Earthquakes and Floods: Comparing Haiti and Pakistan

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Comparisons between the response to the Haitian earthquake and to Pakistan's floods are perhaps inevitable, as these major tragedies occurred within seven months of each other. Much of the commentary has focused on possible reasons for the disproportionate donor response to the two disasters. But there are other similarities – and differences – between the two cases that deserve further attention. This short article seeks to provide some comparisons between disasters in Haiti and Pakistan by looking first at the difference in the nature of the disasters, followed by comparison of housing needs, displacement, and the international response. Before beginning this analysis, however, the table below provides a starting point for comparing key indicators.

Comparing Haiti, Pakistan and the international response

The table below provides preliminary information on some basic indicators of the scale of the disasters in Haiti and Pakistan, the problems encountered, and the international response. While the date – indeed even the exact moment — of the Haitian earthquake is clear, it is difficult to specify the date at which the Pakistani flooding was recognized as a major disaster. Here we have used the date of 29 July when the UN's Office of Humanitarian Affairs issued its first situation report, but this is far from a precise indicator (as discussed below.) Assessments of the extent of the damage in Pakistan are on-going and adjustments are likely as access to affected communities improves. Comparisons between international funding for the two emergencies are also complicated by the different timeframes.

	Haitian earthquake	Pakistan flooding
Date of disaster	12 Jan 2010 First OCHA Situation Report: January 12	Late July 2010 (First reports of flash floods in Baluchistan on July 23, floods in KPK starting around July 26/27) First OCHA Situation Report: July 29
National population 2009 ⁱ	10.2 million	166.1 million ⁱⁱ
Deaths	220,500 ⁱⁱⁱ	1,539 ^{iv}
Injured	Over 300.000 ^v	2,055 ^{vi}
Displaced	Est. 1.8 million (1.3 within Portau-Prince, 500.000 leaving Portau-Prince) vii	Est. 6 million in need of shelter ^{viii} (August 23)
Total affected/as percentage of total national population	3 million (29.4 %) ^{ix}	17.2 million ^x (10.35 %)

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	Haitian earthquake	Pakistan flooding
Houses destroyed/damaged	105.000/208.000 ^{xi}	1,226,678 (August 23) ^{xii}
Schools destroyed/damaged	1,300 ^{xiii}	7,820 ^{xiv}
Hospitals destroyed/damaged	50 ^{xv}	200 ^{xvi}
Original UN Flash appeal	15 January: ^{xvii}	11 August: ^{xviii}
launched	US \$ 575 million	US \$ 460 million
International pledges 2 weeks after flash appeal as percent of total appeal	82 % ^{xix}	57 % ^{xx}
Flash appeal funded 100 %	16 February (35 Days) ^{xxi} On Feb 18 revised Humanitarian Appeal is launched requesting US \$ 1.4 billion for 1 year (includes the \$575 Million of the flash appeal)	
US pledges	US \$ 211.6 million ^{xxii} (part of the extended 1.4 billion US \$ appeal)	
Appeal by International Federation of the Red Cross/Crescent Society	US \$ 103 million	US \$ 74 million
Number of tents/plastic sheets distributed 3 weeks after	10,545/11,390 (February 3) ^{xxiv}	109,500/72,200 (August 23) ^{xxv}
% of displaced receiving tents/tarpaulins (after three weeks)	1.2 %	3.0 %
Donation per affected person received after 2 weeks of flash appeal	US \$ 157.16	US \$ 15.24
Role of US military	Deployed 22,000 troops, 58 aircrafts, 15 ships; oversaw airport operations, rehabilitated the harbor, distributed aid, hospital ship	15 helicopters, as of August 24 the U.S. military had delivered 1.5 million pounds of relief supplies and food, and helicopters had rescued or transported about 6,500 people. xxvi
Health concerns	Traumatic injuries, including crushing Injuries, high needs for surgery, infections	Water-borne illnesses (diarrhea, cholera), skin-disease, acute respiratory disease
Protection concerns	Trafficking of children; gender- based violence in camps, generalized insecurity	Early reports of separated families, a few landmine victims, discrimination against lower castes, women-headed households
Shelter concerns	Land tenure issues, rubble clearance	Land markers washed away by floods, mud removal

	Haitian earthquake	Pakistan flooding
Political concerns	Interrupted Haitian election	Potential strengthening of
	timetable, governance questions	fundamentalist groups,
	and relief effort;	destabilization and
		delegitimization of government
Economic concerns	70 % of Haiti's GDP is generated	Massive destruction of
	in the Port-au-Prince area which	infrastructure, 3.2 million hectare
	has been most heavily impacted	of standing crops have so far bee
	by the disaster, massive	damaged or lost; widespread loss
	destruction of infrastructure	of livestock
Logistics	Destroyed airport, harbor, roads	Destroyed roads, bridges; some
	Generally bad infrastructure;	areas only accessible by
	Particular logistics difficulties in	helicopter;
	Port-au-Prince and surroundings	20% of the country flooded
Total GDP 2009 xxvii	US \$ 6.5 billion	US \$ 166.5 billion
GDP per capita 2009	\$733	\$1,017
nominal ^{xxviii}	•	
Estimated Damage	US\$ 7.8 billion ^{xxix}	Est. US \$ 15 billion*xx
Estimated Damage as	119 %	9 %
percentage of GDP		
Reconstruction Pledges	March 31 - Donors pledge US \$	Aug. 22 – World Bank US \$ 0.9
	9.9 billion of which US \$ 5.3	billion Asia Development Bank U
	billion is pledged over 2 years	\$ 2.0 billion (loans)
	(requested US \$3.9 billion).	(/
Corruption Perception Index	160	139
2009 (out of 180) ^{xxxi}		
HDI 2009 ^{xxxiii} (out of 182)	149	141
Media stories 10 days after	well over 3,000 stories in both	320 broadcast news stories and
the disaster xxxiii	print and broadcast media	730 print news stories
	respectively by day 10 and by day	
	20	
Top 10 donors (pledges)	20 Venezuela US\$ 2.417 m	USA US \$161.9 m
Top 10 donors (pledges)		USA US \$161.9 m Saudi Arabia US \$114.4 m
Top 10 donors (pledges)	Venezuela US\$ 2.417 m	
Top 10 donors (pledges)	Venezuela US\$ 2.417 m Inter-American Development	Saudi Arabia US \$114.4 m UK US \$108 m
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Top 10 donors (pledges)	Venezuela US\$ 2.417 m Inter-American Development Bank US\$2.000 m USA US\$ 1.152 m European Commission US\$ 567m IMF US\$ 436 m	Saudi Arabia US \$114.4 m UK US \$108 m European Commission US \$93.5 m Private Donors US \$84.2 m Germany US \$32 m Australia US \$31.8 m
Top 10 donors (pledges)	Venezuela US\$ 2.417 m Inter-American Development Bank US\$2.000 m USA US\$ 1.152 m European Commission US\$ 567m IMF US\$ 436 m Spain US\$ 427 m	Saudi Arabia US \$114.4 m UK US \$108 m European Commission US \$93.5 m Private Donors US \$84.2 m Germany US \$32 m Australia US \$31.8 m CERF US \$26.6 m
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Earthquakes and Floods

On the global level, between 2000 and 2009, 2 billion people were affected by disasters; 44% of those were affected by floods, 30% by drought and only 4% by earthquakes. However, since 2000 60% of those killed in disasters died in earthquakes. In comparison with hydrometeorological disasters (such as the Pakistan flooding), earthquakes pose particular difficulties²:

- Risk of aftershocks, traumatizing population and complicating relief efforts.
- Damage to infrastructure, collapsed buildings and large amounts of rubble which need to be moved for relief efforts.
- Large numbers of injuries (in contrast to flooding where [to oversimplify] people either die by drowning or escape largely unscathed). Earthquake injuries tend to be particularly serious —spinal cord injuries, crushed limbs requiring both immediate care and longer-term rehabilitation.
- Difficulties in mobilizing support to reduce future risks, as earthquakes are less likely to occur than other disasters.

Most obviously, earthquakes occur suddenly and with little warning. People cannot be evacuated in advance of an earthquake and efforts to mitigate the risks of earthquakes focus on making buildings safer and educating the population on how to respond when the tremors strike. In contrast, flooding can occur suddenly, for example after a particularly heavy rain or the collapse of a dam. But large-scale flooding is usually the result of sustained heavy rains over a period of time which causes rivers to swell and overflow their banks. That's what has happened in Pakistan since July. Although barely mentioned in the mainstream media, this is what is happening in China as well – where flooding of the Yangtze, Yellow and Songhua Rivers has forced the evacuation of millions of people, affected more than 120 million people and destroyed over 600.000 homes.³

Earthquakes, as evident in Pakistan in 2005, can occur in rural as well as urban areas, but the damage is greater in urban areas, simply because there are more and bigger buildings which can collapse and because of the concentration of population. Pakistan's 2005 earthquake was centered in a rural area but most of the 73,000 casualties were people living in small towns and cities.⁴

¹ Integrated Regional Information Networks (IRIN), "Earthquakes: the decade's deadliest killer," 28 January 2010, http://www.irinnews.org/Report.aspx?ReportId=87908

² Active Learning Network for Accountability and Performance in Humanitarian Action (ALNAP), *Responding to earthquakes 2008 - Learning from earthquake relief and recovery operations*, July 2008, http://www.alnap.org/pool/files/ALNAPLessonsEarthquakes.pdf

³ International Federation of the Red Cross, "China – worst flooding in decades leaves millions in need", 23 July 2010, http://www.reliefweb.int/rw/rwb.nsf/db900sid/ASHU-87MS36?OpenDocument&rc=3&cc=chn

⁴ Inter-Agency Standing Committee, *Meeting Humanitarian Challenges in Urban Areas (MHCUA): Draft Assessment.* 2 October 2009,

Flooding because of heavy rains is often paralleled by mudslides. Large-scale flooding tends to have more of an impact on agriculture and livestock than major earthquakes. While major earthquakes certainly disrupt agricultural production, this is usually because of damaged transportation and economic infrastructures. Flooding can destroy crops as well as equipment and seeds. Even when the flood waters subside, the land may be unfit for agricultural production for a period of time. Livestock is a particularly valued resource in rural communities and livestock is almost always lost when there is major flooding. Even when the flooding subsides, the loss of domestic animals represents a loss of household income (or labor). Presently in Pakistan, the estimates are that 16% of this year's crops are destroyed, which means damages of about US\$2.8 billion. Moreover, the country faces major export losses because of the destruction of export crops such as wheat and cotton. Damage to irrigation systems and loss of equipment and seeds will also heavily impact the wheat planting season which starts in September. In contrast, after an earthquake some agricultural land may be destroyed, and crops may remain unharvested because fields are inaccessible, but for the most part, the basic productivity of the land is not significantly affected.

In the immediate wake of an earthquake or widescale flooding, different resources are needed to rescue people from imminent danger. In earthquakes, the immediate challenge is finding survivors buried under rubble while in large-scale flooding, the need is to evacuate people from rooftops, trees, and other places where they have sought protection from the rising water. Simply put, earthquakes require heavy equipment to remove debris and search and rescue teams while flooding requires helicopters. When the capacity of national authorities to meet these needs is overwhelmed (as it usually is in a major disaster), equipment and specialized teams must be brought in from outside the country. And in spite of the best political will, solidarity and planning in the world, this always takes time. In the Haitian earthquake, most of the people pulled alive from the rubble were rescued by family, neighbors and the community. By the time the internationals arrived in force (67 search and rescue teams) and in spite of their heroic efforts, the lives saved numbered only 132⁷. Accounts presently trickling out of Pakistan indicate that many of those who escaped the flooding did soon their own without transport or support from either the Pakistani authorities or the international community. There is an important lesson in this -- strengthening local communities' ability to respond to disasters will probably save many more lives than an equivalent amount spent on deploying expensive international assets.

Access by humanitarian workers to people in need is almost always a difficult issue in natural disaster response because of the destruction of transportation infrastructure. In both Haiti and Pakistan, access has been slow: in Haiti, largely because of the presence of millions of tons of rubble and the destruction of roads, in Pakistan, primarily because much of countryside was

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⁵ FAO, *Pakistan Floods, Executive Briefing*, 17 August 2010,

http://www.fao.org/fileadmin/templates/tc/tce/pdf/Pakistan ExecutiveBrief 17082010.pdf

⁶Ahmed Mukhtar, "Crops losses estimated at \$2.8 billion", Pakissan, 25 August 2010,

http://www.pakissan.com/english/news/newsDetail.php?newsid=22903

⁷ USA Today, "U.N.: Haiti calls off search and rescue", 23 January 2010,

http://www.usatoday.com/news/world/2010-01-23-haiti-saturday_N.htm

underwater and roads and bridges were washed out. At a time when people need food and water, there simply isn't time to rebuild infrastructure to facilitate movement of equipment and supplies -- if people are to be kept alive. The UN is presently appealing for more helicopters to respond to some 800,000 people in Pakistan who can be reached only by air.

In all major disasters, affected communities not only have material needs for life-saving assistance (food, water, water and sanitation, shelter, medical care), but also often face protection needs. Immediately after a disaster, humanitarian workers are so focused on rescue efforts and delivery of assistance that few are looking at protection needs – although this is beginning to change as a result of the introduction of protection clusters in UN response. In the case of Haiti, the problems of separated children, trafficking, sexual and gender-based violence and, overall violence in the camps, continue to be huge issues – 7 months after the earthquake. In Pakistan, reports on protection problems are just beginning to surface – reports of separated children, discrimination by caste in provision of assistance, of gender-based violence, and a few cases where landmines have been dislodged by the flooding and have killed children. It is too early to tell whether these represent isolated cases or indications of more widespread phenomena that will only become apparent when the humanitarians begin looking at protection more closely.

The particular needs for shelter

In both cases, the survivors of earthquakes and flooding face immediate and long-term needs for shelter. Usually national authorities and international agencies provide tents (or plastic sheeting when sufficient tents are unavailable) as temporary accommodations and then plan for transitional and longer-term housing. Rebuilding after a major earthquake in an urban area requires removal of rubble; in Haiti the amount of rubble still be removed is estimated at 24 million tons while only 1 million tons have been removed so far. At present rates, this is a process that will take years. When an earthquake occurs in a rural area, as in Pakistan in 2005, the issues are different – it is less about getting rubble out of crowded streets and more about logistical difficulties in distributing materials and equipment for people to rebuild their own, usually modest, homes. In the case of large-scale flooding in rural areas, people can return to their homes when the floods recede, but often find them filled with mud and their possessions destroyed.

The time of year in which the disaster occurs is a major factor in shelter arrangements. The Haiti earthquake occurred six months before the beginning of the hurricane season which provided an impetus to provide shelter which could withstand the effects of torrential rains. This deadline was not met, however, and humanitarian agencies began focusing on preparing communities living under plastic sheeting on how to respond in the event of a hurricane. ⁹ The

⁸ Edward Cody, "Despite 'all that money,' more than 1 million Haitians remain displaced by January earthquake", The Washington Post, 22 August 2010, http://www.washingtonpost.com/wp-dyn/content/article/2010/08/21/AR2010082102882.html?sid=ST2010081805755

OCHA Haiti, Humanitarian Bulletin, Issue # 9, 17 August 2010, p. 1

2005 earthquake in Pakistan, which occurred in the mountainous northern part of the country, took place in October; consequently the drive of the humanitarian community was to provide 'winterized' tents in advance of the coming snowstorms. The flooding in Pakistan, occurring in July-August, does not carry with it quite the same urgency although some of those affected live in mountainous regions where cold winters can be expected in a few months.

One of the biggest problems in rebuilding housing is the question of land titles and ownership. While temporary shelters and tents can often be erected on public property or on land rented by private owners, when it comes to transitional or permanent housing, questions of ownership are key. Building homes for people who do not have clear titles to the land is fraught with potential conflict. Similarly compensating people for lost homes can create resentment, particularly when ownership is disputed. Moreover, many of those who lose homes are not homeowners, but rather renters and squatters. Their needs also must be considered in rebuilding plans. In Haiti, the question of land ownership and titles is nightmarishly complex and is the major impediment to large-scale reconstruction of housing. In Pakistan, many of those affected by the floods hold only customary title to their lands; reports are that in some cases men are remaining on their flooded property in order to protect their claims to it. Both flooding and earthquakes have a way of altering traditional landmarks which have delineated ownership. When a river changes its course, or a building is shifted by an earthquake, it is hard to use these landmarks to prove ownership or determine where one's property ends and another's begins. In the province of t

Earthquakes and flooding, by their nature, cause different types of damage and require different types of national and international responses. But perhaps equally as important is whether the disaster occurs in an urban or rural area and, it is likely that disasters will become an increasingly urban phenomena – in part because a growing proportion of our planet's population is living in urban areas and in part because as cities grow, people are living on increasingly marginal land, making them more susceptible to the effects of natural hazards. For international humanitarian agencies, working in urban contexts is generally more difficult than working in rural areas because of the presence and sometimes overlapping authority of different national and municipal entities and the presence of many civil society organizations. Humanitarians have a lot more freedom of action in rural areas than they do in cities, particularly in capital cities.¹²

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¹⁰ Elizabeth Ferris, Daniel Petz, *Haiti Six Months On,* 12 July 2010, http://www.brookings.edu/papers/2010/0712_haiti_six_months_ferris.aspx

¹¹ Refugees International, "Refugees International Statement On Pakistan: More Protection Needed," 19 August 2010, http://www.refugeesinternational.org/press-room/press-release/refugees-international-statement-pakistan-more-protection-needed

¹² Inter-Agency Standing Committee, *Meeting Humanitarian Challenges in Urban Areas (MHCUA): Draft Assessment.* 2 October 2009

Displacement

Natural disasters are the greatest cause of population displacement: 38 million were displaced globally after sudden-onset natural disasters in 2008 in comparison with 27.1 million internally displaced by conflicts, and 10.4 million refugees registered with UNHCR who fled conflict and persecution.¹³ Displacement resulting from natural disasters tends to be temporary and internal (within the country's borders). As citizens of their countries, they are entitled to the human rights of all citizens, as spelled out in the UN *Guiding Principles on Internal Displacement* and it is the responsibility of national authorities to see that they are assisted and protected.

In both Haiti and Pakistan, large numbers of people were forced to flee their homes either because they were destroyed, or so badly damaged that they were unsafe, or because of flood waters. The Guiding Principles ¹⁴ tell us that when people are obliged to flee their communities because of natural disasters, they are internally displaced persons, but experiences in both Haiti and Pakistan reveal that there are some gray areas in this definition. Losing one's physical home is not the same as being displaced. Thus in Haiti, many of those who lost homes were able to set up makeshift shelters on or near their property or destroyed homes. They are homeless but not displaced. Similarly in Pakistan, there are people who were displaced by the flooding, but who will be able to return when the waters subside. And it is likely that not all of those displaced have had their homes totally destroyed. They are displaced but not homeless. Much of the trauma of displacement is related to the loss of social networks, the need to access new schools and health services and to develop relationships with a host community which differs (to widely varying degrees) from their community of origin. While the displaced are also in need of shelter, this is far from their only need. For the homeless who remain within their community, the challenge is much more the physical reconstruction of their homes than the need to establish new social relationships in a new community and to be able to access public services without the obstacles that often come from displacement. But the danger is that if temporary or transitional shelter is insufficient and homes aren't rebuilt in a timely fashion, the homeless may leave their communities in search of better options and join the ranks of the displaced. The Haitian and Pakistani disasters illustrate the need to do further thinking on this distinction and for the humanitarian community to develop responses which are appropriate to the particular needs of these groups.

During and after a natural disaster, the displaced often seek temporary shelter with friends or family or in shelters or camps set up by the government or international organizations. The examples of Haiti and Pakistan illustrate the diversity of experiences. In Haiti, people affected by the earthquake were encouraged to leave Port-au-Prince to seek shelter with relatives and friends living in smaller towns and rural areas. More than half a million did so, raising the possibility that the movement could reverse the centralization of the nation's population and

¹³ UNHCR, 2009 Global Trends: Refugees, Asylum-seekers, Returnees, Internally Displaced and Stateless Persons, 15 June 2010, available at: http://www.unhcr.org/4c11f0be9.html. IDMC/OCHA, Monitoring disaster displacement in the context of climate change, available at: http://www.internal-displacement.org.

¹⁴ UN, *Guiding Principles on Internal Displacement*, E/CN.4/1998/53/Add.2, 11 February 1998, available at: _http://www.brookings.edu/projects/idp.aspx

resources in Port-au-Prince. But the strain on host communities has been substantial and there are reports of displaced Haitians returning to Port-au-Prince, some because the assistance in the provinces is inadequate, some because their damaged homes have been assessed as safe, and some because they perceive that there are more opportunities in the capitol. In addition to the 500,000+ who left Port-au-Prince, however, some 1.3 million were displaced within the city. In Pakistan, there are reportedly 6 million people in need of shelter, but it isn't yet clear how many of those are homeless or displaced.

The displacement of Pakistanis by the floods needs to be understood in the context of broader patterns of Pakistani displacement caused by military counterinsurgency operations. By early July 2009 there were between 2.7 and 3.5 million IDPs in North West Frontier Province; returns occurred as fighting there ended, but returnees still faced hardship and by November 2009, 1.25 million were still displaced. In the Federally Administered Tribal Areas (FATA) over 500,000 were newly displaced from military operations in Khyber Agency and South Waziristan conducted between September and November 2009 – adding to the 750,000 IDPs from Bajaur and Mohmand in FATA who were displaced from previous counterinsurgency operations begun in August 2008. The vast majority of the displaced sought refuge with host communities or rented accommodations, putting an enormous strain on health and other public services. In both the conflict- and disaster-induced displacement in Pakistan, a particular challenge has been the fact that many thousands of displaced Pakistanis have taken shelter in schools, depriving local communities of educational facilities.

A major challenge in displacement situations is to prevent them from becoming protracted. While there is at least some literature on protracted displacement as a result of conflict, there is virtually no academic research on long-term displacement resulting from disasters.¹⁷ The

¹⁵ The New York Times, "Rural Haiti Struggles to Absorb Displaced", 16 March 2010, http://www.nytimes.com/2010/03/17/world/americas/17rural.html

¹⁶ See Internal Displacement Monitoring Centre (IDMC), *Millions of IDPs and returnees face continuing crisis - A profile of the internal displacement situation,* 2 December 2009, available at: http://www.internal-displacement.org. See also: Asian Development Bank and World Bank, *Pakistan North West Frontier Province and Federally Administered Tribal Areas: Preliminary Damage and Needs Assessment: Immediate Restoration and Medium Term Reconstruction in Crisis Affected Areas, prepared for the Government of Pakistan, November 2009, http://www.adb.org/Documents/Reports/PAK-FATA-Damage-Needs-Assesment-Nov-2009.pdf*

¹⁷ Alex Mundt and Elizabeth Ferris, "Durable Solutions for IDPs in Protracted Situations: Three Case Studies," Brookings-Bern Project on Internal Displacement, October 2008, http://www.brookings.edu/papers/2008/1028_internal_displacement_mundt.aspx; UNHCR, "Conclusion on Protracted Refugee Situations," Executive Committee Conclusions, No. 109 (LXI) – 2009, 22 December 2009, http://www.unhcr.org/4b332bca9.html. *Forced Migration Review – Protracted Displacement*, Issue 33, September 2009, available at: http://wwww.reliefweb.int/rw/lib.nsf/db900sid/VVOS-

⁷VKSA3?OpenDocument&query=protracted%20displacement; IDMC, *Protracted Internal Displacement in Europe: Current Trends and Ways Forward*, May 2009, available at: http://www.internal-displacement.org; "Protracted refugee situations: some frequently asked questions", Evaluation and Policy Analysis Unit, UNHCR, Geneva, 2002, available at http://www.unhcr.org/pages/4a1d28526.html; Walter Kälin (Representative of the UN Secretary-General on the Human Rights of Internally Displaced Persons), "Protracted Displacement in Europe," Speech

assumption is that people return home quickly – and this is probably true for many -- but in some cases their former places of residence are no longer habitable (as when mudslides obliterate a town), or their source of livelihood has been destroyed. There is at least anecdotal evidence that thousands of people displaced by Hurricane Mitch in 1998 and thousands displaced by Hurricane Katrina were never able to return to their communities. In some (hopefully most) cases, they have found other durable solutions, but we simply do not know.

The Political Dimension

It is the responsibility of national authorities to take actions to mitigate the effects of natural hazards and to respond to the needs of their people when disasters do occur. But large-scale natural hazards overwhelm the capacity of even rich and powerful countries, as evident in the US response to Hurricane Katrina five years ago. In both Haiti and Pakistan, international assistance was needed to supplement the efforts of the national government. In both countries – as in most large-scale disasters (including Hurricane Katrina) – affected communities are often angry at the government for the slowness of its response. When the needs are lifethreatening and days of physical discomfort, emotional trauma, and lack of information drag on, it is normal for people to lash out at those responsible for caring and protecting them. And desperate people do desperate things, including looting and destruction of property. Usually the protests, riots and looting dissipate with the delivery of assistance – and the displacement of people (it was harder, for example, for the victims of Hurricane Katrina to mobilize when they were dispersed throughout the country.) But there are cases where protests against a government's slow or inadequate response to a disaster come on top of increasing dissatisfaction with governmental performance. Rarely are such protests the determining factor in violent efforts to overthrow a government, but it can exacerbate existing tensions. It was the poor response by Anastasio Somoza to the 1976 earthquake in Nicaragua which seemed to be the final straw that led to his overthrow and the ushering in of the Sandinista regime. In 1970, Cyclone Bhola ravaged what was then East Pakistan, causing at least 300,000 (and perhaps as many as 500,000) deaths. Protests against the government of West Pakistan had been intensifying for a year, but it was the callous response of the W. Pakistani government to the relief efforts which proved to be the final blow. Within a year of the cyclone, East Pakistan had been replaced by the new country of Bangladesh.

Haiti, as many commentators have noted, has a long history of poverty, corruption, and poor governance. The earthquake occurred near the capital city which meant that government was almost completely paralyzed in the days immediately following the disaster; 26,000 civil servants are estimated to have perished, government ministries and agency headquarters were destroyed, there were major communications difficulties, and the sheer trauma of so many government workers losing family and homes meant that they were not able to carry out their

responsibilities. Haiti has no military and its police forces, as well as the UN peacekeeping forces (MINUSTAH) - which also suffered significantly due to the quake - were overwhelmed.

The Haitian earthquake wreaked havoc not only with the country's infrastructure, but also with the governance of the country. The earthquake occurred at a time when the political situation was already volatile. It occurred during an election year marked by fierce competition among over one hundred political parties and widespread protests. The earthquake led to uncertainty about when legislative and presidential elections would be held. As its term came to an end (and at that time no election date in sight) the Haitian parliament was dissolved in mid-May. Only five months after the disaster the legislative and presidential elections were finally rescheduled for November 28. Being able to register and vote was probably not the highest priority for either the affected communities or the relief community, but the fact that 15-20 % of the population was displaced and many voting registries were undoubtedly destroyed means that restoring the political infrastructure of the country will be a long-term process. If those displaced are more likely to be poor, and if the displaced are less likely to be able to register and vote, then questions can be raised about the legitimacy of elections.

Like Haiti, Pakistan has a history of turbulent governance and ranks high on indices of corruption (see table above). But it has a strong civil service and a strong military with experience and tradition of responding to national disasters. In the case of the 2005 earthquake, the Pakistani army played the leading role in immediate disaster response, and local governments/institutions generally performed well. There was also an impressive response from Pakistani civil society and the business sector. The Pakistani government immediately set up the Federal Relief Commission to oversee and coordinate all aspects of emergency response (with military and civilian wings). The many international agencies that responded to the Pakistani earthquake worked under the direction of the Pakistani Federal Relief Commission, and often under the military. Civil-military relations were generally good and the US military performed important supportive missions in the relief effort. While the assessment of the government's response was initially positive, reports over the ensuing months have painted a less rosy picture, with stories of widespread corruption and diversion of funds intended for long-term reconstruction of earthquake-devastated areas. ²⁰

Unlike Haiti, at the time of the disaster, Pakistan was involved in a large-scale military offensive in the north of the country – areas also affected by the flooding. As noted above, some 3 million people were displaced in 2009; while most had returned to their communities, the

¹⁸ International Crisis Group, *Haiti: Stabilisation and Reconstruction after the Quake*, Latin America/Caribbean Report No. 32, 31 March 2010, p. 1

¹⁹ For a Pakistani military perspective on this, see "The response to the earthquake in Pakistan", by Major-General Farooq Ahmad Khan, Federal Relief Commissioner Humanitarian Exchange Magazine, Issue 34, July 2006, http://www.odihpn.org/report.asp?id=2811

²⁰ Dean Nelson, "£300m earthquake aid 'misused by Zardari'", The Daily Telegraph, 13 August 2010, http://www.telegraph.co.uk/news/worldnews/asia/pakistan/7944792/300m-earthquake-aid-misused-by-Zardari.html, see also: The Economist, "After the deluge", 19 August 2010, http://www.economist.com/node/16846266?story_id=16846266

flooding displaced many for second time within the course of a year. In fact, some camps housing people displaced by violence had to be evacuated due to flooding. And for those affected but not displaced by the military operations, the flooding set back efforts to rebuild their communities — communities which suffered major damage as a result of Taliban activity and the counter-insurgency campaigns. Thus, in Pakistan, response to the floods has an overtly military component which is lacking in Haiti.

And in the west of the country, reports are that nationalist groups have displaced up to 100,000 mostly-Punjabi settlers in Balochistan since January of this year. Displacement in Balochistan has long been thought to be significant – perhaps 200,000 according to a 2007 report by the International Crisis Group. The numbers of those displaced by flooding is unknown. The government of Pakistan blocked the access of international humanitarian organizations and local NGOs to Balochistan in 2007 and of international agencies in Waziristan in 2008.²² The UN scaled back its operations in Balochistan in July 2009 due to safety concerns following the abduction of the head of the UN Refugee Agency (UNHCR) office in Quetta, John Solecki, in February 2009.²³ At present while the government has eased visa restrictions for international humanitarian workers responding to the floods in other regions, access of foreign nationals to FATA and Balochistan is prohibited, requiring security clearance.²⁴

The Politics of Relief

When a major disaster occurs, the international humanitarian system swings into action. The UN issues an appeal (typically a flash appeal issued quickly, followed by a comprehensive appeal as soon as more information is available), donors pledge money, and a host of international governmental and non-governmental organizations swing into action. In the case of Haiti, the flash appeal was issued on 15 January – 3 days after the earthquake. In the case of Pakistan it was launched on 11 August – 12 days after the first OCHA situation report, illustrating the difficulty of responding to relatively slow-onset disasters. In the case of Pakistan it is difficult to know when the disaster even began. On 29 July, it was difficult to know whether this was going to be a really torrential monsoon provoking a large-scale disaster or just rains that were a bit heavier than usual and which would soon clear up.

Much has been made of the fact that the international community has been much slower to respond to the Pakistani floods than to the Haitian earthquake. After two weeks of the flash

situation, 2 December, 2009, p. 92, available at: http://www.internal-displacement.org

²¹ International Displacement Monitoring Center, "Pakistan: Conflict IDPs among millions displaced by flooding", IDP News Alert, 13 August 2010, http://www.internal-displacement.org/8025708F004D31AA/(httpIDPNewsAlerts)/6241ABFD35A2D500C125777E00333CE7?OpenDocu

ment
²² See IDMC, *Pakistan: Millions of IDPs and returnees face continuing crisis - A profile of the internal displacement*

²³ Solecki was released a few months later. See IRIN, "Pakistan: A dangerous mixture in Balochistan," 1 March 2010, http://www.irinnews.org/report.aspx?ReportId=88267

²⁴ Sanaullah Baloch, "Balochistan ignored," Op-Ed, *Dawn*, 23 Aug, 2010, http://www.dawn.com/wps/wcm/connect/dawn-content-library/dawn/the-newspaper/op-ed-contributor/balochistan-ignored-380

appeal, 82% of Haiti's appeal had been funded, compared with only 57% in the case of Pakistan. But the differences are even greater if you compare contributions to total number of affected people. Contributions per affected person were \$ 157.16 for Haiti two weeks after the appeal, and only \$ 15.24 per affected Pakistani – a ten-fold difference. Brookings Institution researchers Rebecca Winthrop and Justin van Fleet attribute at least some of this disparity to differences in media coverage, finding in the case of Haiti well over 3000 stories in print and broadcast media within 10 days of the earthquake while Pakistan registered only slightly more than 1,000.

While a few governments, notably the US, made rapid contributions to Pakistan flood relief, other governments took longer to respond. In particular contributions from Muslim countries have been slow to arrive. While Saudi Arabia, after a certain delay, has become one of the most generous donors²⁵, other Muslim countries have contributed little to disaster relief operations in Pakistan. But the most striking difference has been that in contributions from individuals. For example, one source reports that while \$31 million were raised in Haitian earthquake relief via text-messaging, only \$10,000 has been raised through this medium for victims of Pakistan's floods. ²⁶

However, if we look at humanitarian operations on the ground, the record is less clear. In particular, tents and plastic sheeting – the most basic shelter – were delivered much more rapidly in Pakistan than in Haiti. After three weeks, Haitians had received only 10,545 tents versus almost ten times that number for Pakistan: 109,500. Even controlling for differences in numbers affected, the differences are significant: 1.2% of Haitians in need of shelter had received tents after 3 weeks, compared to 3% of Pakistanis in the same time period. It should be noted that in both cases the percentages are very low, particularly when you consider the fact that large numbers of traumatized people lacked the most basic protection from the elements.

Why such slower contributions for Pakistan than for Haiti? A number of commentators have given various reasons for this, including the Western perception of Pakistan as a corrupt country that harbors terrorists, the nature of the disaster whereby rising flood waters don't trigger the same sense of urgency as an earthquake that demolishes buildings and kills hundreds of thousands in a few seconds. In the case of Haiti, proximity to the US meant that many civic groups could simply collect relief items and travel to Haiti on their own. Moreover, the presence of a large number of Haitians and Haitian-Americans living in the US generated considerable interest in responding while the corresponding number of Pakistanis living in the US is much lower. The relatively low number of deaths in Pakistan compared with Haiti was undoubtedly a factor, but also the nature of the injuries suffered. Media coverage of the truly horrific injuries in Haiti – which are a characteristic of earthquakes – were widespread. In

²⁶ Max Fisher, "4 Reasons Why Americans Aren't Giving for Pakistan Flood Relief", The Atlantic, 23 August 2010, http://www.theatlantic.com/international/archive/2010/08/4-reasons-why-americans-arent-giving-for-pakistan-flood-relief/61898/

²⁵ Financial Tracking Service, *PAKISTAN - Flood – July*, 25 August 2010, http://fts.unocha.org/reports/daily/ocha R24 E15913 1008251843.pdf

contrast, the major health threat affecting children in Pakistan at present are cholera, gastrointestinal diseases (diarrhea) and skin diseases -which do not trigger the same response as a child facing the loss of a limb or who has been crushed by falling debris.

In both Haiti and Pakistan, the initial responses of the national governments were not inspiring. Haitian President André Préval seemed dazed and withdrawn while Pakistani President Asif Zadari continued his travels in Europe. Some have suggested that the differential response was the result of donor fatigue – coming so soon after Haiti, people were reluctant to contribute to Haiti. But response to the 2005 Pakistan earthquake was generous (although the response was slow in comparison with the rapid response to Haiti) – and it occurred 10 months after the tsunami.

But it's important to look not only at pledges of funds, but at how quickly they are converted into cash contributions. At donors' conferences or through the media, donor governments take pride in announcing large pledges – particularly in cases of high-visibility emergencies. Yet the reality is quite different with respect to the funds transferred as demonstrated in the table below on a few major disasters.

Table 5. Disparity between pledging and delivery of aid after disasters²⁷

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Crisis	Amount pledged (\$)	Amount delivered (\$)		
Cambodian war rehabilatation ²⁸	880m by June 1992	460m by 1995		
Rwandan genocide ²⁹	707m in January 1995	<71m by July 1995		
Hurricane Mitch, Central America ³⁰	9bn in 1998	<4.5bn, December 2004		
Bam earthquake, Iran*	1bn in January 2004	116m December 2004		
Haiti earthquake ³¹ **	508 m in August 2010	134.2 m August 2010		
Pakistan floods (Flash appeal)	262,3 m, August 24 2010			

^{*} Data from E. Mansilla, Universidad Nacional Autónoma de México.

^{**}This amount includes all pledges made to the Haiti Reconstruction Fund which is administered by the World Bank. Donors at the Haiti Donor's conference on the 31st of March 2010 pledged US \$ 5.3 billion for reconstruction for the first two years, most of which should be channeled through the Haiti Reconstruction Fund.

²⁷ Peter Walker et al., Smoke and Mirrors: Deficiencies in Disaster Funding, Feinstein International Famine Center, Friedman School of Nutrition Science and Policy, Tufts University, January 2005, p. 248.

²⁸ Patrick, S., The check is in the mail: improving the delivery and coordination of post-conflict assistance. New York: Center on International Cooperation, 1998. www.nyu.edu/pages/cic/pubs/TheCheck.html

²⁹ Patrick, S., The check is in the mail: improving the delivery and coordination of post-conflict assistance. New York: Center on International Cooperation, 1998. www.nyu.edu/pages/cic/pubs/TheCheck.html

³⁰ Reynolds, P., "Delivering the promise: aid problems," BBC News, 6 Jan 2005, http://news.bbc.co.uk/2/hi/asiapacific/4152285.stm ³¹ Haiti Reconstruction Fund, 24 August 2010, http://www.haitireconstructionfund.org/hrf/members

Final points

The process of delivering relief aid itself is often seen as a political action. People affected by disasters need their governments more than ever. When their government is seen as responding rapidly and compassionately, its stock increases. Present reports are that the Pakistani military is taking the leadership role in relief. This is not necessarily a bad thing. The military possesses capacities and logistical expertise that no one else has when disasters of this magnitude occur. While in Haiti, it was the US military which was in the lead and which mobilized massive amounts of assets (see table), its role in Pakistan – while still important, is o a much lesser scale. Rather it is the Pakistani military which has deployed 60,000 or so troops in support of the relief operations.

In Haiti and in Pakistan, there have been reports of protests against the governments because of their slow or inadequate response. In the case of Haiti – which has endured inept governments for years – these are likely not to lead to organized violent opposition movements, but rather to the continued increase in general lawlessness and growing insecurity (gangs, etc.) In Pakistan, there are already reports of isolated protests, looting and of anger directed at the government. There is concern in Pakistan that militant groups are moving into the vacuum of the relief efforts, but so far these have been isolated reports of initiatives taken in local communities. Unlike the situation of Hezbollah in Lebanon, insurgent groups have not developed long-term social service programs which they can use for service delivery. Nor is it thought that they presently have the funds necessary to support large-scale relief programs. But the possibility of militant groups taking advantage of popular frustration with the relief effort is a further compelling reason to support the government's timely and effective response.

In other disaster situations, we have learned that a quick governmental response to the victims is important, but just as important is <u>how</u> the relief is distributed. When relief items are distributed inequitably – or even more importantly when they are **perceived** as being distributed inequitably – resentment develops. After the 2004 tsunami, the perception that Tamils were being discriminated against in Sri Lankan relief operations contributed to an increase in tensions – and violence.³²

Response to the two disasters also illustrates the weaknesses of the international humanitarian system. This is not a command-and-control system, but rather one where negotiation, political interests, and downright cajoling are necessary to get the necessary resources mobilized. Slow delivery of relief in Haiti and Pakistan was partly the result of the nature and scale of the destruction, but also is indicative that our global response system is antiquated.

³² Elizabeth Ferris, *Natural Disasters, Conflict, and Human Rights: Tracing the Connections,* presented at St. Mary's University, San Antonio Texas, 3 March 2010,

http://www.brookings.edu/~/media/Files/rc/speeches/2010/0303_natural_disasters_ferris/0303_natural_disaster s_ferris.pdf

There is no centralized standing force of disaster responders although there are staff in many individual organizations who are standing by to respond quickly. The UN's Emergency Relief Coordinator, the most senior figure in the international humanitarian system, can only actually deploy his staff at OCHA; other UN agencies, governments, and NGOs decide on the deployment of their own staff. While the UN tries to coordinate actions, such coordination is almost inevitably flawed given the fact that each actor is responding on the basis of its own mandate, constituency, and funding.

Reducing the risks of disasters

Finally, the experiences in both Haiti and Pakistan highlight the importance of taking measures to mitigate the effects of natural disasters. Earthquakes and monsoons cannot be prevented by human action, but actions can be taken which will decrease their risk to populations. The importance of Disaster Risk Reduction (DRR) has long been recognized as an important hallmark of good development planning. Public statements after a major disaster always include a commitment to incorporate DRR in the reconstruction process. But it is harder to generate both political and donor support for long-term mitigation measures than for immediate response to disaster victims. But the evidence is clear that DRR saves lives. For example, during the 2001 Bhuj earthquake in India, most government buildings that conformed to construction codes suffered only limited damage, while schools and hospitals that did not follow the codes collapsed. When Cyclone Sidr struck in November 2007, an estimated 3.2 million Bangladeshis were evacuated from the coastal areas and over two million were already in special shelters when the cyclone hit. About 4,000 Bangladeshis died – compared with around 140,000 in a similar cyclone in 1991 and up to 500,000 in 1970.

It will be interesting to follow the reconstruction processes over the next few years to assess the extent to which the risk of future disasters has been reduced. Despite noble and probably well-meaning rhetoric, past experiences do not inspire confidence.

ⁱ Economist Intelligence Unit

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ALNAP Haiti Earthquake Response, Context Analysis, p 14

OCHA, Situation Report Monsoon Floods No. 16, August 23, 2010

^v Government of Haiti, Post Disaster Needs Assessment (PDNA)

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viii UN, http://www.un.org/apps/news/story.asp?NewsID=35687&Cr=pakistan&Cr1=

X CNN, http://www.cnn.com/2010/WORLD/americas/01/13/haiti.earthquake/index.html

³³ Vatsa Krishna, "Reducing earthquake loss: towards a national perspective," *Economic and Political Weekly*, April 20, 2002. in: OXFAM, Rethinking Disasters, Why death and destruction is not nature's fault but human failure, 2008

³⁴ Oxfam International, *Rethinking Disasters*, 2008, http://www.oxfam.org.uk/resources/policy/conflict_disasters/downloads/oxfam_india_rethinking_disasters.pdf, p. ii

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xii OCHA, Situation Report Monsoon Floods No. 16, August 23, 2010
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