# Climate Change And Migration: Law and Policy Perspectives in Bangladesh

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#### Abstract

Global climate change and consequent potential migration pose a number of challenges and are becoming increasingly important policy issues for Bangladesh. Therefore, policy responses need to deal with diverse issues, including sustainable development (SD), adaptation to climate change, and humanitarian assistance, to address the future challenges posed by climate change and consequent human displacement. There is no simple and straightforward solution to the challenges posed by climate-induced migration, and a "one-size-fits-all" approach will not effectively resolve the complex nature, and patterns, of population displacement. Rather than any single approach, a multifarious, comprehensive, proactive, and coherent policy approach is imperative for managing climate-induced migration in an orderly and humane manner. Based on the available data regarding the environment, climate change, and migration, this paper suggests a range of policy tools and approaches. It also sets out a road map showing how policy interventions could contribute to better integrating the full spectrum of migration issues and concerns into an overall environmental and developmental policy, and vice versa, within Bangladesh.

**Keywords:** climate change, human migration, Bangladesh, legal framework, legal reform

#### 1. INTRODUCTION

The Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) released in 2013 confirms "with very high confidence" that concentrations of greenhouse gases (GHGs) have substantially increased over the past decades, unprecedented in the last 22,000 years. Many studies and reports published by national and international organizations recognize Bangladesh as one of the most vulnerable countries due to the impacts of climate change, and confirm that a large number of people will be displaced within the country as a result. Global climate change and consequent potential migration pose a number of challenges and are becoming increasingly important policy issues for Bangladesh. Policy responses need to deal with diverse issues, including sustainable development (SD),

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<sup>1.</sup> IPCC (2013), p. 9.

<sup>2.</sup> Walsham (2010), p. vii.

adaptation to climate change, labour migration, and humanitarian assistance, to address the future challenges posed by climate change and consequent human displacement.<sup>3</sup> Policy responses should operate on several tracks at once, though those may need to be implemented in different timeframes. As a short-term strategy, humanitarian assistance of basic services such as food, shelter, and health can be provided for people who flee natural disasters and are already displaced; in the long run, however, strategies of adaptation need to be strengthened, to meet the challenges of drastic changes in the environment.<sup>4</sup> In increasing the capacities of the people vulnerable to climate change, migration could itself be considered a good form of adaptation.

Thus, there is no simple and straightforward solution to the challenges posed by climateinduced migration, and a "one-size-fits-all" approach will not effectively resolve the complex nature, and patterns, of population displacement.<sup>5</sup> Since the protection of climate-induced displaced persons 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 single approach, a multifarious, comprehensive, proactive, and coherent policy approach is needed for managing climate-induced migration in an orderly and humane manner.<sup>7</sup> A flagship national policy and law can be devised to link the different instruments—legal regimes and subject areas—to inspire the development of new laws where required. Policies could be more flexible, more easily adopted, and more easily implemented than laws, while remaining equally important and having a similar legal influence.

Based on the available data regarding the environment, climate change, and migration,<sup>8</sup> this paper suggests a range of policy tools and approaches. Recognizing the differences in migration patterns and typologies of climate-induced migration, the paper classifies climate migrants into three different groups on the basis of which to provide protections and policy responses: forced climate migrants, pre-emptive or climate-motivated migrants, and potential climate migrants. It also sets out a road map showing how policy interventions could contribute to better integrating the full spectrum of migration issues and concerns into an overall environmental and developmental policy and vice versa within Bangladesh.

In this context, the paper articulates the importance of developing a regulatory framework for climate-induced migration. It also examines the extent to which existing laws and policies in Bangladesh address issues of climate-induced migration. It suggests the need to mainstream climate-induced migration into existing laws and policies.

## 2. TOWARDS MULTIFARIOUS POLICY RESPONSES TO CLIMATE-INDUCED MIGRATION

For the effective and sustainable protection of climate-induced migration, the root causes of the displacement and protection needs of affected people—who have either already been displaced or are vulnerable to displacement, due to the effects of climate change—need to be identified.

<sup>3.</sup> Foresight (2011), p. 25.

<sup>4.</sup> Newland (2011), p. 1.

<sup>5.</sup> McAdam & Saul (2010), pp. 234, 236, 286.

<sup>6.</sup> Fisher (2010), pp. 551, 566.

<sup>7.</sup> IOM (2010), p. 109; McAdam & Saul, supra note 5, pp. 236, 286.

<sup>8.</sup> Naser (2012a).

Accordingly, those needs should be promoted through national laws and policies for the protection of climate-induced migration. 9 However, existing national laws and policies are not sufficient to protect climate-induced migrants. <sup>10</sup> There should be a multitrack policy approach to fill in the protection gaps. National policies on climate-induced migration need to be designed in such a way that the life and livelihood of the climate victims are protected, and so that they do not feel compelled to flee their places of origin. There should be a proactive policy and early actions to strengthen adaptation programmes and capacity building, bilateral and regional co-operation, and multistakeholder partnerships involving civil society. 11 In this way, climate-induced migration could be better recognized, and the needs of the people affected more appropriately addressed within a national framework. 12

In reality, the effects of climate change result in diverse patterns of human movement that require different policy responses. 13 The policy framework in Bangladesh needs to consider existing migration patterns and socioeconomic conditions specific to Bangladesh.<sup>14</sup> Although people generally migrate as a last resort in Bangladesh, no consistent migration pattern has been observed to date. However, in response to natural disasters, migration patterns can be oriented within a large and dynamic continuum between forced and voluntary.<sup>15</sup> Similarly, in other situations of climate change—such as floods, cyclones, storm surges, and changes in salinity due to the rise of sea levels—people respond differently. Perhaps due to their resilience, some struggle with adverse situations and try to cope with them, while others are trapped in affected areas and remain there to suffer reluctantly. Others still choose migration as part of an adaptive strategy, moving to cities or other safe places because they have skills, education, and resources. However, all face adversity due to impending climatic disasters. It is not fair to discriminate between them, as all are victims of the same climatic phenomenon. As they have the potential to affect all types and patterns of future movement, developing disaster risk reduction (DRR) and climate change adaptation measures remains a challenge to national authorities. Taking this situation into account, a policy framework should be developed in such a way that the needs of all types of migrant are addressed in an appropriate manner.

A protection policy on climate-induced migration is important to define national perspectives on these people. It should be strategic in nature and describe the broad national objectives and strategies for managing climate-induced migration 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-induced migration, and reducing vulnerability in the short, medium, and long term. This paper anticipates three different scenarios likely to be seen in the context of climate-induced migration, and accordingly proposes to extend different types of protection to each group of people. These are as follows: climate-induced forced migrants, climate-motivated migrants, and potential climate migrants. Each group has different protection needs requiring distinct kinds of protection.

<sup>9.</sup> McAdam & Saul, supra note 5, p. 269.

<sup>10.</sup> Akter (2009).

<sup>11.</sup> IOM (2007), p. 7.

<sup>12.</sup> Williams (2008), pp. 502, 512.

<sup>13.</sup> Ferris (2012), p. 8.

<sup>14.</sup> Naser (2013).

<sup>15.</sup> Mayer (2012), p. 19.

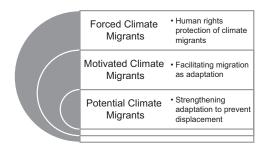


Figure 1. Multifarious policy responses to different categories of climate-induced migration

Thus, a comprehensive approach to climate-induced migration requires that policy responses 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 who are being and will be displaced; and
- 3. facilitating migration as an adaptation strategy in response to environmental change. <sup>16</sup>

### 2.1 Providing Human Rights Protection to Forced Climate Migrants

Given the limitations of adaptation, when people have no choice but to leave their homes because of severe environmental problems, an adequate protection mechanism should be in place to mitigate their suffering. Recent experience of Cyclones Aila and Sidr, and recurring floods, shows that, immediately after natural disasters, a large number of people are compelled to leave their homes and communities to save their lives. 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 are entitled to special protection due to vulnerability stemming from their 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 displacement. The UN Guiding Principles on internally displaced persons (IDPs) have provisions for such protection. To guide the government on the protection of IDPs, the former UN Secretary-General Representative for IDPs, 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 humanitarian law. Since all persons who are forced to move within national borders are included within this framework, irrespective of the cause of their flight (Principle 2), climate-induced migrants who are internally displaced fall within its jurisdiction. The government should take measures to minimize displacement and, if the displacement occurs, assistance and protection should be given to affected people.

<sup>16.</sup> GMG (2011), p.1; IOM (2011), p. 1.

<sup>17.</sup> See Naser (2012b) for a detailed discussion on the obligation of national government towards climate-induced migration under international human rights law.

Thus, framing guidelines specific to forced climate migrants would provide a basis for consistent actions and protective measures. It would also create obligations and responsibilities for authorities, including ministries, local governments, and non-governmental organizations (NGOs). The objectives of the Guiding Principles are: (a) to define climateinduced migration for establishing the protection of migrants; (b) to provide humanitarian assistance to forced migrants; (c) to provide durable solutions to manage them effectively; and (d) to establish an institutional framework for the protection and management of climateinduced migration.

## 2.2 Strengthening Adaptation to Prevent Migration

In the first place, a policy framework should strengthen adaptation through capacity building and SD to support people who remain in affected areas, making them adaptive to adverse climate changes. Indeed, policy responses will be a catalyst in determining the extent to which the people facing adverse environmental changes rely on migration for survival. 18 According to the Fourth IPCC Report, "maintaining and enhancing both resilience and adaptive capacity for weather related hazards are critically important policy and management goals." 19 Many authors note that even if disasters become more frequent in the future, political efforts and measures of protection can lessen the necessity of emigration, provided that the necessary financial means are made available. The Stern Review explains this point as follows: "the exact number who will actually be displaced or forced to migrate will depend on the level of investment, planning and resources."<sup>20</sup> Therefore, government responses should incorporate best practice and international standards to ensure that adaptation programmes meet the needs of affected victims.

#### 2.3 Facilitating Migration as Adaptation

In response to environmental deterioration, people in Bangladesh commonly resort to migration as a coping strategy to secure their livelihoods. With evidence of the effects of mounting climate change in the forms of drought, salinity intrusion, and rising sea levels, people may fear impending disasters and begin pre-emptive migration. Policy responses should address this phenomenon and facilitate migration of this sort as a good strategy of adaptation. 21 Thus, planned relocation and voluntary labour migration with safety and dignity might be a good strategy of adaptation to manage risks associated with climate change. <sup>22</sup>

## 3. MAINSTREAMING CLIMATE-INDUCED MIGRATION THROUGH MULTI-SECTORAL POLICY INTERVENTIONS

Although environmental change is the primary cause of climate-induced migration, associated drivers, such as economic, political, social, and demographic factors, have implications for a wide range of policy areas. Policy-makers should thus find "solution[s] beyond just 'migration'

<sup>18.</sup> Warner (2010), pp. 4, 8.

<sup>19.</sup> IPCC (2007a), p. 344.

<sup>20.</sup> Stern (2006), p. 112.

<sup>21.</sup> Warner (2011), p. 5.

<sup>22.</sup> Ibid.

or 'environment' policy areas."<sup>23</sup> Whether moving individually or as a family, temporarily or permanently, internally or across state borders, the migration decisions and strategies of people are determined by a number of socioeconomic and political considerations.<sup>24</sup> Governmental responses to disasters, including DRR activities, adaptation programmes, and the overall human rights situation, obviously influence decisions regarding migration. Thus, aside from environmental and migration policies alone, climate-induced migration is related to broader developmental policies, emergency preparedness, urban and rural planning, and land-use policies.<sup>25</sup> At the same time, migration has obvious influences on the individuals and communities from which people come and to which they go.<sup>26</sup> The Foresight Report (2011) on "Migration and Global Environmental Change" explains this point as follows:

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>27</sup>

Thus, along with the enactment of new sets of laws and policies, climate-induced migration issues must be integrated into existing laws. Simultaneously, effective connections between diverse areas of policies should also be established, since the range of possible interventions is wide, and the risk exists of policies affecting migration becoming fragmented and incoherent.<sup>28</sup>

In Bangladesh, existing laws and policies are mostly sectoral, neither integrated nor attuned to deal with the challenges posed by climate change. Specifically, their main focus is not the migration likely to arise from environmental change. For example, policies to combat environmental change tend to be driven by a DRR, emergency relief, and humanitarian discourse. Policies addressing the migration likely to arise from environmental change are not effectively integrated with those addressing the environment, disaster management, or climate change.<sup>29</sup> In some cases, the policy discourse even identifies migration as "failure of adaptation" and so attempts to restrict migration. 30 Such an approach hinders developing more proactive policy measures for increasing the adaptive capacities of people likely to be displaced as a result of climate change.<sup>31</sup> Issues related to migration should be integrated into existing laws and policies concerning other areas.

## 3.1 Integrating Issues Related to Climate-induced Migration into Environmental and Climate Change Related Laws and Policies

The main sources of environmental law in Bangladesh are the constitution, statutory laws and by-laws, customs, traditional perceptions and practices, international conventions, and

<sup>23.</sup> Foresight, supra note 3, p. 125.

<sup>24.</sup> Ibid.

<sup>25.</sup> IOM, *supra* note 16, p. 5.

<sup>26.</sup> Ibid.

<sup>27.</sup> Foresight, supra note 3, p. 125.

<sup>29.</sup> Walsham, supra note 2, p. xiv; Akter, supra note 10, p. 11.

<sup>30.</sup> Walsham, supra note 2, p. xiv.

<sup>31.</sup> Ibid.

treaties and protocols. The environment is not protected by rights under the Constitution of Bangladesh. However, the recent Fifteenth Amendment to the Constitution included a provision regarding the conservation and development of the environment.<sup>32</sup> This provision imposes an obligation on the state to protect and develop the environment, and to ensure the conservation and security of natural resources, biodiversity, wetlands, forests, and wildlife. It does not establish the right to a safe environment, rather, it is a fundamental principle of state policy, which can be used as a guideline for interpreting the Constitution and other laws of Bangladesh.<sup>33</sup> This constitutional duty to protect the environment falls to the state, its agencies, individuals, and legal persons. However, it does not establish any corresponding rights for displaced people or those who are at risk of displacement due to failures to protect the environment.

Policies regarding climate-induced migration should be integrated into strategic environmental actions plans and national conservation strategies. In recent years, Bangladesh has adopted a number of laws and policies to combat frequent natural disasters and the adverse effects of climate change. Although there is a direct relationship between climate change, environmental degradations, and migration,<sup>34</sup> migration has been given very little weight in environmental and climate change laws and policies. The most important legislation adopted to deal with environmental protection include the Environmental Policy (1992), Bangladesh Environment Conservation Act (1995), and the Environmental Conservation Rules (1997). The government of Bangladesh has also adopted a number of supplementary policies addressing environmental and developmental issues. In this respect, important policy documents include the Forest Policy (1994), Fisheries Policy (1998), Water Policy (1998), New Agriculture Extension Policy (1995), and Energy Policy (1995). Besides these sectoral policies, the National Conservation Strategy (NCS), National Capacity Self-Assessment (NCSA) for Global Environmental Management (2007), and especially the National Environmental Management Action Plan (NEMAP) (1995) are guiding strategies on the environment that have been formulated to provide action plans to respond to environmental issues and promote SD.35 Although these documents deal with current environmental degradations and their challenges in Bangladesh, only a few make specific reference to the migration effects of environmental change and degradation. <sup>36</sup> For instance, the Coastal Zone Policy (2005) addresses the susceptibilities of coastal communities because these people are dependent on natural resources for their livelihood.<sup>37</sup> However, no action plan exists in the national policy with a timeframe to indicate how the suffering of people likely to be displaced from coastal areas will be addressed.<sup>38</sup>

Regarding climate change, the two key documents are the National Adaptation Plan of Action (NAPA) and the Bangladesh Climate Change Strategy and Action Plan (BCCSAP) (2009).

<sup>32.</sup> Constitution of Bangladesh art. 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>33.</sup> Ibid., art. 8(2).

<sup>34.</sup> Naser, supra note 8.

<sup>35.</sup> Walsham, supra note 2, p. 33.

<sup>36.</sup> Ibid.

<sup>37.</sup> Akter, supra note 10, p. 11.

<sup>38.</sup> Ibid.

The Bangladesh government formulated the NAPA in 2005 to guide, co-ordinate, and manage all the national and international responses and processes to integrate climate risk into development plans and processes. It has prioritized fifteen specific projects. The NAPA is a well-articulated document providing a framework of various programmes and their relations to 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 address the challenges posed by climate change.<sup>39</sup> The NAPA states, for example, that the "high depth of standing water is preventing crop cultivation during Kharif<sup>40</sup> season, affecting jobs and livelihoods and leaving limited food sources, leading to migration to cities for jobs and livelihoods." Moreover, it identifies climate-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 recognize the adaptation potential of migration. 42 Although the negative references to migration were deleted from the updated NAPA of 2009, it does not highlight migration as an explicit adaptation strategy. However, the NAPA lacks a long-term vision for planning, and suffers from a lack of wide acceptability, as it was formulated with little participation from, or endorsement by, affected communities.<sup>43</sup>

In 2009, the BCCSAP was developed to address long-term planning for adaptation and mitigation, as well as management and information sharing on climate change. The BCCSAP is considered an important document for the country's future, which reflects a shift in the government's development priorities and covers a comprehensive range of factors, such as mitigation, disaster management, and capacity building.<sup>44</sup> It seeks to integrate considerations concerning climate change constraints and opportunities into the overall plan and programmes involving all sectors and processes of economic and social development.<sup>45</sup>

The BCCSAP identifies 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. 46 Significantly, population displacement, an important omission in the 2005 plan, is acknowledged in this latest document. 47 The BCCSAP cites the potential effects of climate change on human migration in many places. Importantly, the BCCSAP not only identifies threats, but also supports both the autonomous and planned adaptation strategies of climate-induced migrants.<sup>48</sup> It calls for more monitoring of internal and external migration of adversely affected populations and, crucially,

<sup>39.</sup> Walsham, supra note 2, p. 33.

<sup>40.</sup> The wet season (typically March to October) is characterized by monsoon rain and high temperatures; NAPA (2005).

<sup>41.</sup> NAPA (2005), p. 35, cited in Martin (2010).

<sup>42.</sup> Walsham, supra note 2, p. 33.

<sup>43. &</sup>quot;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." Kamaluddin et al. (2006), cited in CSRL (2008), p. 4.

<sup>44.</sup> BCCSAP (2009), p. xv.

<sup>45.</sup> Khurshid et al. (2011), p. 17.

<sup>46.</sup> BCCSAP, supra note 44, p. 2.

<sup>47.</sup> Ibid., p. 59.

<sup>48.</sup> Ibid.

"support to them through capacity building for their rehabilitation in new environment." 49 It emphasizes 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."50 A specific long-term plan of action is articulated to address climate-induced 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 resettlement and rehabilitation;
- A3. building of capacities through education and training, to facilitate resettlement in new environments 51

However, the main criticism of this document is that it has the same defect as the NAPA—the non-involvement of the communities affected. This document embodies a roadmap for the implementation of climate change related action plans, which have considerable implications for government policies and programmes. However, it requires the active involvement of all stakeholders—local governments and the national government, communities affected, civil society organizations and NGOs, the private sector, and the country's development partners—to effectively implement its plans of action. 52 It is also argued that this document has failed to provide any recommendation regarding the formulation of a climate change policy within its action plans. Moreover, it has not referred to any South Asian regional co-operation to address climate change. Many experts have argued that co-operation of this type is an important aspect in addressing the impact of climate change in Bangladesh.<sup>53</sup>

It is evident that while objectives are set out in laws and policies to address people endangered by climate hazards, migration and displacement issues are not featured prominently in the NAPA. It is necessary to review both the NAPA and the BCCSAP to determine how these documents address issues of displacement and the protection of human rights. A national adaptation plan is a vital ingredient in an overall national planning process that respects and protects the human rights of climate-induced displaced persons. Climate change issues should be integrated into the annual five-year and longer-term development planning process to ensure the effective implementation of this planning framework.

## 3.2 Mainstreaming Climate-induced Migration into Developmental Agenda and Poverty Reduction Strategies

There is an obvious link between the number of environmentally displaced persons and the level of poverty in a particular area.<sup>54</sup> However, susceptibility to climate change mostly depends on the extent to which people are dependent on natural resources and ecosystems. Generally, people who are dependent on natural resources for their livelihood tend to have

<sup>49.</sup> Ibid.

<sup>50.</sup> Walsham, supra note 2, p. 33.

<sup>51.</sup> BCCSAP, supra note 44, p. 59.

<sup>52.</sup> Walsham, supra note 2, p. 34.

<sup>53.</sup> Hossain (2009), p. 12.

<sup>54.</sup> Ketel (2004), p. 2.

less reliance on economic or social resources. Therefore, declining natural resources, a likely consequence of environmental degradations due to the effects of climate change, poses a greater risk to the livelihood of climate-affected community.

One can identify two main reasons for human migration in Bangladesh: poverty and environmental factors. In most cases, these two factors play a co-determining role in people's migration decisions. For example, movements from rural areas that result from poverty and unemployment have their roots in environmental factors. At times, environmental degradation and natural events leave people homeless and jobless. Conversely, environmental migration has its structural roots in poverty and unemployment. The poor have lower adaptive capacities to environmental events than those who have resources, including money and knowledge, allowing them to withstand 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 such states to adapt to climate change.<sup>55</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 capacities. The costs involved in adaptation programmes, including building infrastructure and settlement protection, are beyond its financial capacities.

Moreover, the ability of individuals or different groups in society to respond to extreme climatic events is by no means uniform in response to any of these hazardous events. <sup>56</sup> In the context of Bangladesh, for example, while devastating cyclones completely destroy the kuchcha<sup>57</sup> houses of poor people living in seaside villages, low-lying char lands, and unprotected islands, the concrete homes of wealthier people are the least affected. 58 Thus, the varying influence of poverty over human responses to environmental effects, as well as patterns of environmental migration, thwarts the attempts of establishing a synergy between climate change, migration, and development.

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>59</sup> While poverty and overpopulation exacerbate the country's major environmental problems such as deforestation, water quality deterioration, land degradation, salinity, unplanned urbanization, discharge of untreated sewage, and industrial wastes-environmental degradation also results in the prostration of capital resources, sustainable livelihood, and displacement.<sup>60</sup> Climate change poses a significant threat to the fight against poverty in Bangladesh. 61 A Joint Loss and Damage Assessment Team of the government and international experts estimated

<sup>55.</sup> McAdam & Saul (2008), p. 6; Connell (1999), p. 1.

<sup>56.</sup> Ericksen et al. (1997), p. 5.

<sup>57.</sup> Houses made of bamboo and wood.

<sup>58.</sup> Ericksen et al., supra note 57, p. 5.

<sup>59.</sup> Griebenow & Kishore (2009), p. 17.

<sup>61.</sup> Government of the People's Republic of Bangladesh (2008) "National Strategy for Accelerated Poverty Reduction II", p. 5.

that the total damage and losses caused by Cyclone Sidr was Tk.115.6 billion (US\$1.7 billion). 62 Monies that might have been used for social investment and food security were used to replace and renovate bridges and cyclone centres.

Since the country's independence in 1971, the economy of Bangladesh has relied largely on agriculture, as most of the country lies in the fertile floodplain of the Ganges, Brahmaputra, and Meghna rivers. However, climate change causes an increase in the frequency of periodic flooding and drought events, posing new environmental threats.<sup>63</sup> The greatest problems facing Bangladesh are the effects of increased flooding that results from climate change.<sup>64</sup>

Bangladesh's high poverty and population density makes it more vulnerable to climate change. 65 Climate change has already affected the lives and livelihoods of the people in the coastal, arid, and semi-arid regions of Bangladesh. 66 A significant proportion of the population could be displaced in Bangladesh as a result of climate change induced flooding, tropical cyclones, and storm surges. 67 More significantly, climate change and its consequent displacement could have negative effects on the successes of poverty reduction so far, and could increase poverty.<sup>68</sup>

Development in climate-affected areas that are likely to see future migration could thus provide a sustainable solution to migration. However, current policy debates focus on humanitarian assistance to, and legal protection of, displaced people, ignoring the root causes of the problem. In its recently published report, the Asian Development Bank (ADB) urges strengthening the capacities of communities and orients the issue of climate-induced human displacement in terms of a development agenda. <sup>69</sup> It also suggests incorporating the potential effects of climate change and environmental degradation into poverty reduction strategies, since the successful implementation of poverty reduction programmes could mitigate the effects of climate change and the resulting migration.<sup>70</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 Millennium Development Goals (MDGs). NSAPR-II emphasizes mainstreaming and strengthening climate change adaptation across various sectors—improved crops, watershed and coastal zone management, including afforestation, cyclone shelters, embankments, salinity control measures, public awareness, climate research, and data collection.<sup>71</sup> More significantly, adequate attention is given to migration issues; it includes a specific section on "foreign employment." which establishes a number of long-term strategies for expanding

<sup>62.</sup> Ibid., p. 4.

<sup>63.</sup> Griebenow & Kishore, supra note 60, p. 18.

<sup>65.</sup> Government of the People's Republic of Bangladesh, supra note 62, p. 5.

<sup>66.</sup> Ibid.

<sup>67.</sup> Ibid.

<sup>68.</sup> ADB (2012), p. 44.

<sup>69.</sup> Ibid., p. 41.

<sup>70.</sup> Ibid., p. 45.

<sup>71.</sup> Government of the People's Republic of Bangladesh, supra note 62, p. 5.

access to overseas labour markets.<sup>72</sup> This strategy paper identifies the challenges of climate change and takes into account environmental concerns in setting strategic goals on international migration, which includes undertaking a special initiative for exporting labourers from *monga* and other ecologically vulnerable areas.<sup>73</sup>

Bangladesh has also initiated a long-term development plan, namely the Bangladesh Perspective Plan (2012 to 2021), which is also called Vision 2021. This has become a guideline for all sectoral and yearly development plans and public investment. Vision 2021 clearly states the need for the integration of DRR and climate change adaptation in all development plans. As a part of Vision 2021, the Sixth Five Year Plan (SFYP) makes the specific recommendation of considering disaster risks in sectorial investments and plans.

#### 3.3 Mainstreaming Climate-induced Migration into Disaster Management Policies

The obligation of states to provide support to disaster victims, including displaced persons, is affirmed in the declaration adopted by delegates to the 2005 World Conference on Disaster Reduction: "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." Thus, states have the primary responsibility of protecting the people and property in their territory from natural disasters, through measures that include the integration of risk reduction into development policies and the adoption or modification of legislation. Effective DRR mechanisms can combat the effects of natural disasters on the right to freedom of movement in particular and other human rights in general. 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 national legislation and plans based on the informed participation of affected communities.

While some states have adopted constitutional provisions that expressly provide for a governmental obligation to reduce the risk of disasters, <sup>78</sup> the Constitution of Bangladesh does not impose any such obligation to provide support to displaced persons during natural disasters. Part III of the Constitution does, however, contain a list of fundamental rights.

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 South Asian Association for Regional Cooperation (SAARC) Disaster Management Framework. This plan makes reference to displacement and specific vulnerabilities related to migration, such as problems facing families left behind. However, it does not contain any

<sup>72.</sup> Walsham, supra note 2, p. 33.

<sup>73.</sup> Government of the People's Republic of Bangladesh, supra note 62, p. 5.

<sup>74.</sup> ISDR (2005a), para. 4.

<sup>75.</sup> Ibid.; ISDR (2005b), para. 16.

<sup>76.</sup> Oloka-Onyango (2010), p.46

<sup>77.</sup> ISDR, supra note 75, paras 2-4; ISDR, supra note 76; UNCCD (1994), art. 5; UNECE (1999).

<sup>78.</sup> For example, Ethiopia's Constitution says that the "Government shall take measures to avert any natural and manmade 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 Yugoslavian Republic of Macedonia, art. 8.

detailed strategies or plans of action related to longer-term migration likely to arise due to environmental degradations, particularly from slow-onset disasters.<sup>79</sup>

Bangladesh also has "standing orders" on disaster management; <sup>80</sup> but, as McAdam and Saul note, "they are discretionary, malleable and unenforceable." The standing orders lack specificity and the reference to human rights protections that climate-induced migration requires. 82 For example, while authorities have rehabilitated certain sections of displaced persons due to natural disasters through the allocation of khas land, the Adarshya Gram and Abashan projects, these measures provide little detail regarding either the rights that are guaranteed or the timeframes and processes by which protection and assistance will take place.

Bangladesh has a Participatory Disaster Management Programme (PDMP) with a focus on disaster management and prevention, and a Comprehensive Disaster Management Plan (CDMP) that focuses more on disaster preparedness and risk reduction. CDMP has a number of disaster management components, among them a charge 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. 83 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.

In 2012 the Disaster Management Act (DMA) (XXXIV Act of 2012) was passed in Bangladesh to enforce disaster management rules, regulations, mechanisms, and standing orders, which will enable Bangladesh to better address these issues. Under this Act, rightssensitive response frameworks need to be developed, providing detailed guidelines to deal with DRR, relief, and recovery holistically. 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."84

Therefore, the government needs to integrate issues of displacement into national legislation and must ensure that programmes for displaced persons respect human rights and do not increase their risk and vulnerability to hazards. 85 The Hyogo Declaration, adopted at the

<sup>79.</sup> Walsham, supra note 2, p. 33.

<sup>80.</sup> Standing Orders on Disaster (1999).

<sup>81.</sup> McAdam & Saul, supra note 5, p. 272.

<sup>83.</sup> There are three main areas of focus:

i. capacity building for the Ministry of Environment and the Department of Environment to co-ordinate 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 co-ordination to promote climate change adaptation in development activities.

<sup>84.</sup> Law Concerning Disaster Management (2005), prelim. para. a, art. 6 (Indonesia) (unofficial translation), cited in Fisher, supra note 6, p. 569.

<sup>85.</sup> Leighton (2010), p. 2.

World Conference on Disaster Reduction held in Kobe, Japan, in 2005, should be adapted for and integrated into legislation in Bangladesh. 86 A pro-people DMA is crucial for Bangladesh to uphold the rights of people affected by disasters. However, taking into account the potentially large amount of displacement likely to arise from natural disasters, the new DMA should have incorporated human migration concerns. 87 Simultaneously, a proactive policy on migration and disaster is needed.

#### 3.4 Reform of Land-use Law and Policy

As large amounts of land are at risk of submersion in Bangladesh due to rises in sea levels, land scarcity and an overwhelming population further pose aggravated risks to the human security of Bangladeshi people. The loss of arable land (1% of agricultural land each year), threatens food security and triggers migration to urban centres. By the year 2051, Bangladesh will be left with only 0.07 acres (283 sq. m. or 3049 sq. ft.) of agricultural land per person. This number is based on the assumption that urban areas remain unchanged between now and 2051; based on all probable scenarios, this might not be the case.

The main concerns regarding the resettlement of climate migrants will be settlement locations and appropriate infrastructure. Authorities should allocate land for settlement. Larger tracts of land will be needed to enable relocated communities to build houses, gain access to subsistence, and engage in agricultural activities. The government policy of allocating public khas lands to landless people through leases is a process that can be used for the relocation of climate-induced migrants. However, securing khas lands for the resettlement of the probable large numbers of climate-induced migrants is difficult in a densely populated country like Bangladesh.<sup>88</sup>

However, McAdam and Saul argue that land scarcity is not the main reason for a lack of available resettlement land; rather, illegal occupations and the mismanagement of public lands leave displaced people landless.<sup>89</sup> McAdam and Saul cite 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."90 At present, people with political influence occupy reclaimed lands with the assistance of local and forestry officials. This fact notwithstanding, it could be argued that the available public land for the resettlement of large numbers of people remains insufficient.

Indeed, all these issues, including loss of land due to sea level rises and the relocation of large number of climate-induced migrants, add a significant dimension to the land usage issues in Bangladesh. Nevertheless, there should be an effective land management system. Khas lands possessed illegally should be reclaimed and distributed to climate migrants on fair terms. The land laws should be updated, securing provisions for the distribution of land reclaimed from the sea and rivers. Reclaimed land should be distributed to climate victims.

Given the limited land area and high population density in Bangladesh, the authorities need to ensure the equitable distribution of land among landless people, which necessitates a revision of land-use policies. Section 54 of the Land Management Manual (1990) establishes

<sup>86.</sup> Oloka-Onyango, supra note 77, p. 46.

<sup>87.</sup> Walsham, supra note 2, p. 46.

<sup>88.</sup> It is predicted that almost 30 million people will be displaced by 2050.

<sup>89.</sup> McAdam & Saul, supra note 5, p. 275.

<sup>90.</sup> Ibid.

priority in the distribution of government khas lands. 91 Section 56 of the Manual gives highest priority in the distribution of government khas lands to the families of farmers whose land had been under cultivation and washed away or eroded by rivers. Thus, those occupying cultivated land rendered uninhabitable as a result of rising sea levels would fall into this category and receive the highest priority in acquiring government khas lands. 92 Again, the objectives of the 2001 land-use policy ensure the optimal utilization of char land reclaimed from the sea for landless people.<sup>93</sup> However, neither the Policy nor the Manual adequately address poor landless people likely to lose their shelter and livelihood as a result of climate effects. The landless climate-induced displaced people may be resettled in the land reclaimed from the sea as suggested in Section 10 of the Policy in a managed and planned way with safety and dignity. Rational plans and controls to optimize land use are crucial for an effective SD, giving due consideration to disaster management and climate change adaptation.

## 3.5 Climate-induced Migration, DRR, and Poverty Reduction Strategies: An Integrated Approach

The poverty-disaster-migration interface in Bangladesh is perplexing. Disasters have longterm adverse effects on the social and economic activities of the poor. Additionally, the poor are more vulnerable to disasters of any kind due to: (a) depletion of assets; (b) income erosion due to the loss of employment; (c) increased indebtedness; and (d) migration. Moreover, the costs of coping with disasters are disproportionately higher for the poor. Thus, the most vulnerable people, who lead lives of subsistence in risk-prone areas, are left unprotected, without any government support. Therefore, it seems practicable to build people's capacities by strengthening adaptation programmes, so that people can stay in their areas of origin while coping with adverse environmental situations. There may be extreme situations in which it would be impossible for them to continue their livelihoods in these places. In these situations, either people should be relocated to new areas, or adaptation programmes should themselves support migration as part of their coping strategies.

Policy responses need to take into consideration linkages between poverty and people's social and economic vulnerability in cases of natural disasters and migration. Not only should the DRR be responsive to natural disasters that occur suddenly, but long-term DRR strategies and poverty reduction programmes should also be combined with adaptation programmes to ensure people's improved capacities and increased resilience in response to natural disasters. Thus, DRR strategies with a strong emphasis on SD could reduce forced migration and help people to stay in their places of origin. 94 Remittances sent by migrants to their families could play a critical role in building the capacities of communities.

Both adaptation and DRR programmes have serious implications for migration. The successful implementation of both types of measure could reduce displacement. While adaptation refers to "initiatives and measures to reduce the vulnerability of natural and human systems against actual or expected climate change effects,"95 DRR involves "systematic efforts

<sup>91.</sup> Freestone et al. (1993), p. 6.

<sup>92.</sup> Ibid.

<sup>93.</sup> Ibid., s. 2(c).

<sup>94.</sup> IOM, supra note 5, p. 6.

<sup>95.</sup> IPCC (2007b), p. 869.

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." Both adaptation and DRR can be used as tools to build people's capacities so that they need not rely on migration for alternative sources of livelihood, or they could facilitate migration as an adaptation or risk-reduction strategy, providing both households and communities with security in coping with environmental changes. 97 A study on the 1998 flood found that a direct causal link existed between well-coordinated relief efforts with sufficient compensation and assistance in the post-flood period, and a reduction in migration decisions.<sup>98</sup>

Therefore, this paper suggests a convergence between adaptation and DRR. DRR should be integrated into adaptation policies to prevent displacement. Both DRR and adaptation to climate change strategies aim at enhancing sustainability, the resilience of societies, and human security.

#### 4. CONCLUDING REMARKS

Although climate-induced migration is mentioned in the media, and in the speeches of leaders and policy-makers in Bangladesh, it is not appropriately addressed in national laws and policies. Bangladesh has yet to develop any legal and institutional framework in which to deal with climate-induced migration. Similarly, this issue has not been integrated into laws and policies related to the environment, climate change, DRR, development, and land management. This is urgently needed to promote the development of adequate and appropriate protection instruments to safeguard the rights, needs, and human security of populations displaced by climate change. 99 Institutions should be developed and strengthened to better protect these persons. 100

In this context, this paper highlights the importance of a national regulatory framework for the protection of climate-induced migration. It examines existing laws and policies, and the extent to which they address the issue of climate-induced migration. It suggests the development of a national legal framework, as well as the integration of issues related to climate-induced migration into other laws and policies. It is important to determine how to use both existing and potential legal apparatuses to provide protection for climate-induced migration. 101

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<sup>97.</sup> Martin, supra note 41, pp. 397, 399.

<sup>98.</sup> Bimal (2003), cited in Walsham, supra note 2, p. 11.

<sup>99.</sup> Boano et al. (2008), p. 31.

<sup>100.</sup> Zetter (2009), pp. 387, 403.

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