

# **Environment & Climate Change**

The impact of climate change on human mobility



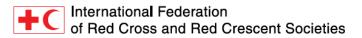
Tuvalu Red Cross prepares its volunteer Emergency Response Teams to be able to respond to inundation events — events where large tides, combined with storm swell, can flood homes and temporarily displace people. These events are predicted to come more often in the future. It is vitally important that volunteers and communities that live along low-lying coastlines can anticipate and respond to such events.

The climate is a key determinant of where people live and climate change is increasingly recognised to influence the factors that can lead to population movements, including migration and displacement. Displacement is the movement of people from their place of residence, and can occur when extreme weather events, such as flood and drought, make areas temporarily uninhabitable. Major extreme weather events have in the past led to significant population displacement, and changes in the incidence of extreme events will amplify the challenges and risks of such displacement. (IPCC 2013). Planned and well-managed migration (which poses operational challenges) can reduce the chance of later humanitarian emergencies and displacement.<sup>2</sup>

## The effects of climate change on migration

Climate-related shocks and trends that can cause population displacement include:

- More intense and/or more unpredictable extreme weather events
- **Increased occurrence of slow-onset disasters** such as increasing temperatures and drought, which affect agricultural production and access to clean water;
- **Rising sea levels** which can render coastal areas increasingly difficult places to live and work; small atolls will be especially affected (44% of the world's population lives within 150 kilometers of the coast);
- **Degradation of land and competition over natural resources** can challenge institutions' ability to manage relations over shared resources, leading to rivalry and in turn migration.
- 1. Intergovernmental Panel on Climate Change, Fifth Assessment Report 2013
- $2.\ UK\ Government\ Office\ for\ Science,\ 2011.\ Migration\ and\ Global\ Climate\ Change:\ final\ project\ report$



#### **Climate Change Facts and Figures**

Climate change is already happening in the world today, and largely caused by human emissions of greenhouse gases. Changes to the earth's climate have included: warming of the atmosphere and oceans, reduced snow and ice, a rise in the level of the oceans, and changes in rainfall patterns and climate extremes. Many of these observed changes are unusual or unprecedented in the last decades to millennia.

Examples of current impacts that are particularly relevant to the Red Cross Red Crescent include the likely increase in frequency of heat waves (e.g. in large parts of Europe, Asia and Australia), and of heavy rainfall events (e.g. North America and Europe). Storm surges, such as the killer waves that came with tropical cyclone Haiyan and hurricane Sandy, are already higher due to ongoing sea level rise. In addition, the increasing CO<sup>2</sup> in the atmosphere is causing the ocean to become more acidic, which threatens marine ecosystems, coral reefs and fisheries, with severe implications for coastal communities. Also, some amount of climate change will continue regardless of how much we reduce greenhouse gas emissions.

Many vulnerable groups do not have the resources to be able to migrate from areas exposed to the risks from extreme events. While we cannot say precisely where and how climate change will drive migration, a future increase in the number of people on the move is a matter of concern for the Red Cross Red Crescent Movement, since migrants are often vulnerable and face situations of distress, violence and social isolation.

Of course people often migrate for a combination of reasons. This makes it difficult to create robust global estimates of future displacement. For instance, climate changes in rural areas could amplify migration to urban centres. However, environmental conditions and altered ecosystem services are few among the many reasons why people migrate. So while climate change impacts will play a role in these decisions in the future, given the complex motivations for all migration decisions, it is difficult to categorize any individual as a climate migrant. However, it is important to note that there is significant evidence that well-planned migration can reduce the human security costs of displacement from extreme weather events.

**Migration has many different forms.** It can be internal, regional or international; it can be temporary or permanent, forced, voluntary or a mix of those characteristics. When disasters occur, people mostly move at relatively short distance, and within a country or a region. The displaced usually have the desire to return home when the situation is normalising. Large-scale and long-distance migration is not typically linked to natural disasters and protracted complex emergencies. Much of disaster-induced migration is internal, and often from rural areas to cities.

While displacement can increase the vulnerability of an individual, family or community, in some cases migration can contribute positively both to the adaptive capacity of communities of origins, as well as to the population in receiving areas<sup>3</sup>. Migration away from hazardous areas can therefore be part of a strategy of disaster risk reduction<sup>4</sup>.

#### Migrants for the IFRC

The IFRC description of migrants is deliberately broad: "Migrants are persons who leave or flee their habitual residences to go to new places — usually abroad —to seek opportunities or safer and better prospects. Migration can be voluntary or involuntary, but most of the time a combination of choices and constraints are involved." IFRC Policy on Migration (2009), available online <a href="https://example.com/here">here</a>

<sup>3.</sup> Barnett J.& Webber M., <u>Accommodating Migration to Promote Adaptation to Climate Change</u>, <u>Commission on Climate Change and Development</u> (2009)

<sup>4.</sup> Mghendi N.& Rances A., Collaborating to tackle humanitarian consequences of climate-induced migration, IFRC (2011)

For example, remittances can support the resilience of communities of origin, either as support to families, as well as for investments in public infrastructure. Returning migrants can strengthen the resilience of their home communities as agents of positive change and through transfer of skills. Migrants can also contribute to building the resilience of their host communities through new skills, and as entrepreneurs and innovators (i.e. agricultural techniques which can improve local practices). In order to view migration as a transformational adaptation strategy contributing to long-term resilience, international policy will need to be shaped in such a way that benefits are maximized for the individual as well as the source and destination communities (WDR 2008).

## The IFRC approach to migration

The IFRC Policy on Migration<sup>5</sup> makes it clear that "the approach of the Movement to migration is strictly humanitarian and based on the recognition of each migrant's individuality and aspirations. It focuses on the needs, vulnerabilities and potentials of migrants, irrespective of their legal status, type, or category."

This was reconfirmed when the 31st International Conference adopted the Resolution "Migration: Ensuring Access, Dignity, Respect for Diversity and Social Inclusion<sup>6</sup>."

The Movement will respond to realities on the ground and speak out for the actual needs and vulnerabilities of people as they evolve, regardless of their reason to move. Nevertheless, it will be important to **complement our planning** 



Bangladesh, 2012. Women line up for relief supplies being distributed by Bangladesh Red Crescent Society following severe floods in the country's north. Joe Cropp/IFRC

by including strategic information on long-term risks, when operationally relevant. To respond to increasing migration pressures exacerbated by the impact of climate change, it is crucial that IFRC increases its focus on proactively reducing vulnerability and supporting resilience at community level. Particularly the case for the millions of people who will be unable to migrate from locations in which they are highly vulnerable to the impacts of climate variability and climate change, planned and well-managed migration can provide invaluable support.

## Key Messages – Climate Change Conference Advocacy Toolkit<sup>7</sup>

- Climate change is increasing disaster risk for millions of the world's most vulnerable people.
- Local action is the key to adaptation. Empowering communities through knowledge about climate change is crucial to ensure informed and appropriate action at the local level.
- More investment is needed for disaster risk reduction, including effective early warning systems across all timescales.
- Youth engagement is pivotal for developing sustainable solutions into the future.
- More attention is needed for solutions that harness synergies between climate change adaptation and climate change mitigation.



Following the impact of the 2004 Indian Ocean Tsunami on the Maldives, the Red Cross constructed an entirely new settlement on the Island of Dhuvaafaru. Homes and infrastructure were constructed for over 400 families who were relocated from a neighbouring island which was badly affected by the tsunami because the protective coral reef surrounding the island had been largely destroyed.

- 5. IFRC, Policy on Migration (2009)
- 6. 31<sup>st</sup> International Conference of the Red Cross and Red Crescent, Geneva, Switzerland, November 2011, <u>Resolution 3: Migration: Ensuring Access</u>, Dignity, Respect for Diversity and Social Inclusion
- 3: Migration: Ensuring Access, Dignity, Respect for Diversity and Social Inclusion
- 7. IFRC Climate Change Key Messages, Climate Change Conference Advocacy Toolkit, COP19 Warsaw (2013)

### What can we do to support communities?

#### Response - keep a humanitarian focus, and respond flexibly

- Disaster preparedness through community based early warning systems, contingency planning and capacitybuilding for humanitarian response can minimize the impacts, improve the resilience of communities and provide options to migration.
- As a proactive approach, we can **identify the hotspots** where humanitarian assistance might be needed and engage in dialogue at the national level, along the migratory trail across international borders.
- **Humanitarian diplomacy and action** can assist and protect the people at risk, help increase their options and choices, and alleviate pressures that may force them to migrate against their will and desire.

#### Disaster risk reduction - protect people against hazards

- In addition to assisting people when the disaster occurs, we can invest in **disaster risk reduction** at local and regional level to prepare for, and reduce the risks to populations in disaster-prone areas today.
- When we take a risk reduction approach, we can use **available information about current risks**, such as early warning.
- In addition, we can take into account the longer-term climate predictions that lead to changing patterns of risks
  that are known and relevant to humanitarian operations to prepare communities and ourselves for future hazards.

#### Resilience-building - contribute to people's resilience at community level

The volunteer-based work of National Societies can make a huge difference in strengthening the resilience of
people at community level through for example, programmes for food security and livelihoods diversification,
income generation, as well as health and public awareness and education.

#### Practical information – where can you find information?

- UNESCO's publication on "Migration and Climate Change"
- IOM: Migration, Climate Change and Environment
- Forced Migration Review 31, Climate Change and Displacement

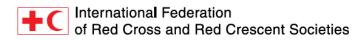
#### Case study— Pacific Islands

The Pacific region is often synonymous with the words 'climate change and migration'. However, the sense of people's place, including land, culture, livelihoods and environment, are very important to the identity of Pacific people. Pacific leaders declared in the 2008 'Niue Declaration on Climate Change' that the desire to keep their people's social and cultural identity and live in their own countries into the future is strong<sup>8</sup>.

In this context, the prevention and avoidance of displacement, and building upon the resilience of Pacific peoples, is the first priority in addressing the impacts of climate change. For example, **Tuvalu Red Cross** works with national partners to assist communities increase their capacity to address the climate challenges they face. The National Society has been working with the Tuvalu Meteorological Service, National Disaster Management Office and members of Teone community to improve access to, understanding and use of weather and climate information. The community has made a plan to take actions to reduce the impacts of drought and coastal flooding events such as improving the community rain water harvesting system through monitoring and fixing of home guttering systems using a seasonal calendar, building a communal emergency water distribution tank, planting of trees along the ocean and lagoon sides of the village, building of composting toilets and raising the village bridge above high tide levels to allow easy access.

Tuvalu Red Cross also prepares its volunteer Emergency Response Teams to be able to respond to inundation events – events where large tides, combined with storm swell, can flood homes and temporarily displace people. These events are predicted to come more often in the future (IPCC, 2012). It is vitally important that volunteers and communities can anticipate and respond to such events.

8. The Nansen Initiative consultation on the Pacific: <a href="http://www.nanseninitiative.org/pacific-regional-consultation">http://www.nanseninitiative.org/pacific-regional-consultation</a>



In the bigger picture, climate change is merging with broader issues such as environmental degradation, urban drift, land ownership challenges to internal migrants due to increases in urban settlements, population pressures, political instability and economic challenges. In the decades ahead, some people and/or communities may need to leave their homes and relocate internally or in some cases to other countries, both temporarily or permanently. For some Pacific Islanders, their countries have historical ties and political alliances that may enable them to migrate or invest in other countries. For others, this may not be the case

To this end, the Kiribati Government is implementing the 'Migration with Dignity' policy in that it trains nurses to high standards who can work both in Kiribati and overseas. These people can establish a new life in other countries and send remittances back to family in Kiribati. The Kiribati Government is advocating for this approach to be utilised in the years ahead as the country seeks assistance

with migration due to climate change and other factors.

For those continuing to live on Tarawa atoll in Kiribati, access to safe water is a daily challenge, exacerbated by environmental pollution and salinization of ground water. Initially in response to a drought, the Kiribati Red Cross worked with communities to improve access to water. Recognising that responding to the disaster situation was not enough, Kiribati Red Cross worked with the Department of Health and the affected community to assess longer-term water related needs. The result has been the installation of water tanks in community areas such as schools and meeting places, water collection infrastructure such as roofs and guttering, as well as hygiene promotion with community members to address diarrhea outbreaks.

Red Cross is working across the Pacific with communities and Governments towards the prevention of and preparedness for disasters. Building upon the inherent resilience of Pacific Island people is an important step towards dealing with the impacts of climate change and reducing displacement.



Kiribati, Eita Village, 2014. despite several sea walls built around the islands, the sea comes more and more inland. In addition, the island faces a huge problem of waste control, with garbage lying everywhere. Benoit Matsha-Carpentier/IFRC

#### Case study Kenya (urban and rural examples)

In northern Kenya, indigenous peoples have developed migration strategies to respond to a very variable climate. Within one rainy season, the rain can fall sporadically throughout the area. To deal with differences of rainfall, pastoralists in this savannah region migrate with their herds of cows, goats, and sheep, following the rains as they fall. However, migrating across someone else's land can often be controversial.

With climate change, these rainfall patterns could change further, and it will be important for pastoralists to have access to pasture year-round. Kenya Red Cross, as part of the Partners for Resilience Alliance, is working in Northern Kenya to encourage peaceful rangeland governance within these communities. In these locations, the team has convened community meetings to reserve areas of land for the dry season and for drought years, which can then be shared when the rainfall is unusually low. By agreeing on peaceful migration plans, communities are more resilient to climate shocks.

Nairobi, on the other hand, is a bustling capital city that has been receiving migrants from across Kenya to its urban informal settlements. Kenya Red Cross recognizes that the population of Nairobi's slums grows during climate shocks, and that these slumdwellers are very vulnerable to disaster. Through an integrated Urban Risk Reduction Programme, Kenya Red Cross is working to raise awareness and build capacity of these populations to manage climate related risks and hazards (e.g. floods and urban fires) in order to have systems in place to deal with disasters when they strike.

More information on IFRC work on migration is available here or by email at migration.unit@ifrc.org

9. See: http://www.climate.gov.ki/category/action/relocation/

