THE RESPONDERS' CAULDRON: THE UNIQUENESS OF INTERNATIONAL DISASTER RESPONSE

Arjun Katoch

Natural calamities claimed the lives of 249,896 people worldwide in 2004 in 360 reported disasters, compared to 84,570 killed in 1995 in 239 reported disasters, one indication that the frequency and effects of disasters on people is increasing.[1] The year 2005 began with the aftermath of the Indian Ocean tsunami and ended with the South Asia earthquake. These two high-profile disasters resulted in the unusual sight of two former U.S. presidents, George H. W. Bush and Bill Clinton, simultaneously serving as the UN Secretary-General's Special Envoys. Meanwhile, new entities such as the corporate sector are becoming engaged in disaster response. In some circles it is trendy to talk about disaster prevention, mitigation and risk reduction as a panacea for dealing with disasters. The fact remains, however, that no amount of reduction or mitigation can tame nature and prevent disasters from happening. Consequently, there will always be a need to assist the victims of disasters by responding quickly and effectively.

Responding to disasters is entirely different from responding to conflict-related complex emergencies. This difference is not well appreciated even within the international humanitarian community, which considers responding to complex emergencies its "normal" work. Although disaster response is inherently chaotic, tried and tested international tools and procedures do exist to assist a disaster-affected government and its people to handle the situation. However, new players, including the corporate sector, and to some extent the public, have entered the field of disaster response. Drawn by increased media exposure to disasters since Hurricane Mitch in Central America in 1998 (the first disaster response covered live by CNN) these new entities present opportunities, but their very presence in large numbers at a disaster site poses certain challenges. When added to the difficulties inherent in international disaster response, these new actors could lead to coordination becoming less effective in the future unless remedial action is taken quickly. These actions include strengthening international and national disaster response preparedness; ensuring

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verifiable operational standards of international responders; and restoring a hard-won consensus on international response processes. In addition, the humanitarian community must understand that disaster response is a completely different specialized activity that requires professionals and decisionmakers experienced in this field in order to function effectively. Donors must also fund response preparedness between disasters. Finally, if the corporate sector is serious about disaster response, it has to work within established coordination structures and·agree to certain ethical and professional guidelines.

It is in this context that this paper discusses the international response to sudden onset natural disasters. It examines the circumstances that create the unique, high pressure cauldron in which responders find themselves at a disaster site. It thereafter goes on to examine the many simultaneous levels and locations of response at a disaster site and to explain the specific features of disasters that make coordination and response inherently difficult. It outlines what instruments the international community uses to respond to major natural disasters to support a disaster-affected country as well as the requirements of on-site coordination in the disaster area. It then discusses several barriers to effective coordination that have recently developed. Finally, this paper recommends actions that need to be taken to strengthen the international disaster response system.

The Disaster Cauldron: An Emergency Environment Different From All Others

Most humanitarian responders spend the majority of their careers responding to complex emergencies. Yet humanitarian response in complex emergencies differs significantly from that in natural disasters. Natural disasters are unpredictable natural events such as earthquakes, cyclones, floods and volcanic eruptions. Complex emergencies, by contrast, are the result of man-made structural problems and can take the form of civil wars or long-term droughts. Consequently, responders encounter very different environments in both situations. In natural disasters, responders encounter a unique, high-pressure emergency environment in which response in the early phases is critical to saving lives. Complex emergencies, on the other hand, require addressing structural issues that normally take years to resolve. Moreover, in a natural disaster national governments are responsible and thus ultimately in charge of coordinating disaster relief. So unlike complex emergencies, where there may or may not exist a national government for responders to coordinate with, responders in natural disasters must coordinate with the national government. Finally, because of their unexpected nature and need for immediate response, natural disasters produce a kind of international visibility and response that has a very different life-cycle than that of complex emergencies.

Sudden, Overwhelming Needs

In a major natural disaster like an earthquake, the situation changes from one of normality to one of overwhelming need in a matter of seconds and minutes. The 2003 earthquake in Bam, Iran, for example, lasted less than 20 seconds, killed 27,000 people and destroyed 85 percent of the city. The rapid and overwhelming destruction of New Orleans caused by the flooding resulting from Hurricane Katrina is another example of such a situation. As David Aaronovitch admirably pointed out in *The New York Times*, "the New Orleans disaster is far worse than 9/11, and dwarfs anything seen in the West in modern times save for the Etna eruption and the San Francisco earthquake."[2] In response to the sudden, overwhelming needs of the victims, the time to save lives is measured in minutes and hours, not days, as is more often the case in complex emergencies.

Physical Conditions Created by Disaster: Damaged Infrastructure and Communications

The devastation following a natural disaster imposes physical limits on the capacity of responders to move and deliver assistance, to communicate with one other and to plan joint responses. This is because natural disasters inevitably damage physical and communications infrastructure. For example, in the immediate aftermath of the October 2005 Pakistan earthquake, kilometers-long segments of mountain road to the two major population centers in the Neelum and Jhelum Valleys were completely destroyed by earthquake-triggered landslides. The only way to get supplies to the affected population was through military assisted helicopter lifts, which limited the tonnage of supplies responders could get to the area. In Aceh, Indonesia following the tsunami, movement was impossible along the destroyed coastal road—the only transport artery in the area—despite the presence of significant military logistical support. In effect, the widespread destruction of infrastructure separates and isolates the affected geographical areas by creating physical limits to responder coordination. These inevitable consequences of natural disasters impose physical limits to the capacity of national and international humanitarian assistance to respond early and deploy rapidly, in terms of logistics and coordination.

The Responsibility and Capacity of National Governments

According to international humanitarian law, national governments have primary responsibility for responding to natural disasters. Any bilateral or multilateral assistance can only be provided at the request of the affected government and must be coordinated through it.[3] The centrality of national governments in disaster response has two implications.

The first is related to the issue of sovereignty. Governments zealously guard their

ability to act autonomously, especially in domestic matters. Developing countries, in particular, are suspicious of interventions mobilized for so-called humanitarian purposes. Many states are reticent "to bind themselves to rules concerning disaster relief," especially when they are undertaken on the basis of "a right of humanitarian intervention grounded in a 'responsibility to protect'."[4] Unlike complex emergencies, during disasters there is likely to be a strong state present with which humanitarian responders must support and coordinate. However, many international humanitarian responders are more experienced working in complex emergencies where the state is often weak and in some cases nonexistent. Having to coordinate with national governments and work under clear national control, and, furthermore, not being used to doing so, adds another level of stress and complication for many international humanitarian organizations.

The second major implication is the national capacity to respond to natural disasters. While under international humanitarian law national governments retain the duty to respond and the right to determine how response is organized, many national governments may not have the organizational or logistical capacity to do so. Not only do most natural disasters occur in developing countries, but they also affect them disproportionately. In 2004, for example, all ten countries with the largest number of people affected by disasters were developing countries.[5] The quality of disaster response and its coordination is dependent on the experience and administrative and organizational ability of the government of the affected country. Despite significant progress by countries such as China, Iran, Cuba and India in developing disaster management systems, many disaster prone countries do not have adequate capacity to manage disasters effectively.[6] This creates inherent limits on the effective deployment and coordination of the multitude of international responders who arrive at the disaster site. Such limitations are inescapable as there is no indication that governments will cede their sovereign control to outside entities even in the aftermath of a natural disaster.

Degradation of Local Capacity Due to Casualties and Stress

One of the least appreciated effects of sudden onset natural disasters is the fact that local government officials and community leaders are also victims of the catastrophe at a time when they are responsible for leading the response. According to Mostafa Mohagegh, the Iranian Red Crescent operations coordinator for the response to the Bam earthquake, "all Government officials in the management chain were killed except the Governor, and four out of the six Iranian Red Crescent officials of the area were killed."[7] Even if such local officials are not personally affected, their family members may be injured and there is the potential for trauma from the loss of relatives and friends. To then expect the local authorities to function normally, as the media and the outside world sometimes appear to do, is irrational.

Overwhelming Influx of Mutual and International Assistance

In the case of most natural disasters the bulk of immediate assistance to victims is provided spontaneously and in an uncoordinated fashion by neighbors, friends, family and local governmental and civil organizations. In addition, there is normally a sudden influx of assistance from outside the affected area from citizens, in-country organizations and other domestic responders. However, the delivery of this assistance, especially of goods in kind, arriving before actual needs are ascertained, can often be detrimental to the relief effort, clogging whatever access roads exist. A regional workshop led by the United Nations on lessons learned after the Indian Ocean tsunami reported that, "Numerous 'well-wishers' arrived in the affected areas with or without resources, many without appropriate experience in working in disaster situations. The coordination and management of these well-meaning individuals and organizations placed further strain on local and national authorities."[8]

There is also a sudden influx of international agencies, NGOs and, increasingly, private companies into a disaster site. According to Jesper Lund, UN Disaster Assessment and Coordination (UNDAC) team leader to the Bam earthquake, "approximately 1,300 responders from 34 countries arrived in the city by the fourth day after the earthquake."[9] No local government or administration, certainly not one hit by a large disaster, can cope with that kind of influx without well-trained coordination support.

International Assistance Provided Bilaterally

In complex emergencies, most assistance is channeled through multilateral humanitarian agencies such as the United Nations, the Red Cross/Crescent and NGOs. In natural disasters the bulk of assistance is undoubtedly provided through domestic efforts. International assistance by governments is usually provided bilaterally in part because it makes good political sense to be seen to be helping in times of distress. As a result of U.S. support to Indonesia during the Indian Ocean tsunami, 79 percent of Indonesians said that their image of the U.S. had improved.[10] However, bilateral assistance makes the task of the UN Emergency Relief Coordinator (ERC) difficult.[11] This official has been mandated to coordinate international disaster response, yet bilateral assistance often goes on without his knowledge in an uncoordinated manner.[12] The coordination necessary to save lives and ensure that critical needs are met becomes extremely difficult when there is no way of knowing what resources and actors are entering a disaster site, from whom and when.

Presence of the Military

The use of military assets by governments for response to natural disasters does not carry the same political connotations as it does in complex emergencies. International guidelines for military responses to natural disasters were agreed to in

Oslo, Norway in May 1994.[13] In most of the developing world, the military has greater logistics capability than the civilian sector and is therefore routinely used as a primary responder. During the Indian Ocean tsunami, military contingents from thirty-four countries were deployed. The U.S. alone deployed approximately 16,000 military personnel, twenty-six ships, fifty-eight helicopters and forty-three fixed wing aircraft.[14] However, many international humanitarian agencies and NGOs who view the military through their experience in conflict areas are not comfortable with the military and are hesitant to collaborate with them during disaster response. Since in the initial stages the military has many assets, these responders are nevertheless forced to work with the military in an uneasy relationship that can add to problems on the ground.

Pressures Brought to Bear by the Media

The role of the media in reporting natural disasters has changed dramatically in recent years. The coverage of Hurricane Mitch by CNN in Central America marked the first time that reports were made live from the site as the first responders arrived. Thus, television coverage has now evolved to a point where the local media is sometimes present at the disaster site even before the first responders have arrived. Powerful images of people buried under rubble or stranded on rooftops and in trees are immediately broadcast to the world. During Hurricane Katrina in New Orleans, the media, and through it the public, knew of the conditions in the Superdome even before the Director of the Federal Emergency Management Agency (FEMA) did.

When such pictures are shown on national or worldwide television, they exert an immense amount of political pressure on the national government, international responders and donors. Governments in particular are eager to be seen "doing something," prompting them to take some, or even any, visible action.

The Responders' Cauldron: The Unique Features of Disaster Response

As a result of the factors discussed above—the acute compression of response time, media pressure, damaged infrastructure and communications, casualties amongst local officials and the influx of responders—a disaster area can quickly become a cauldron seething with multiple actors all working in a high-pressure environment. The situation is almost always on the brink of chaos. Response requires that a diverse set of responders coordinate activities among three simultaneous but distinct response phases, each of which encompasses a variety of sectors requiring different functional specializations across varying levels and locations. This kind of response requires experience, understanding of local conditions and knowledge of disaster response processes—qualifications which are not always present among responders today.

Simultaneous Phases of Response

In a natural disaster the immediate response actually consists of three simultaneous phases, which are not present in other emergencies. Before these phases even begin the government must first realize it has an uncontrollable disaster on its hands. Often this takes more time than it should. The first is the *Search and Rescue Phase*, which includes the immediate post-impact life-saving and life-sustaining response of search and rescue teams, medical teams, etc. The critical parameter here is time. This phase usually lasts one to two weeks in sudden-onset disasters such as earthquakes, but may be longer in slower disasters, such as floods. *The Relief Phase* includes the provision of humanitarian assistance for shelter, water and sanitation, care of the affected population, restoration of government structures and the provision of food aid. This phase usually lasts up to three months. Finally, the *Rehabilitation and Reconstruction Phase* includes the commencement of activities related to recovery and infrastructure reconstruction as well as disaster mitigation programs, which have to be commenced along with the immediate response and relief. This overlapping of phases leads to a difficult situation in which different kinds of responders with different agendas and perceptions must work at the same time, within the same space.

Response Clusters

If having to undertake simultaneous Search and Rescue and Relief and Rehabilitation phases in conditions of chaos were not enough, there is also the imperative created by a paucity of resources for all responders—whether government, international and domestic agencies, Red Cross/Crescent or NGOs—to coordinate and act collectively in what are called "clusters." These are specific areas of response such as health, food, water and sanitation and provision of shelter. Most agencies and NGOs specialize in one or more of these areas, outside of which they have little expertise. The UN Humanitarian Response Review of 2005 has identified nine clusters: health, nutrition and feeding, water and sanitation, emergency shelter, camp coordination and management, logistics, telecommunications, early recovery and protection.[15] The cluster system was first used in the Pakistan earthquake in preparing the Flash Appeal, a system managed by the United Nations to coordinate funding for humanitarian emergencies.[16] The cluster system has potential, but much will depend on the willingness and ability of the nominated lead agencies to put the resources and effort into making their cluster work.

Varying Levels and Locations of Coordination

Deployment and utilization of responders must not only be coordinated *on-site*, but also must be synchronized simultaneously at the *national* center of government and the *international* level. The national government functions from the capital, as

do foreign embassies and most donor organizations, and decisions taken there dramatically affect events on-site. Similarly, at the international level, the UN Office for the Coordination of Humanitarian Affairs (OCHA) must ensure that donors and other major responders are kept fully informed of what is a rapidly evolving situation, so that appropriate international assistance can be dispatched rapidly.

Local Knowledge is Indispensable: NGOs and Civil Society

Since a natural disaster necessitates extremely quick response times, it is difficult for responders without previous knowledge of the affected area to gain sufficient understanding of local conditions before arriving. This makes local NGO and civil society partners as well any international NGOs and agencies that have experience working in the area indispensable for an effective response. For example, the most useful international partner in Pakistan in the aftermath of the earthquake was the NGO Islamic Relief, which had been working in the area earlier and had a deep understanding of the prevailing conditions. Experienced international responders understand this and actively seek out local partners and ensure their integration into their own activities and the overall international effort.

Inadequate Disaster Response Experience Within the Humanitarian Community

Finally, it must be acknowledged that there are few major international agencies or NGOs that actually have significant experience in international disaster response. This is the case because disaster response has been a neglected facet of humanitarian aid. As the successor organization of the UN Disaster Relief Coordinator, which had been responsible for international disaster response since 1971, UN OCHA has over thirty years of experience in disaster response.[17] However, even UN OCHA has allowed these skills to deteriorate, as the humanitarian community has fixated on conflicts and complex emergencies over the last decade. Before the media started covering disasters "live," conflicts were more politically interesting than disasters and lasted a much longer time. Also, the increase in the world's population has compelled more people to live in disaster-prone areas for economic reasons. Climate change has arguably added to the severity and frequency of disasters in recent times. A combination of these factors has meant that most humanitarian organizations have focused on conflict-related complex emergencies, even though the number and severity of natural disasters are increasing. The lack of adequate experience in disaster response, combined with insufficient local knowledge, has adversely impacted the ability of international organizations and NGOs to effectively respond to disasters.

International Disaster Response and Coordination Mechanisms

The combination of infrastructure destruction, casualties, limited response time,

media reporting, different and concurrent response phases and clusters, different geographical locations and multiple and varied responders with different agendas and understandings of the situation, results in a very complicated and stressful situation. Dealing with such a situation in a major disaster requires professional, experienced, rapid-deployment teams working in support of the national and local government to quickly establish a coordination and information management system. Fortunately, international tools and mechanisms for this purpose have evolved over the years. International response mechanisms include the UN Disaster Assessment and Coordination team (UNDAC) and the Urban Search and Rescue (USAR) teams belonging to the International Search and Rescue Advisory Group (INSARAG). To complement these international response mechanisms, a variety of field coordination mechanisms have also been developed including the On-site Operations Coordination Centre (OSOCC) and the International Humanitarian Partnership (IHP). In addition, a number of new actors from the corporate sector and civil society have become involved in disaster response.

The UN Disaster Assessment and Coordination Team (UNDAC)

The UNDAC team is part of the international emergency response system for sudden onset emergencies such as hurricanes, earthquakes, floods and volcanic eruptions.[18] It is a standby team of volunteer emergency managers with varied skills from forty-six countries, international agencies and NGOs and is managed by UN OCHA in Geneva. Established in 1993, UNDAC is capable of deploying, self-contained and fully equipped, within twenty-four hours to a disaster area anywhere in the world. It is provided free of charge to the disaster-affected country and is designed to meet the need for early and qualified on-site information and coordination during the initial period of a sudden onset emergency.

UNDAC provides local authorities with the professional capacity to create a coordination platform, conduct cross-sectoral emergency assessments and process information simultaneously at the disaster site. In collaboration with the local authorities, the UNDAC team establishes an On-site Operations Coordination Centre (OSOCC), which assists them in coordinating the international urban search and rescue teams as well as the relief and rehabilitation efforts of international responders caring for victims. As of January 2006, in response to requests from governments or the UN system in disaster-affected countries, UNDAC teams had been deployed on 142 missions to seventy-three countries.[19]

Urban Search and Rescue (USAR) Teams and the International Search and Rescue Advisory Group (INSARAG)

The INSARAG is a professional network of countries and responders dedicated to urban search and rescue (USAR), i.e. rescuing trapped people from collapsed

structures. It was created as a result of the chaotic international response to the earthquake in Armenia in 1988 that killed 25,000 people.[20] The network was formed to develop internationally accepted procedures and systems for sustained cooperation between international USAR teams operating at a disaster site.

Through the adoption of a UN General Assembly resolution, INSARAG established broad international consensus on the need for international USAR teams at a disaster site.[21] It has also developed mutually agreed INSARAG Guidelines for international USAR operations that have been translated into Chinese, Korean, Japanese, Spanish, German, Arabic and French. These guidelines are a detailed manual that cover all aspects of international USAR response from mobilization, entry into a country, coordination and functioning at a site and exit. Most importantly, INSARAG has developed standard operational criteria for the classification of international USAR teams, thereby enabling their professional capabilities to be ascertained beforehand.

International USAR teams that are members of INSARAG work very closely with the UNDAC team on-site. This is extremely important when one realizes that a USAR team deployed to an international emergency has 96 hours (the time beyond which it is unlikely for people to survive trapped in a collapsed building) to deploy and complete its operations. The average professional USAR team consists of approximately fifty to seventy personnel with about 30 tons of equipment and can be airborne from a cold start in eight hours.[22] They have 96 hours from the time the disaster occurred to get approval to deploy, fly to the nearest airport in another country, move by land to the disaster site, set up their base and rescue trapped people.[23] Without pre-agreed procedures for coordination and working together among many nationalities, this is an extremely difficult undertaking and INSARAG's great value lies in having achieved this understanding around the world.[24] These achievements are little known even within the humanitarian community.

What Field Coordination Involves

In order to be useful and effective, the international system's response has to fit into and assist overall national relief efforts. What exactly does this mean in terms of field coordination? Essentially, coordination can be defined as three levels of increasing responder integration. The first and simplest is *Information Sharing,* which is knowing where everyone is and what they are doing. The next level involving greater integration is *Operational Cooperation,* where entities carry out their own program but align them with others to achieve jointly identified aims. Finally, the highest level of coordination is *Combined Operations,* which involves common assessment, planning and operations based on one plan. This level is rarely achieved. However, for any of these activities to be managed at a disaster site there is a vital need to establish a coordination platform that is also the physical focus of international efforts. Such a platform was first created for urban search and rescue by the UNDAC

team under the INSARAG Guidelines. It is now commonly used for relief coordination and is called the On-site Operations Coordination Centre (OSOCC).

The On-site Operations Coordination Centre (OSOCC)

The OSOCC, established by UNDAC, has to be co-located with, and in support of, the local emergency management agency (LEMA).[25] It must be appreciated that the LEMA head is normally a district commissioner or some other local official who is the senior most representative of government at the disaster site. He or she is extremely unlikely to have had any prior experience of coping with an influx of international responders at the scale, speed and variety that arrive with a major disaster. The LEMA head normally has his or her hands full coordinating domestic relief efforts, which are invariably on a much larger scale than international efforts. It therefore needs the OSOCC, which provides a single point of interface with the international effort. The OSOCC is manned by UNDAC members who have hands-on experience in handling such situations.[26]

An OSOCC facilitates information exchange between international and national relief actors; provides the means to plan international relief operations on-site; and facilitates logistics support in cooperation with national authorities in the LEMA. It is important to stress that an OSOCC is not a command center. Rather, it is a focal point and physical location for coordination, which, in the international response world, is still done by mutual consensus. The activities that take place in an OSOCC include general and sectoral or "cluster" coordination meetings; coordination of needs assessments; processing and dissemination of information, including situation displays and maps; telecommunication facilities; briefing of newly arrived entities; providing information to the press; and briefing and, most essentially, coordination with the LEMA.

The International Humanitarian Partnership (IHP)

The IHP is an informal grouping of governmental emergency response organizations from Denmark, Finland, Norway, Netherlands, Sweden and the United Kingdom, with UN OCHA providing a secretariat in Geneva. It was originally created to provide multi-national collaborative support to the UNDAC team in emergencies, specifically in the form of equipment. The IHP now provides equipment and on-site staff as in-kind contributions for UNDAC teams as well as a variety of other partners engaged in disaster response.

The IHP provides support modules that vary depending on the needs of the environment and may include communications, office facilities, accommodation, catering and logistics. Modules may range in size from two or three support staff hand-carrying communications equipment, to a complete facility providing accommodation and office facilities under canvas with catering and transport to support a

large field mission for an extended period.[27] The IHP provided such modules and tented camps during the tsunami in Banda Aceh, Meulaboh and Calang in Indonesia as well as more recently at Muzaffarabad and Bagh in Pakistan. It is unlikely that international operations could have been run effectively in these disasters without this support. A similar grouping as the IHP is being formed in the Asia-Pacific region consisting of Australia, China, Japan, Korea, New Zealand and Singapore.[28]

Collectively, these tools and mechanisms that have been developed over the years—especially the OSOCC, manned by the UNDAC team, with the physical wherewithal provided by the IHP—provide the foundation for all international coordination in a disaster area. Establishing the OSOCC ensures that the local authorities have a system by which national and international responses are meshed together as much as possible. However, even with the OSOCC and the other response tools there are limits to what coordination can be accomplished in the disaster cauldron.

New Trends That May Impede Effective Coordination

Having discussed the conditions and pressures that disaster responders face, the variety of responders, as well as the coordination tools at the international community's disposal, it is pertinent to ask whether there is a point beyond which responders cannot be coordinated due to the very nature of the event. Are there limits to coordination? As discussed earlier, a variety of natural physical limits arise from the very nature of the natural disaster, such as destruction of infrastructure in the affected area, which makes it difficult to access disaster areas and come to the aid of affected populations. In addition, there are a variety of features of the current response that complicate coordination and rapid deployment. These include uneven standards among international responders, the fraying of agreed-upon international deployment processes, diversification of funding sources and a new set of actors on the scene with diverse motivations and levels of experience. Together these trends suggest that coordination is likely to become even more difficult in the near future.

Numbers and Uneven Standards of International Responders

Driven by media publicity, the number of entities now participating in international disaster response, be they international agencies, search and rescue teams, NGOs or civil society groups, has risen exponentially. Many of these groups have very little previous experience in this field but do find the means to appear on-site. Most have varying agendas and an eye on camera exposure resulting in increased fundraising capacity back home. In addition, the corporate sector is increasingly deploying people and assets in response to disasters. This has resulted in a situation where responders with wide variance in their professional knowledge, motivation and standards are present at the disaster site, thus diluting coordination efforts. In a lessons learned report from the tsunami, the United Nations observed that,

"While the high level of international interest in this disaster led to the provision of massive amounts of much-needed relief supplies, it also contributed to exacerbating many problems traditionally experienced during large-scale disasters that receive high levels of media attention."[29] The phenomenon of increasing numbers of inexperienced international responders will certainly impose limits on the ability of governments and the international community to coordinate and will impact negatively on the quality of assistance provided to victims.

Fraying of Agreed International Deployment Processes

Prior to the advent of instant media presence at disasters, the community of international disaster responders was a small, professional community mainly contained in the INSARAG, UNDAC and IHP networks, with the United Nations providing a forum for discussion. The small size of the community allowed it to come to consensus on protocols and processes for deployment of assets to a disaster site in a reasonably systematic and rapid manner, thus achieving the reduction of chaos. These procedures use Internet technology to overcome the obstacles of distance and time zone differences by relying heavily on the Virtual OSOCC, a password protected website enabling international disaster responders to coordinate and share information.[30] With the introduction of large numbers of new players into the field, a situation is developing where the consensus, and with it response systems, are fraying due to lack of knowledge of such systems. Reflecting again on the tsunami, the United Nations noted that "many non-governmental actors, who had little or no experience in humanitarian relief, were unwilling or unaware of the need to coordinate with other partners."[31] This situation is likely to get worse before it gets better, thereby leading to another limit on effective coordination.

Diversification of Funding Sources

In earlier times, funding for international disaster response primarily came from a small number of western governments. This allowed donor governments to insist that those agencies or NGOs to which they gave money participate in established coordination processes, in turn increasing the effectiveness of coordination. The Indian Ocean tsunami and Hurricane Katrina changed this situation, wherein the public emerged as a major donor in its own right. However, because it is fragmented and lacks specialized knowledge, the general public has very little influence on the way the organizations it funds behave relative to other organizations at a disaster site. For many NGOs involved in the tsunami response, easy, plentiful funds eliminated any need to take into consideration that how and what they did would affect others. Small NGOs went to an area in Aceh, for example, vaccinating survivors and leaving the area without a record of what was given to whom, making subsequent health interventions difficult. Such unprofessional intervention has also resulted in a weak-

ening of coordination, and is a trend that is unlikely to soon reverse itself.

The Corporate Sector: A New Player that Can Make a Difference

The tsunami brought about a sea change in the way the corporate sector views engagement with disaster response. The United Nations notes that the tsunami "resulted in an unprecedented influx, at all levels of the relief effort, of goods and services from the corporate business community."[32] The tsunami triggered immense interest in disaster response among major corporations and added to the proliferation of corporate sector networks seeking their own role. Networks now interested in disaster response include Corporations for Humanity, Business Roundtable, Global Hand, as well as the Disaster Response Network, an initiative of the World Economic Forum.[33]

Motivations for this interest among companies appear to be mixed. Undoubtedly, the ethics of corporate social responsibility plays a major part, but so does a desire for positive publicity and perhaps market access. Be that as it may, the corporate sector has great potential for good. What is important is how this potentially hugely influential entity, entirely new to the field of disaster response, can be integrated into a response system that has been systematically developed and built upon over the years. More pertinently, is the corporate sector willing to be coordinated and integrated along with other actors in order to provide value-added services, or will they throw money and resources at the disaster with an incomplete understanding of, and perhaps disdain for, existing response systems run by perceived "bureaucrats" of national governments and the United Nations? Only time will tell.

From the issues discussed above it is clear that there are inherent limits to the effectiveness of international disaster response coordination. Most of these limitations are a result of factors that cannot be easily rectified and are in fact being amplified. In fact, the sum total of these factors creates pressures towards a situation where coordination is likely to become less rather than more effective. Nonetheless, there are measures, discussed below, which can and must be taken by the international community between disasters to reduce the effect of some of these factors.

Taming the Cauldron: Recommendations on Improving Disaster Response

While the conclusion reached in above may appear rather gloomy, there is much that can be done to improve international response. However, these actions require the international community to put in considerable hard work between disasters.

Strengthen Disaster Response Preparedness

Disaster response preparedness is of the utmost importance as it ensures a more coherent and effective response once disaster strikes. The international community

must invest heavily in it between disasters. Even recent articles in newspapers have begun advocating this course of action. Anders Wijkman writing recently in the *International Herald Tribune* argues that, "Governments and international organizations should start paying serious attention to studies showing the importance of disaster preparedness."[34] Disaster preparedness involves building and strengthening international response networks such as UNDAC, INSARAG, Red Cross/Crescent disaster response tools and integrating international response processes and capacities into regional, national and local disaster response planning. Equally, if not more importantly, preparedness involves the establishment of working relationships of trust with the governments of disaster-prone countries and assistance in enhancing their disaster response capacities and systems. As Robert Cassen wrote more than a decade ago, "For any recipient country the heart of an aid coordination system must be a strong central unit in the government with a complete overview of the aid process."[35] Such units and capacities rarely exist in disaster-prone developing countries even today and therefore response preparedness must include helping disaster prone countries build their capacity to handle emergencies.

Ensure Verifiable Operational Standards of International Responders

There is no existing system by which international responders to a disaster are required to meet specified operational standards before they can respond. The humanitarian field is one of the few fields where one needs no qualifications to set up and operate a relief organization. This is actually quite astonishing when one considers that the lives of ordinary people all over the globe are at stake. John Holland of RAPID-UK cites a recent example of this recurring problem when describing an unqualified team that appeared during the rescue operations at the collapsed Margala Towers in Islamabad, Pakistan in October 2005: "One such team turned up at the Margala Towers without liaison. They posed for pictures, carried out television interviews and then left. This sort of action by a theoretically specialized rescue team does nothing to gain the local people's confidence."[36] Such incidents are commonly repeated in all sectors of humanitarian response. These irresponsible acts and the lack of accountability must be addressed under a system of verifiable operational standards imposed on all those who respond to disasters.

INSARAG is the first network to have started the process of creating such standards. In November 2005, at its annual international urban search and rescue team meeting leaders finally established, after years of discussion, internationally agreed-upon operational standards classifying USAR teams into light, medium and heavy categories. It simultaneously established a process for mutual assessment of international USAR team operational capabilities and made it clear that light USAR teams should not respond internationally as they lack adequate operational capability.

Similar systems should be set up in all clusters or sectors of emergency response

to natural disasters. On this issue, the Humanitarian Response Review is quite clear: "The other key recommendations cover, first and foremost, the development and application of benchmarks and indicators to measure performance."[37] Organizations, irrespective of their area of expertise, should not be permitted into a disaster area if they have not been assessed as to whether they meet established operational standards. Enforcement of these standards will help to establish a system of access to disaster sites based on professional qualifications and reduce the number of unqualified and inexperienced responders, thereby significantly improving the quality of assistance provided to affected people.

Restore the Consensus on International Response Processes

As discussed above, the consensus that existed on the sequence and processes of international response when there were only a few professional responders in the field has been frayed by the influx of new players drawn by media exposure. This consensus needs to be restored among a much wider set of actors that will now need to include the corporate sector and other entities new to disaster response. Only the United Nations, because of its international acceptability, can effectively undertake this challenge. To this end, UN OCHA needs to devote significant resources and energy to creating a consensus among all responding entities on procedures and methods of disaster response and coordination through discussions, seminars and exercises at international, regional and national levels.

Create Corporate Guidelines for Involvement in Disaster Response

Since the corporate sector is a new and potentially powerful player in disaster response, it is imperative that business disaster relief activities be planned and implemented within the parameters of established international coordination structures. Business must complement and add value to the work of governments and relief agencies, not compete with them. There is a need to establish corporate guidelines, or a set of binding principles on business engagement in disaster response, on to which companies can sign. These should include a commitment to participate in coordination, to respect humanitarian principles, to work in close collaboration with experienced relief agencies and to become acquainted with the existing humanitarian methodology in their area of expertise. Ideally, these guidelines should be negotiated between the UN Emergency Relief Coordinator representing the humanitarian community and an organization such as the World Economic Forum representing the corporate community.

Humanitarian Decisionmakers: Specialization Needed for Disaster Response

Decisionmakers in the international humanitarian community, be they from the

UN, NGOs or donors, do not appear to appreciate the fact that disaster response is different from other emergencies and needs specialization. As Toni Frisch, head of the Swiss Humanitarian Aid Unit observes, "too many strategic errors occur because decisions are being taken by people not familiar with disaster response."[38] This is because their experience is primarily in conflict zones and complex emergencies. It is an unfortunate reality that people with only conflict-related experience, and consequently a lack of understanding of natural disaster response, are those in decision-making positions in humanitarian organizations. This needs to change. Organizations with an interest in disaster response should put those with experience in it in decisionmaking positions. They should also create within their organizations entirely separate branches without any other responsibilities but to deal with the issue. Otherwise, they will not be able to build the relationships and trust with disaster-prone countries that need to be in place before a disaster strikes in order to react efficiently during a disaster. Nor will they be able to develop the necessary professional specialization.

Donors and the Public: Fund Response Preparedness

Except for high profile natural disasters covered by the media, donors have traditionally funded activities related to operations in conflict-related emergencies rather than those related to natural disasters. This bias towards complex emergencies is clearly observed by the Humanitarian Policy Group research report on donorship trends, which notes that, "as a comparison of overall humanitarian aid on the FTS [Financial Tracking Service] from 1999-2004, only 8 percent has been for natural disasters."[39] If international response is to improve, especially through essential response preparedness measures, this ratio has to change. Small amounts of money spent on response preparedness will have a major multiplier effect in improving international response during disasters.

During the tsunami, public contributions to charities appealing for funds to deal with the disaster were extremely generous. However, this also had the effect of allowing numerous organizations with no experience to be present at the site with no stake in participating in coordinated action. Some mechanism to channel public contributions so that they do not have this unintended disruptive effect must be found. One possibility is to appeal to the public to give contributions to the enhanced Central Emergency Relief Fund or another common fund to be established that should have a trustworthy and transparent management system. This fund could in turn fund responders based on their verified professional capabilities.[40]

Conclusion

The emergency environment of a major disaster is different from any other. It is a responders' cauldron, but reliable, well-tested tools and procedures exist to assist

the disaster-affected government in handling the situation. High-profile disasters and their associated media coverage have increased the interest of the public in disaster response and have resulted in fresh entities being involved in disaster response; this includes the corporate sector, which has immense potential for good. However, these new actors need to understand the imperative need for coordination and to work within the international framework that has been painstakingly established over the years. As discussed in this paper, there are trends that appear to limit the ability to coordinate responders at disaster sites. The increasing number of inexperienced responders and the easier availability of funding seem to be creating conditions where coordination only becomes more difficult, not better.

There are a number of measures, however, that can and should be taken to ensure that these trends are contained and that disaster response is given the importance it is due by the humanitarian community. Most importantly, time, effort and money must be invested in the response preparedness of disaster-prone countries; the operational capabilities of responders must be classified; and the restoration of an international consensus on the processes of international disaster response must occur. Donors must allocate adequate funds between disasters for these activities. Only then will a system emerge that can reliably and efficiently respond to the needs of victims of disasters regardless of when and where they occur. ♔

The views expressed in this paper are the personal views of the author and do not necessarily reflect the views of the United Nations.

NOTES

[1] International Federation of Red Cross and Red Crescent Societies, *World Disaster Report 2005*, Annex 1, (Geneva: 2005), 198, 199.

[2] David Aaronovitch, "From the murky water of doubt emerges an uncomfortable truth," *London Times,* 3 September 2005.

[3] For details of UN General Assembly Resolutions see Arjun Katoch, "International natural disaster response and the United Nations," *International disaster response laws, principles and practice: reflections, prospects and challenges,* (Geneva: International Federation of Red Cross and Red Crescent Societies, 2003), 50.

[4] David P. Fiddler, "Disaster Relief and Governance after the Indian Ocean tsunami: what role for international law?" *Melbourne Journal of International Law* 6, no. 2 (October 2005): 472.

[5] Centre for Research on the Epidemiology of Disasters (CRED), "Disaster Data: a Balanced Perspective" and "The 2004 Human Impact: the 10 most affected countries," (reports, Universite Catholique de Louvain, Brussels: August 2005), 2.

[6] United Nations, "International cooperation on humanitarian assistance in the field of natural disasters, from relief to development," (Report of the Secretary-General to the General Assembly, New York: 2005), 10.

[7] Mostafa Mohagegh (Federation of Red Cross and Red Crescent Societies), interview by author, Geneva, 3 January 2006.

[8] United Nations, *Regional Workshop on Lessons Learned and Best Practices in Response to the Indian*

Ocean Tsunami, Report and Summary of Main Conclusions, (Medan, Indonesia: 13-14 June 2005), 4.

9 Jesper Lund (UN Office for the Coordination of Humanitarian Affairs), interview by author, Geneva, 4 January 2006.

10 Pew Research Center, "U.S. Image Up Slightly, But Still Negative," (16-Nation Pew Global Attitude Survey Report, Pew Global Attitudes Project, Washington, DC: 23 June 2005).

11 United Nations General Assembly, *Strengthening of the coordination of emergency humanitarian assistance of the United Nations*, Resolution A/RES/46/182, (New York: 19 December 1991), 6.

12 Katoch (2003), 51.

13 United Nations Department of Humanitarian Affairs, "Guidelines on the use of Military and Civil Defence Assets in Disaster Relief," (report: Geneva: May 1994).

14 The White House, "US Support for Earthquake and Tsunami Victims," 3 January 2005, www.whitehouse.gov/infocus/tsunami/.

15 United Nations, "Humanitarian Response Review: An independent report commissioned by the United Nations Emergency Relief Coordinator and Under-Secretary-General for Humanitarian Affairs, Office for the Coordination of Humanitarian Affairs (OCHA)," (New York and Geneva: August 2005). The "clusters" are sectors where there is a need for all humanitarian actors in an emergency—government, UN, NGOs, Red Cross/Crescent—to work together.

16 OCHA, Consolidated Appeals Process (CAP), "Flash Appeal 2005 for South Asia Earthquake," (report, Geneva: August 2005).

17 The United Nations Disaster Relief Coordinator (UNDRO) was created by United Nations General Assembly Resolution 2816 (XXVI) of 14 December 1971 with complete responsibility for all aspects of dealing with disasters. It was merged into the United Nations Department of Humanitarian Affairs (DHA) in 1991 with the creation of the United Nations Emergency Relief Coordinator through United Nations General Assembly Resolution A/RES/46/182 of 19 December 1991, "Strengthening of the coordination of emergency humanitarian assistance of the United Nations." In 1998, DHA morphed into OCHA with the present Secretary-General Kofi Annan's reform of the organization through United Nations General Assembly Resolution 52/12/B of 9 January 1998, "Renewing the United Nations: a programme for reform." Through all these changes the responsibility for international disaster response stayed with what is now OCHA but the responsibility for disaster mitigation and reduction was shifted to the United Nations Development Programme (UNDP) when OCHA was created in 1998, thus breaking the disaster cycle.

18 See Field Coordination Support Section, "UNDAC," OCHA, http://ochaonline.un.org/webpage.asp?MenuID=10428&Page=552.

19 OCHA, Field Coordination Support Section, "UNDAC Missions," http://ochaonline.un.org/webpage.asp?ParentID=10428&MenuID=10440&Page=556.

20 U.S. Geological Survey Earthquake Hazards Program, "Earthquakes with 1,000 or more deaths since 1900," http://earthquake.usgs.gov/regional/world/world_deaths.php.

21 United Nations General Assembly, *Strengthening the Effectiveness and Coordination of International USAR Assistance*, Resolution 57/150, (New York: 16 December 2002).

22 OCHA, International Search and Rescue Advisory Group (INSARAG) Guidelines (forthcoming), http://ochaonline.un.org/webpage.asp?ParentID=2894&MenuID=2915&Page=574.

23 Ibid.

24 For a recent update on INSARAG activities, see United Nations, "International cooperation on humanitarian assistance in the field of natural disasters, from relief to development," (report of the Secretary-General to the General Assembly, New York: August 2005), 15.

25 OCHA, Field Coordination Support Section, "INSARAG - OSOCC," http://ochaonline.un.org/webpage.asp?Page=571.

26 For more information see OCHA, Field Coordination Support Section, INSARAG, OSOCC, http://ochaonline.un.org/webpage.asp? ParentID=10172&MenuID=10189&Page=571.

[27] OCHA, Field Coordination Support Section, "The International Humanitarian Partnership (IHP)," http://ochaonline.un.org/webpage.asp?MenuID=10173&Page=593.

[28] The group is called the Asia-Pacific Humanitarian Partnership (APHP). See United Nations, "International cooperation on humanitarian assistance in the field of natural disasters, from relief to development," (Report of the Secretary-General to the General Assembly, New York: August 2005), 8.

[29] United Nations, "Regional Workshop on Lessons Learned and Best Practices in Response to the Indian Ocean Tsunami," (Report, 2005), 3.

[30] The Virtual OSOCC allows international disaster responders to enter deployments, movements, needs assessments and any other recommendations regarding the emergency from anywhere in the world instantaneously. This is an extremely powerful tool that most humanitarian staff and organizations outside the disaster response community do not know exists. See OCHA, ReliefWeb, Virtual OSOCC, http//:www.reliefweb.int.

[31] See note 29.

[32] See note 28.

33 Fritz Institute, "Partners for Effective Relief" and "Corporations for Humanity," http://www.fritzinstitute.org; Business Roundtable, "Special Initiative" and "Partnership for Disaster Relief," http://www.businessroundtable.org; Global Hand, http://www.globalhand.org. Disaster Relief Network (DRN) is one corporate entity that was an earlier entry into this field, well before the tsunami, and has provided aircraft handling teams at airfields during the response to disasters. See http://www.drnglobal.org.

[34] Anders Wijkman, "We Can Minimize Natural Disasters," *International Herald Tribune*, 31 December 2005, 6.

[35] Robert Cassen, *Does Aid Work?*, (Oxford: Oxford University Press, 1994), 185.

[36] John Holland, "Quake Lays Waste to South Asia," *Crisis Response Journal* 2, no. 1 (December 2004): 16.

[37] United Nations, "Humanitarian Response Review" (Report, 2005), 12.

[38] Emily Hough, "Dealing with complex emergencies," *Crisis Response Journal* 1, no. 1 (December 2004): 37.

[39] Adele Harmer and Lin Cotterrell, "Diversity in donorship: The changing landscape of official humanitarian aid," (Report 20, Humanitarian Policy Group, Overseas Development Institute: September 2005), 19.

[40] To address the lack of predictable funding, the United Nations General Assembly has upgraded the United Nations Central Emergency Response Fund (CERF) and established a funding goal of $500 million. The upgraded CERF adds a grant facility of up to $450 million to the existing CERF loan mechanism of $50 million. This will enable the United Nations to make initial financial commitments immediately when needed without having to wait for appeals to be funded. This money has not yet been committed by donors.