

# In Search of Shelter

Mapping the Effects of Climate Change on Human Migration and Displacement



## Executive Summary

The impacts of climate change are already causing migration and displacement. Although the exact number of people that will be on the move by mid-century is uncertain, the scope and scale could vastly exceed anything that has occurred before. People in the least developed countries and island states will be affected first and worst.

The consequences for almost all aspects of development and human security could be devastating. There may also be substantial implications for political stability.

Most people will seek shelter in their own countries while others cross borders in search of better odds. Some displacement and migration may be prevented through the implementation of adaptation measures. However, poorer countries are under-equipped to support widespread adaptation. As a result, societies affected by climate change may find themselves locked into a downward spiral of ecological degradation, towards the bottom of which social safety nets collapse while tensions and violence rise. In this all-too-plausible worst-case scenario, large populations would be forced to migrate as a matter of immediate survival.

Climate-related migration and displacement can be successfully addressed only if they are seen as global processes rather than local crises. The principle of common but differentiated responsibilities—both in terms of minimizing displacement and supporting unavoidable migration—must, therefore, underlie policy negotiations and subsequent outcomes. The burden of assisting and protecting displaced populations cannot be allowed to fall on the shoulders of most affected states alone.

### *Nature and purpose of this report*

This report explores how environmental shocks and stresses, especially those related to climate change, can push people to leave their homes in search of “greener pastures” ... or just to survive. In order to make informed decisions, policymakers and

development actors need a better understanding of the linkages between environmental change, displacement and migration. This report, therefore, offers:

- *empirical evidence* from a first-time, multi-continent survey of environmental change and migration;
- *original maps* illustrating how, and where, the impacts of climate change may prompt significant displacement and migration;
- *policy recommendations* that reflect the collective thinking of key multi-lateral and research institutions, as well as non-governmental organizations working directly with many of the world’s most vulnerable populations.

Policy decisions made today will determine whether migration becomes a matter of choice amongst a range of adaptation options, or merely a matter of survival due to a collective failure by the international community to provide better alternatives.

### *Key findings*

- Climate change is already contributing to displacement and migration. Although economic and political factors are the dominant drivers of displacement and migration today, climate change is already having a detectable effect.
- The breakdown of ecosystem-dependent livelihoods is likely to remain the premier driver of long-term migration during the next two to three decades. Climate change will exacerbate this situation unless vulnerable populations, especially the poorest, are assisted in building climate-resilient livelihoods.
- Disasters continue to be a major driver of shorter-term displacement and migration. As climate change increases the

frequency and intensity of natural hazards such as cyclones, floods, and droughts, the number of temporarily displaced people will rise. This will be especially true in countries that fail to invest now in disaster risk reduction and where the official response to disasters is limited.

- Seasonal migration already plays an important part in many families’ struggle to deal with environmental change. This is likely to become even more common, as is the practice of migrating from place to place in search of ecosystems that can still support rural livelihoods.
- Glacier melt will affect major agricultural systems in Asia. As the storage capacity of glaciers declines, short-term flood risks increase. This will be followed by decreasing water flows in the medium- and long-term. Both consequences of glacier melt would threaten food production in some of the world’s most densely populated regions.
- Sea level rise will worsen saline intrusions, inundation, storm surges, erosion, and other coastal hazards. The threat is particularly grave vis-à-vis island communities. There is strong evidence that the impacts of climate change will devastate subsistence and commercial agriculture on many small islands.
- In the densely populated Ganges, Mekong, and Nile River deltas, a sea level rise of 1 meter could affect 23.5 million people and reduce the land currently under intensive agriculture by at least 1.5 million hectares. A sea level rise of 2 meters would impact an additional 10.8 million people and render at least 969 thousand more hectares of agricultural land unproductive.
- Many people won’t be able to flee far enough to adequately avoid the negative impacts of climate change—unless they receive support. Migration requires resources (including financial, social, and political capital) that the most vulnerable populations frequently don’t have. Case studies indicate that poorer environmental migrants can find their destinations as precarious as the places they left behind.

## Policy Recommendations

New thinking and practical approaches are needed to address the threats that climate-related migration poses to human security. These include the following principles and commitments for action by stakeholders at all levels:

### Avoid dangerous climate change

*Reduce greenhouse gas emissions to safe levels.*

The international community has until December 2009, at the Conference of Parties to the United Nations Framework Convention on Climate Change (UNFCCC), to agree on a way forward. If this deadline isn't met, we will almost surely shoot past any safe emissions scenario and commit future generations to a much more dangerous world in which climate change-related migration and displacement, on a truly massive scale, is unavoidable.

### Focus on human security

*Protect the dignity and basic rights of persons displaced by climate change.*

Climate-related displacement and migration should be treated, first and foremost, as a "human security" issue. Sensationalist warnings must not be permitted to trigger reactionary policies aimed at blocking the movement of "environmental refugees" without genuine concern for their welfare.

### Invest in resilience

*Increase people's resilience to the impacts of climate change so that fewer are forced to migrate.*

The breakdown of natural-resource dependent livelihoods is likely to remain the premier driver of long-term migration during the next two to three decades. Climate change will exacerbate the situation unless vulnerable populations, especially the poorest, are assisted in building climate-resilient livelihoods. This will require substantial investment in:

- *in situ* adaptation measures including, for instance, water-wise irrigation systems, low/no-till agricultural practices, income diversification, and disaster risk management;
- the empowerment of women and other marginalized social groups to overcome the additional barriers they face to adaptation; and

- inclusive, transparent, and accountable adaptation planning with the effective participation of especially vulnerable populations.

### Prioritize the world's most vulnerable populations

*Establish mechanisms and binding commitments to ensure that adaptation funding reaches the people that need it most.*

Negotiations under the United Nations Framework Convention on Climate Change (UNFCCC) are currently focused on how to generate sufficient funds for adaptation in developing countries and how the funds should be managed. These are important questions. However, it is equally important to determine how funds will be channeled so that they reach the people who need them most. Objective criteria for assessing vulnerability to the negative impacts of climate change—including people's risk of displacement—should be developed to guide priority assistance.

### Include migration in adaptation strategies

*Recognize and facilitate the role that migration will inevitably play in individual, household and national adaptation strategies.*

For millennia, people have engaged in long- and short-term migration as an adaptive response to climatic stress. Millions of individuals and households are employing a variant of this strategy today. Human mobility—permanent and temporary, internal and cross border—must be incorporated into rather than excluded from international and national adaptation plans. This can be done in a variety of ways at a number of levels and may include:

- measures to facilitate and strengthen the benefits of migrant remittances;
- the rights-based resettlement of populations living in low-lying coastal areas and small island states.<sup>1</sup>

Environmentally, socially and economically sustainable resettlement meeting human rights standards (as reflected *inter alia* in the Guiding Principles on Internal Displacement) can be costly; and international agreements must address how these and related needs will be met. Existing mechanisms for

adaptation funding, which rely on voluntary contributions, have failed to deliver. Therefore, future agreements under the UN Framework Convention on Climate Change must establish binding commitments for historic high emitters. These funds must be new and additional to existing commitments, such as those for Official Development Assistance.

### Close the gaps in protection

*Integrate climate change into existing international and national frameworks for dealing with displacement and migration.*

The unique challenges posed by climate change must be factored into norms and legal instruments dealing with displacement and migration. Especially important conundrums surround:

- *disappearing states and non-viable homelands.* Unlike some people displaced by conflict or persecution who may one day return home, those displaced by the chronic impacts of climate change (e.g. inadequate rainfall and sea level rise) will require permanent resettlement.
- *irrevocably deteriorating living conditions.* Climate change will result in cases that do not fit into current distinctions between voluntary and forced migration. At present, people who move due to gradually worsening living conditions may be categorized as voluntary economic migrants and denied recognition of their special protection needs.

In order to satisfactorily address such challenges, duty-bearers will need clear guidelines for protecting the rights of environmentally-induced migrants.

*Strengthen the capacity of national and international institutions to protect the rights of persons displaced by climate change.*

Institutions tasked with protecting the basic rights of migrants and displaced persons are already under-funded and overstretched. Climate change will add to their strain, making the practice of protection even more difficult. The international community must, therefore, begin substantial discussions about how to realize its duties to protect migrants and displaced persons under conditions of radical environmental change.