from aid to capacity development:
fostering research alliances for tsunami
rehabilitation and reconstruction

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Disaster relief includes short-term post-disaster operations that minimize the loss of life and property and attempt to restore vital life support systems. This phase includes ensuring that people in the affected areas have access to food, temporary shelter and clean water.

Reconstruction and rehabilitation refers to long-term post-disaster efforts necessary to return life to normal or improved levels. This phase requires an integrated approach that respects the subtle dynamics of communities' economic, political and cultural lives, and how these interact with the natural environment.

Capacity development includes activities/initiatives that are designed to help communities reduce vulnerability and increase their ability to respond to, and recover from, future natural disasters. This includes political, institutional, and social capacity to learn from past experiences and use this information to guide change.

Population health issues and reconstruction concerns related to the post-tsunami situation:

As the immediate survival needs of victims have abated, secondary effects of the Asian tsunami disaster become increasingly important. Water supply is particularly problematic: while it is crucial for sustaining life, it can also harbour catalysts for disease. Among the most common post-disaster population health threats related to water are Cholera, Hepatitis and Typhoid. Insect borne diseases such as Malaria and Dengue fever, a multitude of viral or parasitic diseases and bacterial infections to existing injuries further threaten recovery. Psychosocial consequences such as Post-Traumatic Stress Disorder (PTSD), Acute Stress Disorder and bereavement often produce much longer term suffering from traumatic events and affect both the victims and the response workers attending to them.

The Tsunami's destructive power obliterated essential civic services and agricultural industries. It eviscerated micro-economies and industries, especially fishing industries and essentially razed the entire infrastructure of certain regions. Reconstruction is remarkably complex and delivery of primary building materials and machinery to the hardest hit regions remains a challenge. Plans for rebuilding initially focused on restoring essential health services, sanitation services and schools but now need to extend to other affected spheres such as housing, small businesses and local industries.

Of greatest importance are issues related to the masses of displaced people. As with many disasters, each demographic is affected differently: women and girls are affected differently from men and boys, therefore rehabilitation policy and planning should reflect these nuances when targeting interventions.
Canadian response

The Canadian response has been significant. According to the Canadian International Development Agency (CIDA), the Department of Foreign Affairs Canada (FAC) coordinated the overall effort in response to the crisis; not only did FAC convene a special disaster task force within a few hours, but they also worked with local governments in affected areas and various aid organizations to determine how Canada should support the humanitarian efforts.

CIDA responded immediately by working with multilateral and non-governmental organization (NGO) partners to direct Canada's aid. CIDA will also manage Canada's $425 million pledge allocated for rehabilitation, humanitarian help and reconstruction over the next five years.

Emergency supplies were sent by the Department of National Defense (DND) via military aircraft. Additionally, DND deployed the Disaster Assistance Response Team (DART) to Sri Lanka, one of the hardest hit countries. Health Canada and the Public Health Agency of Canada provided expertise toward curbing the spread of disease. Satellite images were supplied by the Canadian Space Agency. The Departments of Natural Resources and Fisheries and Oceans are participating in the development of early warning systems.

Not insignificantly, the Canadian public responded with almost $200 million in contributions which are being managed by CIDA through a controlled project proposal process.

Canadian companies have responded quickly and generously to the crisis with monetary and in-kind donations. Some of those contributions are as follows:

- Potash Corp. of Saskatchewan Inc., announced it would donate $1.2 million.
- Nortel Networks and its employees have provided $1 million in assistance.
- INCO and its Indonesian subsidiary, PT International Nickel Indonesia, have provided $540,000.
- TELUS Canada donated $500,000.
- Canadian Tire, Home Hardware, the Hudson's Bay Company and Business Depot (Staples) each pledged $250,000.
- RBC Financial Group will donate up to $250,000 to the Red Cross, matching all donations up to a total of $100,000 made at its branches. It will also give $50,000 to help immigrants from tsunami-affected regions who will settle in Canada.
- TD Bank Financial Group has announced it will contribute $250,000 to the Red Cross and UNICEF.
- Manulife Financial and CIBC will each donate $200,000. Scotia Bank will give $175,000.
- Shell Canada will donate $100,000 and the National Bank $75,000.
- Air Canada, Apotex, DuPont, Canus Goat's Milk, Please Mum, Rhoxal Pharma and Swiss Medica have also provided goods and services worth several million dollars to World Vision. Air Canada has provided a number of flights to ship relief aid (medicine, water purification equipment, non-perishable goods, clothing and housing material) to devastated regions in Indonesia. Zenon Environmental Inc., which earns over 10% of its profits in Asia, has sent water treatment systems to tsunami victims in India and Sri Lanka through the assistance of Eureka Forbes and World Vision to support relief efforts in Asia.

Private Sector Contributions:

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(All private sector figures are based on donations received as of January 7, 2005)
Monetary Aid Flow

This map illustrates the monetary aid given to the Tsunami affected regions in SouthEast Asia. The line thickness is proportional to the total amount of aid money pledged by individual countries. Country heights indicate the percentage of the total pledge that has been received, for instance, Japan has fulfilled its obligation so the country height is 100%. The map is based on data current to the 5th of April 2005 (ReliefWeb, UN Office for the Coordination of Humanitarian Affairs (OCHA)).

Human Impact

<table>
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<tr>
<th>Country</th>
<th>Deaths</th>
<th>Missing</th>
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</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>East Africa*</td>
<td>137</td>
<td>0</td>
</tr>
<tr>
<td>India</td>
<td>10,749</td>
<td>5,640</td>
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<tr>
<td>Indonesia</td>
<td>126,602</td>
<td>93,638</td>
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<td>5</td>
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<td>82</td>
<td>26</td>
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<tr>
<td>Myanmar</td>
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<tr>
<td>Somalia</td>
<td>298</td>
<td>0</td>
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<tr>
<td>Sri Lanka</td>
<td>38,938</td>
<td>4,100</td>
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<tr>
<td>Tanzania</td>
<td>10</td>
<td>0</td>
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<tr>
<td>Thailand</td>
<td>5,395</td>
<td>2,932</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>182,343</strong></td>
<td><strong>106,361</strong></td>
</tr>
</tbody>
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Agenda

Thursday April 21 2005

evening networking reception
@ senate room, tabaret hall, university of ottawa

5.30 - 7.30 pm
registration
welcome to participants by forum hosts and sponsors:

Institute of Population Health, University of Ottawa - Carol Amaratunga
Ocean Management Research Network, (OMRN) St. Mary’s University - Tony Charles
Canadian Society for International Health (CSIH) Jan Hatcher-Roberts
Public Health Agency of Canada - Paul Gully
University of Ottawa Nicole Bégin-Heick

Friday April 22, 2005

forum
@ pinnacle room, crowne plaza hotel, 101 lyon st., Ottawa

8.00 - 8.30 registration and coffee
8.30 - 8.45 film And Gaia Shuddered
8.45 - 9.00 Opening remarks and Introductions
Carol Amaratunga, Institute of Population Health, University of Ottawa
Tony Charles, Ocean Management Research Network, St. Mary’s University
9.00 - 9.30 Overview of Tsunami December 26, 2004
Murat Saatcioglu, Vice Dean (Research), Faculty of Engineering, University of Ottawa
Tad S. Murty, Department of Civil Engineering, University of Ottawa
update on Prime Minister’s mission
Situation Analysis from the Field - CIDA overview
Phillip Baker, Canadian International Development Agency
9.30 - 10.00 break

10.00 - 10.15 Agency Responses
International Development Research Centre
Canadian Red Cross
CARE Indonesia
Doctors Without Borders/Medics sans Frontières

10.15 - 11.00 small group discussion – country focused: Thailand, Indonesia, India, Sri Lanka, East Africa and other affected countries

11.15 - 12.15 LUNCH
Speaker Naresh Singh, Governance and Social Development Directorate, CIDA – “Livelihoods and Ecosystem Health Foundations of the Reconstruction Process”

12.15 - 13.15 towards an ecosystem and population health framework for research and action

13.15 - 14.45 break

14.45 - 15.15 Plenary - creating a framework

15.15 - 16.45 wrap up and closing remarks

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The Institute of Population Health (IPH) is a consortium of nine faculties of the University of Ottawa (Arts, Education, Health Sciences, Law, Science, Social Sciences, Medicine, Administration and Engineering). As a consortium, the IPH coordinates, initiates, and supports interfaculty and multiparty, transdisciplinary research and training in Population Health. Among many objectives, IPH aims to build a strong scientific foundation for population health in the areas of risk assessment, intervention design, policy formation and global health and to inform the development of evidence-based population health policy in Canada and at a global level.

www.iph.uottawa.ca

The aim of the Ocean Management Research Network is to create and share knowledge for the application of critical thinking and best practices to oceans management in Canada. The OMRN is interdisciplinary, with an initial focus on social science, providing a forum for researchers, managers, and policymakers to evaluate timely and innovative linkages, integrate lessons learned, transfer and share knowledge, and help create an expert core of ocean researchers. The OMRN facilitates value-added research, provides seed funding, and seeks to establish a long-term research agenda.

www.omrn.ca

The Canadian Society for International Health (CSIH) is a national non-governmental organization with members committed to the promotion of international health and development. CSIH members offer a solid network of experts and experience with the Canadian government, international agencies, non-governmental organizations and academia.

www.csih.org

The Laboratory for Applied Geomatics and GIS Science is a national non-governmental organization with members committed to the promotion of international health and development. CSIH members offer a solid network of experts and experience with the Canadian government, international agencies, non-governmental organizations and academia.

www.geomatics.uottawa.ca

www.dmsolutions.ca