A woman does laundry in the rubble of her home devastated by the tsunami in Galle, southern Sri Lanka, on January 2, 2005/©UNHCR/N.Behring.

DISASTER MANAGEMENT AND RESPONSE:
Capacity Building for Developing Country Institutions

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This project was intended to identify and assess the effectiveness of capacity-building activities related to natural and human made disasters in developing countries; and determine gaps in such activities, areas in need of strengthening, and opportunities for improvement. Based on the assessments, this report recommends actions that could be undertaken by international entities to enhance the capacity of developing country institutions and individuals to manage disasters in the most effective manner possible. The findings are based on our own review of capacity-building activities and three regional workshops in Latin America, Africa, and Asia. In each region operational and academic experts addressed the challenges of building local capacities for managing natural and human caused disasters. Additionally, the grant provided support for related research, which took the form of extensive inventories of the international programs underway in the three regions.

The three regional workshops held in Costa Rica (September 2004), Kenya (February 2005), and Thailand (May 2005) produced insights and recommendations by governments, international organizations, non-governmental organizations (NGOs), and academics for enhancing capacity-building opportunities and addressing obstacles to better coordinated and more comprehensive disaster management within their regions. In the preparation of each workshop, ISIM partnered with a regional capacity-building institution, which handled logistics and participated in selecting participants. The Latin American and Asian regional meetings focused primarily, though not exclusively, on capacity building related to natural hazards; in the Africa meeting, workshop expertise was fairly evenly divided between natural hazards and humanitarian emergencies. The partners and participants in the three regions were enthusiastic and appreciative of the opportunity afforded by Gates to discuss local capacity building. All were eager to share ideas and launch initiatives.
Prior to each of the workshops, the project team or its partner institution developed an extensive inventory of international capacity-building efforts already underway and prepared other related material for distribution. The projects in the Inventories were organized in categories: projects in prevention, preparedness, and response; knowledge/technology transfer; and alliance building. At an early stage, the project team also sought guidance and information from both substantive experts and training staff in government, non government and international organizations.

Discussions in the regional workshops covered similar thematic areas that defined where local capacities must be established in order to prevent, prepare, respond to, and mitigate the effects of disasters and humanitarian emergencies:

- Education and training of developing country personnel in NGOs and government agencies to engage in disaster relief activities, including substantive knowledge needed to respond to emergencies and management expertise needed to guide institutions engaged in disaster response;
- Early warning of humanitarian emergencies and emergency preparedness to respond in as timely a manner as possible;
- Disaster mitigation strategies and behavioral changes needed to reduce the likelihood of high mortality and morbidity during humanitarian emergencies;
- Ensuring optimal cooperation and coordination of relief and development agencies to ensure a smooth transition from disaster responses to longer-term reconstruction and development;
- Monitoring and evaluation of the effectiveness of services provided during various stages of disaster responses;
- Raising and managing funds needed to engage in timely and effective disaster relief activities; and
- Establishing partnerships between developing and developed country non-governmental and academic institutions to promote greater capacity in developing countries.

Participants in the three workshops strongly urged donors (and their own governments) to channel more of their support to disaster prevention and mitigation rather than solely to preparation and response. In other words, they implicitly criticized current approaches to disaster management support as overly reactive and short term, noting that strategic investments in longer-term institutional and individual capacity building and risk assessments can reduce the damage from disasters and even avert them altogether. Likewise, a stronger focus on training, community involvement, communication and information dissemination mechanisms, and participatory planning will make disaster mitigation – and post disaster rebuilding – more sustainable.
Specifically, greater donor attention should be placed on the following categories, discussed in detail below:

1. Improving institutional capacities of developing country organizations to engage in all phases of disaster management, from prevention and mitigation to response and reconstruction.
2. Encouragement for more systematic mechanisms of knowledge management and information dissemination and sharing across national boundaries, north-south and south-south.
3. More strategic and equal partnerships among organizations involved in disaster management, including those bringing together organizations focused on natural disaster response and those dealing with complex humanitarian emergencies, so that skills and knowledge can be shared.
4. More effective involvement of community members in all phases of disaster management in disaster-prone areas.

The results of the three workshops reinforced that there is an abundance of skill and experience in the three regions related to disaster management. Participants’ comments combined with the regional inventories identified a number of locally operating projects for disaster prevention, preparation, response and mitigation. There are solid initiatives on which to build. Hence, outside investment in key areas has achieved and can expand significant and sustainable results.

Institutionalizing Disaster Management Capacities in Developing Country Organizations

The importance of stronger institutions for disaster management was perhaps most vividly expressed by a participant in the Asia meeting who noted that some years ago cyclones of the same velocity struck Bangladesh and Los Angeles resulting in hundreds of thousand of deaths in the former and less than 20 in the latter. Today, the Cyclone Preparedness Program in Bangladesh is backed by organized volunteers at the community level and sustained by support institutions that maintain preparedness and training programs. Because the country is better organized and prepared for inevitable floods, the overall cost in lives and property is far less than it used to be. A participant in the Africa meeting struck a similar note, recounting how the good will of hundreds of people acting spontaneously saved many lives when terrorists attacked the US

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1. Hurricane Katrina showed, however, that disaster mitigation and emergency preparedness are deficient in the United States. Many of the recommendations in this report could usefully be applied domestically as well as internationally.
Embassy in Kenya. But thousands more lives could have been saved, he noted, had there been an organized early warning and response system and a well prepared health system. Since then the Government of Kenya has begun to put national disaster response programs in place. Several participants from Central America pointed to the high proportion of international funding squandered after Hurricane Mitch, due to a number of weak development factors, including governance.

Even a cursory review of the Inventories produced for the project demonstrates how international and bilateral support mechanisms have helped bring about the creation of national and regional entities, specialized in wide-ranging fields: health, meteorology, refugees and humanitarian emergencies. Their relative strength and effectiveness are uneven, but they form a basis on which to build. In Latin America, progress in all phases of disaster management is probably the best developed and several internationally and nationally supported organizations, with varying levels of activity, have been established to address disaster responses, risk reduction, and mitigation. In Asia, there are effective programs for disaster response and mitigation in evidence in many of the disaster prone countries, i.e. Bangladesh, India, the Philippines, Sri Lanka, and China. (Alas, in preparing capacity to manage the traditional disasters, they failed to prepare for the 2004 tsunami.)

In Africa, awareness of what can and should be done locally has grown and, with it, a greater commitment on the part of some governments, universities and institutes to build and support local capacities. The increased interest is evident regionally through the Intergovernmental Authority on Development (IGAD) and (potentially) the New Partnership for Africa’s Development (NEPAD), as well as in individual countries, e.g. in Mozambique’s flood related programs. Southern Africa has established technically sophisticated facilities and East African governments are building their capacities. East Africa’s refugee law and research programs have influenced national and international refugee policies.
A number of different actors can play important roles in building institutional capacity. What forms should institutional support take?

**Training Centers** where experts in a variety of fields can offer short-term instruction to officials in relevant ministries and where disaster responders from several countries can share experiences with each other and resident experts in order to maximize learning. Two of the three workshops, in Latin America and Asia, were hosted by regional training centers, the International Resources Group (IRG) disaster training and technical assistance project and the Asia Disaster Preparedness Center (ADPC), both of which currently receive significant, albeit time limited, support from the Office of Foreign Disaster Assistance (OFDA) of the US Agency for International Development (USAID). In both cases, additional support would permit more sustained operations and greater attention to the longer-term issues involved in prevention and preparedness. In Africa, there is no precise equivalent of these training institutes. However, the TECHNICON training programs operating from South Africa offer distance education for disaster management, and the Southern Africa Humanitarian Information Network, SAHIMS, project of the UN Office for the Coordination of Humanitarian Affairs (OCHA), with UN Development Program (UNDP) support, provides region wide training programs aimed at training the trainers, instructing in risk assessment, developing tools of evaluation, etc. Institutions such as these, national and regional, need to operate on a secure basis and to develop capacities to prevent, prepare, and manage disasters of several kinds.

**Universities** are not usually associated with disaster management, but their potential value was discussed at length in each workshop. The Africa workshop was organized by Centre for Refugee Studies, Moi University in Kenya. In universities, professionals can be formed in basic and applied sciences and technologies relevant to disaster risk assessment, national and international law, data management, monitoring and evaluation and other fields. Workshop participants acknowledged that there is too little communication today between and among university-based scientists and the potential users of science, among specialists in different fields, and between scholars and operational personnel. They unanimously asked for support and encouragement to surmount these divisions so as to be able to work more effectively and comprehensively. African universities deserve particular attention at the present time as the most likely potential venues for knowledge gathering and sharing, applied research, evaluation skills and so on. There is encouraging evidence of sharing in research and teaching, but maintaining current gains is problematic due to meager funding. In all three regions, experts pointed to the under-exploited potential of universities to offer training for government personnel.
**Inter-governmental agencies** are needed for knowledge dissemination, cross border activities to prevent and prepare for disasters and conflict mediation. Present regional intergovernmental organizations with mandates to manage disasters are not as effective as they could be, especially for promoting longer term efforts – e.g. the Coordination Center for the Prevention of natural Disasters in Central America (CEPREDENAC) and the Caribbean Disaster Response Agency (CDERA) in Latin America. Some of the specialized agencies, e.g. for meteorology or seismology are technically impressive but small and narrowly focused. Larger regional agencies, such as IGAD, NEPAD/African Union, and the Organization of American States have made commitments to take stronger action in disasters and humanitarian emergencies. The Pan American Health Organization is very much in the leadership on disaster training, preparation and mitigation advocacy related to health, and has advised counterparts in Africa and Asia. However, as yet, few intergovernmental agencies operate funded programs for capacity building, early warning or conflict management. Nor do they presently serve as important repositories for knowledge and new technologies.

**Health ministries and facilities**, without doubt, are essential for meeting the needs of disaster victims. As the workshops and other material have made clear, the adequacy of health facilities is related to development. Buildings and equipment that can withstand disasters; capacities to detect, monitor and treat diseases and to identify health risks; health professionals who can be mobilized quickly and so on – these are attributes of developed societies and often lacking in less developed contexts. Health ministries in developing countries are often understaffed and lacking in professionals with adequate training in disaster management.

**NGOs and community organizations** have taken on the lion’s share of local capacity building, which is as important as technology, if not more so, for early warning, preparation and disaster response. Presently NGOs typically work in small settings and, frequently, in an *ad hoc* manner. They leave behind useful skills, which beneficiaries are unable to institutionalize without continuing support. Likewise, individual communities acquire knowledge and experience over the years, but too rarely communicate what they have learned either to higher political levels or to other vulnerable communities.

Local NGOs are better able to put together sustainable capacity building programs, but less likely than international NGOs to obtain funding for so doing. The latter regularly promise to engage in capacity building, but typically are called away to other projects. The International Federation of Red Cross and Red Crescent Societies has an impressive record of systematic capacity building at the local level, albeit with some variation in
success, but general NGO capacity building action is spotty. Moreover, the best trained of the local NGOs typically take better-paid jobs with international agencies.

In this context, one creative way to multiply training of trainers among NGOs and communities would be a program of human resource sharing, where skilled staff members are shared among developing countries. To turn local talents to the most productive possible use for disaster management, an initial investment should be made to assess existing local human resources and promising mechanisms. Such an assessment would pave the way for investment toward sustainable management systems.

**Knowledge Production and Sharing**

Knowledge production and sharing of information is enhanced by training centers and universities as noted above. There are important data base gaps in all three regions that impede early warning, adequate responses, and policy decisions overall. On the one hand, much of the existing data is of poor quality or outdated. On the other hand, some high quality data – often funded by outside sources – is not made available to potential users.

Participants endorsed stronger mechanisms for transferring knowledge from those who produce it to those who will use it. The ProVention consortium consisting of governments, international organizations, academic institutions, and civil society groups dedicated to sharing knowledge and resources for disaster risk management could be expanded. ProVention provides small grants to researchers in developing countries to produce research useful for practitioners and policymakers. The Regional Disaster Information Center for Latin America is launching an interactive directory to enhance information sharing, and similar initiatives would be useful elsewhere as well. The University of Wisconsin’s Disaster Management Center has long provided training for government and non-government professionals. Refugee and emergency response institutes at Georgetown and Tufts Universities have cooperative relations with counterpart programs in Africa and Latin America.

Media attention is overwhelming during the first days almost every disaster and consistently absent after a few weeks. In the regional workshops, the media was represented with individuals who understood the fields they were covering. A larger number of such people, with training and support, could play positive roles in all aspects of disaster management. This is true both of national and international media. Possibly the most useful contribution media can make in the disaster field is in disseminating information about risks that are known but are not being addressed.
This kind of journalism, common in North America and Western Europe, are not common in other areas. Beyond reactive media coverage, however, it is important to think creatively about public information that would serve both educational and information purposes, aimed at building awareness of potential disasters and risks of violence.

**Partnerships**

Nearly all of the above recommendations for institutionalizing disaster management contain a strong endorsement of partnerships. Partnerships among governments, training institutions, and international IO/NGOs are operating, and account for a significant amount of the learning that is taking place. Donors, including OFDA, DFID, ECHO, JICA and others have invested seriously in establishing productive partnerships. These are wanted and needed—although some forms of partnering were criticized as being one-sided and donor driven. North-south partnerships are undeniably important but, too often, the northern partner dictates to the southern institution or the northern organization contracts for services with a local organization but does not seek an equal partner.

South-south partnerships, permitting Asians, Latin Americans and Africans to share resources and knowledge, within the regions and among them, are beginning to show considerable promise, (e.g. Brazil-Mozambique; the East Africa university partnership in refugee studies; PAHO-APDC).

Finally, within developing countries, it is important to encourage greater partnership and communication among people in related fields relevant
to disasters and emergencies. The concept of “partnership” may be broadly defined, but is understood here to encompass ongoing communication and sharing of knowledge, which, in turn, relies on relations of trust and common commitments. A striking gap in partnerships are between those involved in natural disasters and those involved in complex humanitarian emergencies (often caused by conflict), despite similarities in needed responses to such issues as massive displacement. Our workshops were often the first time that experts from these two different communities had met, even if they were operating in the same country. Mechanisms to broaden their contacts and encourage sharing of perspectives, information and expertise would enhance both areas.

Involvement of Local Communities

Participants at all workshops emphasized the importance of moving beyond institutional capacities to reach members of communities that are affected by disasters. One issue raised was the important role that networks of community volunteers play in emergency preparedness and dissemination of warnings of likely disasters. The Bangladesh experience discussed above, demonstrates the effect mobilization of volunteers as a key to reducing high levels of mortality and morbidity during natural disasters.

Schools are highly productive places in which to bring awareness of prevention and mitigation strategies to the attention of community members. Children learn of simple life-saving steps that can be taken by their families and communicate the information to their elders. Such education provided at the elementary level and then sustained throughout schooling is a cost-effective way to reduce the vulnerability of local communities to the often disastrous effects of natural and manmade hazards.

Conclusions

In the course of the three workshops, the project organizers heard from individuals representing sectors and institutions in different countries and contexts, and bringing different kinds of experience to the table. The level of consensus on the points we have underscored in this report could hardly have been greater. The urgency for making progress on these points has been especially clear in this year of unprecedented disasters. The international community has learned to respond more effectively to disasters and emergencies in different corners of the world, and this is to be commended. Unfortunately the same cannot be said regard-
ing either international or national responses to the need for longer term prevention, preparation and mitigation actions that would minimize human and material loss, and help recovery. Here, what is called for is not a quick response with the latest “high tech” equipment, but a long term society wide program of training and capacity building, beginning early and constantly updated. Building capacities for prevention, preparation and recovery means learning to assess vulnerabilities, reinforcing expertise in relevant technical, social and scientific institutions, and establishing partnerships of mutual learning that extend from communities and districts to central authorities, as this report has described. The will to invest in this kind of capacity building is widespread. Governments, international agencies, and private groups embrace the concepts, and expertise is available in every corner of the globe. This report makes the case that international agencies and donors can make significant contributions in sharing knowledge and resources and helping to build on existing capacities toward more effective national and locally directed action.