

This pdf contains:

Leckie, S. 2009. "Climate-related Disasters and Displacement: Homes for Lost Homes, Lands for Lost Lands." Pp 119-132 in: *Population Dynamics and Climate Change*, edited by J.M.Guzmán, G. Martine, G. McGranahan, D. Schensul and C. Tacoli. New York: UNFPA; London: IIED.

The contents of the full book can be found here:

<https://www.unfpa.org/public/publications/pid/4500>

This pdf was downloaded from www.iied.org

Climate-related Disasters and Displacement: Homes for Lost Homes, Lands for Lost Lands

Scott Leckie

Introduction

Everyone working in the field of climate change knows full well that it will lead to mass displacement. No one, however, knows how large the scale of this eventual displacement will be. Whether 150-200 million people are eventually displaced by climate change, as is most commonly asserted, or if one billion lose their homes, lands and, most important, their financial assets, as several prominent non-governmental organizations (NGOs) have predicted in worst case scenarios, or even if only several million face the reality of forced climate migration, it is clear that displacement caused by climate change will have severe and long-lasting repercussions on human rights, security and land use (Brown, 2008).

If a human rights approach—as opposed to a purely humanitarian or other approach—is taken towards this question, then what is needed in the first instance are laws and policies that, in effect, ensure houses for lost houses and land for lost land. Anything short of that will fail the human rights litmus test. Viewing forced climate displacement as a human rights issue—grounded as this is within the international human rights regime as the principle of *the inherent dignity of the human person*—forces us to take a more caring, practical and concrete perspective on the measures required to adapt to the displacement caused by climate change. This is because a human rights approach to this serious matter implies above all that each and every single person who is forced from his or her home, land or property must have a *remedy* available which respects, protects and, if necessary, fulfils his/her rights as recognized under international human rights law. For there to be a sense of climate justice, climate-displaced persons need to be ensured a home for a home and land for land. This is the basic message that needs to be sent to all states, all intergovernmental organizations and all people of good will the world over.

Fortunately, the human rights dimensions of climate change are receiving ever greater attention. The United Nations Human Rights Council has issued studies on this question. Governments heavily affected by climate change, in particular, Kiribati, the Maldives and Tuvalu, have led the way in raising the human rights

elements of climate change to the higher echelons of international policymaking, and a growing number of civil society groups are playing an ever more direct role within the context of climate change in a myriad of ways (Displacement Solutions, 2009).

The consequences of climate change can affect the full spectrum of civil, cultural, economic, political and social rights, including the right to life, the right to water, the right to freedom of expression, the right to health, the right to food, the right to an adequate standard of living, the right to political participation, the right to information, the right to be free from discrimination, the right to equal treatment, the right to security of the person and a host of other rights. These rights should have a direct bearing on a wide cross-section of climate change decisions made by governments, which in turn will determine the consequences of these decisions and how the impact of climate change will be experienced by individual rights-holders (Displacement Solutions, 2009).

If the focus is solely on the displacement dimensions of climate change, a variety of rights can be found within the international human rights legal code that are particularly relevant to the discussion of climate-change-induced displacement. These are far more extensive than is commonly assumed and include:

- The right to adequate housing and rights in housing;
- The right to security of tenure;
- The right not to be arbitrarily evicted;
- The right to land and rights in land;
- The right to property and the peaceful enjoyment of possessions;
- The right to privacy and respect for the home;
- The right to security of the person;
- The right to housing, land and property (HLP) restitution/compensation following forced displacement;
- The right to freedom of movement and to choose one's residence.

When all of the entitlements and obligations inherent within this bundle of HLP rights are taken together, it is apparent that people everywhere are meant to be able to live safely and securely on a piece of land, to reside in an adequate and affordable home with access to all basic services and to feel safe in the knowledge that these attributes of a full life will be fully respected, protected and fulfilled. The normative framework enshrining these rights is considerable and is constantly evolving and ever expanding. Combining the sentiments of the Universal Declaration on Human Rights, the Covenant on Civil and Political Rights, the Covenant on Economic, Social and Cultural Rights and a range of other treaties, together with a vast array of equally important instruments and interpretive standards, such as the United Nations Committee on Economic, Social and Cultural Rights General Comment No. 4 on the Right to Adequate Housing, General Comment No. 7 on Forced Evictions and General Comment No. 15 on the Right to Water and the UN's Guiding Principles on the Rights of Internally Displaced Persons, the UN "Pinheiro" Principles on Housing and Property Restitution for

Refugees and Displaced Persons of 2005 and many others, leads to a very considerable body of international human rights laws and standards which can be used by governments to build the legal, policy and institutional frameworks required to ensure that any rights related to climate change will be upheld, particularly those involving durable solutions to displacement.

Thus, as far as human rights laws go, there is a reasonably strong basis from which to demand positive and well-planned actions by states and others to develop the means necessary to protect and secure all of these rights for climate-displaced persons. However, when the performance of states and the international community over the past 60 years of the human rights experiment is considered, and when the voices of the hundreds of millions of rights-holders throughout the world who remain as far as ever from enjoying their legitimate HLP rights are heard, it can be quickly surmised that solving the HLP consequences of climate change is going to be far from a simple task. Indeed, the prospects of achieving this are truly daunting and will require leadership, commitment and creativity the likes of which the world has all too rarely seen in recent decades. This is where the necessity of adaptation and human rights must converge and together build a stronger and more vibrant response than has been witnessed to date.

Indeed, the people of the world's 191 nations *already* face a severe, massive and dramatic global housing crisis. Well over one billion people—one in every six human beings alive today—spend their lives in one of the more than 200,000 slums that dot every corner of the planet. If recent predictions hold true, as they almost surely will, two billion or more slum-dwellers can be expected by 2030. This crisis does not bode well for the displacement to come as a result of climate change. If governments, which already have legal obligations to ensure access to adequate and affordable housing for everyone, have all too often failed in achieving these objectives, and if ordinary citizens in Egypt, India, Botswana, Dili, Belgrade, Detroit and elsewhere are increasingly less likely to be able to afford safe, secure and decent homes in accordance with their rights, how can it possibly be expected that things will suddenly improve for climate-change forced migrants, simply because the nature of their displacement and their misery may be of a different, more environmentally-based source?

Beyond the current global housing crisis—which policymakers, states, the United Nations and the donor community continue, in most respects, effectively to ignore—it must be noted that the mass of humanity who have faced forced displacement in past decades—caused by conflict, by investor greed, by poorly planned development, by disasters, earthquakes, floods, tsunamis and more—have lost their homes and lands due to these events. Sadly, far too few have seen either their rights respected or a slow, gradual improvement in their housing and living conditions once the circumstances leading to their displacement have ended or been altered. This must be remembered and placed at the forefront of human-rights-based strategies to address the displacement dimensions of climate change. Whether as a result of dam displacement in China, conflict displacement in Sri Lanka, Iraq or Bosnia, discriminatory displacement by Israel or tsunami

displacement in Aceh, the track record of most countries in treating victims of displacement as rights-holders, in particular HLP rights-holders, is very poor.

There are, of course, some positive highlights, for instance, the increasing recognition of the right of refugees and displaced persons to return to their original homes and the realization by growing numbers of international agencies that displacement (often labelled as involuntary resettlement) should be a last policy option rather than the first one. But overall, the situation and the perspectives taken by too many important and powerful actors remain alarming and constitute yet another serious obstacle which must be taken into account in developing rights-based responses to the displacement caused by climate change.

Building Housing, Land and Property Rights into the Package of Solutions for Climate-induced Displacement

The human rights dimensions of climate change have, indeed, been increasingly recognized and, to a very small degree, acted upon. What has not yet happened, however—with the exception of several valiant efforts that will be described below—is the development of detailed, well-resourced and concerted efforts to find sustainable, rights-based solutions to all of the various types of displacement that are being, and will be, caused by climate change. Given this reality, the questions must be asked: What are the real HLP options for those who are forcibly displaced by climate change in coming years? Can an effective rights-based response to climate-change-induced displacement be encouraged so that it generates *solutions* to the emerging crisis that show humanity's best sides?

The answer to the latter question is a solid 'yes', and to develop such responses there first must be an understanding that not all types of displacement caused by climate change will necessarily have the same consequences. In fact, there are at least five different types of climate-induced displacement, each of which will require different remedies. In the most general of terms, displacement due to climate change is likely to manifest in five primary ways:

Temporary Displacement: People who for generally short periods of time are temporarily displaced due to a climate event such as a hurricane, flood, storm surge or tsunami but who are able to return to their homes once the event has ceased.

Permanent Local Displacement: People who are displaced locally but on a permanent basis due to irreversible changes to their living environment, in particular sea level rise, coastal inundation and the lack of clean water, and increasingly frequent storm surges. This form of displacement implies that localized displacement solutions will be available to this group of forced migrants, such as providing higher ground in the same locality.

Permanent Internal Displacement: People who are displaced inside the border of their country, but far enough away from their places of original residence that

return is unlikely or impossible. This would involve, for example, a family displaced from one region of a country to another region in the country, for instance, from a coastline to an inland town or city.

Permanent Regional Displacement: People for whom displacement solutions within their own countries are non-existent or inaccessible and who migrate to nearby countries willing to offer permanent protection. This would include, for instance, a citizen of Vanuatu or Kiribati migrating on a permanent basis to New Zealand.

Permanent Inter-continental Displacement: People for whom no national or regional displacement solutions are available, and who are able to receive the protection of another state on another continent, such as a Maldivian who migrates to London.

Each of these five categories, of course, has different policy and legal implications for governments, the people concerned and the international agencies tasked with assisting climate-change forced migrants to find durable solutions to their plight. Such responses, which can perhaps most usefully be understood in terms of short- and long-term options, have very important ramifications for those affected and for those involved in ameliorating the displacement crisis caused by climate change. Short-term policy responses, of course, would be similar to those already in place following many conflicts and disasters and would consist largely of shelter programmes, forced migrant camps and settlements and other short-term measures. These, in turn, would need to be augmented by local adaptation measures that preclude similar displacement in the future, e.g., by raising the floor levels of homes, etc. Long-term policy responses would be grounded more comprehensively within an HLP rights framework and would involve remedies such as the provision of alternative homes and lands, compensation and access to new livelihoods, among other policy measures, and should be based on the lessons learned from previous efforts at permanent resettlement. Problematically, the record of treatment faced thus far by those who have arguably already been displaced due to climate change does not bode particularly well for the millions yet to be displaced. As has often and appropriately been reiterated, it is not the poor who are the first to migrate from situations of crisis. Rather, the poor are most likely to be the most vulnerable victims of climate displacement, given their frequent inability to migrate in the event this becomes necessary due to the financial and other constraints they may face. The poor are always the ones left behind. Will this be allowed to occur again in the context of climate change?

Of the most well-known cases of what are seen as climate-change-induced displacements—including the Carteret and other atolls (Tasman, Mortlock and Nugeia) in Papua New Guinea, Lateu village in Vanuatu, Shishmaref and other villages in Alaska (United States) and Lohachara Island in the Hooghly River in India—none have thus far been very successful in resettling those displaced, and,

in all instances, many of the human rights of those affected are clearly not subject to full compliance. If there was ever a warning, it is in the consequences now faced by those already displaced due to climate change. Resources are sorely lacking, governmental and international agency responses thus far have been exceedingly weak, and, clearly, a sense of resignation is widely apparent within the institutions that could actually do something positive for climate-displaced persons.

At the same time, work is emerging in countries that is, at last, beginning to highlight the displacement dimensions of climate change and the solutions required to deal with it. Some of this work is truly extraordinary and worthy of all types of support—financial, political, solidarity and moral. Several of the more interesting developments along these lines include the following initiatives in Papua New Guinea, Tuvalu and Bangladesh:

The Integrated Carterets Relocation Programme of Tulele Peisa (Papua New Guinea) and the Bougainville Resettlement Initiative

The work of the group Tulele Peisa (“Riding the Waves on Our Own”) in Papua New Guinea (PNG) is truly path breaking and worthy of close inspection by anyone concerned with finding solutions for climate-displaced persons (see the Tulele Peisa website: www.tulelpeisa.org). Led by the dynamic Ursula Rakova from the Carteret Islands, Tulele Peisa has set out to find permanent housing, land and property solutions for the 3,000-strong population of the Carterets on nearby Bougainville Island. When the national Government of PNG and the Autonomous Provincial Government of Bougainville decided several years ago to resettle those from the Carterets and other atolls on Bougainville, many expected the relevant governmental bodies to effectively manage this process, including the identification and allocation of sufficient land on Bougainville to resettle those fleeing their atolls. After a frustrating period of inaction—which included the still unexplained non-expenditure of 2m Kina (+/- US\$670,000) that had been allocated for these purposes under the national PNG budget—Tulele Peisa was founded with a view to actually finding HLP solutions for those to be displaced.

Working against the odds and with very limited financial resources, Tulele Peisa thus far has been able to amass some 300 acres of land on Bougainville, most of which has been donated by the Catholic Church for the purpose of resettling a portion of the Carteret Islanders. More land is obviously needed, but an important start has been made in developing the methods required to provide sustainable HLP solutions to the atoll dwellers. Displacement Solutions (DS) has been working closely with Tulele Peisa since 2008 and, through its Bougainville Resettlement Initiative, has been seeking funds to support the work of the organization. DS was also involved in putting together the components of what would have been the largest land purchase to date for the exclusive purpose of resettling climate-displaced persons. Working with one of the main private landowners on Bougainville, DS put in place a plan to assist in the sale of some 7,000 acres of private land

to the Autonomous Government of Bougainville on the condition that the land—once it re-entered the public domain—would be set aside for the resettlement of the Carteret, Tasman, Mortlock and Nugeria Islanders. (A detailed description of this process is available at the DS at work section of the website: www.displacementsolutions.org.) Suffice it to say, neither local nor national government funds were forthcoming, despite the allocation of monies within the budget that could have been used for this purpose, and the private land was then sold to a foreign developer who plans to use the land for tourism and possibly agriculture. While it is still hoped that the developer will set aside a portion of the land for use by atoll dwellers, it is clear that a golden opportunity for finding land solutions for some of the first climate-displaced persons was lost.

Nevertheless, despite this and other setbacks, Tulele Peisa continues to work diligently on behalf of the Carteret Islanders to find viable land and livelihood options for them on Bougainville. With more than 96 per cent of Bougainville still under customary land ownership, finding available land for the purpose of resettlement has proven extremely challenging.

What to do about the people of Tuvalu?

As is well known, few of the countries worst affected by climate change are under as dire a threat as Tuvalu (McAdam and Loughry, 2009). Unlike the atoll dwellers in PNG, who at least can be resettled on Bougainville (which, of course, is within the same country as the atolls), and a similar but less promising situation in Kiribati which, according to the government official responsible for climate change adaptation, sees its largest atoll of Kiritimati as “our version of Bougainville as far as resettlement is concerned”, Tuvalu’s 10,000 inhabitants have no such domestic options available to them. It is becoming increasingly clear that third-country resettlement is in all likelihood the only viable alternative available to the population. At the moment, however, neither Australia nor New Zealand has expressed a willingness to integrate the entire population of Tuvalu into their own territories, although both countries have in place immigration programmes for a small number of Tuvaluans each year.

The land loss situation in Tuvalu is so dire, in fact, that the Prime Minister, Apisai Ielemia, issued a formal request to the Government of Australia in 2008 to cede to Tuvalu a small piece of territory for the purpose of re-establishing Tuvalu on a minute portion of what is now Australian territory. Needless to say, Australia was hesitant to support this request. But in response to the Federal Government’s reluctance, and in an act of remarkable islander solidarity, representatives from the Torres Strait Islands in the north of Australia unofficially offered Tuvalu use of one of its islands to re-establish itself there. Could this be an option for Tuvalu or other islanders as things move from bad to worse?

There may be hope yet, given that Australia took in well over 200,000 immigrants from around the world in 2008, clearly proving the capacity of the regional superpower to incorporate large numbers of new arrivals every year. The recently

developed Pacific labour programme in Australia is seen by many as a precursor to a larger plan down the road. This programme entitles a small number of Pacific Islanders to work in Australia within the agricultural sector and will bring ever larger numbers of Tuvaluans to its shores. At another level, in June 2009, a detailed presentation will be made in Brisbane, Australia, by a leading Tuvaluan policy analyst advocating the full-scale resettlement of the inhabitants of Tuvalu to Australia; details of this plan, however, are not yet available. Many options are under discussion now, but nothing is yet clear about the future of Tuvalu as a nation and the collective future of its citizens. Countries often come to the aid of other countries when they are illegally occupied or otherwise under existential threat. Will nations come to the aid of Tuvalu and secure its sovereignty or will the states of the world let one of their own drown forever beneath the sea?

Bangladesh: the Climate Refugee Alliance

Although the Pacific and Indian Ocean island nations receive the lion's share of attention in discussions about climate change and displacement, no country will actually be harder hit in terms of pure population numbers than Bangladesh. Already severely affected by land scarcity, overcrowding and ever-growing slums, Bangladesh has begun to witness climate-induced displacement across much of its coastline. The recent emergence of the Climate Refugee Alliance, a grouping of affected communities assisted by the Coastal Resource Centre, is a hopeful sign that more concrete moves are under way to find viable HLP options for those most heavily affected. Among other things, the Alliance has pressured the Government to set aside state land for the exclusive purpose of resettling what are being labeled 'climate refugees'. The Alliance has begun to address questions of land purchase and acquisition and the development of community land trusts which may hold promise for the millions who will be displaced due to the multiple effects of climate change. Things do, however, appear to be going from bad to worse in the affected areas, as this e-mail message from Mohammed Abu Musa of the Coastal Resource Centre sent on 29 May 2009 clearly indicates:

There is increasing influx of climate refugees in Khulna city. We assume that several thousand have already reached the city in the last 3 days (26-28 May '09). Room rent in slums and low cost houses has been increased by 50% and all available space has been booked in advance by the relatives (living in the city) of the people stranded in tidal saline water. We fear that the extreme poor will not be able to get any room.

Four Practical Recommendations for Consideration

If permanent climate-induced displacement takes place without sufficient global attention, state intervention and the resources required to address it properly, the impact of climate change will be far worse than anyone could possibly wish. Not

only will the impact upon local economies be dramatic, but severe asset losses, combined with dramatic increases in the world's slum and urban populations, the loss of life and livelihood, health declines and severe crises within the HLP sector will all contribute to making the problems worse long before they become better. As a start, it must be noted that the typical costs associated with involuntary resettlement in development contexts will apply, and that these are very expensive and equally resource-intensive. As much as resettlement efforts have often failed over the past decades, the situation is likely to be even worse as a result of climate change. What then can be done to improve the human rights prospects of those affected by climate change, and what specific areas of concern demand greater attention by citizens, states and the international community? While the list of possible actions is long, the following four areas require attention in the near term in order to build the capacity to better address the human rights implications of climate change:

1. The need for adequate domestic institutional frameworks to protect the rights of climate-displaced persons

When speaking about the rights of those displaced by climate change, it is first necessary to clarify which public institutions within affected countries are legally, or at least politically, responsible for resolving their plight. In determining this, forced migrants can reasonably be expected to ask several very straightforward questions:

- Where do I turn for assistance? On which door do I knock for relief and remedy?
- What rights do I have to a new home or new land?
- How long will I be homeless?
- What laws and rules are in place to ensure the enforcement of my rights?
- Am I entitled to compensation or reparations?

In far too few countries—in fact, in virtually none—can these and related questions easily, adequately and quickly be answered by public authorities. This is not to condemn, but rather to simply point out that good planning, good institutional frameworks, good laws and good policies are all required for successful adaptation to current and future climate change challenges. Human rights law and the growing number of judicial decisions on HLP rights, in particular, show that *planning*—that seemingly most innocuous dimension of governance—is, in fact, one of the most important roles any responsible government can play in taking HLP and other rights seriously. In fact, it could be argued quite convincingly that adherence to the most important human rights treaties, laws and principles obliges states to plan appropriately. Indeed, human rights laws require states not only to plan, but to carefully diagnose domestic human rights challenges, to develop laws and policies adequate to address these and to ensure that remedies of various sorts are available to individuals and communities unable to enjoy, or who are prevented from enjoying, the full array of human rights protections.

2. The need for adequate international institutional frameworks to protect the rights of climate-displaced persons

The painful lack of a specific international institutional framework with a recognized mandate to protect the rights of climate-displaced persons has been the subject of a growing global debate on how to ensure that forced migrants no longer fall through the cracks of the international protection and/or humanitarian regimes. Some have suggested that the 1951 UN Refugee Convention and its 1967 Protocol be structurally revised with a view to expanding the UN High Commissioner for Refugees' (UNHCR) mandate to include assistance to and protection of climate-displaced persons. Extending the coverage provided within the Refugee Convention, however, is far from assured, and there is considerable reluctance both within UNHCR and, in particular, from the donors that support it to make the giant institutional leap towards providing structural assistance to climate-displaced persons. At the same time, would it truly be wiser to attempt to build a new global institution to be in charge of climate migrants rather than to allow other existing international organizations concerned with migration or other issues—but which do not necessarily ground their work in human rights norms—to bear responsibility for the huge and long-term tasks associated with protecting the basic rights of climate-displaced persons? The answer is 'no'.

Rather, the time has come for states and UNHCR to begin systematically to examine the implications of incorporating these issues into both their legal mandates and their day-to-day operations. In doing so, UNHCR would surely work closely with states, other United Nations and international organizations and with NGOs and the migrants themselves in pursuing *solutions* that are grounded deeply in the spirit and letter of human rights. And yet while there is surely some support both within UNHCR and outside the organization for doing so, convincing donors and the leadership of UNHCR to embrace these challenges will be a major undertaking, which by no means is assured of success. If the history of the involvement of UNHCR in issues of internally displaced persons (IDPs) is anything to go by, it could take years before climate-displaced persons find a home within the organization, and a delay such as this simply will not do. UNHCR is the right institution to protect climate-displaced persons, but to do so it must act now, together with donors, to broaden its mandate in a rapid and fully resourced manner. Changing the 1951 UN Refugee Convention might not work, but suggesting a new Protocol to the Convention may well yield results.

3. Facilitating the evolution of international law

Another useful step that should be pursued is the development of a comprehensive international standard on the rights of climate-displaced persons. Several recent initiatives have made important contributions to the thinking required to adopt a new standard. The Declaration of the Fourteenth SAARC (South Asian Association for Regional Cooperation) Summit called for adaptation initiatives and programmes; cooperation and early forecasting, warning and monitoring; and sharing of knowledge on the consequences of climate change in order to pursue

climate-resilient development in South Asia. In a more targeted manner, the Malé Declaration on the Human Dimension of Global Climate Change, adopted on 14 November 2007, makes frequent reference to human rights principles, including the fundamental right to an environment capable of supporting human society and the full enjoyment of human rights. This Declaration urges participants at the Bali Conference of the Parties of the UN Framework Convention on Climate Change to pay greater attention to the human dimension of climate change. It also seeks the increased engagement of the UN Office of the High Commissioner for Human Rights on climate change issues.

One important outcome of the increased attention to the human rights implications of climate change would be the adoption of a new international standard on these issues. Texts developed in recent years—the Malé Declaration, among others—provide a useful starting point for further work in this regard. Such a standard, or perhaps even a composite group of standards which together would constitute international principles on the relationship of climate change and human rights, could, if formulated properly, be of considerable assistance to national governments seeking guidance on addressing these challenges, as well as to the international community and individual rights-holders in determining where rights and responsibilities begin. It would be equally important to determine precisely what form such a new standard might take. Some have suggested simply amending the Refugee Convention. Others have proposed additional options including treaties and other binding law. The experience of the past decade, as it relates to the treatment of all displacement issues by the international community, at least as far as new standards are concerned, clearly shows that there has been an overwhelming preference for developing new soft law standards (guidelines, guiding principles, basic principles, general comments and so forth) rather than entrenching rights of this nature—which in many respects are HLP rights—into new binding treaties. For instance, with regard to the question of internal displacement—which is very relevant to the climate change debate—the importance of the UN’s Guiding Principles on the Rights of Internally Displaced Persons (1998), the UN “Pinheiro” Principles on Housing and Property Restitution for Refugees and Displaced Persons (2005) and the Inter-Agency Standing Committee’s Operational Guidelines on Human Rights and Natural Disasters (2006) is apparent, but none are as legally strong as proponents of the rights of IDPs may wish. At the same time, it must be reiterated that these and similar texts do achieve results that are greater than their drafters may have ever envisaged.

Understanding this, therefore, two routes of action could be chosen. One could be the creation of a new standard, similar to those adopted during the past ten years. This process can be achieved reasonably rapidly without the type of resources and political anxiety that so often accompanies the treaty-making process. In fact, achieving recognition of such a standard—perhaps called the UN’s *Human Rights Guidelines On Climate Change*—could be quite fast, and, if the resources and interest are apparent, there would be no reason why such a standard could not be approved either at the next climate talks in Copenhagen in 2009 or by the UN General Assembly or

UN Human Rights Council even sooner than that. A second option, a new treaty, certainly could also be a possibility, though this would demand time, effort and resources of a significantly higher order.

4. The land challenge: Land banking and expropriation as fundamental domestic remedies

Finally, governments throughout the world should be encouraged to review public land holdings and domestic legislation as they relate to questions of expropriation of land for public purposes. It is widely agreed that climate-change-induced displacement, among other things, will put immense pressure on cities and the slums that surround them. Indeed, without appropriate adaptation measures, the world's slums will grow at a far faster rate and, in turn, create health, social, economic and other crises far worse than many would now predict. To assist in reducing these pressures, governments everywhere should begin identifying unused land for possible future use to resettle people and their communities should this become necessary. This is a complex issue with innumerable dimensions, but few governments are structurally unable to at least begin the land identification process as a part of the planning process related to the challenges of climate change.

In summary, when people are threatened with the loss of their homes, lands and properties due to climate change, there is a need to be realistic and to acknowledge that this is not solely about circumstances such as those facing the Maldives, Kiribati, Tuvalu and other small island states. Indeed, only a small fraction of likely future displacement will occur in small island states, and, even here, perhaps less than one million people will require permanent regional or inter-continental resettlement. This is a tragedy for all of those islanders who lose their homes, but it is a tragedy of a scale that can be managed sustainably and within a human rights framework.

The vast majority of eventual displacement due to climate change is set to occur along vulnerable coastlines in some of the world's poorest countries and in inland areas that are increasingly made inhospitable due to steadily worsening climate events such as droughts, floods and storms. None of this in any way detracts, of course, from the fact that small island nations remain—under human rights laws—responsible for securing the rights (including HLP rights) of all citizens and lawful residents within their territories, up to *the maximum of their available resources*, and that the international community, in turn, has *responsibilities to protect* when states are no longer willing or capable of protecting basic rights, including HLP rights.

What is unique and particularly tragic with respect to small island nations is the unimaginable prospect not only of displacement on a massive scale, but the possibility that entire nations may become completely incapable of sustaining populations, and, in some dire instances, may eventually cease to exist all together. This is surely one of humanity's greatest tragedies, a preventable wrong which simply must affect all the world's citizens. Using the power of human rights to find housing, land and property solutions in all countries affected by climate change is one means by which this challenge can most effectively be met.

References

- Bogardi, J., and K. Warner. 2009. "Here Comes the Flood." *Nature Reports Climate Change* 3: 9-11.
- Brown, O. 2008. "The Numbers Game." *Forced Migration Review* 31(October): 8-9.
- _____. 2007. "Climate Change and Forced Migration: Observations, Projections and Implications." Background paper prepared for the *Human Development Report 2007/2008: Fighting Climate Change: Human Solidarity in a Divided World*. Human Development Report Office Occasional Paper. No. 2007/17. New York: UNDP.
- Christian Aid. 2007. *Human Tide: The Real Migration Crisis*. A Christian Aid Report. London: Christian Aid.
- Corlett, D. 2008. *Stormy Weather: The Challenge of Climate Change and Displacement*. Sydney: UNSW Press.
- Displacement Solutions. 2009. *Climate Displaced Persons and Housing, Land and Property Rights: Preliminary Strategies for Rights-based Planning and Programming to Resolve Climate-induced Displacement*. Geneva: Displacement Solutions.
- Forced Migration Review* 31 on Climate Change and Displacement, October 2008.
- Friends of the Earth Australia. 2007. *A Citizen's Guide to Climate Refugees*. Fitzroy: Friends of the Earth Australia.
- Friends of the Earth International. 2007. *Climate Change: Voices from Communities Affected by Climate Change*. Amsterdam: Friends of the Earth International.
- Global Humanitarian Forum. 2009. *Human Impact Report: Climate Change: The Anatomy of a Silent Crisis*. Geneva: Global Humanitarian Forum.
- Inter-Agency Standing Committee. 2006. *Protecting Persons Affected by Natural Disasters: IASC Operational Guidelines on Human Rights and Natural Disasters*. Washington, D. C.: Brookings-Bern Project on Internal Displacement.
- International Council on Human Rights. 2008. *Climate Change and Human Rights: A Rough Guide*. Versoix, Switzerland: International Council on Human Rights.
- International Institute for Environment and Development (IIED). 2007. *Reducing Risks to Cities from Climate Change: An Environmental or a Development Agenda*. Environment and Urbanization Brief. No. 15. London: IIED.
- Leckie, S. 2003 "Where It Matters Most: Enforcing International Housing Rights Nationally." Ch. 1 in: *National Perspectives on Housing Rights*, edited by S. Leckie. The Hague: Kluwer International Publishers.
- Locke, J. T. 2009 "Climate Change-induced Migration in the Pacific Region: Sudden Crisis and Long-term Developments." *The Geographical Journal* 175: 1-10.
- Lonergan, S., and A. Swain. 1999. *Environmental Degradation and Population Displacement*. Global Environmental Change and Human Security (GECHS) Project Aviso Research Report. No. 2. Victoria, B. C., Canada: GECHS.
- McAdam, J., and M. Loughry. 30 June 2009. "We Aren't Refugees." *Inside Story: Current Affairs and Culture*. Australian Policy Online. Melbourne: Australian Policy Online. Website: <http://inside.org.au/we-arent-refugees>, last accessed 19 August 2009.
- Mimura, N., et al. 2007. "Small Islands." Ch. 16 in: *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, edited by M. L. Parry, et al. 2007. Cambridge: Cambridge University Press.
- Myers, N. 1993. "Environmental Refugees in a Globally Warmed World." *BioScience* 43(11): 752-761.
- Norwegian Refugee Council. 2008. *Future Floods of Refugees: A Comment on Climate Change, Conflict and Forced Migration*. Oslo: Norwegian Refugee Council.

- O'Brien, K., et al. 2008. *Disaster Risk Reduction, Climate Change Adaptation and Human Security*. A report prepared by the Global Environmental Change and Human Security (GECHS) Project for the Norwegian Ministry of Foreign Affairs. GECHS Report 2008:3. Oslo: University of Oslo.
- Oxfam. 2009. *The Right to Survive in a Changing Climate*. Oxford: Oxfam.
- Renaud, F., et al. 2007. *Control, Adapt or Flee: How to Face Environmental Migration*. InterSecTions Publication Series of UNU-EHS, No. 5/2007. Bonn: United Nations University and Institute for Environment and Human Security (UNU-EHS).
- Representative of the Secretary-General on Human Rights of Internally Displaced Persons. 2008. *Displacement Caused by the Effects of Climate Change: Who Will be Affected and What are the Gaps in The Normative Framework for their Protection?* Background paper. Geneva: Office of the UN High Commissioner for Human Rights.
- Revi, A. 2007. "Climate Change Risk: An Adaptation and Mitigation Agenda for Indian Cities." Paper prepared for the meeting on Building for Climate Change Resilience, The Rockefeller Foundation, Bellagio, Italy, 8-13 July 2007.
- United Nations. 2009. *Report of the High Commissioner for Human Rights on the Relationship between Climate Change and Human Rights (A/HRC/10/61)*. New York: United Nations.