Beth Ferris welcomed participants to this informal roundtable discussion, noting that individual researchers, government agencies and organizations are increasingly looking at the relationship between climate change and displacement. Researchers and policy-makers from different disciplines are writing about the relationship, bringing different perspectives and expertise to the discussion and that it is good to learn what others are doing – even when it means moving out of our silos and comfort zones. The purpose of the roundtable is to simply share information on current and planned research.

The discussion was wide-ranging and included a combination of reporting on research initiatives underway as well as discussion of several common themes. Although the discussion ranged back and forth, these are reported separately below.

**What’s going on?**

**Lindsay Lowell** reported on the work of a project based at Georgetown University under Susan Martin’s direction which had been funded by the German Marshall Fund. This project had looked at climate change and displacement from three perspectives: migration, humanitarian response and the environment. A series of meetings were organized, short site visits (Senegal, Bangladesh and Mexico) were undertaken and a series of reports were published. ([http://www.gmfus.org/cs/publications/publication_view?publication.id=650](http://www.gmfus.org/cs/publications/publication_view?publication.id=650)).

The project found that climate change-induced migration is likely to take different forms; most displacement is likely to be internal rather than cross-border; and there are gaps in legal frameworks to respond to such migration. While this project with the German Marshall Fund has been completed, Susan is talking with the MacArthur Foundation about a possible three-year project to look at migration stemming from broad environmental changes as well as natural disasters with the aim of moving toward a) developing Guiding Principles for those displaced by climate change which affirm the rights of migrants; b) examining existing practice, and 3) testing out the ideas through a process of regional consultations.

**Greg Wannier** reported on initiatives being undertaken at the Columbia School of Law on legal issues arising from climate change-induced displacement. In particular a conference entitled “Threatened Island Nations: Legal Implications of a Changing Climate” will be held from 23-25 May in New York and will focus on some of the legal issues arising from the Pacific islands, including such issues as continuing statehood and maintenance of maritime zones for states facing inundation from sea level rise; resettlement rights and practicalities of population displacement; liability for climatic harm in judicial forums; the utility of responsibility regimes under current law; and the role for a new convention on climate displacement. The initiative for this conference comes from the Marshall Islands. (For more information or to participate in the conference, contact: gregory.wannier@law.columbia.edu.) The Law
School also has an interdisciplinary team working on adaptation in the islands, including issues such as housing and infrastructure.

Picking up on the legal issues, Beth Ferris reported on a recent conference at Bellagio organized by UNCHR which looked at the gaps in protection arising from climate change-induced displacement. The meeting had commissioned 4 papers (to be published by UNHCR. Contact Agnes Hurwitz: Hurwitz@unhcr.org) on issues arising from current climate change negotiations (written by Koko Warner), rising sea levels of Pacific Islands and the risk of statelessness (written by Susin Park), legal standards in the context of climate change (written by Jane McAdam) and protection gaps (Roger Zetter). Beth reported that UNHCR will bring the results of the Bellagio conference to a major conference in Oslo in June 2011 and perhaps eventually to an inter-ministerial meeting in December 2011. The paper Beth prepared for the Bellagio meeting (http://www.brookings.edu/papers/2011/0228_cc_displacement_ferris.aspx) focuses on lessons learned from development-forced displacement and resettlement for planned relocation from areas rendered uninhabitable because of climate change.

Saliha Dobardzic noted that the Global Environment Facility is working on two funding mechanisms: the LDC and the Climate Change funding, but the facility has no mandate to finance migration.

Alex de Sherbinin reported that a November 2010 conference in Bellagio had focused on lessons learned from development induced displacement for possible relocation from climate change – not only on planned relocation owing to climate change impacts but also those due to large scale infrastructure or development activities in the name of adaptation or mitigation (e.g., large dams for water storage, water transfer schemes, or soya/jatropha/sugar cane for biofuels production). The results of this Bellagio meeting are presently being drafted in an article for publication later this year.

Alex also reported on efforts to map hot spots by looking at climate change scenario data – going beyond analysis of low elevation coastal zones. See for example:

In Search of Shelter:

Alex de Sherbinin, Koko Warner, and Charles Ehrhart, "Casualties of Climate Change" (2011), Scientific American. This includes maps for three case studies, with additional ones available at (hopefully will be up soon): http://www.scientificamerican.com/jan2011/migrations

Low Elevation Coastal Zone population, urban population, and land area Estimates (an update of this using a variety of sea-level rise bands will be ready by the end of 2011):
http://sedac.ciesin.columbia.edu/gpw/lecz.jsp

He requested input on the utility of mapping for decision making – in terms of resource allocation, for planning by the international community, or for other applications. What kind of mapping is useful?

Mark Silverman noted that a recent study on areas of international humanitarian law where further work is needed identified the protection of the natural environment as one such area. While this is
currently part of customary international law, it is also an area where an international cooperation scheme might be needed, as in when new systems for cleanup are needed.

Kathleen Newland reported that one area of focus for the work of the Migration Policy Institute is on the relationship between climate change, displacement and global governance. Global governance includes more than legal frameworks, but also includes bilateral and regional agreements, adaptation and humanitarian response, which brings up the age-old discussion of the relationship between relief and development.

Daniel Garrett noted two recent articles in *Nature* which demonstrate an improved ability to separate out the climate change signature from extreme events which otherwise must be considered to have multi-causal underpinnings. One explores the relationship between the 2003 European heat wave and climate change [http://www.nature.com/nature/journal/v432/n7017/full/nature03089.html](http://www.nature.com/nature/journal/v432/n7017/full/nature03089.html). The second looks at the relationship between climate change and increased precipitation in North America [http://www.nature.com/nature/journal/v470/n7334/full/nature09763.html](http://www.nature.com/nature/journal/v470/n7334/full/nature09763.html). He noted that an early warning capacity already exists to some extent for extreme events, in so far as the MET in Britain had been able to predict the Pakistani deluge roughly ten days in advance, and NOAA had about a 7 day lead time. The problem is that there is no robust system of disseminating this information internationally and helping to get it acted upon. Finally he pointed out that new studies on the potential for the Green Economy, such as the one recently published by the UNEP, [http://www.unep.org/greeneconomy/](http://www.unep.org/greeneconomy/) suggests that the transition to a green economy could lead to many attractive possibilities for business and as such help avoid a total dependence on governmental financing of such initiatives. As applied to the grassroots level moreover, whatever the form of financing, return on investment promises to be good.

The International Organization for Migration is organizing workshop on "Climate Change, Environmental Degradation and Migration" on 29-30 March. The workshop is being held in the framework of IOM’s International Dialogue on Migration (IDM) which in 2011 has the overall theme of "The Future of Migration: Building Capacities for Change“. The purpose of the workshop is to explore the policy, research and technical capacities that will be needed to manage the impact of climate change and environmental degradation on human mobility. Specifically, it aims to:

• Bring together governments to exchange their experiences of and responses to the realities of environmentally-induced movements in their respective societies and to identify effective practices for minimizing vulnerability;
• Provide the IOM membership with the opportunity to discuss different dimensions of capacity building required to manage the multifaceted impact of climate change and environmental degradation on human mobility;
• Exchange innovative ideas for multi-stakeholder partnerships at all stages of the migration process including strategies for a comprehensive approach to ensure effective protection and assistance to environmental migrants.

Niels Harild reported that the World Bank has a long history of engagement with both development-induced displacement and more recently with social dimensions of climate change. His team leads the Bank’s Global Program on Forced Displacement (GPFD) which looks at the development challenges of forced displacement, particularly at housing and property issues, livelihoods, access to service delivery and governance at the local level. Over the last couple of decades, the Bank has been involved in close to 100 operations addressing developmental aspects of displacement mostly for IDPs but also for refugees. While the GPFD is concentrating its efforts on displacement forced by conflict violence and
persecution, the GPFD is keeping an open eye on other types of forced and none forced displacement for the purposes of cross learning being very mindful of the different contexts. These different types of displacement include, sudden-onset natural disasters, climate change induced displacement, development-forced displacement, what has been called survival migration, and migration and development.


Stacey White reported on a study carried out by the Feinstein Center at Tufts University and Humanitarian Futures on behalf of humanitarian practitioners which explores future humanitarian challenges posed by climate change. In particular she noted that the full case studies contain research beyond that reported in the executive summary. (https://wikis.uit.tufts.edu/confluence/display/FIC/Humanitarian+Horizons+-+A+Practitioners'+Guide+to+the+Future)

Stacey also reported that together with the World Bank, CSIS will be organizing an event on 23 May 2011 looking at the use of cost-benefit analysis for disaster risk reduction.

The UK government through its Foresight Project (directed by Richard Black) has commissioned 12-15 studies from a multidisciplinary perspective, ranging from geophysical to economic/social dimensions to provide a platform for advising the UK government. The results should be made available later this year

The Foresight Project on Global Environmental Migration

Hongyuan Yu reported on his project to survey Chinese and US policy leaders on climate change and security. In particular, he is interested in the question of political instability resulting from climate change. Climate change could lead, for example, to border conflicts between countries and to patterns of irregular migration. His study will be completed by the end of 2011.

Beth Ferris reported that Jane McAdam (University of New South Wales) is finishing up a book on climate change and forced migration based on research in Tuvalu, Kiribati, and Bangladesh which focuses on legal frameworks. She has also written an article in the International Journal of Refugee Law and is embarking on a new long term project looking at external relocation in the context of the Pacific Islands. Roger Zetter (Refugee Studies Centre, Oxford) is starting a two year research project on five countries, looking at the experience of those affected by environmental change in the context of protection (http://www.rsc.ox.ac.uk/PDFs/EnvironmentalDisplacementRSCExecSum.pdf). Koko Warner (UN University) is working with Care International and other partners on a three year project looking at the relationship between rainfall variability, food security/livelihoods/ and mobility to be based on 9 case studies. They plan to complete field work by February 2012 and have the results completed for the Rio+20 Summit.
Scott Leckie at Displacement Solutions has been working since 2009 on The Climate Change and Displacement Initiative designed to find practical and viable housing, land and property solutions for climate displaced persons. Through rights-based and innovative policy and strategy development, targeted workshops, network building, awareness raising, publications, original research and other activities, the Initiative seeks both to inform the world of the massive scale of displacement which will affect forced climate migrants in the years and decades to come, and to advocate for rights-based solutions to this form of displacement, both within the nations affected and through regional and international resettlement initiatives. One part of the initiative is to examine the precise scale and circumstances confronting present and future forced climate migrants within an initial focus on five countries: Bangladesh, Kiribati, Maldives, Papua New Guinea and Tuvalu.

Michael Cernea reported that Brookings will be looking, among other aspects, at the displacement and resettlement impact of investments in mitigation of global warming and climate change effects, which are increasing worldwide. Many of these investments are incremental to those being made anyway for growth and development, and therefore the resulting displacement will add to the high number of people displaced worldwide by development interventions. Nonetheless, it can be noted that no serious concern for addressing the likely displacement associated with mitigation investments is present in the current climate change literature.

Themes emerging in the discussion

- The difficulty of ascertaining causality: Sometimes factors driving migration are attributed to climate change while they are actually the result of bad development policies. “Ninety percent of the time,” one participant remarked, “economic or family factors – rather than climate change – drive migration.” Moreover, the question was raised about the importance of ascertaining causality. “Does it matter,” one participant asked, “if the drought which is affecting Somalis is the result of climate change or development policies or cyclical variations? Do Somalis displaced by climate change have any greater claim on protection, assistance or attention than those displaced by environmental degradation? Poverty? Conflict?”

- While sudden-onset natural disasters are receiving increased attention from those looking at climate change and displacement, there is great uncertainty about how to deal with slow-onset disasters and about their relationship to climate change. Some expressed concern that the question of responding to slow-onset disasters will be swept into the humanitarian fold – at a time when the humanitarian system doesn’t respond very well even to sudden-onset disasters. Humanitarian agencies should focus on the sudden-onset disasters while slow-onset disasters should be looked at through a development lens.

- A key factor which needs further attention is the question of livelihoods which become more tenuous as a result of climate change. For example, we need to consider how the issue of livelihoods can be addressed more purposefully through migration.

- There is a need to assess how existing knowledge can be used. “We’re really good at reinventing the wheel and it’s easier to invent new guidelines than to implement the ones we have,” one participant commented. “But it’s important to remember that we’re not starting from scratch.” For example, the guidelines developed by the World Bank and other development banks should be analyzed to see how they can be adapted to relocations necessary because of climate change.
• Much of the existing knowledge about migration is simply not taken into account in discussions of possible climate change-induced displacement. For example, (voluntary) migration undertaken at the present time can be a strategy which actually reduces (forced) displacement in the future.

• Leaving aside the issue of the causes of displacement and their relationship to climate change, there are serious humanitarian concerns. The number and intensity of natural disasters is increasing and is causing stress on the capacity of the international system to respond. The challenge is that the system will cost money. “Humanitarian response to Pakistan and Haiti was at best mediocre,” one participant remarked. “We need to develop better tools to respond.”

• There is a constellation of factors that are coming together – including environmental degradation, natural disasters (both rapid and slow-onset), conflict, fragile states, humanitarian access, and urban violence – which present particular difficulties for humanitarian actors.

• Humanitarian assistance simply can’t absorb the needs likely to be generated by climate change-induced displacement/migration. There is a tension between addressing existing displacement and preventing displacement – the present division of labor isn’t working. Development actors need to step up to deal with issues of displacement (most of which is protracted); this would reduce the need for more humanitarian funding.

• There is a need to build climate resilience. Presently a lot of funding is directed toward ‘rescue missions’ which could be better invested in supporting resilience and in early warning mechanisms. There are crying needs now which if addressed now could mitigate the effects of climate change – e.g. addressing deforestation, rainwater harvesting. These are development programs.

• The assumption is that investing money in prevention is cost-effective in that it will save money down the road by reducing the need for humanitarian assistance. But the countries most likely to be affected by climate change are also the ones with poor governance and low capacities. There is concern that investing in their efforts may not be cost-effective. There also seem to be assumptions among donor governments that cost-benefit analysis should be used to make decisions. One of the development specialists reminded the group that poor people suffer when decisions on projects are made only on the basis of cost-benefit analysis, without analyzing benefit distribution -- who gets the benefits and who suffers.

• There is a need to think outside the box and to identify which governments are supporting good models, such as migration agreements with governments of countries likely to be affected by climate change. Even within governments, there is a lack of coordination between different branches on issues related to climate change and displacement.