respect and ensure respect for their obligations under international law, including human rights and humanitarian law, in all circumstances, so as to prevent and avoid conditions that might lead to displacement of persons.’

<sup>30</sup> David Hodgkinson et al., ‘Copenhagen, Climate Change “Refugees” and the Need for a Global Agreement’ (2009) 4(2) *Public Policy*, 155, 167.

<sup>31</sup> See Neil Adger et al., *Climate Change 2007: Effects, Adaptation and Vulnerability: Working Group II Contribution to the Intergovernmental Panel on Climate Change: Summary for Policymakers* (Cambridge University Press, 2008); Kathleen Newland, ‘Climate Change and Migration Dynamics’ (Migration Policy Institute, 2011) 7.

range of social and economic factors that influence people's exposure to climate change.<sup>32</sup> For instance, poor fisherman living on the coasts and coastal islands of Bangladesh are the most vulnerable since they live in areas of high exposure with few resources.<sup>33</sup>

Resilience is the ability of groups or communities to cope with external stresses and disturbances as a result of social, political and environmental change.<sup>34</sup> The vulnerability of communities will be reduced by direct measures to reduce the hazard or threat by 'delivering adaptation actions',<sup>35</sup> or indirectly through the increasing of their adaptive capacity.<sup>36</sup> Adaptation programmes through access to human, social, political and financial capital could build resilience among people to cater with destructive environmental episodes.<sup>37</sup>

The IPCC defines adaptation as an 'adjustment in natural or human systems in response to actual or expected climate stimuli or their effects, which moderates harm or exploits beneficial opportunities'.<sup>38</sup> Adaptation strategies help to reduce the effects of long-term changes in climate variables and cope with the consequences of climate change.<sup>39</sup> Based on local, national or international responses, adaptation responses may encompass behavioural changes, infrastructure and technological responses (for example, sea defences and monitoring- and early-warning systems), governance, technology, management or a wide range of policies.<sup>40</sup> These strategies also seek to increase resilience of people to future

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<sup>32</sup> Etienne Piguet, Antoine Pecoud and Paul de Guchteneire, 'Migration and Climate Change: An Overview' (Working Paper No. 79, University of Oxford, 2010) 10.

<sup>33</sup> Newland, above n 31, 7.

<sup>34</sup> See WN Adger, 'Social and Ecological Resilience: Are they Related?' (2000) 24(3) *Progress in Human Geography* 347–364.

<sup>35</sup> Nicholas Stern, *Report of the Stern Review: The Economics of Climate Change* (HM Treasury, London, 2006).

<sup>36</sup> James S Pender, 'What is Climate Change? And How It will Effect Bangladesh' (Briefing Paper [Final Draft], Church of Bangladesh Social Development Programme, 2008) 47.

<sup>37</sup> Newland, above n 31, 7.

<sup>38</sup> Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2007: Effects, Adaptation and Vulnerability. Working Group II Contribution to the Intergovernmental Panel on Climate Change Fourth Assessment Report* (Cambridge University Press, 2007), 6.

<sup>39</sup> R Selvaraju et al., 'Livelihood Adaptation to Climate Variability and Change in Drought-Prone Areas of Bangladesh: Developing Institutions and Options' (Institutions for Rural Development 5, Asian Disaster Preparedness Centre and Food and Agricultural Organization of the United Nations, 2006) 2.

<sup>40</sup> David Hunter, James Salzman and Durwood Zaelke, *International Environmental Law and Policy* (Foundation Press, 4<sup>th</sup> Edition, 2011) 667; Britta Heine and Lorenz Petersen, 'Adaptation and Cooperation, Climate Change and Displacement' (2008) 31 *Forced Migration Review* 48; See also IPCC, 'Climate Change 2007: The Physical Science Basis, Summary for Policy Makers, Contribution of Working Group II to the

effects and contribute to the protection of people's livelihood. Such measures would indeed increase people's resilience to the effects of climate change so that fewer were forced to migrate.

The adaptation programmes operated at the earliest stage possible would ensure cost-effective and sustainable interventions, which would make people less reliant on migration.<sup>41</sup> For mapping effective adaptation programmes for the protection of affected people, the authorities first need to assess the protection needs of affected people and initiate adaptation programmes accordingly taking into context 'best practice and international standards related to adaptation and migration management'.<sup>42</sup>

#### ***9.4 Adaptation in International Framework and Climate Change Displacement***

The law on adaptation is still considered in its infancy as mitigation has been dealt with widely in climate change regimes to date.<sup>43</sup> The UNFCCC is the basic legal document for adaptation to climate change. Article 4 of the Convention is the pivotal section for undertaking adaptation and enhancing adaptive capacity in a climate change regime. Paragraph 1(b) of article 4 provides that parties must formulate and implement national or regional programmes containing 'measures to facilitate adequate adaptation to climate change'. Article 3(3) has complemented this clause, committing the parties to 'take precautionary measures to anticipate, prevent or minimize the causes of climate change'. Thus, the Convention obliges all state parties to address adaptation in a precautionary and strategic way through programmes, not simply relying on autonomous adaptation by nature.<sup>44</sup>

Moreover, in paragraph 1(e) of article 4, all parties commit to cooperate in preparing for adaptation to climate effects. This international collaboration has been stressed in several sensitive fields, like coastal zone management, water resources and agriculture, protection and rehabilitation of areas affected by droughts, desertification and floods. In addition to these initiatives, article 4, paragraph 1(f) focuses on the careful crafting of adaptation policies in economic, social and environmental sectors of state parties to prevent adverse

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Fourth Assessment Report of the IPCC' (2007) 19 <<http://www.ipcc.ch/pdf/assessment-report/ar4/wg2/ar4-wg1-spm.pdf>>.

<sup>41</sup> IOM, 'Discussion Note: Migration and the Environment (94<sup>th</sup> Session)' MC/INF/288, IOM, 2007 5.

<sup>42</sup> Michelle Leighton, Xiomeng Shen and Koko Warner, 'Climate Change and Migration: Rethinking Policies for Adaptation and Disaster Risk Reduction' No. 15/2011, UNU-EHS, 2011 18.

<sup>43</sup> See R Verheyen 'Adaptation to the Effects of Anthropogenic Climate Change—The International Legal Framework' (2002) 11(2) *Review of European Community & International Environmental Law* 129–143.

<sup>44</sup> See *ibid.*

effects of climate change.<sup>45</sup> All state parties also underline a national reporting obligation in that response as per article 12(1) of the Convention. The commitment to adaptation is further reaffirmed in article 19(b), that all parties shall agree to ‘formulate, implement, publish and regularly update national and, where appropriate, regional programmes containing measures to mitigate climate change and measures to facilitate adequate adaptation to climate change’.<sup>46</sup>

Some directives of the UNFCCC have been further specified and dealt with in detail in the Kyoto Protocol and in several decisions of the COPs to the Convention govern the basic legal issues of adaptation in the international climate regime.<sup>47</sup> For instance, article 3(14) of the Kyoto Protocol commits the Annex 1 countries (developed states as enlisted in Annex I of the UNFCCC) to meet their emission reduction targets for minimising ‘adverse social, environmental and economic effects on developing countries’. Article 10, paragraph 1(b) of the Protocol directs the non-Annex I parties to formulate, publish and regularly update national programs for adaptation to climate change. In this regard, NAPAs is a process to be used for generating these plans. The Marrakech Accords (COP7 2001) specified the guidelines for the preparation of NAPAs to unify the national priorities for adaptation. These guidelines require multi-disciplinary and public consultation in the preparation of NAPAs (Decision 29/CP7). In LDCs (a group of 50 countries with roughly 11 per cent of the world’s population), NAPAs are prepared with the institutional support of the LDC Expert Group (LEG) and financed by a dedicated fund, the LDCF.<sup>48</sup> These NAPAs are a partial implementation of article 4.1(b) of the UNFCCC and so far are the only documents within the Convention that deal solely with adaptation.<sup>49</sup>

In climate change regimes, adaptation gained further attention in 2004 at COP10 in Argentina. The Buenos Aires Programs of Work on Adaptation and Response Measures was adopted during this Conference (Decision 1/CP10). This program included further scientific assessments of vulnerabilities and options for adaptation, support of the NAPAs of LDCs, new workshops and technical papers on climate change risk and adaptation and

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<sup>45</sup> Marco Grasso, *Justice in Funding Adaptation Under the International Climate Change Regime* (Springer, 2010) 71–88.

<sup>46</sup> UNFCCC art 19(b).

<sup>47</sup> See E Melkas, ‘Sovereignty and Equity within the Framework of the Climate Regime’ (2002) 11 *Review of European Community & International Environmental Law* 115–128; Verheyen, above n 43, 129–143.

<sup>48</sup> See Grasso, above n 45.

<sup>49</sup> See Verheyen, above n 43, 129–143.

support for mainstreaming adaptation into SD planning.<sup>50</sup> These objectives and scopes of the Buenos Aires Programs of Work were further specified by a detailed five-year programme of work at COP11 in Montreal in 2005. This five-year programme of work, known as the Nairobi Work Programme, mainly focused on effects, vulnerabilities and adaptation to climate change with an aim that these will assist state parties, in a true sense, to make informed decisions on the implementation of adaptation measures (Decision 2/CP11). The objective of this programme arguably envisages adaptation to factors such as displacement by providing assistance to parties (especially developing countries, least developed countries and SIDS) to ‘improve their understanding and assessment of effects, vulnerability and adaptation, and to make informed decisions on practical adaptation actions and measures to respond to climate change on a sound, scientific, technical and socio-economic basis, taking into account current and future climate change and variability’.<sup>51</sup>

The Bali Roadmap (COP13 2007) fostered alliances between the north and the south to promote adaptation in the developing world.<sup>52</sup> Paragraphs 1(c)(i) to (v) of the 2007 Bali Action Plan emphasise ‘enhanced action on adaptation’ by parties in a post-2012 agreement.<sup>53</sup> The Copenhagen Accord (COP15 2009) concentrates on the urgent necessity of enhanced action and international cooperation for adaptation initiatives. Most significantly, the importance of adaptation for implementing the objectives of the Convention were admitted during this Conference (Decision 3/CP15) and the Copenhagen Adaptation Framework has been established.<sup>54</sup>

The development in the Cancun Adaptation Framework adopted as part of the Cancun Agreements at the 2010 Climate Change Conference in Cancun, Mexico, could further

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<sup>50</sup> A Srinivasan, ‘Adaptation to Climate Change’, in A Srinivasan (ed.), *Asian Aspirations for Climate Regime Beyond 2012* (SATO Printing Co., 2006) 77–100.

<sup>51</sup> *UNFCCC Conference of the Parties (COP) 2005 para. 1*, cited in Angela Williams, ‘Turning the Tide: Recognizing Climate Change Refugees in International Law’ (2008) 30(4) *Law & Policy*, 502, 519.

<sup>52</sup> See Grasso, above n 45.

<sup>53</sup> Bali Action Plan, Report of the Conference of the Parties on its Thirteenth Session, held in Bali from 3 to 15 December 2007, *UNFCCC FCCC/CP/2007/6/Add.1*\* 14 March 2008 4.

<sup>54</sup> ‘Adaptation to the adverse effects of climate change and the potential effects of response measures is a challenge faced by all countries. Enhanced action and international cooperation on adaptation is urgently required to ensure the implementation of the Convention by enabling and supporting the implementation of adaptation actions aimed at reducing vulnerability and building resilience in developing countries, especially in those that are particularly vulnerable. That is, especially least developed countries, small island developing states and Africa. We agree that developed countries shall provide adequate, predictable and sustainable financial resources, technology and capacity-building to support the implementation of adaptation action in developing countries.’ See Copenhagen Accord, Draft Decision CP. 15, Conference of the Parties, Fifteenth session, Agenda item 9, *FCCC/CP/2009/L.7* 18 December 2009, *UNFCCC* <<http://unfccc.int/resource/docs/2009/cop15/eng/l07.pdf>>.

offer scope to enhance the global governance of migration in the context of climate change. In particular, paragraph 14(f) calls upon states to enhance their action on adaptation by pursuing a range of measures, including ‘to enhance understanding, coordination and cooperation with regard to climate change induced displacement, migration and planned relocation, where appropriate, at the national, regional and international levels’.<sup>55</sup> Thus, the Cancun Accord recognised migration as adaptation and emphasised international cooperation for the relocation of climate change induced displacement. It must be noted that the indication of ‘planned relocation’ does not only refer to developing policy responses for migration or displacement, but includes also those ‘who are unable or unwilling to move without assistance’.<sup>56</sup> This paragraph may be ‘the first step towards effectively addressing the thorny and complicated problem of environmental migration and displacement’.<sup>57</sup> However, it remains uncertain whether adaptation funding can be expended for migration or resettlement programmes.<sup>58</sup>

Thus, it appears that there already exists an international framework for adaptation within which regional and national initiatives can be developed to respond more clearly and directly to the challenges posed by climate change and human displacement.<sup>59</sup> Given the enormous challenges posed by climate change on human migration, the post-Kyoto agreement, recognising the displacement issue, develops more concrete and explicit adaptation measures for climate change displacement.

### ***9.5 Protecting Those Who Remain by Adaptation Strategies***

It is the poorest population who are most vulnerable to the effects of climate change. As the UNDP noted in its 2007 to 2008 Human Development Report: ‘[m]illions of world’s poorest people are already being forced to cope with effects of climate change ... However, increased exposure to draught, to more intense storms, to floods and environmental stress is holding back the efforts of the world’s poor to build a better life for themselves and their children’.<sup>60</sup> Climate change adaptation calls for comprehensive

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<sup>55</sup> Cancun Framework para. 14(f).

<sup>56</sup> Foresight, above n 2, 154.

<sup>57</sup> Sébastien Jodoin, ‘Human Rights in Climate Change Negotiation’ (CISDL Legal Working Paper Series on Climate Change Law and Policy, CISDL, 2002) 3.

<sup>58</sup> Benoit Mayer, ‘Environmental Migration in Asia and the Pacific: Could We Hang Out Sometimes?’ (Earth System Governance Working Paper No. 22, Earth System Governance Project, 2012) 11.

<sup>59</sup> See Williams, above n 38, 519.

<sup>60</sup> UNDP, ‘Fighting Climate Change: Human Solidarity in a Divided World’ (Human Development Report 2007/2008, UNDP, 2007) 1.

policymaking. The adaptation strategies should be designed in such a way that those strategies build the capacity of the people to cope with the adverse effects of climate change that prevents displacement. The IOM suggests tailoring policy interventions at the earliest stage of environmental degradation.<sup>61</sup> The Guiding Principles also advocate protection at three stages—before, during and after displacement, including resettlement. Based on the nature and extent of movement and degree of ‘force’ motivating migration, a range of options should be employed that are appropriate to particular needs of specific region or society.<sup>62</sup> This thesis suggests multi-track adaptation strategies that would potentially help managing potential large numbers of climate change induced displacement in Bangladesh. Appropriate adaptation strategies involve a synergy of the correct assessment of current vulnerabilities to climate change effects, use of appropriate technologies and information on traditional coping practices, diversified livelihoods and current government and local interventions. Based on existing coping mechanisms and suggested future adaptive strategies, the following concrete measures are imperative to reduce total vulnerability of people and promote SD preventing displacement.

### ***9.5.1 Strengthening Adaptation through Capacity Building***

Bangladesh is particularly vulnerable to the consequences of climate change, because the rural economy and livelihoods of the people in affected areas are directly dependent on climate and weather conditions. A lack of capacity (technical, human and financial) makes it harder to adapt to changing conditions and to mitigate the risks. Capacity building at all levels is the centre point of both climate change adaptation and DRR.<sup>63</sup> The main aim of adaptation programmes is to make people more capable and resilient so that they can cope with adverse effects of climate change. Successful implementation of adaptation programmes and sustainable rural and urban development help people stay in their original place.<sup>64</sup> SD assistance is required to strengthen the coping capacity of communities

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<sup>61</sup> International Organization for Migration (IOM), *Discussion Note: Migration and the Environment* (2007) 5

<[http://www.iom.int/jahia/webdav/site/myjahiasite/shared/shared/mainsite/microsites/IDM/workshops/evolving\\_global\\_economy\\_2728112007/MC\\_INF\\_288\\_EN.pdf](http://www.iom.int/jahia/webdav/site/myjahiasite/shared/shared/mainsite/microsites/IDM/workshops/evolving_global_economy_2728112007/MC_INF_288_EN.pdf)>.

<sup>62</sup> Jane McAdam, ‘How to Address the Protection Gaps—Ways Forward’ (Paper presented at the Nansen Conference: Climate Change and Displacement in the 21<sup>st</sup> Century, Oslo, 5–7 June 2011) 1 <<http://d2530919.hosted213.servetheworld.no/expose/global/download.asp?id=2267&fk=1626&thumb=>>.

<sup>63</sup> IOM, ‘Disaster Risk Reduction and Climate Change Adaptation in IOM’s Response to Environmental Migration’ (IOM, 2012) 5.

<sup>64</sup> Koko Warner, ‘Climate and Environmental Change, Human Migration and Displacement: Recent Policy Developments and Research Gaps’, UN Secretariat, 12 February 2011, 5 <<http://www.un.org/esa/population/meetings/ninthcoord2011/p10-unu.pdf>>.

affected by environmental degradation.<sup>65</sup> In many cases, climate change induced displacement can be avoided by ensuring capacity building and livelihood security for affected people both in rural and urban areas.<sup>66</sup> The government's NAPA for climate change is also geared towards increasing resilience to the effects of climate change and prioritising intervention activities in the most vulnerable communities. The NAPA discusses several adaptive responses to climate change as part of the country's overall development goals and objectives. Moreover, to cater with the problem, Bangladesh needs a strategic policy and programmes for climate resilient SD.<sup>67</sup>

### **9.5.2 Sustainable Development**

The adaptation strategies need to follow a holistic approach and take into consideration others protection needs of the community that equally influence the decision on migration.<sup>68</sup> Strengthening the coping capacity of communities affected by environmental degradation through sustainable rural and urban development may help people stay in their original place without relying on migration for alternative livelihoods in the face of adverse environmental situation.<sup>69</sup> SD implies balancing economic development with environmental protection. While the term SD is fraught with a multiplicity of definitions, the definition coined by the World Commission on Environment and Development is often cited in literature: 'development that meets the needs of the present without compromising the ability of the future generations to meet their needs'.<sup>70</sup> The International Law Association (ILA) elaborated the concept:

the objective of sustainable development involves a comprehensive and integrated approach to economic, social and political processes, which aims at the sustainable use of natural resources of the Earth and the protection of the environment on, which nature and human life, as well as social and economic development depend and, which seeks to realize the right of all human beings to an adequate living standard on the basis of their active, free and meaningful participation in development and in the fair distribution of benefits resulting therefrom, with due regard to the needs and interests of future generations.<sup>71</sup>

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<sup>65</sup> IOM, 'Migration and the Environment' Discussion Note, 94<sup>th</sup> Session, MC/INF/288, 1 November 2007 <[http://www.iom.int/jahia/webdav/site/myjahiasite/shared/shared/mainsite/microsites/IDM/workshops/evolving\\_global\\_economy\\_2728112007/MC\\_INF\\_288\\_EN.pdf](http://www.iom.int/jahia/webdav/site/myjahiasite/shared/shared/mainsite/microsites/IDM/workshops/evolving_global_economy_2728112007/MC_INF_288_EN.pdf)>.

<sup>66</sup> Warner, 'Climate and Environmental Change', above n 64, 5.

<sup>67</sup> Government of the People's Republic of Bangladesh, 'Moving Ahead: National Strategy for Accelerated Poverty Reduction II (FY 2009–11)' (Government of the People's Republic of Bangladesh, 2008) 13.

<sup>68</sup> See James S Pender, 'What is Climate Change? And How It will Effect Bangladesh' (Briefing Paper [Final Draft], Church of Bangladesh Social Development Programme, 2008) 43.

<sup>69</sup> Warner, 'Climate and Environmental Change', above n 64, 5; IOM, above n 65, 5.

<sup>70</sup> See GH Brundtland, *Our Common Future* (Oxford, 1987) 43.

<sup>71</sup> ILA Resolution 3/2002, *New Delhi Declaration of Principles of International Law Relating to Sustainable Development*.

SD is one of the underlying principles of the climate regime and is found throughout the UNFCCC and the Kyoto Protocol.<sup>72</sup>

Although a separate policy or strategy on SD is not yet in place, the issue of SD has been mentioned in a number of national policies and programmes. However, the Vision 2021 long-term development plan of the Bangladesh Government aims to ensure a more-equitable socio-economic environment and SD through ensuring higher living standards, better education and social justice for better protection from climate change and natural disasters.

SD is an effective and comprehensive approach to climate change displacement in Bangladesh as it takes into account all the dimensions of the decision to migrate through slowing down environmental degradation, adaptation to climate change, food security, health and education, water supply and sanitation, conservation of biodiversity, building resilience and reducing vulnerability, sustainable use of natural resources and early-warning systems and risk management. Special attention needs to be given to the environmental push factors in all kinds of development policies, including: National SD Strategies, NAPA and Poverty Reduction Strategies. The laws and policies relevant to climate change displacement can be integrated under the three pillars of SD.<sup>73</sup> The principles of SD may coordinate and reconcile the different laws relating to climate change migration.<sup>74</sup> Since the purpose of all activities dealing with climate change displacement is increasing resilience and capacity of the people, implementation of principles of SD may promote resilience and sustainability to situations that would lead to displacement.

### **9.5.3 Building Infrastructure**

Saltwater intrusion poses the greatest threat to agricultural development and human survival in the coastal chars<sup>75</sup> in Bangladesh. As a result, salinity control is often at the core of adaptive water management strategies. The authorities need to protect infrastructure building embankments, dykes and coastal barriers to cope with rising waters and salinity intrusion.<sup>76</sup> There is a need to build more cyclone and flood shelters for safe

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<sup>72</sup> Rosalind Cook and Eljalill Tauschinsky, 'Accommodating Human Values in the Climate Regime' (2008) 4(3) *Utrecht Law Review* 18, 21.

<sup>73</sup> Benoit Mayer, 'Sustainable Development Law on Environmental Migration: The Story of a Bag of Marbles, an Obelisk and a Tapestry' (Working Paper Series 04, CISDL and IDLO, 2011) 28.

<sup>74</sup> Ibid.

<sup>75</sup> *Chars* are ephemeral sandbanks that are formed in the riverbeds.

<sup>76</sup> Bimal Kanti Paul, 'Climate Refugees: The Bangladesh Case', *The Daily Star* (online), 6 March 2010 <<http://www.thedailystar.net/newDesign/news-details.php?nid=128811>>.

refuge during natural disasters. People's homes and other structures need to be made more climate resilient. The authorities need to create embankments and regular dredging to prevent siltation. New technologies should be invented for land reclamation from the sea.

The Char Development and Settlement Project in Bangladesh provides one example of an integrated adaptive response strategy for persons displaced or threatened by RBE and flooding. Adaptive measures promoted by the programme include the dissemination of rainwater harvesting technologies through governmental and non-governmental organisations to counter the increasing salinity of drinking water in coastal zones. The authorities also need to invent crops that are more resistant to drought and saline water.<sup>77</sup> The authorities should focus on proactive adaptations, such as modifying zoning laws on coasts in anticipation of stronger sea surges, planning for large tracts of forest in flood-prone areas along rivers and coastlines.<sup>78</sup> These pre-emptive adaptation measures could reduce the vulnerability of the people likely to be affected by climate change.<sup>79</sup> It is found in many reports and studies that an obvious interconnection exists between levels of adaptive measures and infrastructural development of a particular country and the scale of outward migration.<sup>80</sup>

#### **9.5.4 *Alternative Livelihood and Access to Basic Services***

It must be noted that access to capital and socio-economic conditions play a major role in determining vulnerability, since they provide the climate affected people more options to overcome adversities posed by climate change effects.<sup>81</sup> Wealthy people generally can adopt alternative strategies, including migration to safer places within or across borders in response to slow-onset or repetitive disasters. Adaptation strategies need to primarily focus on the poor section of the population. The poverty made this group more susceptible to the risks posed by climate change effects because of frequent exposure to disaster and their limited adaptive capacity to cope with the changing environment.<sup>82</sup> The poor mainly live in high-risk areas such as hillsides, slums and near to embankments, with limited protection

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<sup>77</sup> Ibid.

<sup>78</sup> Ibid.

<sup>79</sup> Ibid.

<sup>80</sup> MZ Hossain, 'Rural-Urban Migration in Bangladesh: A Micro-Level Study' 2 <[http://www.iussp.org/Brazil2001/s20/S28\\_P02\\_Hossain.pdf](http://www.iussp.org/Brazil2001/s20/S28_P02_Hossain.pdf)>.

<sup>81</sup> ADB, above n 13, 47.

<sup>82</sup> Tahera Akter, 'Climate Change and Flow of Environmental Displacement in Bangladesh' (Unnayan Onneshan—The Innovators, 2009) 13; Cecilia Tacoli, 'Migration and Adaptation to Climate Change' Sustainable Development Opinion (IIED, 2007) <<http://pubs.iied.org/pdfs/17020IIED.pdf>>.

and support services.<sup>83</sup> Livelihoods of the poor are mainly based on natural resources, which are susceptible to environmental degradation due to climate change. Almost 80 per cent of Bangladesh's population lives in rural areas, with 54 per cent of them employed in agriculture and the remainder in the rural non-farm (RNF) sector.<sup>84</sup> Salinity increase or long lasting water logging is likely to destroy crops and soil fertility, having negative effects on livelihoods and biodiversity.<sup>85</sup> Thus, loss of property and livelihood diminish ability, leading to forced migration or displacement.<sup>86</sup> Authorities should assist the affected communities who are dependent on natural resources for livelihoods that become unsustainable to find alternative livelihoods. Alternative sustainable land-use systems can be invented to adjust to population growth and carrying capacity. Economic diversification may be another strategy.

Manifestly, increasing the capacity of the affected people through strengthening adaptation programmes and securing their livelihood would reduce the migration pressure from the affected areas.<sup>87</sup> Therefore, the best adaptation strategy is to secure the livelihoods of people. The strategies generally 'seek to adapt agricultural practices, management of pastoral lands, infrastructure such as dykes and coastal barriers, fishing patterns and other strategies to reduce pressures on fragile eco-systems, thereby allowing populations to remain in place'.<sup>88</sup> The alternative livelihoods should be arranged through improving dissemination of knowledge, access to information and proper training.<sup>89</sup> For capacity building, the Government may generate livelihood programmes in affected areas or alternatively facilitate migration as a part of a capacity building and adaptive strategy. There is a need to strengthen access to basic services (for example health, education, water and sanitation) and livelihoods in disaster-prone communities to make affected people more resilient. Thus, effective adaptation strategies will help to 'reduce migration pressures and allow people to remain in their original settlements'.<sup>90</sup> However, as a policy

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<sup>83</sup> Ibid.

<sup>84</sup> World Bank, *Bangladesh: Priorities for Agriculture and Rural Development* <<http://go.worldbank.org/770VR4DIU0>>.

<sup>85</sup> Akter, above n 82, 13.

<sup>86</sup> Warner, 'Climate and Environmental Change', above n 64, 5.

<sup>87</sup> David Hodgkinson et al., 'The Hour the Ship Comes in': A Convention for Persons Displaced by Climate Change, 4 <[http://www.ccdpconvention.com/documents/Hour\\_When\\_Ship\\_Comes\\_In.pdf](http://www.ccdpconvention.com/documents/Hour_When_Ship_Comes_In.pdf)>.

<sup>88</sup> Susan F Martin, 'Climate Change, Migration and Adaptation' (Background Paper, German Marshall Fund of the United States, June 2010) 3 <[http://www.gmfus.org/galleries/defaultfile/SMartinAdaptation\\_V3.pdf](http://www.gmfus.org/galleries/defaultfile/SMartinAdaptation_V3.pdf)>.

<sup>89</sup> See detail about procedural matter in Chapter 4; Akter, above n 82, 13.

<sup>90</sup> Martin, above n 88, 3.

response, existing social safety net programmes could be implemented in favour of climate change induced displaced people.<sup>91</sup> The government may initiate special safety net programmes for the people displaced by river-bank and coastal erosion, cyclone and slow-onset process, including water logging and salinity intrusion.<sup>92</sup>

### **9.5.5 Protection of Human Rights**

With poverty and lack of livelihood, overall degrading human rights play a concomitant role in increasing human migration. The rampant violations of human rights can create situations of poverty, poor governance and conflict.<sup>93</sup> Consequently, such a situation may motivate people to migrate. Therefore, addressing the human rights violation and protection of human rights could reduce pressure to emigrate.<sup>94</sup> Thus, ‘adaptation to climate change framed in human rights terms is in essence pre-emptive action against prospective denial of human rights’.<sup>95</sup> Thus, economic and social rights of the victims of natural disasters can be protected through supporting resilience and adaptation.<sup>96</sup>

McAdam and Saul raised the concern that adaptive measures under policy may undermine the human rights norms and standards.<sup>97</sup> Under human rights principles, people need to have freedom and choice in selecting their options for livelihood, right to culture and freedom of religion must be respected and people need to be consulted before taking any action affecting them. The Government should come out from the narrow interpretation of civil and political rights; they need to equally emphasise economic, social and cultural rights. For this reason, McAdam and Saul stress ‘adaptation with dignity’ to achieve the goal of ‘dignified life’.<sup>98</sup>

The fulfilment of human rights at a satisfactory level in Bangladesh would itself provide a solid basis for autonomous adaptation (that is, measures spontaneously initiated by citizens

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<sup>91</sup> Ziaul Hoque Mukta, ‘Making the Move for Climate Refugees’ *Bdnews24.com* (online), 1 December 2011 <<http://opinion.bdnews24.com/2011/12/01/making-the-move-for-per-centE2-per-cent80-per-cent98climate-refugees-per-centE2-per-cent80-per-cent99/>>.

<sup>92</sup> Ibid.

<sup>93</sup> Global Migration Group (GMG), ‘Mainstreaming Migration into Development Planning: A Handbook for Policy-makers and Practitioners’ (IOM, 2010) 11.

<sup>94</sup> Ibid 12.

<sup>95</sup> Lavanya Rajamani, ‘The Increasing Currency and Relevance of Rights-Based Perspectives in the International Negotiations on Climate Change’ (2010) 22(3) *Journal of Environmental Law* 391, 428.

<sup>96</sup> Zetter, ‘The Role of Legal and Normative Frameworks, above n 11, 402.

<sup>97</sup> McAdam and Saul, above n 12, 268.

<sup>98</sup> Ibid 269.

in response to climate changes).<sup>99</sup> Local provision of information, guarantees of public participation in government and freedom of speech and association all provide affected communities with the voice and capacity to force change in their local settings.<sup>100</sup>

### **9.5.6 Community-based Adaptation**

Adaptation measures should be specific to particular locations and situations. What may work in one location, with one socio-economic context, may not be feasible in another context and scenario. Therefore, it is not possible for a national government to create a ‘one-size-fits-all’ adaptation approach. It is imperative that national policy efforts improve the ability of local communities to adapt to climate change. Notwithstanding the range of location specific limitations inherent to any adaptive response strategy, local and traditional coping mechanisms developed within the communities in Bangladesh may provide the most reliable form of protection against extreme events.<sup>101</sup> The local people facing adverse environmental events know best about any changes, as well as the traditional responses for self-protection and adaptation to cope with the changing circumstances.<sup>102</sup> Community-based adaptation should be a participatory empowerment process that helps climate-affected communities to systemise and synthesise their knowledge around climate changes, and they must have ownership over the design and implementation of adaptation strategies.<sup>103</sup> It makes them aware of their collective role as active citizens in coping with the changes. Thus, community-based adaptation is crucial to promoting appropriate development policies and practices.

The adaptation strategies could be implemented successfully if the local people can be involved.<sup>104</sup> Adapting to changing situations is a familiar traditional practice for

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<sup>99</sup> ‘Climate Change and Human Rights: A Rough Guide, International Council on Human Rights Policy’ (2008) 27 <[http://www.ichrp.org/files/reports/36/136\\_report.pdf](http://www.ichrp.org/files/reports/36/136_report.pdf)>.

<sup>100</sup> Ibid.

<sup>101</sup> James Pender, ‘Community-led adaptation in Bangladesh, Climate change and Displacement’ (2008) 31 *Forced Migration Review* 54.

<sup>102</sup> Scott Leckie, Zeke Simperingham and Jordan Bakker, ‘Bangladesh’s Climate Displacement Nightmare’, *Ecologist*, 18 April 2011

<[http://www.theecologist.org/blogs\\_and\\_comments/commentators/other\\_comments/854868/bangladeshs\\_climate\\_displacement\\_nightmare.html](http://www.theecologist.org/blogs_and_comments/commentators/other_comments/854868/bangladeshs_climate_displacement_nightmare.html)>.

<sup>103</sup> Kate Raworth, ‘Climate Wrongs and Human Rights—Putting People at the Heart of Climate-Change Policy’ (Oxfam Briefing Paper No. 117, Oxfam International, 2008) 18; M Sajid Raihan et al., ‘Understanding Climate Change from Below, Addressing Barriers from Above: Practical Experience and Learning from a Community based Adaptation Project in Bangladesh’ (Action Aid Bangladesh, 2010) 63.

<sup>104</sup> Anwar Ali, ‘Climate Change Effects and Adaptation Assessment in Bangladesh’ (1999) 12 *Climate Research* 109, 115.

Bangladeshi people, since they have been living with disasters for a long time.<sup>105</sup> Traditionally, over many centuries, Bangladesh has learned to cope well with climate variations. The people of Bangladesh are very enterprising and innovative in devising coping mechanisms and strategies that they learned from their constant interaction with natural disasters for centuries. Traditional methods and knowledge in this respect must be taken into consideration. Such traditional knowledge must be preserved for the future as Bangladesh undergoes development.

The NAPA and BCCSAP propose a number of measures and action plans, including infrastructure improvements, coastal afforestation, livelihood adaptation and increased investment in comprehensive disaster management. These programme initiatives would be more successful if local community and the real stakeholders are involved and their participation can be ensured effectively.<sup>106</sup> If the policy-makers can successfully engage the community on a priority basis, it is expected that the mass displacement resulting from sea-level rise and other climatic effects would be halted in the near future.<sup>107</sup> Thus, rights-based adaptation policies would ensure transparency and accountability of adaptation programmes.

#### ***9.5.7 Effective Disaster Risk Reduction and Disaster Risk Management Measures***

Improved disaster preparedness and management has huge implications in mitigating forced displacement.<sup>108</sup> The authorities need to establish and operate adequate monitoring and early-warning systems to detect environmental hazards before they threaten human survival and start to trigger displacement. Well-informed populations, ready shelter and humanitarian assistance are crucial for tackling the adverse environmental situation. DRR offers opportunities for ‘bottom-up’ strategies for adaptation to current climate variability and climate extremes. In this respect, DRR can promote early adaptation to climate risks and effects. The early-warning system and emergency preparedness measures may help reduce displacement from natural disasters associated with climate change.<sup>109</sup> In 2003, the Government of Bangladesh, along with UNDP and DFID, took a decision about the CDMP. In 2004, Climate Change Cell (CCC) was established as a unit of the Department

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<sup>105</sup> Ibid.

<sup>106</sup> Matthew Walsham, ‘Assessing the Evidence: Environment, Climate Change and Migration in Bangladesh’ (IOM, 2010) 17–18.

<sup>107</sup> Ibid 18.

<sup>108</sup> IOM, above n 65, 6.

<sup>109</sup> Martin, above n 88, 3.

of Environment. The CDMP of the Government pilots activities to integrate into the comprehensive disaster management framework for Bangladesh climate risks and adaptation needs with regard to extreme events. To promote links between DRR and climate change adaptation, the government need to make the people aware of the impending dangers, carry out detailed scientific research and develop local grained methods of adaptation.<sup>110</sup>

#### ***9.5.8 Sustainable Management of Natural Resources and Ecosystem-based Adaptation***

The protection and preservation of the natural ecosystem is vitally important to secure coastal zone from disasters and the livelihoods of coastal people.<sup>111</sup> Destruction of ecosystems and loss of biodiversity have negative effects on human habitat and livelihoods and are likely to induce human migration.<sup>112</sup> Biodiversity and natural ecosystems have an important role to play in coastal zone protection and the livelihoods of coastline communities.<sup>113</sup> Coastal mangrove forests have played a crucial role as a buffer and minimised the effects of Aila/Sidr in 2007 and 2009 in Bangladesh.<sup>114</sup> The Sundabans mangrove forest in the southwest of Bangladesh is important for tourism, timber and honey collection. Local people often rely on non-timber forest products for food during disasters.<sup>115</sup> Well-managed natural coastal zone ecosystems could contribute to a reduction in the vulnerability of coastal zone communities and the need for migration as an adaptation strategy.<sup>116</sup>

#### ***9.5.9 Declaration of ‘Environmentally Vulnerable Communities’***

The government as a part of adaptation strategy needs to protect and manage natural coastal zone ecosystems. Such efforts would help to reduce the vulnerability of the coastal communities and people would rely less on migration for alternative livelihoods as an adaptation strategy.<sup>117</sup> The authorities may declare people of certain areas as ‘environmentally vulnerable communities’ (EVC). This requires both a scientific and

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<sup>110</sup> Ali, above n 104, 115.

<sup>111</sup> Ibid.

<sup>112</sup> Refugee and Migratory Movement Research Unit (RMMRU), ‘Bangladesh, Low Elevation Coastal Zones and Islands’ (Migration and Global Environmental Change, Foresight, 2011) 19.

<sup>113</sup> Grame Hugo et al., ‘Climate Change and Migration in Asia and the Pacific’ (Draft Edition) (ADB, 2011) 66.

<sup>114</sup> See Pender, above n 68, 55.

<sup>115</sup> Ibid.

<sup>116</sup> Hugo et al., above n 113, 66.

<sup>117</sup> Ibid.

empirical study to understand the scientific effects, as well as social and human dimensions of climate change in those areas. However, the coastal zones of Bangladesh, which are critically vulnerable to sea-level rise, storm surges, recurrent flooding, cyclones, and salinity intrusion, seem appropriate to be included as an Environmentally Critical Zone (ECZ). The coastal areas of Bangladesh, known as a zone of multiple vulnerabilities as well as opportunities, covers 32 per cent of total land masses and 28 per cent (35 million) of the total population; of them, 52 per cent households are functionally landless and poor.<sup>118</sup>

However, questions may arise in respect to the sanctity and justification of providing special treatment to those people when Government has an obligation to all individuals affected by climate change generally. However, it is argued that provision for such special protection is not new in Bangladesh. While all citizens of Bangladesh have equal rights to education and government services, the Government has a reserved quota for people from CHT and indigenous communities and children of freedom fighters, since they need special treatment. The Government also declared certain areas as ECA,<sup>119</sup> where the ecosystem is considered to be threatened to a critical state. While it is positive to declare such ECA for the protection of environment, it is more desirable to take urgent measures for the protection of people critically at danger due to the adverse effects of climate change. However, the Government by notification may include and exclude areas for ECZ.

### **9.6 Concluding Remarks**

While ‘environmental migration’ is likely to occur in a great continuum, the literature and policy discourses on climate change induced displacement repeatedly focus on ‘displaced persons’. However, the research findings and evidence confirm that large numbers of people who are affected due to the effects of climate change are forced to remain at their homes due to lack of resources. The adaptation programmes through capacity building and

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<sup>118</sup> MR Islam, *Where Land Meets the Sea* (University Press Limited, 2004); BBS, *Statistical Yearbook 2008*, Bangladesh Bureau of Statistics, Government of the People’s Republic of Bangladesh.

<sup>119</sup> Ecologically Critical Area: Ecologically defined areas or ecosystems affected adversely by the changes brought through human activities. The Bangladesh Environment Conservation Act (BECA), 1995, has provision for Ecologically Critical Area (ECA) declarations by the Director General of the Department of Environment in certain cases where an ecosystem is considered to be threatened to a critical state. If the government is satisfied that due to degradation of environment, the ecosystem of any area has reached or is threatened to reach a critical state, the government may, by notification in the official gazette, declare such areas as ECA. The government shall specify, through the notification provided in sub-clause (1) or by separate notification, which of the operations or processes cannot be initiated or continued in the Ecologically Critical Area. See *Bangladesh Environment Conservation Act/BECA 1995*, *Banglapedia*

<[http://www.banglapedia.org/httpdocs/HT/E\\_0017.HTM](http://www.banglapedia.org/httpdocs/HT/E_0017.HTM)>.

resilience of the people living in climate vulnerable areas would indeed mitigate the number of displaced people. Therefore, obvious inter-linkages exist between adaptation and displacement. The policy response for climate change displacement needs to recognise this interconnection, and adaption programmes should be strengthened to mitigate the number and sufferings of climate change induced displacement.

Government protection measures need to support those without the resources to move, who may be more vulnerable to displacement and forced migration and less able to use mobility in an adaptive way to migrate in safety and dignity. The Government should incorporate the building of institutional and technical capacities for migration, displacement and planned relocations into their national climate change adaptation plans, and tailor such plans to address, prevent and mitigate the well-known risks of human rights violations and impoverishment embedded in virtually all forced displacements.<sup>120</sup> The policy responses should support and assist households to diversify income sources, particularly among rural vulnerable populations where agricultural decline due to environmental change is likely to be substantial, in order to mitigate the effects of environmental degradation and natural disasters and reduce their vulnerability to the effects of such phenomena.

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<sup>120</sup> See Elizabeth Ferris, Michael M Cernea and Daniel Petz, 'On the Front Line of Climate Change and Displacement: Learning from and Within Pacific Island Countries' (The Brookings Institution— London School of Economics Project on Internal Displacement, 2011) 31.

# **CHAPTER 10**

## **PROTECTION OF CLIMATE CHANGE INDUCED DISPLACEMENT IN BANGLADESH: THE WAY FORWARD**

### ***10.1 Context of the Study***

This study commenced its journey in search of a suitable legal apparatus for the protection of a large number of people already displaced and likely to be displaced in Bangladesh due to climatic events such as sea-level rise, floods and cyclones. At the start, the study faced the challenge of how to conceptualise the people who are already displaced or at risk of displacement due to the direct effects of climate change. The more difficult task was to find an appropriate term to identify those people. A vast number of literature, mostly by Western scholars, challenged the concept of ‘climate refugees’ and persistent debates remain in respect to the nature and extent of climate change induced displacement based on the issue of multi-causality. Such debates have produced a wide variety of terms to identify persons moved for environmental reasons. As a result, globally there is no agreement on the definition of climate change induced displaced persons both in academic and policymaker circles, and no international instrument recognises these persons as a distinct migrant group. The dispute over definitional issues and the difficulty of predicting its scale have in some respects worked against developing effective protection regimes for climate change induced displacement.

Both national and international legal framework provides protection to climate change induced displacement in a fragmented way. As a result, there has been no coordinated response at both national and international levels by concerned governments to address this issue. Debates also focus on the modes of protection mechanisms in support of this vulnerable group of people. While some authors find the Refugee Convention appropriate, other academics propose to expand it to include the people moved for environmental reasons. Considering the UNFCCC as an appropriate forum to deal with displacement arising from climate change, scholars propose to develop a protocol under UNFCCC. Lastly, some authors argue that no current international framework is able to deal with the specificity and extent of challenges posed by climate change induced

displacement, and so propose developing a full-fledged independent treaty for their protection.

It is confirmed by many studies that the climate change induced displacement in Bangladesh will be mostly internal. While international solidarity and cooperation are imperative for the protection of climate change induced displacement, a national framework is essential for the effective protection of climate change induced displacement. Although the Bangladeshi policymakers frequently refer to the existence of a large number of ‘climate refugees’, and the national strategy paper and plan of action mention the term ‘climate refugee’, the term is not defined. No national law or policy has been developed targeting specifically ‘the persons displaced for environmental/climate change reasons’.

This concluding chapter outlines how this thesis deals with these debates and protection gaps in respect to climate change induced displacement, both at international and national levels. It also identifies issues for future research and policy development as a way forward for the protection of climate change induced displacement.

## ***10.2 Charting a Roadmap to the Protection of Climate Change Induced Displacement in Bangladesh***

This thesis systematically addressed the central research question—‘recognition and protection of climate change induced displacement in Bangladesh through law and policy responses’—throughout the chapters. This analytical legal study examined a number of complex issues under international environmental law, international human rights law and migration and refugee law that have relevance with the protection of climate change induced displaced persons. At the outset, it conceptualised the group of people displaced or likely to be displaced due to the effects of climate change as ‘a distinct category of migrants’ that require specific recognition and protection. This thesis proposes a new governance approach towards protection of climate change induced displacement and sets out a roadmap showing how the policy interventions could contribute to better integrating the full spectrum of migration issues and concerns into overall environmental and developmental policy and vice-versa within Bangladesh.

### ***10.2.1 Climate Change, Environmental Degradation and Migration: A Complex Nexus***

A complex correlation exists between climate change, environmental degradations, and consequent human migration.<sup>1</sup> The major effects of climate change play a substantial role in triggering human migration.<sup>2</sup> This study analysed debates associated with environmental migration mainly based on the problem of multi-causality to show the diversity and complexity of issues related to environmental migration.<sup>3</sup> There are also debates and problems with the methodologies and data collection associated with climate change displacement. In response to the debates of multi-causality regarding environmental migration, this study suggested that, notwithstanding the interrelated social, economic and political factors that influence the decision on migration, there are some effects of climate change, such as sea-level rise, floods and cyclones that substantially dominate other factors and act as principal drivers for climate change induced migration.<sup>4</sup> Indeed the ‘decision to move’ to other areas is interrelated with other socio-economic factors. For instance, people in coastal and rural areas in Bangladesh depend on natural resources for their livelihood, such as agriculture and fishing. Their social and economic status is bound to change with predicted climate variability. Environment, economy and poverty appear to be synonymous for them. It is difficult to segregate one distinct ‘cause’ for their migration decision and it is important to see whether ‘environmental change’ is the predominant factor motivating them to move. This study found that all the debates arise mainly as an excuse for evading responsibility for this large vulnerable group. Thus, it argued for recognition and protection of the people displaced due to certain direct effects of climate change, notwithstanding the existence of multi-causality.<sup>5</sup>

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<sup>1</sup> See Headings 2.4 and 2.5 of Chapter 3 for a detailed discussion on this issue.

<sup>2</sup> See Headings 2.2 and 2.3 of Chapter 3 for a detailed discussion on this issue.

<sup>3</sup> See Headings 2.3 and 2.4 of Chapter 3 for a detailed discussion on this issue.

<sup>4</sup> See Heading 2.5 of Chapter 3 for a detailed discussion on this issue.

<sup>5</sup> See Heading 2.5 of Chapter 3 for a detailed discussion on this issue.

### ***10.2.2 Conceptualisation of Climate Change Induced Displacement in Bangladesh***

Until recently, most of the available definitions of environmental/climate change displacement were limited to merely describing the phenomenon.<sup>6</sup> However, the authors Biermann and Boas and Docherty and Giannini, who provided the definition of ‘climate refugee’, drew the attention of the international community for recognition of and developing protection mechanisms for these displaced persons, since they are devoid of any recognition in current international law. The first step for recognition and developing an effective protection framework is to formulate a comprehensive, accepted and concrete definition of climate change induced displacement. Thus, the variety of terms interchangeably used today, and the lack of conceptual clarity and consensus, is a key problem that left the large numbers of climate change induced migrants unrecognised and unprotected in both international and national frameworks.<sup>7</sup>

This study conceptualised the climate change induced displacement in Bangladesh, analysing the typology of climate change induced displacement based on the causes and extent of the movement.<sup>8</sup> It analysed the essential elements of existing definitions and classified climate change induced displacement into three distinct groups and defined each of them.<sup>9</sup> This study chose to view climate change as including environmental events that have a direct relationship with climate change, and argues for the protection of those migrants for whom the environment and, more specifically, certain environmental events that are likely to occur due to direct effects of anthropogenic climate change are the primary and substantial cause of movement.<sup>10</sup>

### ***10.2.3 Climate Change Induced Displacement: Recognition and Protection under International Law***

This study firstly identified the lack of an apparent international regime and adequate international institutions and structures for the recognition and protection of climate change induced displacement.<sup>11</sup> With all the staggering predictions of climate change induced displacement, these persons are yet to receive recognition as a formal legal

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<sup>6</sup> See Section 2.4.5 of Chapter 3 for a detailed discussion on this issue.

<sup>7</sup> See Sub-heading 2.4.5 and Heading 2.6 of Chapter 2 for a detailed discussion on this issue.

<sup>8</sup> See Heading 3.3 of Chapter 3 for a detailed discussion on this issue.

<sup>9</sup> See Headings 3.4 and 3.5 of Chapter 3 for a detailed discussion on this issue.

<sup>10</sup> See Sub-heading 3.4.2 and Heading 3.5 of Chapter 3 for a detailed discussion on this issue.

<sup>11</sup> See Heading 4.2 of Chapter 4 for a detailed discussion on this issue.

category of people requiring specific protection.<sup>12</sup> To address the gaps, academics, international organisations and policymakers make several suggestions, including extension of the Refugee Convention to include climate change induced displacement, separate protocols under UNFCCC and separate international frameworks to deal with climate change induced displacement.<sup>13</sup> Each of the suggested frameworks has its own limitations. Moreover, given the stalemate conditions of international climate change negotiations and the outlook of developed countries regarding ‘refugees’, it is unlikely to receive any concrete outcome soon in favour of climate change induced displacement.<sup>14</sup>

The international law, including international environmental law, international human rights law, climate change framework and ethical norms and standards confer an obligation and responsibility on both national and international actors towards people who suffer from human rights violations and are in need of protection due to the effects of climate change.<sup>15</sup> Since LDCs like Bangladesh lack sufficient resources to deal with large numbers of internal climate migrants, this study argued that the industrialised countries, based on the principle of CBDR, the polluter-pays principle and principle of international cooperation, should contribute to the existing funding mechanisms for adaptation.<sup>16</sup> The global adaptation funds, such as the Green Climate Fund, can be central in assisting climate change displaced persons. Since this thesis considers migration as an adaptation strategy, these funds should recognise that migration, displacement and planned resettlement are effective adaptation strategies. Thus, the measures and planning for climate change displacement should be incorporated into the criteria for funding. The funds should be coordinated with efforts to strengthen the capacity of the individuals in affected areas and build resilience so that people can cope with adverse climatic effects and not fall into protracted displacement.<sup>17</sup>

This study suggested providing temporary protection for the people who flee their original home due to extreme situations in which the environment was degraded so that it was impossible to continue life and livelihoods.<sup>18</sup> Alternative solutions, including relocation within the national territories, may not be a viable option because of high

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<sup>12</sup> See Heading 4.2 of Chapter 4 for a detailed discussion on this issue.

<sup>13</sup> See Heading 4.2 of Chapter 4 for a detailed discussion on this issue.

<sup>14</sup> See Heading 4.2.4 of Chapter 4 for a detailed discussion on this issue.

<sup>15</sup> See Heading 4.3 of Chapter 4 for a detailed discussion on this issue.

<sup>16</sup> See Heading 4.4 of Chapter 4 for a detailed discussion on this issue.

<sup>17</sup> See Sub-heading 4.4.1 of Chapter 4 for a detailed discussion on this issue.

<sup>18</sup> See Sub-heading 4.4.2.1 of Chapter 4 for a detailed discussion on this issue.

population density and other cogent reasons, and so people take immediate refuge across borders. It is argued that these individuals, whether ‘refugee, economic migrant, or illegal intruder’, should receive temporary and complementary protection under international human rights law.<sup>19</sup> The receiving states should arrange durable solutions for managing these people in safety and dignity until the emergency situation is over. Receiving states should not be allowed to push them back to their original place or any other place where their life is at danger. The receiving state must ensure the temporary protection of a range of civil, political, economic, social and cultural rights based on the principle of non-discrimination.<sup>20</sup>

This study argued for urgent recognition at national, regional and international levels to take the necessary actions in responding to the challenges posed by climate change displacement. To address the protection gaps and for the development of an international regime for the status and treatment of such persons, this study advocated for developing ‘soft guidelines’ based on existing norms and principles of international human rights law and international environmental law.<sup>21</sup> It was argued that norms and principles developed under international law on which the international community has already agreed and consented to have a huge potential to deal with the climate change induced displacement.

#### ***10.2.4 Human Rights Obligation of National and International Authorities***

Displacement resulting from climate change effects has huge human rights implications. International human rights law imposes obligation on states to ensure the safety of life, liberty and property and freedom of communication within their territories. In this context, this study illustrated the interrelationship between climate change induced displacement and human rights. It analysed how the human rights norms were violated due to the displacement caused by climate change effects.<sup>22</sup> It also discussed the obligations of the national government under international human rights treaties to protect and fulfil the human rights of climate change displaced persons.<sup>23</sup>

This study predominantly based its argument on ‘the concept of responsibility’ under both international and national law. While the literature on climate change related

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<sup>19</sup> See Sub-heading 4.4.2.1 of Chapter 4 for a detailed discussion on this issue.

<sup>20</sup> See Sub-heading 4.4.2.1 of Chapter 4 for a detailed discussion on this issue.

<sup>21</sup> See Heading 4.5 of Chapter 4 for a detailed discussion on this issue.

<sup>22</sup> See Heading 5.2 of Chapter 5 for a detailed discussion on this issue.

<sup>23</sup> See Heading 5.3 of Chapter 5 for a detailed discussion on this issue.

displacement and international negotiations are predominantly occupied by the debates surrounding the conceptualisation of the issue—climate change induced displacement—this study, based on the existing principles of international law, attempted to focus on the ‘responsibility’ of both international and national authorities to extend protection to this vulnerable migrant group to preserve their human rights and human dignity. This was irrespective of the terminology used to identify them and their legal status; that is, refugee, migrant or IDP.

It is argued that the displaced persons remain citizens of Bangladesh and the role of the national Government is central to the protection of climate change induced displacement since it is the principal guardian of human rights. Plainly, the internally displaced persons are entitled to the protection of all guarantees of human rights norms and standards provided by the Constitution of Bangladesh.<sup>24</sup> In no way can these displaced persons be deprived of the rights guaranteed for all the citizens of Bangladesh. Rather, the displaced persons have specific needs and rights, distinct from those of the non-affected population, which call for specific assistance and protection measures.

This study focuses on strategies, instruments and practical measures under international human rights law to be pursued for the protection of human rights of the climate change displaced persons in Bangladesh. Then it argued that the human rights lens can be helpful in approaching and managing climate change displacement and examined the potential benefits of a human rights-based approach in tackling challenges posed by climate change induced displacement.<sup>25</sup> It also analysed how human rights standards can provide principled guidance to finding solutions for the displaced people, and argued that the application of human rights principles and norms can bring a range of benefits to international and national efforts to respond to climate change induced displacement.<sup>26</sup>

#### ***10.2.5 Legal and Policy Responses in Bangladesh***

Given that most of the climate change induced displacement will be internal, national laws, policies and institutions are clearly the first level of protection. To cater for the multifarious challenges posed by climate change induced displacement, this study

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<sup>24</sup> See Heading 5.3 of Chapter 5 for a detailed discussion on this issue.

<sup>25</sup> See Heading 5.5 of Chapter 5 for a detailed discussion on this issue.

<sup>26</sup> See Heading 5.5 of Chapter 5 for a detailed discussion on this issue.

argued for developing multi-sectorial policy interventions for effective solutions and management of climate change induced displacement.<sup>27</sup> Taking into context the different effects on environmental events and consequent environmental migration, this study argued for the development of policy responses recognising this phenomenon. For example, in the situations where people have already been displaced, the Government should protect all relevant human rights of those people and provide humanitarian assistance to them. In situations where people are trapped in affected areas and where measures of evacuation or relocation to safety are necessary, the Government should take such measures accordingly. In situations where people are yet to be displaced but are at risk of displacement, the Government should strengthen adaptation measures to build their capacity and resilience so that they do not need to move.

Thus, this study advocated for the inclusion of three types of people who are affected by climate change in the policy responses for climate change induced displacement. These categories are: first, forced climate migrants who are forced to move from their original place in search of food, shelter and livelihoods due to the direct effects of climate change; second, climate-motivated migrants who move pre-emptively to cope with the adverse effects of climate change as part of adaptation strategy, and the Government should facilitate this sort of migration as adaptation; and thirdly, potential climate migrants who either choose to remain due to strong resilience capacity, or cannot move due to lack of sufficient resources.<sup>28</sup>

This study proposed to redefine current migration, adaptation and development policies that often focus on keeping people where they are. It argued for mainstreaming the protection of climate change induced displacement into government laws and policies in other areas, including environment, climate change, development, disaster management and land-use reforms.<sup>29</sup> The institutions need to be strengthened to enhance coordination and collaboration between Government ministries and agencies so that the human rights of the climate displaced persons are protected. There should be coordination and integration of resettlement, adaptation and DRR activities.<sup>30</sup> Finally, this study argued for a much greater collaboration in four relevant areas; environmental

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<sup>27</sup> See Heading 6.2 of Chapter 6 for a detailed discussion on this issue.

<sup>28</sup> See Heading 6.2 of Chapter 6 for a detailed discussion on this issue.

<sup>29</sup> See Heading 6.3 of Chapter 6 for a detailed discussion on this issue.

<sup>30</sup> See Sub-heading 6.3.4 of Chapter 6 for a detailed discussion on this issue.

science, migration, humanitarian issues and development issues, to understand the interconnections among environmental factors and human mobility.

### ***10.2.6 Protecting Human Rights of Forced Climate Migrants***

People who are already displaced by climate change within Bangladesh are plainly entitled to the full range of human rights guaranteed by international frameworks, as well as the Constitution of Bangladesh.<sup>31</sup> Such rights also include protection against arbitrary or forced displacement and basic rights related to food, housing and property restitution for displaced persons. This study revealed the lack of comprehensive normative frameworks to protect the rights of people displaced internally within the borders of Bangladesh. This study proposed the enactment of ‘Guiding Principles for Forced Climate Migrants’ who need immediate protection of humanitarian assistance.<sup>32</sup> The contents of the ‘Guiding Principles’ are heavily drawn from binding international human rights law, and soft laws such as the UN Guiding Principles on IDPs, the Operational Guidelines and the Hyogo Framework.<sup>33</sup> This study tailored those principles in the context of climate change induced displacement in Bangladesh and provided a draft national legal framework for the protection of climate change induced displacement.<sup>34</sup> Since migration, especially environmental migration, in most cases has a large continuum, the ‘Guiding Principles’ suggest extending protection at all the three stages of displacement—before, during and after displacement.<sup>35</sup>

### ***10.2.7 Facilitating Migration as an Adaptive Strategy***

This study suggested extending protection to people who are adversely affected by the climatic effects, but at risk of displacement at any point of time with increasing climatic phenomena and decreasing coping capacity.<sup>36</sup> In such situations, some people may decide to move across borders as part of their coping strategy so that they could work abroad, earn money and send remittances for their families left behind.

Traditionally, although people in response to natural disasters migrate as a part of a coping strategy, the governance approach of Bangladesh is to resist migration.<sup>37</sup> This

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<sup>31</sup> See Heading 7.2 of Chapter 7 for a detailed discussion on this issue.

<sup>32</sup> See Heading 7.2 of Chapter 7 for a detailed discussion on this issue.

<sup>33</sup> See Heading 7.2 of Chapter 7 for a detailed discussion on this issue.

<sup>34</sup> See Heading 7.3 of Chapter 7 for a detailed discussion on this issue.

<sup>35</sup> See Heading 7.3 of Chapter 7 for a detailed discussion on this issue.

<sup>36</sup> See Chapter 8 for a detailed discussion on this issue.

<sup>37</sup> See Heading 8.2 of Chapter 8 for a detailed discussion on this issue.

study sought to shift such an approach and facilitate migration as adaptation. It is essential that climate change induced human displacement can be viewed as a part of a wide spectrum of adaptive possibilities and not just displacement.<sup>38</sup> It is argued that carefully planned and negotiated arrangements, rather than reactive and unplanned responses, can only produce durable solutions and satisfactory outcomes for the protection of these climate migrants.<sup>39</sup> This chapter suggested developing a long-term plan for the resettlement of people who are likely to be displaced in the future due to the effects of climate change.<sup>40</sup> It also suggested developing guidelines for the resettlement of climate change displaced persons and analysed the contents of the guidelines.<sup>41</sup>

In the current state of secured international borders, only rich people who have education, money and networks can cross an international border and find refuge in another country. The poor people who are in need of protection either move within borders or are trapped in affected areas. The national Government should take extensive measures, including providing training, skills and other necessary administrative services facilitating this type of migration, as part of an adaptation strategy so that citizens can find employment in developed countries. The developed countries where labour shortage is rampant should receive those skilled environmental migrants. The developed countries or international bodies themselves can set up a centre for technical and vocational training to make the people skilled as part of long-term adaptation strategy.<sup>42</sup>

#### ***10.2.8 Protecting Potential Climate Migrants through Adaptation Assistance***

As the effects of environmental events can never be totally eliminated, it is important to build the resilience of future communities through measures to enhance rural livelihoods and social protection.<sup>43</sup> One very important tool in preventing displacement could be strengthening adaptation for people who remain in the disaster areas; that is, potential climate migrants. It is essential to integrate SD and climate change concerns into development cooperation policy and programs. This study argues for the following

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<sup>38</sup> See Heading 8.4 of Chapter 8 for a detailed discussion on this issue.

<sup>39</sup> See Heading 8.6 of Chapter 8 for a detailed discussion on this issue.

<sup>40</sup> See Sub-heading 8.6.2 of Chapter 8 for a detailed discussion on this issue.

<sup>41</sup> See Sub-heading 8.6.2 of Chapter 8 for a detailed discussion on this issue.

<sup>42</sup> See Heading 8.7 of Chapter 8 for a detailed discussion on this issue.

<sup>43</sup> See Headings 9.2 and 9.5 of Chapter 9 for a detailed discussion on this issue.

of a human rights-based approach at all levels of law and policy-making, adoption and implementation.<sup>44</sup>

### ***10.3 Contributions of Thesis***

This thesis examined a number of complex issues under international environmental law, international human rights law and migration and refugee law. Notwithstanding the debates on the multi-causal aspects of environmental migration, the causal links between climate change, environmental degradation and migration is established in Chapter 2, which justified the existence of climate change induced displacement requiring special protection. The definitions of different categories of climate change displacement provided in Chapter 3 helped to conceptualise climate change displacement, which based the context for developing legal and institutional framework for the protection of climate change induced displacement. To date, no literature or policy framework has provided a definition of climate change displacement in the context of Bangladesh.

Manifestly, the failure of international law to address the issue of climate change induced displacement in a comprehensive manner results in undeniable gaps in the international protection system. Currently, no international laws and institutions specifically deal with climate change induced displaced persons. This thesis sought to address the ‘protection gaps’ in managing climate change displacement at both national and international levels, and thus illuminated issues of justice, equity and international human rights standards in policy responses of climate change induced displacement. Given the uncertainty in developing a separate independent treaty in current political climate, this thesis explored the possibility of extending protection to people likely to be displaced due to climate change effects under existing international law. This thesis argues for recognising people migrating due to climatic effects as a separate category of ‘climate change induced displacement’, so that international climate finance can be used directly for their benefit. For developing legal and policy framework, it identified principles, effective practices and institutional frameworks to help governments in developing appropriate laws, policies and programmes to address climate change induced migration. It also suggested developing soft guidelines for the protection of climate change induced displacement to fill the protection gaps. These guidelines may

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<sup>44</sup> See Heading 9.5 of Chapter 9 for a detailed discussion on this issue.

be a good starting point for the development of a more comprehensive binding treaty in future.

Exposing the human rights obligations of the national government, this thesis emphasises that all actions in respect to the protection of climate change displacement must be in compliance with human rights norms, standards and practices. This thesis proposes a new governance approach towards climate change displacement. It argues for eventual managed migration for climate migrants likely to be displaced due to climatic changes in their environment instead of seeking 'refugee' status in developed countries. This thesis challenges the dominant views that migration is a failure of adaptation, and all people in the affected areas will eventually migrate. Unlike current migration discourse, this thesis does not exclusively focus on forced migrants and displacement and characterise migrants as a vulnerable community. Rather, it seeks to view migration as part of a wide spectrum of adaptive possibilities and policy responses to include all affected people who either move to safer places pre-emptively or those who stay behind in the affected areas in the face of climate change. It also sets out a roadmap showing how the policy interventions could contribute to better integrating the full spectrum of migration issues and concerns into overall environmental and developmental policy and vice-versa within Bangladesh.

A range of policy options were discussed for the corresponding three types of climate migrants; namely, forced climate migrants, climate-motivated migrants and potential climate migrants. A policy framework was suggested for the protection of forced climate migrants that provides humanitarian assistance to forced climate migrants and durable solutions at all phases of displacement; that is, before, during and after displacement. A range of policy options are also suggested for managed and planned relocation or resettlement and labour migration with safety and dignity, so that people who are unable to remain in their original place due to adverse environmental effects can adopt migration as a coping strategy to protect their lives and livelihoods. This thesis also suggests strengthening adaptation programmes so that people do not need to rely on migration for alternative livelihoods and can remain where they currently live and work. The suggested laws and policies would help to design pre-emptive actions that prevent displacement and post-disaster migration management plans for the durable solution of migrants. Overall, this thesis provides a policy framework for the protection and management of climate change induced displacement. All these measures will

capacitate Bangladesh to respond proactively to minimise the risks and maximise the benefits of climate change induced migrants. Inadequately managed, climate change induced migration may induce serious pressure on overall development and achievement of MDGs. Successful adoption and implementation of this policy framework would help to mitigate the negative effects of climate change on human migration.

The problems and challenges identified from the examples of Bangladesh may be of concern and relevance to many other developing countries facing similar situations. It is true that some the protection needs of climate change induced displaced persons in Bangladesh are different from other countries, given their cultural and geographical situations. Despite these differences, most of the recommendations made here may be applicable to other vulnerable and developing countries. The suggested national legal and policy responses, although designed in the context of Bangladesh, have far-reaching positive effects for the protection of people who are at risk of displacement in other developing LDCs and small island countries vulnerable to the effects of climate change. Such a framework could be used as a model or guideline for other countries with similar socio-economic and environmental conditions to address climate change displacement in their territories.

#### ***10.4 Protection of Climate Change Induced Displacement in Bangladesh: The Way Forward***

This thesis focuses on the central research question: how climate change displacement in Bangladesh can be protected through legal and policy responses. Given that climate change posed multifarious challenges to human life, livelihood and migration, this concluding chapter takes the opportunity to identify and discuss the areas that need to be addressed comprehensively in future research and policy development at both national and international levels.

##### ***10.4.1 Development of Soft Guidelines for the Protection of Climate Change Induced Displacement***

While the climate migrants displaced internally continue to enjoy protection under domestic legal and human rights systems, protection for people who are displaced by

environmental changes across international borders are out of international protection. Significant gaps exist in existing international law, including international refugee law and international human rights law, in providing protection of both temporary protection measures and durable solutions to people who are permanently displaced across borders by environmental factors. However, the potential magnitude of environmental migration across borders demands a special protection at national, regional, and international levels.

To cater to the protection gaps in international law frameworks, scholars suggested different options including amendments or addition of protocol in existing frameworks, and a separate independent framework. However, there are well-established international, regional and national human rights instruments, covenants and norms, refugee laws and general international law principles of dignity, humanity, and international cooperation that provide normative principles, which could be predicated for the protection of the rights of people forcibly displaced by climate change. These principles represent a shared and legally codified moral language around which consensus can be built and new arguments can be brought to the international and national debates relating to protection of climate change displacement. Thus, they seem more suitable to inform and guide international negotiations concerned with the governance of climate change induced migration. The challenging task remains to consolidate those norms and principles into a single document and develop a global guiding framework in the form of soft instrument titled ‘Guidelines for Climate Induced Displacement’. Further research is required to develop the framework of this normative framework drawn from existing human rights and humanitarian norms and principles.

#### ***10.4.2 Strengthening the Rights-based Legal Framework in Bangladesh***

The majority of those affected by climate change will be displaced internally. According to the Operational Guidelines on Human Rights and Natural Disasters, rights are often violated, not because of conscious intention but because of the lack of rights-based planning. Therefore, the policy responses dealing with the displacement as a consequence of climate change must adhere to the human rights norms, principles and obligations. The normative basis of the human rights protection framework developed for last six decades can provide a guideline in designing policy responses for climate change displacement. Upholding international and national human rights obligations should be a vital element in the development of the new framework for climate

migrants. The Government should identify existing gaps in legislations that hinder climate migrants from effectively accessing their rights and design a new national policy framework for climate migrants that would provide greater clarity towards the protection of persons displaced or migrating because of environmental hazards. Such legal framework embodying a comprehensive set of human rights principles should incorporate fundamental principles of humanity, human dignity and human rights principles.

To date, there is no effective national framework for the protection of people displaced internally in Bangladesh due to the effects of climate change. Current laws and policies regarding environment and climate change and approaches to migration lack rights-based framework focusing on human dignity. Since overall degrading human rights situations have a contributing role to trigger climate change induced displacement, a rights-based approach addressing the human rights violation and protection of human rights could avert many of the motivations responsible for human migration. A rights-based approach offers protection and support for adaptation, and resilience strategies for those who decide not to migrate in response to climate change events, thus preventing displacement. The rights-based approach also ensures procedural guarantees for government policies, since it requires states to ensure that the affected people are duly consulted before taking any decision in respect to them. It also supports vulnerable groups and individuals in holding their government accountable to fulfil their respective obligations towards the people who have individual rights to adequate housing, food, water and health.

#### ***10.4.3 Long-term and Visionary Policy Approaches to Filling the Protection Gaps in Bangladesh***

The victims of natural disasters are currently treated in a fragmented way in Bangladesh. Even this issue is not yet a focus of the country's overall or sectorial development planning process. The response measures are mostly limited to relief distribution during and in the aftermath of disaster measures. Public policies, including adaptation strategies, DRR and migration management, have the potential to play a determining role in the nature and extent of climate change induced human movements. However, the protection of this large number of people likely to be displaced by climate change requires a holistic and coherent policy response. Since the climate change induced displacement is a complex issue with multiple drivers, the policy narratives

towards climate change induced displacement needs to be changed, adopting long-term planning rather than short term and ad hoc measures. This issue should be integrated within the current adaptation programmes and development agenda so that the influence of climate change on migration is reduced and people's resilience to climate change is enhanced. Multifarious strategic and comprehensive policy formulation is clearly needed to mitigate the negative consequences of climate change induced displacement. National policies should have an action plan with a timeframe to achieve specific targets.

Successful implementation of the actions and measures taken in other fields, such as DRR, adaptation programmes and development programmes, to reduce the vulnerability of the people affected by environmental change may help to reduce the amount of environmental displacement. If governments do not take action to reduce the risks people face from acute crises arising from natural disasters, the increasing vulnerability of the victims of natural disasters will result in mass displacement, which will be much more difficult to address. Investments could be made in resilience-building strategies designed to pre-empt uncontrolled crisis situations, as well as in more effective humanitarian responses to natural hazards. Thus, coordination of long-term visionary policies and inter-sectorial cooperation on strategic decisions is required to achieve the targeted solution. Government should strengthen early-warning systems, evacuation plans, preparedness strategies and emergency response capacities to deal with the increased frequency of extreme environmental events that threaten the lives and livelihoods of populations.

The policy responses need to address climate change displacement in a number of ways. The policy framework should offer humanitarian assistance and also alternatives for durable solutions; that is, returning to the place of origin in safety and with dignity, resettlement to another part of the country or integration at the place of displacement for forced climate migrants.

Usually, displacement occurs in different phases. Given the complexity of the environment and migration nexus and the range of existing vulnerabilities that ultimately lead to migration, the best way to deal with the people likely to be displaced by climate change is to improve their capacity and ability to cope with the vulnerabilities likely to arise from the changing environment. Sufficient measures need to be taken for strengthening adaptation to prevent climate change displacement.

The people of Bangladesh have always had to cope with environmental hazards through temporary or permanent migration. Migration is part of their coping strategy to increase their long-term resilience to environmental change. Therefore, the policy-makers need to facilitate planned and safe migration as a part of a livelihood and adaptation strategy. There is an urgent need for the development of appropriate policies, institutions and mechanisms to cope with the effect of climate change on migration. Policies should facilitate migration as a coping strategy through planned resettlement and labour migration. The policies should facilitate circular mobility, including seasonal migration and strong rural-urban linkages, which can help provide support structures and allow for income diversification for those migrants and their communities. Thus, major improvements will be required in many areas—more effective migration management, stronger governance, development of appropriate funding mechanisms and enhancement of international cooperation on climate change issues.

#### ***10.4.4 Synergies between Migration, DRR, Adaptation and Development Policies***

It is clear that apart from climate change effects and environmental degradation, there are some other ‘push and pull’ factors for human movement. Most of the important drivers are the lack of good governance, poverty and unemployment. The MDGs aim to remedy these. If the adaptation and migration policies are formulated in coherence with development policies, the development-oriented migration policies would secure more funding from the MDG and other development-related funds. Enhancing synergies between humanitarian action and SD, including through DRR and climate change adaptation measures. Every effort must be made to ensure that climate change does not frustrate the goals of SD, particularly the MDGs.

#### ***10.4.5 Compensation to Climate Change Displaced Persons***

As a matter of global justice, the current framework of international law posits that developed countries should take the lead in the reduction of greenhouse gas emission and the mitigation of effects of climate change. The principle of CBDR has become a touchstone for the international climate equity debate. The perception of justice and equity remains an important feature of global climate politics, and plays an important role in the design of climate protection policy. Equity also demands that at the decision-making level, human effects of climate change and their differentiated causal responsibilities must be fully acknowledged and taken into account in the multilateral

negotiations. This is because it is widely believed that the negative effects of climate change will exacerbate existing inequality by creating additional burden for developing countries who suffer from an already stressed and largely degraded natural resource base and high level of poverty. The issue of payment of compensation by developed states to the affected countries, including small islands, becomes central to the concept of global climate equity as a mechanism of fair distribution of the burden of climate change. All these aspects of global climate equity are inextricably linked to human rights from a broader perspective, at least at the normative level.

However, the current framework of international legal regimes on climate change, such as the UNFCCC and the Kyoto Protocol, does not provide any provision for compensation to the affected countries. However, the legal premise of compensation can be asserted, at least from two well-established principles of environmental law: the polluter-pays principle and liability for trans-boundary harm. The principle of prevention of trans-boundary harm is grounded in the customary norm of international law. Apart from these principles, the liability can be located in the framework of the human rights obligations of the states. For example, the projected effects of climate change on a range of human rights provides a moral and legal justification for states, particularly developed states, to take action to address climate change. Thus, the developed states have an obligation to mitigate the effects of climate change on vulnerable communities by reducing their emissions of GHGs and to assist vulnerable communities in adapting to the effects of climate change by providing them with funding, cooperation and assistance. Therefore, human rights violations arising from human-induced climate change can implicate the liability and responsibility of developed states. Under the ICESCR, developed states have an obligation to provide cooperation to assist developing countries in the implementation of economic, social and cultural rights in light of these same effects and consequences.

### ***10.5 Concluding Remarks***

It is almost certain that climate change related environmental events will continue to affect human life and livelihood in Bangladesh with increasing intensity and frequency. The individual or combined effects of these disasters have serious negative implications for the realisation of a broad range of internationally protected human rights, which can generate considerable direct influence on the displacement of millions of people in many and varied ways.

Among the strategies to combat the effects of climate change, a human rights-based approach has emerged as the most effective one. The human rights-based approach is normatively based on international human rights standards and practically directed to promoting and protecting human rights. From the perspective of the effects of climate change in Bangladesh, the human rights-based approach can offer many benefits, including claims for compensation from developed states, claims for financial assistance for adaptation and mitigation of climate change and the development of national policies and strategies on adaptation.

Upholding the human rights obligations, authorities need to deal with a large number of displaced persons in a managed and planned way with safety and dignity. Failure to do so could result in a protracted displacement leading to humanitarian crises with great social and economic costs. Thus, the Government of Bangladesh, as well as the international community, must urgently address this issue in a sustainable and proactive manner. The legal and policy responses for managing climate change induced displacement in Bangladesh as provided in this thesis have profound implications in mitigating the effects of climate change on human migration. The absence of legal and policy framework for this large number of potential climate change induced displaced persons in Bangladesh would have multifarious negative ramifications. The cost of inaction is likely to be higher than the cost of action.

### **Contribution of Thesis: A Summary**

- Establishes linkage between human dimensions of climate change and consequent human displacement in Bangladesh
- Suggests typology and pattern of climate change induced displacement in Bangladesh
- Provides definition of climate change induced displacement
- identifies principles, effective practices, and institutional framework to help governments in developing appropriate laws, policies and programmes to address climate change induced displacement
- Suggests international framework for climate change induced displacement in the form of soft guidelines based on existing human rights norms, principles, standards and states' best practice
- Suggests multifarious policy responses for protection of climate change induced displacement
- Designs a model national framework for forced climate migrants in Bangladesh incorporating the norms and principles from the UN Guiding Principles on IDPs, IASC Operational Guidelines, and the Hyogo Framework
- Outlines the measures to facilitate migration as adaptive strategy as a way out for planned resettlement
- Outlines the measures to strengthen adaptation programmes to prevent displacement

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