urban-based victims of conflict, disasters and environmental degradation. Advocates in urban areas have until recently largely focused on helping forcibly displaced people to return to small communities, or they have initiated projects on behalf of specific segments of the urban population, such as for street children and trafficked women. It is difficult to overstate the challenges now facing UNHCR and numerous NGOs in reorienting their staff and deploying their resources to cities but it is particularly important that humanitarian agencies work in closer partnerships with development actors and government officials than has been the case historically.

Urban planners in most places are very well aware of the severity of the problems they face as a result of rapid growth. They seem less aware, however, of the dimensions of the problems that are producing such rapid urbanisation. Development actors too often, and mistakenly, consider crisis migration as a temporary phenomenon and primarily a humanitarian problem. As has become abundantly clear, people forced to flee and to move to cities more often than not remain there for long or indefinite periods. Municipal and national authorities now need to find ways to integrate them.

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1. Unlike most crisis migration situations, those Iraqis who fled were mainly urban dwellers who went to other cities.
2. FMR issue 34, published in February 2010, is devoted to ‘Adapting to urban displacement’. The various articles describe the often miserable conditions and lack of security that refugees experience in cities, and offer guidelines related to various sectors of humanitarian operations.

Choice and necessity: relocations in the Arctic and South Pacific

Robin Bronen

Relocation – whereby livelihoods, housing and public infrastructure are reconstructed in another location – may be the best adaptation response for communities whose current location becomes uninhabitable or is vulnerable to future climate-induced threats.

Erosion, flooding and sea-level rise threaten the lives, livelihoods, homes, health and basic subsistence of human populations currently inhabiting the Arctic and small islands in the tropical and sub-tropical oceans. Warming global temperatures are causing a loss of the natural barriers that protect coastal communities from sea surges, erosion and floods. Arctic sea ice is decreasing in thickness and extent, causing a delay in freezing of the Bering and Chukchi Seas. Near the shore, pack ice has historically provided a protective barrier to coastal communities but the delay in freezing of the Arctic seas is leaving coastal communities in western Alaska exposed to the autumnal storms while the loss of Arctic sea ice, coupled with thawing permafrost, is causing severe erosion and storm surges.

In the tropical and sub-tropical oceans, coral reefs and mangroves protect coastal communities from extreme weather events and storm surges but coral reefs have been dying or degrading dramatically in the past 20 to 50 years and will continue to do so as temperatures rise. Sea-level rise will also contribute to flooding, sea surges, erosion and salination of land and water.

Climate-induced change and mobility

Because of these disparate climate-induced environmental changes, individuals and communities will be displaced. The climate-change drivers of displacement fall into three categories: extreme weather events, such as hurricanes; the depletion of ecosystem services by slow-onset environmental
change; and the combination of repeated extreme weather events and slow-onset environmental changes that accelerate and are exacerbated by these extreme weather events. Each of these drivers will cause distinct patterns of human migration, which will vary depending on the length of time of the migration and the demographics of the population movement. The relocation of entire communities will occur when the land on which they live becomes uninhabitable and disaster risk reduction strategies are not able to protect populations in place. The Newtok Traditional Council in Alaska and an NGO in Papua New Guinea’s Carteret Islands – communities connected by the Pacific Ocean – are already mobilising their communities to relocate.

Newtok in western Alaska is a Yup’ik Eskimo village located near the Bering Sea where approximately 400 residents reside in about 60 houses. The Ninglick River borders Newtok to the south. No roads lead to or from the community. A combination of extreme weather events, thawing permafrost and decreased Arctic sea ice is accelerating erosion, moving the Ninglick River closer to the village.

Six extreme weather events occurred between 1989 and 2006. These storms repeatedly flooded the village water supply, caused raw sewage to be spread throughout the community, displaced residents from homes, destroyed subsistence food storage, and shut down essential utilities. Public infrastructure that was significantly damaged or destroyed included the village landfill site, barge ramp, sewage treatment facility and fuel storage facilities. The barge landing, which allows for delivery of most supplies and heating fuel, no longer exists, creating a fuel crisis. Salt water is affecting the potable water.

The State of Alaska spent about $1.5 million to control the erosion between 1983 and 1989. Despite these efforts, erosion associated with the movement of the Ninglick River is projected to reach the school, the largest structure in the community, by about 2017.

In 1994, the Newtok Traditional Council (NTC) analysed potential relocation sites to start a relocation planning process. After Newtok’s inhabitants voted to relocate to Nelson Island nine miles to the south, NTC obtained title to the preferred relocation site – which they named Mertarvik – through a land-exchange agreement negotiated with the US Fish and Wildlife Service. The Newtok Planning Group was created in 2006 to coordinate the relocation effort and the NTC unanimously approved a set of guiding principles, based on the Yup’ik way of life, to guide the relocation to Mertarvik. These include:

■ Remain a distinct, unique community – our own community.

■ Make decisions openly and as a community and look to elders for guidance.

■ Build a healthy future for our youth.

■ Our voice comes first – we have first and final say in making decisions and defining priorities.

■ Development should: reflect our cultural traditions; nurture our spiritual and physical wellbeing; respect and enhance the environment; be designed with local input from start to finish; be affordable for our people; hire community members first; and use what we have first and use available funds wisely.

Construction began at the relocation site in 2009, and these guiding principles govern every aspect of the relocation process.¹

The Carteret Islands, comprising seven atolls, are within the jurisdiction of the Autonomous Bougainville Government in eastern Papua New Guinea. As with Newtok, erosion has plagued the Carteret Islands for decades. Despite the construction of sea walls and planting of mangroves to protect against the sea, more than 50% of their land has eroded since 1994. ‘King tides’ inundate the land, creating swamps where malarial mosquitoes breed. Areas that previously
held food gardens are now under water, causing a food shortage. Saline intrusion is destroying the drinking water supply.

In September 2007, the Council of Elders of the Carteret Islands formed an NGO called Tulele Peisa (‘Sailing the Waves on Our Own’). Tulele Peisa developed the Carteret Integrated Relocation Project (CIRP), a community-led relocation model, to coordinate the voluntary relocation of Carteret Islanders to Bougainville Island, 100 kilometres to the north-east. The first group of Carteret Islanders began to relocate in 2009 to Tinputz on Bougainville Island to land allocated by the Catholic Church. The location of the relocation site is critical because Tulele Peisa wants to ensure there is sufficient land for the Carteret families to be economically self-sufficient and have secure food resources. Maintaining access to their traditional fishing grounds is also important so that people can still rely on this food source even though they no longer reside on the Carteret Islands. Working with the host communities – which are culturally, politically and socially different from the Carteret Islanders – has been a critical component of the relocation programme. The CIRP therefore seeks to ensure that the host communities will benefit from the relocation through upgrading of health facilities and schools.

From protection to relocation

The duty to protect arguably extends to responsibility for implementing adaptation strategies. Communities will need a continuum of such strategies and the ability to respond dynamically – from protection in place to community relocation – in order to adapt to climate-induced environmental change. Disaster and hazard mitigation are critical components in order to assess vulnerabilities and develop disaster mitigation strategies where protection in place is possible. Unlike government-mandated relocations associated with infrastructure development projects which are the catalyst for population displacement, there are no standardised mechanisms or criteria to determine whether and when populations need to be relocated due to environmental change. And no method currently exists to determine whether and when a community can no longer be protected in place and must relocate.

Social-ecological indicators can be used to assess vulnerability and guide the design of adaptation strategies for communities and government agencies in order to transition from protection where they are to community relocation. In Alaska, government agencies have proposed using the following indicators: (1) risk to life or safety during storm or flood events; (2) loss of critical infrastructure; (3) threats to public health; and (4) loss of 10% or more of residential dwellings. Ecological factors would include, for example, the rates of erosion and sea-level rise and loss of drinking water due to salination. Extreme weather events which cause mass population displacement are not an appropriate indicator to use to evaluate whether people should be relocated. In the aftermath of an extreme event, most people want to return home and will, unless the land on which they lived no longer exists. In addition communities that have decided that relocation is the only feasible
adaptation strategy will require a governance framework to authorise the expenditure of funds specifically for relocation.

These considerations support the creation of an adaptive governance framework which can respond dynamically to communities’ needs as climate change affects habitability and residents’ safety. A human rights framework is critical to the design and implementation of this governance framework to ensure that relocation only occurs when there are no other feasible solutions to protect vulnerable populations. If human rights protections cannot be realised because of inadequate resources or if governments do not have the technical expertise to carry out some of the tasks related to community relocation and need funding or technical assistance, then support for institutional capacity building through expansion or reform can be a part of the international obligations generated by the recognition of these rights.

**Protection of collective rights**
Climate-induced displacement will affect entire communities whose members will collectively need protection. International human rights conventions, such as the UN Declaration on the Rights of Indigenous Peoples, recognise the rights of peoples collectively and that indigenous peoples have the collective right to the fundamental freedoms articulated in the Universal Declaration of Human Rights and in international law. Like these documents, any human rights instrument that addresses climate-induced population displacement must ensure the protection of collective rights. These rights include the right to relocate as a community, as well as the collective right to make decisions regarding where and how a community will relocate. No human rights protocol currently contains a community right to make these decisions.

For the residents of both Newtok and the Carteret Islands, the right to relocate as a community is the most important right to protect. The residents of each community are making all of the decisions related to the relocation effort to ensure that, despite the enormous loss of connection to the land on which they have each dwelled, they will be able to preserve their cultural heritage and ensure the long-term sustainability of their community.

A human rights instrument responding to climate-induced displacement must also ensure that human rights protections are extended to those living in communities which provide sanctuary for those displaced by climate change. In Papua New Guinea, Tulele Peisa has developed several programmes.
to ensure that host communities are involved in the relocation process, including providing funding for host community infrastructure so that the host community is not burdened by the increase in population.

As climate change renders entire localities uninhabitable, a governance framework based in human rights must be designed and implemented so that communities have the ability to relocate when disaster risk reduction strategies can no longer protect residents in place. In this way, an adaptation strategy can be created that facilitates an effective transition from protection in place to community relocation and that serves as a model for governments throughout the world.

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3. www.idpguidingprinciples.org

Migrants on offshore islands of Bangladesh
Rezwan Siddiqui

Riverbank erosion and the consequent formation of new islands in the Bay of Bengal cause frequent changes in the shape and size of the delta, forcing the inhabitants to migrate frequently. This kind of migration is as old as the history of people living in this region but when the new islands get overpopulated or start to erode, people have to move out to yet more remote islands. With insufficient resources to enable them to move to a better place, they migrate to worse or more vulnerable places — where they become even more vulnerable economically, socially and environmentally than they were before. Cyclones, storm and tidal surges and increased salinity exacerbate their hardships.

Char Nizam Kalkini is a remote offshore island with an area of 3.57 sq km, discovered in the mid-1980s, since which time people started to live there. This island does not even exist on the administrative map. At present around 250 families live on Char Nizam Kalkini, and every year a further 10 to 15 families move to the island. The island is regularly flooded and is extremely vulnerable to cyclones and associated storm surges; there is only one fragile shelter to provide protection. These people are trapped within a circle of bad fortune by their poverty and the natural hazards of the region. The people living on Char Nizam Kalkini are landless families who have lost their houses and lands to riverbank erosion and other natural disasters. Families living here are so poor that they even do not have sufficient assets to move towards towns or cities to better their livelihoods.

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