



International Organization for Migration (IOM)  
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INTERNATIONAL DIALOGUE ON MIGRATION  
INTERSESSIONAL WORKSHOP ON  
**CLIMATE CHANGE, ENVIRONMENTAL DEGRADATION  
AND MIGRATION<sup>1</sup>**

29-30 March 2011

**BACKGROUND PAPER**

**Introduction**

The consequences of climate change are becoming increasingly ineluctable and are attracting the attention of governments around the world. It is already obvious that few aspects of social and economic life will remain unaffected: Climate change is likely to have repercussions for development, human rights protection and security, to mention but a few. Among the most significant impacts of climate change are those on human mobility.<sup>2</sup> Estimates vary widely, with figures ranging between 25 million and one billion people displaced by climate change over the next 40 years.<sup>3</sup> While the magnitude may be uncertain, the actual impact on people is not.

The central idea of this workshop is that migration in the context of climate change can be both problem and solution: On the one hand, the serious humanitarian consequences of environmental migration cannot be ignored. On the other hand, and far from being a mere failure to adapt to a changing environment, migration has the potential to serve as an adaptation strategy. A comprehensive approach to environmental migration would thus pursue three broad objectives: *a) to minimize forced, unmanaged migration as much as possible; b) where forced migration does occur, to ensure assistance and protection for those affected and seek durable solutions to their situation; and c) to facilitate the role of migration as an adaptation strategy to climate change.* As such, particular emphasis will need to be placed on building capacities to effectively link migration management with climate change adaptation, disaster risk reduction, and sustainable development.

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<sup>1</sup> The topic of this workshop was selected by IOM membership. In 2011, the International Dialogue on Migration is guided by overarching theme: *The Future of Migration: Building Capacities for Change.*

<sup>2</sup> For example, the International Panel on Climate Change stated as early as 1990 that “the gravest effects of climate change may be those on human migration” (IPCC First Assessment Report page 103).

<sup>3</sup> See IOM (2009) *Migration, Environment and Climate Change: Assessing the Evidence* (page 9).

## The nexus between climate change, environmental degradation and migration<sup>4</sup>

There has always been a fundamental interdependency between migration and the environment, rooted in the history of human civilization. The contemporary reality of climate change, however, adds a new and urgent dynamic to this nexus.<sup>5</sup> While not itself the sole trigger of migration, climate change is likely to exacerbate gradual processes of *environmental degradation* and the frequency and intensity of *natural disasters*, both slow-onset (e.g. desertification, drought, coastal erosion) and sudden-onset (e.g. tropical storms, flash floods). In the long term, a gradual environmental degradation is expected to produce the largest impact on migration. Adding a further layer of complexity, most migration scenarios usually involve a range of political, social, economic and other factors. In sum, *environmental migration is understood as a multicausal phenomenon, yet one in which environmental drivers play a significant and increasingly determinative role*. These drivers can be in the form of natural disasters or environmental degradation and these may or may not be related to climate change.

The type, severity and reversibility of the environmental phenomenon at hand influences the migratory outcome – for example, sudden-onset natural disasters tend to result in temporary migration, while severe forms of slow-onset environmental degradation are more likely to lead to permanent movement. Furthermore, most available empirical research suggests environmental migration is likely to be mainly internal, with a smaller proportion taking place between neighbouring countries, and even smaller numbers migrating long distances.

The concept of vulnerability plays an important role in understanding the linkages between migration and climate change.<sup>6</sup> Vulnerability is a function of people's exposure (in this case to environmental factors) and their capacity to adapt. Vulnerability can take a geographical or social dimension – for example, people living in drylands, small islands or low-lying coastal areas are more susceptible to the effects of climate change; and some social groups are more vulnerable than others, especially those facing socio-economic disparities and discrimination. Migration can heighten or lessen an individual's vulnerability: Migration can be a *survival strategy*, above all in the event of impending or acute natural disaster. It can also be an *adaptation strategy*, especially where environmental degradation is not yet too severe, by reducing or modifying reliance on the environment for subsistence and allowing for livelihood and income diversification. Of course, migration, and forced migration in particular, can also lead to new and greater vulnerabilities for migrants and communities of origin and destination. Insofar as the adaptive potential of migration is concerned, however, it is often not the poorest and most vulnerable groups of society who are able to “move out of harm's

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<sup>4</sup> Please refer to the Annex for suggested further reading, a list of useful definitions and a selection of relevant policy and legal frameworks at the international level, to complement this overview. You may also wish to consult [www.iom.int/envmig](http://www.iom.int/envmig).

<sup>5</sup> It should be noted that climate change, i.e. alterations in the state of the climate brought about by changes in the composition of the atmosphere or in land use, is *one* form of broader and ongoing environmental change. In other words, not all changes in the physical environment are due to climate change. This paper is based on the premise that, on balance, scientific evidence supports the thesis that human activity is contributing to climate change.

<sup>6</sup> A definition of vulnerability is contained in the Annex.

way”, as migration typically requires social and economic resources and opportunities not available to them.<sup>7</sup>

### **Capacity building to meet current and future challenges**

Addressing disaster-induced displacement, alleviating the vulnerability of populations, connecting sustainable development and climate change adaptation, and transforming migration into an adaptation strategy present complex tasks for policymakers and practitioners alike. How, then, can States meet the multiple challenges of environmental migration, which are compounded by dynamic and largely unpredictable changes in climatic conditions?

Migration continues to be a relatively new area of policymaking for many countries, but even where this is not the case, the environmental dimension adds complexity to existing migration management systems. Consequently, countries may need to assess their existing capacities in this area and build new ones, where necessary. IOM’s *World Migration Report 2010* defines capacity building as “*the process of strengthening the knowledge, abilities, skills, resources, structures and processes that States and institutions need in order to achieve their goals effectively and sustainably, and to adapt to change*”.<sup>8</sup> Governments need to be equipped with a range of capacities to understand and anticipate such changes; to formulate legislative, policy and programmatic solutions; to implement appropriate measures tailored to specific needs and circumstances; and to monitor and evaluate their effectiveness.

Capacity building needs will vary between different countries, depending on the way in which environmental migration manifests itself in a given geographic area. At the same time, capacity building is not necessarily relevant only at the national level: Empowerment and capacity of local governments and civil society are equally important, as are mechanisms and fora to consult and cooperate on issues of environmental migration at regional and international levels. Finally, the need for adequate capacities cannot be isolated from three fundamental and interrelated building blocks of any policy process: priority / objective setting, allocation of resources, and political will.

In the following sections, this paper will attempt to address the issue of capacity building in the context of environmental migration in three areas: knowledge building, institutional responses and operational intervention.

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<sup>7</sup> For more detail, please refer to the IOM *Policy Brief on Migration, Climate Change and the Environment* (2009), available at [www.iom.int/envmig](http://www.iom.int/envmig).

<sup>8</sup> IOM *World Migration Report 2010 The Future of Migration: Building Capacities for Change*. The report enumerates several aspects of capacities specific to migration (migration and labour market data; national migration policy goals and priorities; training of migration officials; development of legislative frameworks; coherent administrative structures; consultation mechanisms; international cooperation). With respect to migration in the context of environmental change, the report identifies ten areas in which capacity building is required. See in particular chapters 2 and 7. For more on capacity building from an IOM perspective, refer to IOM document SCPF 52/2010 *Capacity Building in Migration Management*. N.B.: “Capacity building”, as used in this paper, fully recognizes that most countries possess capacities which may need to be enhanced, not built from scratch. The term “capacity development” has been suggested as an alternative.

*i) Building the knowledge base through enhanced research and data capacities*

It hardly bears repeating that the most effective policies and programmes are those constructed on a reliable evidence base. Yet, and notwithstanding significant advances in researching the migration-environment nexus, robust data sets and forecasts remain largely elusive and true inter-disciplinary research limited. The main challenges in terms of capacity building reside in the realms of *causalities* (e.g. to what extent the environment acts as the primary driver, what migration patterns emerge in response to different environmental stressors, what socio-economic factors need to be considered with regard to vulnerability); *data* (e.g. how many people will migrate and where, how climate models can be improved and account for the multi-causal nature of migration, how migration and environment datasets can be enhanced and/or harmonized) and *definitions and terminology* (e.g. what definitions and concepts are needed for research and policy, their strengths and limitations).

While it is unrealistic to expect to have absolute certainty on the patterns and volumes of environmental migration, much can be done to enhance the knowledge base in the three criteria mentioned above: for instance, data collection, analysis and comparability could be improved at national level by including questions on migration (including, crucially, internal movement) or experiences of environmental degradation and natural disasters in census data and household surveys. Innovative or successful methodologies in smaller case studies could be tested on a larger scale where possible. Combining technological advances in Geographical Information Systems and mapping with relevant research methods represent another way to enhance knowledge. A further under-utilized source of evidence is the knowledge that can be gained from a systematic monitoring and evaluation of policies and programmes already in place. Not the least to justify continued expenditures, governments have an interest in assessing the performance of existing measures or past programmes (including planned relocation). Furthermore, a conscious effort to move towards standardized terminology on environmental migration will result in significant improvements in research and ease international cooperation on the issue. Capacity needs in the area of data and research are not limited to developing countries, but generally greater, not the least as they tend to be more vulnerable to the effects of climate change. Research cooperation – through development aid for higher education or institutional “twinning” of universities and research bodies in developed and developing countries – not only transfers skills and knowledge, but can also give rise to innovative inter-disciplinary thinking and methods, essential for gaining a deeper understanding of environmental migration.

*ii) Effective legislative and policymaking processes through strengthened institutional capacities*

No internationally agreed definition of “environmental migration” or “environmental migrant” exists to date. This complicates research and data collection, but also has implications for national, regional and international legal frameworks. It is undisputed that the human rights of all those migrating are dealt with by international migration law. There is, however, currently no specific framework at the global level that would explicitly cover the protection and assistance needs of *international migrants* propelled by natural disasters and environmental degradation. How to ensure effective protection and assistance for such individuals is one of the most vexing questions in the management of environmental migration. At national level, capacities are required, on

the one hand, to create the appropriate legislative basis which would cover situations arising from environmental migration, and, on the other hand, to ensure the implementation of such laws in practice. Existing legislation and policies may need to be reviewed to account for cases of individuals crossing borders due to environmental factors, for example, through granting of Temporary Protection Status.

Seeing that the bulk of environmental migration is expected to be internal in nature, States may also consider revisiting legal and policy arrangements to protect and assist *internally displaced persons* who had to move due to natural disasters and environmental degradation. Again, international instruments provide important guidance in this regard.

Given the multidimensionality of the phenomenon, policy coherence on environmental migration is equally critical. Governments must have the capacities and mechanisms to draw on all relevant areas of expertise and competency in designing their policies. Besides migration and environmental policy, environmental migration touches on broader development policy, emergency preparedness, human security, and urban and landuse planning, to name a few. The existing relevant policy tools do not, for the most part, take into account environmental migration. For instance, few National Adaptation Programmes of Action make mention of migration, and even fewer recognize the adaptation potential of migration. Likewise, Disaster Risk Reduction strategies could go further in promoting sustainable development (e.g. via enhanced synergies with Poverty Reduction Strategy Papers) and cross-fertilization with Climate Change Adaptation measures.<sup>9</sup> Insufficient capacity to coordinate and streamline these and other policy tools will, at best, result in duplication and a stretch of resources; at worst lead to contradictions. Conversely, a closer meshing of these strategies will contribute to improved resilience of populations to the effects of climate change and to minimizing instances of forced migration.

Institutional capacity also requires the involvement of local governments, affected populations and international partners. For instance, given the likely increase in rural-urban migration due to the effects of climate change, urban areas may need to enhance their capacity to absorb larger populations within existing infrastructure and services. Similarly, strong local institutional networks and communication lines between authorities are critical in ensuring a coordinated response in emergency situations. For example, should evacuations or relocation be necessary, these should not take place without consultations with and active involvement of affected populations and receiving communities. Lastly, regional and international cooperation significantly strengthens States' capacity to manage international migration, including when provoked by environmental factors. As a practical example of the adaptive potential of migration, temporary and circular labour migration programmes can be arranged on a bilateral basis to support populations affected by environmental degradation and natural disasters.<sup>10</sup>

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<sup>9</sup> See section 3 of the Annex for more on these policy instruments.

<sup>10</sup> IOM's Temporary and Circular Labour Migration programme between Colombia and Spain involving disaster-affected populations is one such example. See "Operational Activities – Selected Examples" at [www.iom.int/envmig](http://www.iom.int/envmig) for more.

*iii) Connecting emergency preparedness and response with sustainable development through reinforced operational capacities*

Given the potential of natural disasters to trigger forced migration, disaster risk reduction (i.e. preparedness for natural disasters and prevention of humanitarian emergencies) is a crucial area for capacity building. The Hyogo Framework for Action makes several recommendations in this regard, including risk assessments and risk reduction (ranging from early warning systems to evacuation plans) and the creation of institutions and response mechanisms in case of emergency. Operational capacities need to be oriented towards connecting humanitarian and development work. What is often simplified as “build back better” means that preparations for the next emergency already ought to start during the recovery and reconstruction phase of the previous one. Especially under the dynamic conditions of climate change, recurring disasters combined with more intense environmental degradation lead to cumulative vulnerabilities and eroded resilience for affected populations. Disaster risk reduction, with strong emphasis on sustainable development, is key in reducing forced migration and stabilizing populations in areas affected by degradation or disaster. It should be recognized, however, that migration can sometimes be the only option for survival.<sup>11</sup>

Secondly, ensuring protection of and assistance to populations affected or displaced by sudden- or slow-onset disasters requires particular strong capacities on the part of the State (as the primary duty-bearer) and the various entities which participate in a relief effort, such as local authorities and civil protection bodies. Capacities and contingencies need to be in place to respond to the immediate and most basic needs of displaced populations in terms of shelter, food, sanitation and medical attention. Furthermore, a rights-based approach to disaster response also means making adequate provisions for the most vulnerable groups and taking account of special vulnerability factors such as gender, age, ethnicity, and health (including HIV/AIDS).

Lastly, Climate Change Adaptation is becoming an increasingly important dimension of any operational and programmatic activities aimed at supporting populations affected by natural disasters or environmental degradation. Capacity building efforts to better link migration and development are already underway. These now need to be reinforced taking into account the dynamic variable of climate change in order to promote migration as an adaptation strategy to changing environments. For instance, labour migration programmes can promote skills and income diversification for migrants and channel remittances towards adaptation measures in home communities; or diaspora contributions can be factored into operational activities, for instance following natural disasters.

## **Conclusion**

In 2010, the fourth Global Forum on Migration and Development considered the question of the impact of climate change on migration and development. In the same year, the Cancun Agreements concluded at the United Nations Climate Change Conference call attention to “climate change induced displacement, migration and

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<sup>11</sup> This is elaborated in IOM (2010) *Disaster Risk Reduction, Climate Change Adaptation and Environmental Migration – A Policy Perspective*.

planned relocation”.<sup>12</sup> As this paper has tried to demonstrate, the challenges posed by the human mobility consequences of climate change need to be met by cross-sectoral responses of precisely this sort – linking migration, sustainable development, climate change adaptation and disaster risk reduction. Many of the capacities needed to address environmental migration and its repercussions for individuals and communities already exist, but need to be mobilized, reinforced and better coordinated to support those most vulnerable to the impacts of climate change and to work towards a comprehensive approach to environmental migration.

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<sup>12</sup> Cancun Agreements, paragraph 14 (f) “Invites all Parties to enhance action on adaptation under the Cancun Adaptation Framework, taking into account their common but differentiated responsibilities and respective capabilities, and specific national and regional development priorities, objectives and circumstances, by undertaking, inter alia, the following:... (f) 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.”

## ANNEX

### 1. Useful Definitions

#### *Climate change*

A change in the climate that persists for decades or longer arising from either natural causes or human activity (Source: Intergovernmental Panel on Climate Change).

#### *Climate Change Adaptation*

The adjustment to actual or expected climatic stimuli and their effects, which moderates harm or exploits beneficial opportunities (Adapted from UNISDR Terminology on Disaster Risk Reduction 2009).

#### *Disaster Risk Reduction*

All efforts that can contribute to reducing risk through analyzing and managing the causal factors of disasters; through reducing exposure to hazards; through lessening vulnerability of people and livelihoods; through managing land and the environment; and through improving preparedness for adverse events (Adapted from UNISDR Terminology on Disaster Risk Reduction 2009).

#### *Environmental degradation*

The reduction of the capacity of the environment to meet social and ecological objectives and needs (Source: UNISDR Terminology on Disaster Risk Reduction 2009).

#### *Environmental migrant*

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 (Source: IOM World Migration Report 2008).

#### *Internally Displaced Person*

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 generalised violence, violations of human rights or *natural or human-made disasters*, and who have not crossed an internationally recognised State border (Source: Guiding Principles on Internal Displacement, emphasis added).

#### *Natural disaster*

A serious disruption of the functioning of a community or society due to a natural process or phenomenon which involves widespread human, material, economic or environmental losses and impacts and which exceeds the ability of the affected community or society to cope using its own resources (Adapted from UNISDR Terminology on Disaster Risk Reduction 2009).

### ***Resilience***

The ability of a system, community or society to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner (Adapted from UNISDR Terminology on Disaster Risk Reduction 2009).

### ***Sustainable development***

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Source: Brundtland Commission 1987).

### ***Vulnerability***

The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard (Source: UNISDR Terminology on Disaster Risk Reduction 2009).

## **2. References / Bibliography**

*Please note that all publications are available on the IOM website at <http://publications.iom.int/bookstore/>.*

*For more information specifically on climate change, environmental degradation and migration and IOM's activities, please also visit [www.iom.int/envmig](http://www.iom.int/envmig) and [www.iom.int/climateandmigration](http://www.iom.int/climateandmigration).*

- IOM *Migration Research Series* No. 30 (2007) "Migration, Development and Natural Disasters: Insights from the Indian Ocean Tsunami."
- IOM *Migration Research Series* No. 31 (2007) "Migration and Climate Change."
- IOM *Migration Research Series* No. 33 (2008) "Climate Change and Migration: Improving Methodologies to Estimate Flows."
- IOM *Migration Research Series* No. 35 (2008) "Migration, Development and Environment."
- IOM *International Dialogue on Migration* No. 10 (2008) "Expert Seminar: Migration and the Environment."
- Human Security Network Conference Report (Geneva, 19 February 2008) "Climate Change, Environmental Degradation and Migration: Addressing Vulnerabilities and Harnessing Opportunities."
- IOM *Policy Brief* (2009) "Migration, Climate Change and the Environment."
- IOM (2009) "Migration, Environment and Climate Change: Assessing the Evidence."
- IOM (2009) "Compendium of IOM's Activities in Migration, Climate Change and the Environment."
- IOM (2010) "Assessing the Evidence: Environment, Climate Change and Migration in Bangladesh."

- IOM (2010) “Disaster Risk Reduction, Climate Change Adaptation and Environmental Migration – A Policy Perspective.”
- IOM (2010) *World Migration Report* “The Future of Migration: Building Capacities for Change.”
- IOM *Migration Research Series* No. 42 (forthcoming) “Climate Change, Migration and Critical International Security Considerations.”
- IOM (forthcoming) “The Other Migrants – Preparing for Change. Environmental Changes and Migration in the Republic of Mauritius.” An Assessment Report.

### **3. List of selected international legal and policy frameworks**

- Guiding Principles on Internal Displacement: [www.idpguidingprinciples.org/](http://www.idpguidingprinciples.org/)
- National Adaptation Programmes for Action: [www.napa-pana.org/](http://www.napa-pana.org/)
- Poverty Reduction Strategy Papers: [www.imf.org/external/np/exr/facts/prsp.htm](http://www.imf.org/external/np/exr/facts/prsp.htm)
- United Nations Framework Convention on Climate Change (UNFCCC) / Cancun Agreements: [www.unfccc.int/](http://www.unfccc.int/)
- United Nations International Strategy for Disaster Reduction (UNISDR) / Hyogo Framework for Action: [www.unisdr.org/eng/hfa/hfa.htm](http://www.unisdr.org/eng/hfa/hfa.htm)