<table>
<thead>
<tr>
<th>項目</th>
<th>内容</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>【《国際ワークショップ》報告】Legal Issues Faced by Island Nations Threatened by Sea Level Rise</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Gerrard, Michael B.</td>
</tr>
<tr>
<td>Citation</td>
<td>国際琉球沖縄論集 = International Review of Ryukyuan and Okinawan Studies(1): 57-62</td>
</tr>
<tr>
<td>Issue Date</td>
<td>2012-03-30</td>
</tr>
<tr>
<td>URL</td>
<td><a href="http://hdl.handle.net/20.500.12000/30015">http://hdl.handle.net/20.500.12000/30015</a></td>
</tr>
<tr>
<td>Rights</td>
<td></td>
</tr>
</tbody>
</table>
Legal Issues Faced by Island Nations Threatened by Sea Level Rise

Michael B. Gerrard*

In December of 2008, tidal surges during the seasonal high tide period ("King Tide") covered Majuro, an island atoll serving as capital of the Republic of the Marshall Islands. These tides washed out roads, low-lying houses, and other coastal installations, severely damaged freshwater-dependent plant life, and generally caused $1.5 million in damages (about 1% of the national economy). This event was not unique: Majuro, and indeed the entire country, is one of the lowest lying countries in the world, at most sitting only a few meters above static sea level at its highest point. As a result, Majuro has become accustomed to such tidal events every decade or so. However, as carbon emissions continue to increase around the world, sea levels will inevitably rise and tropical weather events will become more numerous and intense, causing flooding events such as the one above to become ever more common. The Marshallese people can respond to flooding events every few years, but they cannot respond every few months; they also are not currently prepared to respond to more intense flooding that may come with rising seas, or even a tsunami. The threats posed to these islands from the ocean are very real, and growing, and it is possible (indeed probable) that life as they know it could become untenable by the end of the century.

The Marshall Islands are just one of several nations facing existential threats to their way of life; several other nations, mostly in the Pacific and Indian oceans, face threats to the habitability of all or most of their territory. These threats raise serious legal questions about the continued viability of these nations as well as protections for individuals who may need to relocate. At Columbia Law School’s Center for Climate Change Law we have been considering whether under these circumstances these nations can continue to exist, in what form, where their citizens can and should move, if at all, how to pay for such preparations, and who can be held responsible. Threatened nations must prepare themselves legally for a future without habitable territory and its complications, and there are resulting diplomatic and political steps each nation could pursue to strengthen their legal standing into the future.

Scientific Summary

Without any remediating activity the Marshall Islands and other low-lying island nations around the world could become uninhabitable in a matter of decades. Sea level rise will be particularly acute in the Pacific and other island regions where increased intensity and severity of weather patterns may overwhelm domestic infrastructure and water supplies, as well as local ecosystems.

* Professor of Columbia Law School
Several people have argued that mitigation should be the main focus of, and priority for, climate negotiations because mitigation will alleviate the necessity of adaptation efforts. However, even complete mitigation will not eliminate the need for adaptive planning. No amount of mitigation will have much affect on the rate of sea level rise for the next approximately thirty years. By the end of the century, the amount of mitigation will have played a crucial role in the amount of sea level rise, but even under the most optimistic projects, there will be a considerable rise in sea levels and in the resulting hazards faced by small island nations.

The impacts felt by these threatened islands are varied. In addition to flooding and coastal erosion, communities could see saline intrusion into their freshwater sources, especially groundwater resources, and more destructive wave activity, especially during major storms. Existing human activities on these islands may exacerbate some of these trends; most notably, coastal construction often relies on dredging and other reef degradation activities, which may aggravate the impacts of rising sea levels.

**Sovereignty and Territory**

Perhaps the most fundamental question that will affect these islands is what happens to the nations themselves if their island territories become uninhabitable. Sovereignty in the international system is of course a source of pride for any society, but it provides more practical benefits as well: membership in the United Nations gives these groups access to international forums at a level not granted to cohesive interest groups; it also gives these nations the ability to negotiate, secure funding for their people, and vote for measure that benefit them in the short and long term. Statehood also gives entities the ability to solicit help from international organizations, including the International Organization for Migration, as necessary. It allows countries to levy taxes on their citizenry and incur debts to finance public projects, and generally grants greater flexibility in long-term financial and societal planning. In short, statehood provides access to privileges that many of the most threatened islands rely upon to provide crucial services to their citizens.

Having established the importance of sovereignty, the question then becomes how such sovereignty can be preserved; the answer to this question involves both legal and equitable considerations. It is very possible that some traditional requirements for statehood (permanent territory and population) may no longer be met by some of these countries; but other nations will probably continue to recognize these nations for equitable reasons (and in fact may be legally obligated to do so), meaning that the indices of statehood can likely be preserved.

If these indices are preserved, it then becomes necessary to think about how they should practically be organized. This might most effectively happen via some ex-situ arrangement, whereby country representatives given full power as national leaders in international law would manage and distribute national resources to a scattered population, or diaspora. In practice, such a situation would necessitate the establishment of a government system, whose main task would be the administration of national assets for the benefit of its people; a so-called trusteeship system. One way to administer this trusteeship could be to establish it under the United Nations Trusteeship system, which has overseen
similar arrangements in the past (albeit with mixed success). The key here would be constant and active engagement with the diaspora and their chosen representatives in administering the system, respecting the sovereignty of the nation ex-situ.

The extent of the resources available to any nations ex situ depends heavily on nations’ ability to continue to access marine territories, which provide critical fishing and mineral rights. As currently set by the Law of the Sea Convention (LOSC), Exclusive Economic Zones (EEZs) extend 200 nautical miles from nations’ low-tide mark. However, the Convention does not naturally delineate permanent boundaries, and so traditionally EEZs would recede along with the coast if sea levels rose. Of more concern to small island nations, substantial marine territory – as much as 40,000 square nautical miles - could be threatened with the abandonment of a single island, because the LOSC clearly disallows marine territory for uninhabitable rocks. This could severely impact revenue sources for island nations, for whom fisheries revenues account for up to 42% of national economies.

Precedent elsewhere may support the artificial preservation (or bulwarking) of islands to preserve existing claims. Japan most famously bolstered Okinotorishma Island from a rock to a full base that serves as a basis for a huge claim of territory to the south. Although this has been repeatedly challenged by other nations, it might be more difficult for such nations to mount a challenge to former inhabitable islands, for diplomatic reasons as well as equitable considerations.

In addition to physical responses to preserve existing land, innovations may also be possible in the definition of baselines and territories. Nations should utilize relevant provisions of LOSC to define their baselines advantageously to avoid any loss of territory even as sea levels rise.

**Protections and Solutions**

If certain small island nations become uninhabitable, their populations will need to relocate somewhere. However, it remains unclear where they would go. Unfortunately, the existing human rights regime, and the patchwork of international protections for displaced peoples, do not provide much direct guidance on this question. Least helpfully, refugee law as established in the 1951 Convention on Refugees probably would not apply to climate migrants (although subsequent clarifying agreements applying to Africa and the Americas might); and there is no direct international obligation for any particular country to take in such migrants. Similarly, protections in the United States and Europe for victims of environmental disasters are temporary, and leave no path to full residency. Human rights law may provide at least an avenue for right assertions, however; the patchwork of human rights standards, including the obligation to respect other nations, protect against human rights violations, and fulfill human rights in other countries, exert at least a legal obligation on large emitters. The issue here however is that human rights obligations are largely unenforceable in practice unless states accept them, taking away some utility (though not all, because of possible political/diplomatic effects) from the possibility of demonstrating human rights violations in the climate context.
Options also exist in international institutions to provide more aid and support to climate-displaced peoples. Traditional institutions that could be integral to this effort include the International Organization on Migration and the United Nations High Commissioner for Refugees. The United Nations Framework Convention on Climate Change (UNFCCC) may also be of potential use in organizing resettlement activities. This is particularly true following the outcome of the 2010 Conference of the Parties in Cancun, which recognized the importance of “measures to enhance understanding, coordination and cooperation with regard to climate change induced displacement...at national, regional and international levels.” The UNFCCC, and more specifically its loss and damage mechanism, could perhaps be used to harness private sector funding and insurance protection for vulnerable parties.

As described above, existing frameworks offer some opportunities to arrange funding and resettlement options for the people of small island nations. However, it is almost universally acknowledged that existing institutions do not, and indeed cannot, provide a perfectly tailored solution to what will be a very difficult set of issues to resolve in the coming decades. In response, some scholars argue that a new international convention is required that would be tailored particularly to the problem of climate migration. These and other proposals vary in their application and administrative structure, but all create refugee-like protections for qualifying environmental victims. Other scholars have suggested instead that reinterpretation and utilization of existing treaties and institutions is the most effective and viable strategy for addressing existing adaptation needs. The best option for some individual nations may be to rely on existing agreements and relationships with potential destination countries that allow migration through other channels and for other reasons or purposes. Domestic immigration laws in certain countries may also be used. The main arguments made by this set of scholars against a new international convention focus on the political difficulty associated with negotiating and getting individual countries’ approval for a new convention; they argue that even if a new convention were approved it would be watered down to the point of ineffectiveness or simply not be adopted by the relevant countries, and are concerned that efforts placed into such efforts will instead detract from more practical efforts to utilize existing channels.

Finally, if resettlement becomes unavoidable, that process must be organized. Preparations should be made far in advance of any actual movement, and should focus on preserving both physical and financial security, and cultural norms. Basic housing and life-supporting infrastructure must be planned. Certain housing obligations and standards exist that would apply to any new community in both international and domestic law. Equally importantly, the political relationships between displaced nationals and host states would need to be resolved, addressing communities’ relationship with host nations as well as their involvement in the planning process. The experience of Alaskan villages’ resettlement in Newtok, where community leaders have successfully led the relocation process (without mandates from outside), as contrasted with less successful relocations of island populations in Chagos and elsewhere, suggests that community involvement in the process is critical for the success of any relocation activity. This involvement is important largely because new communities must do more than provide housing; they should be structured to promote livelihoods and preserve critical familial and community bonds; and community leaders are best placed to structure their resettlement process accordingly.
Accountability and Responsibility

If island populations are forced to resettle, many have argued that they should be able to recover damages for harms received. However, the authority for such litigation remains unclear. There are several possible bases for establishing a substantive violation of international law. An area of possible liability that has garnered particular attention is breach of treaty claims under the UNFCCC. Some have argued that such claims hold promise in large part due to the UNFCCC’s focus on climate harms (recognizing harm that is associated with climate emissions), and its linkage to UN dispute settlement provisions, including its own conciliatory dispute settlement body under Article 14.6.

One particularly interesting possibility would be to base a claim on ocean acidification, which could kill off tropical coral species, deplete fish reserves and potentially further undermine the physical stability of coral atolls. This allows a line of litigation under the LOSC, which could be advantageous because the LOSC offers a compulsory dispute settlement mechanism.

One litigation strategy that has gained at least some traction is to challenge environmental impact assessments for failing to consider climate impacts internationally. The Federated States of Micronesia (FSM) challenged a proposed coal-fired power plant as inadequately accounting for its transboundary climate impacts, with mixed results.

A more difficult question to resolve is which courts could hear such claims and enforce remedies (so where such remedies are possible). The International Court of Justice is empowered by Chapter XIV of the UN Charter as the principal judicial organ of the UN, but with limited powers, including advisory opinions; and as above certain treaties, including the UNFCCC in Article 14.6, offer similarly advisory commissions which could perhaps hear such cases. Access to domestic courts in key major emitting countries is similarly uncertain; the United States famously makes it difficult for foreigners to gain access to U.S. courts under the Alien Tort Claims Act.

Conclusion

To prepare for this changing world, small island governments will also need to take several actions domestically, including updating existing institutions to prepare administratively for sea level rise and possible relocation. Such actions include community adaptation projects (including planting and building defenses against saltwater inundation), educational programs, and more direct sets of incentives for good long-term planning, and against short-sighted or destructive activities. More of this should be done. In addition to community education and development, states will need to address property systems to account for changing landscapes, develop new budget priorities, establish targeted insurance regimes to allow for individual recovery, and above all educate their populations to prepare them for possible future resettlement.

At the same time, because this is fundamentally a global problem, the burden to resolve these issues falls squarely on the world’s largest emitters. Through no fault of their own, entire civilizations could soon be lost to the ocean. They have attempted, and will
continue to attempt, to ease the pain of any transition through legal innovations and active planning—and in those activities this book will hopefully serve as a useful guide—but they will still need help. It is our moral duty as a society to help them prepare for the world to come.

** Gregory Wannier provided invaluable assistance in the preparation of this paper.