WELCOME FROM THE CO-PRESIDENTS

Established in 2003 as a not-for-profit organization, CRHNet aims to promote or strengthen disaster risk reduction (DRR) and emergency management (EM) in Canada. It acts to establish a forum through which researchers, public officials and practitioners effectively share knowledge and strategies towards disaster risk reduction in Canada.

During the last 12 plus months, CRHNet has been instrumental in framing and advancing Canada's National Platform on Disaster Risk Deduction. The "Platform", which is Canada's formal response to the 2005 Hyogo Accord, is intended to be a pan-societal collaboration, one that will ultimately be led by non government actors. The Platform will be initially co-Chaired by Public Safety Canada and a representative of Senior Officials Responsible for Emergency Management (SOREM). It has an Advisory Committee of nine members, five of which are permanent and the rest are elected on a rotating basis. I am proud to report that CRHNet is a permanent member of the Advisory Committee, representing the academic community. I therefore encourage you to become a member of CRHNet and participate in our deliberations and activities.

CRHNet is again gearing its effort and resources to hold its annual conference. This year's conference – the 7th of its kind, is scheduled to be held in Fredericton, NB during October 27-29, 2010. (It is held immediately after the formal creation of the "Platform".) As its predecessors, the conference is unique in that it truly promotes reflection and integration of ideas that contribute to the safety and security of all Canadians. Don't miss it.

As an Association, CRHNet continues to formalize its structure and operations. During the last year, we continued to make progress by strengthening our financial reporting, and other processes or structures. We updated our website and are continuing to populate it with valuable information to our stakeholders. Our current target is to further formalize our membership processes, to make it more meaningful to you while keeping our rates unchanged and affordable. I encourage you to become a CRHNet member and to contribute through the National Platform on Disaster Risk Reduction

Ron Kuban, Ph.D and **Michel C. Doré**, Ph.D, CEM - CRHNet Co-President**s**

CANADA'S NATIONAL PLATFORM FOR DISASTER RISK REDUCTION

The inaugural Annual National Roundtable for Disaster Risk Reduction will be taking place October 26, 2010 in Fredericton New Brunswick, co-located with the 7th Canadian Risks and Hazards Network Symposium. A National Platform for Disaster Risk Reduction can broadly be defined as an assembly of interdisciplinary stakeholders brought together by their shared interest in reducing the risks posed by disasters and it seeks to build a sense of national, cross-sectoral ownership in the DRR process through coordinated leadership and action. To register for the Roundtable and the Symposium please go online at **www.snb.ca/crhnet** or **www.snb.ca/crhnetfr**.

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NOTE FROM EXECUTIVE DIRECTOR
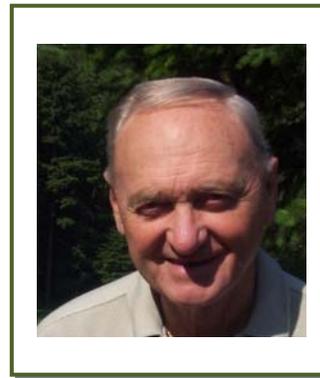
I would like to extend a warm welcome to all of the members of the Canadian Risk and Hazards Network to the third edition of *HazNet*. We are indeed fortunate to have so many terrific articles by Dennis Mileti, Thomas Drabek, Ilan Kelman, Avi Kirschenbaum, Victor Smart, Elena Orrego and a number of students.

The last few months have been a busy time for the CRHNet and for the Board of Directors. There have been significant events which have enhanced and strengthened the network.

In the late Spring I was asked by the Board to seek proposals to revitalize the CRHNet web page and to explore a suitable contractor one who could create a useable and user-friendly website and host and maintain our site. This was accomplished and the Board approved the Justice Institute of British Columbia's (JIBC) proposal. If you have not already done so, please check in and visit the new

less dedicated will continue to simply "piss in the ocean."

And as they do, many disaster survivors will in fact be helped through their efforts. That's the good news, and it should not be forgotten or ridiculed. Helping even one person or saving even one life, is commendable. But members of this profession should aim higher. And that will require far more insight and awareness of the root causes of disasters and the systemic changes required.

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Introduction

Disasters such as climate change frequently affect peace and conflict at many levels and in varied ways. Disaster diplomacy (see the following website http://www.disasterdiplomacy.org) is one framework for exploring such interactions. Conclusions from this work to date suggest that disaster-related activities can catalyze and influence ongoing diplomatic processes but cannot create new peace without a pre-existing basis. Such conclusions need to be further investigated for long-term disasters such as climate change.

One of Fiji's outer atolls, highly vulnerable to sea level rise (photo by Ilan Kelman).

One example is the potential for the destruction of low-lying islands through phenomena associated with climate change. Possibilities are sea-level rise, inundation from storms, or changes to freshwater, geomorphology, ocean acidity, or fisheries so that islands become uninhabitable. None of these impacts is inevitable and large uncertainties remain, but exploring the possible planning consequences is prudent, which must include the potential for evacuating islands permanently. Some themes on

the ethics and legalities of island evacuation are examined in this article.

Disaster diplomacy and islands

Disaster diplomacy examines how and why disaster-related activities do and do not reduce conflict and create peace. All disaster-related activities are covered: pre-disaster such as prevention and risk reduction plus post-disaster such as response and recovery.

Dozens of case studies show that disaster diplomacy has a poor success rate. In the short-term, over weeks and months, disaster-related activities frequently have the potential to affect diplomacy—to catalyze it, to influence it, and to push or pull it along. For that to happen, a pre-existing basis must exist for the reconciliation. That basis could be ongoing secret negotiations between political enemies or cultural and trade links, formal or informal.

The 26 December 2004 tsunamis around the Indian Ocean provide a useful case study. In Aceh, Indonesia, a peace deal resulted after the tsunami. Secret negotiations had started between the Indonesian government and the Aceh fighters just two days before the tsunami. Those negotiations formed the basis for the peace deal. Consequently, the tsunami did not create the peace, but it created conditions that permitted an ongoing peace process to succeed.

Over longer time periods, non-disaster factors have a more significant impact on diplomacy than disaster-related activities. Examples of non-disaster factors are leadership changes, mutual distrust, belief that an historical conflict or grievance should take precedence over present-day humanitarian needs, or desire for conflict.

Sri Lanka after the 2004 tsunamis provides an example. On that island, little pre-existing basis existed to help peace in the short-term, but reasons abounded for continuing the conflict. For instance,

one rebel leader was facing corruption accusations and had a strong incentive to continue fighting. Those other reasons dominated efforts at conflict resolution and efforts at post-tsunami aid.

One disaster for which disaster diplomacy has been investigated is climate change, while one case study severely affected by the disaster of climate change is islands (see http://www.islandvulnerability.org). Climate change is expected to hit islands particularly hard, so islanders themselves are increasingly vocal about what that will mean for them.

Selling the day's catch on Tongatapu, Tonga (photo by Ilan Kelman).

One example is the program Many Strong Voices (see http://www.manystrongvoices.org). Indigenous people from the Arctic, many of whom live on numerous islands, along with those from Small Island Developing States (SIDS; see http://www.sidsnet.org) joined together and asked for support for dealing with climate change. The result was the Many Strong Voices program dealing with climate change within the wider contexts of day-to-day life and century-to-century societal planning. The program deliberately connects science, policy and practice.

Several scientists from the Intergovernmental Panel on Climate Change (IPCC) who are from SIDS are involved and they contribute to Many Strong

Voice's research agenda. One priority that they identified was wanting to know more about the potential need to evacuate islands or island countries.

Island Evacuation: Uncertainty of impacts

Numerous climate change impacts are seen and expected, but none are certain in terms of their impact on island inhabitability. Even sea-level rise is controversial because complete inundation and drowning of the islands is not inevitable. The empirical evidence available from the tropics shows little evidence of islands disappearing directly from climate change. That empirical evidence does not cover all island types nor does it project into the future. Plus, even if the islands do not disappear, they might be difficult to live on.

In the Arctic, erosion inland is proceeding rapidly in some places, forcing several island communities to explore swift relocation. In the tropics, some cyclones build up coral rubble walls that are larger than some of the islets on which people currently live. Such extremes, even though they build up the land, might make living there impossible if such an event happens every few years. Thus, severe physical changes might lead to an island being unliveable even if those changes are island building rather than island drowning, especially if fresh water is affected. In fact, changing freshwater resources are frequently highlighted as being a principal climate change concern.

Similarly, changes in marine resources are important. Fish numbers might decline in many places and some species might go extinct, but others might migrate giving some islands major food challenges and other islands major food gains, but alongside large ecosystem changes. Ocean acidification will likely kill coral reefs, exposing the islands to waves and changing the near-shore fisheries. That might also impact dead coral rubble and shingle beaches, impinging any building processes.

Fishing as a livelihood off the shore of Tongatapu, Tonga (photo by Ilan Kelman).

In this text several "mights" have been used. No impact is certain. With all these unknowns and uncertainties, what can and should islanders do about evacuation and about the sustainability of their land, livelihoods, and cultures?

Decision making

Island evacuations have happened on many previous occasions, including for climate-related reasons but also due to volcanic eruptions and nuclear testing. These examples reveal a wide range, from the people self-evacuating with no external help to forcible evacuations by authorities.

House on Upolu, Samoa which was damaged by Cyclone Heta in January 2004 (photo by Ilan Kelman).

Ethically, questions arise regarding who decides regarding evacuation, such as the timing, method, and destination for evacuation. Legally and ethically, any decision needs to be enforced. By whom? Who pays for the decision-making process, for enacting the decisions, and for enforcing the

decisions on those who disagree? Ethically, should richer countries pay the poorer countries, especially considering that the richer countries can be blamed for a significant part—but not all—of the climate change problem that the islanders face?

Is it appropriate to apportion blame? Moral blame, as in identifying the realities of who caused the problem, and legal blame, as in taking the perpetrators to a formal court and trying to convict them under international law. For dealing with the people who are affected and for making the needed decisions, does blame matter? If so, should blame be attributed for climate change? Or should blame be attributed for the inter-state social and power structures which mean that the islanders do not have the resources or choices to deal with climate change themselves?

If islanders select and pursue evacuation, whether or not it is needed, the islanders must move somewhere. Legal and ethical questions emerge regarding sovereignty and autonomy, of the islanders in their new location and over the abandoned islands. A scramble for fish, minerals, oil, and other resources is likely. If the islanders wish to preserve the natural heritage or use the natural resources for themselves only, do they have that legal and moral right? Could territorial waters or abandoned land be exchanged for territory in a host state or for funds to build a new community?

For social aspects, if laws on capital punishment differ between the island state and the place of settlement, which law should prevail? Who has the moral right and legal authority to choose levels of sovereignty and cultural customs for resettled islanders? If one country, such as Canada, pays for islander resettlement, can the donor country demand that certain islander laws or customs should change or remain?

Climate change diplomacy

Trying to answer these questions operationally could lead to inter-state conflict. Even amongst islanders, disparate views prevail. Meanwhile, researchers debate the appropriateness of the terms "climate (change) conflict" and "climate (change) refugees".

Children near Nadi, Fiji: They must deal with the full effects of climate change (photo by Ilan Kelman).

While research on these topics rapidly expands, the policy level tends to sidestep them—just as it has been sidestepping the needed emissions reductions to tackle climate change. Preventing inter-state conflict over island evacuation due to climate change is feasible. The islanders will be suffering enough due to climate change and disaster diplomacy could be actively implemented now to assist islanders in need. Realistically, given the disaster diplomacy and climate change patterns from the past, and continuing to emerge, it appears as if such steps are not likely to be taken until decisions are forced by urgency or calamity; that is, until it is too late.

Given this situation, is the enemy the environment and climate change? Or, when it comes to disasters and diplomacy, and thinking about sustainability and development, is the enemy ourselves and humanity's inability to properly deal with what the environment yields, whether that be volcanic eruptions or fossil fuels?

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Barbados (photo by Ilan Kelman)

By: Alan (Avi) Kirschenbaum and Carmit Rapaport

Planning the Impossible

Being totally prepared for a disaster or an emergency is virtually impossible. As disasters vary in type, strength, and impact there may be no one appropriate method or preparedness plan that could encompass all potential hazards. Evidence that organizations experience and respond differently to the same non-routine events, according to their size, sector, ownership and managerial risk perceptions, support the notion that pre-designated plans are problematic. As a result, organizations tend to depend on external help of emergency agencies, which may take critical time to arrive and would not necessarily fit the specific organization's needs. Furthermore, even on the basis of past experience, organizations in general and managers in particular can not rely on previous responses as each event is unique, and the people involved may change. In fact, organizations' managers do not tend to make long-term decisions quickly during emergencies. Thus, many of them avoid taking any decision, and just follow the event unfolding and its consequences.

If this is the case, it seems that emergency managers are trapped: on one hand, when preparing for the future, preparedness planning is not always effective, while on the other, relying on the past can be problematic. What would be, then, the most appropriate response when handling a case of an emergency? We suggest, based on recent evidence from our research in Israel that you base your response on the present! There is no doubt, as you will see from our study, that existing social relations among employees would enable an adaptive adjustment to the new conditions imposed by an