



Crisis report

Indonesia

A Tale of Two Crises

June 2010

Lying on the Pacific Ring of Fire, Indonesia has been described by the UN Office for the Coordination of Humanitarian Affairs (OCHA) as the most disaster-prone country in the world. More than a million Indonesians were affected by natural hazards in 2009, including volcanic eruptions, flooding, landslides and earthquakes. 2009 saw 469 earthquakes with a magnitude of over 5.0 on the Richter Scale (OCHA 2010).

After the 2004 Indian Ocean tsunami, and a massive international investment in evaluation of the response through the Tsunami Evaluation Coalition (TEC), many humanitarian actors pledged that lessons learned would help improve future responses. Five years later, two devastating earthquakes struck Indonesia in the same month, displacing nearly 200,000 people, killing approximately 1,300 and damaging or completely destroying almost 300,000 homes. The initial responses were not encouraging. Those affected by the West Java earthquake watched as their government struggled to respond to their needs and the international community observed in silence. People affected by the West Sumatra earthquake, on the other hand, saw a flood of international actors arrive. After the well-publicised destruction caused by the 2004 tsunami in Banda Aceh, the media was keen to cover a further natural disaster in Sumatra. Their coverage inflated a medium-scale disaster into a large one. Both the *Good Humanitarian Donorship* (GHD) *Principles* and the many recommendations made by the TEC highlighted best practices and lessons donors should apply in supporting responses to natural disasters. These recent Indonesian earthquakes show there is still

considerable room for learning, improved coordination and investment in preparedness.

The quakes

The first earthquake, measuring 7.0 on the Richter Scale, struck West Java on September 2, 2009. It was followed by aftershocks of 5.1 and 5.4 (USGS 2009a). Information regarding the effects of the earthquake was initially scarce, which was a factor in the minimal involvement of international actors. OCHA cited government figures that the quake had left 81 dead, 47 people missing, 1,248 injured, 178,490 displaced and 65,643 houses severely damaged. With its epicentre 142 kilometres south of the Tasikamalaya district, the earthquake had a widespread impact, affecting 16 districts and municipalities in West Java (OCHA 2009a).

On September 30, a 7.5 earthquake (USGS 2009b) occurred off the coast of West Sumatra, with its epicentre 45 kilometres from the city of Padang. There were two significant aftershocks. Three villages in the Padang Pariaman district were levelled by resultant landslides. Unlike the West Java earthquake, the West Sumatra events were more concentrated in urban areas, especially in the city of Padang (OCHA 2009b). The West Sumatra government reported that 1,195 people died and 1,798 were injured (IFRC 2009b). Depending on the source, the number of displaced ranged from 4,000 (IFRC 2009c) to 8,000 (OCHA 2009c). A total of 231,395 homes were damaged to some degree, with reports that 121,679 homes had been severely damaged, 52,206 moderately damaged and 57,510 lightly damaged (OCHA 2009b). Uncoordinated needs assessments meant that figures varied substantially.

West Java: forgotten but not gone

The Government of Indonesia (GoI) decided not to request international assistance following the West Java quake. West Java is among Indonesia's most prosperous provinces and the national authorities assumed that with their support, the local authorities could handle the response. The government also assumed that the logistics would be simple, as supplies could be despatched from Jakarta within four or five hours. The GoI seemed keen to demonstrate to its citizens that five years after the tsunami, it could respond efficiently and effectively.

It was initially difficult for international humanitarian actors to obtain clear and transparent information on damage and needs assessments undertaken by the Indonesian authorities. The large scale and wide impact across an area twice the size of the affected area in West Sumatra, entailed delays in gathering data. A major donor noted that "no assessments were published until after the end of Ramadan," 17 days after the disaster. This lack of data hindered external emergency intervention but does not in itself excuse the lack of action from most international actors.

Most donors respected the GoI's stance that external support was not needed, despite knowing this was not the case. Only the European Commission Humanitarian Aid Office (ECHO) and the Emergency Response Fund (ERF), a locally-managed pooled fund for non-governmental organisations (NGOs), provided financial support for the 15 organisations that responded. Some international NGOs became operational using their own funds, but the vast majority left after a few weeks in order to respond to the West Sumatra disaster where donor funding was more forthcoming. Many quickly forgot West Java.

The GoI focused its response on initial emergency needs. Organisations interviewed in the field reported success although there were major gaps related to shelter, water, sanitation, hygiene and early recovery. Responses were delayed both by general bureaucratic inertia and the fact that the quake occurred at the end of the Indonesian financial year, thus complicating mobilisation of necessary resources. Seeing that help did not arrive, many earthquake survivors self-repaired damaged housing and do not expect to

receive reimbursement promised by the GoI. At the time of the field mission many others continued to live in tents.

The minimal response from the international community has resulted in little information on the quality of the response, thus preventing rigorous assessment of GoI humanitarian assistance and further decreasing the likelihood that those with remaining needs will receive the external assistance they require.

Sluggish call for assistance in West Sumatra

After the experience in West Java, the GoI realised it could not handle the response to West Sumatra on its own and decided to "welcome" international assistance. The term "appeal" was not used, lest it was seen as indicating some sense of incapacity. Consequently, there was no formal West Sumatra flash appeal, but, instead, a Humanitarian Response Plan (HRP). Government deliberations were time-consuming, the GoI eventually realising it could not fund two earthquake responses in the same month. Prevarication meant that many UN agencies could not apply for funding and thus did not engage in the emergency response.

Once the HRP was launched, international attention quickly shifted to West Sumatra despite the fact that needs remained in West Java. *GHD* Principle 11 – enjoining donors to "strive to ensure that funding of humanitarian action in new crises does not adversely affect the meeting of needs in ongoing crises" – was not heeded. To make matters worse, many organisations also reported that other natural disasters in the region – including typhoons in the Philippines, flooding in Vietnam and a tsunami in Samoa – also affected their funding.

Once again, the "CNN effect"

In stark contrast to the extremely weak international response to West Java, the earthquake in West Sumatra captivated the attention of the international community. News teams began broadcasting images of the earthquake within hours. The initial news sparked fears the disaster would be on the same cataclysmic scale as the 2004 tsunami. The fact that Padang is more than 900 kilometres from

Banda Aceh was lost on TV anchors and viewers. For many, the timing of the Padang earthquake was “perfect” – almost five years since the tsunami. The fact that destruction was mostly in a large city allowed for visually striking imagery. Rumours that the death toll was rising further stoked interest. The Health Minister reported to CNN that she expected a greater number of casualties than the 2006 Yogyakarta earthquake which had killed some 5,000 people (CNN 2009b). The media fuelled speculation there would be thousands of fatalities.

Such media hype invariably provoked an emotional response from the public and donors. Search and rescue teams were despatched and a flood of NGOs poured in. No fewer than 189 INGOs and 111 local NGOs arrived in Padang within days of the disaster. Some had no previous disaster response experience, no funds and limited knowledge of the city. A significant number of the incoming INGOs were agencies whose operations in Banda Aceh were being wound down. Many conducted needs assessments, took up space and facilities and added to the chaos before quickly leaving when they did not receive funding. At the time of the Humanitarian Response Index field mission in late January 2010, approximately 50 organisations were still engaged in the response.

The quest for visibility

Fearful of being perceived as neglecting the disaster, donors tended to fund the most visible needs, leading to an unseemly scramble to compete for visibility. The contest for profile had absurd consequences. According to one humanitarian organisation, at one point there were 700 people and 70 dogs searching for survivors. They arrived three days after the earthquake, by which time all survivors had already been rescued by Padang locals. So many donors rushed to set up mobile hospitals that one complained that no space could be found to erect the one they were funding. This donor eventually had to set up far from the disaster area, treating some 600 patients a week, of whom only two were injured earthquake survivors. A further farce was caused by a branding squabble between agencies when two different logos were placed on the same truck, leading to non-departure of a convoy. As these and other unfortunate incidents played out, less visible needs received significantly less donor support.

Chaotic assessments and unconvincing appeals

The first assessment in Padang was by the local government’s Padang District Antenna for Crisis Management (SATAKORLAK). Many donors and international responders considered it over-estimated the quake’s impact. SATLORLAK used methodology developed by the US Geological Survey (USGS) to provide a rough-and-ready immediate assessment in the densely populated area around the epicentre. The local authorities were particularly keen to quickly release assessment results following criticisms of delays and lack of transparency in providing information on the impact of the West Java earthquake. Two days later, the local government followed up this rapid estimation by sending field teams, primarily to regional health centres, but also to conduct direct surveys. Government figures were consistently higher than those of international actors.

To some extent, this discrepancy is understandable. Local administrative capacity had been greatly diminished by the quake, with four fifths of government buildings ruined or damaged. Such was the impact that it was not initially clear whether the primary Indonesian responder would be the local or national government. Eventually it was decided that SATAKORLAK would be in charge. The governor invited OCHA to install its coordination centre in his official residence.

The day after the disaster a multiplicity of international assessments began. Many actors undertook their own. The International Federation of Red Cross and Red Crescent Societies (IFRC) conducted a joint assessment as did the UN in conjunction with the Emergency Capacity Building Project (ECBP) – a consortium of seven major INGOs. Due to unexpected problems, they found themselves reliant on government figures which they supplemented with their own analysis. On the third and fourth days after the earthquake, newly-arrived INGOs began conducting their own assessments, but many soon left when funding proved unavailable.

The assessment chaos had several consequences. The multiplicity of assessments created tension with affected communities as survivors were forced to repeatedly answer the same questions. Lack of standardised procedures and methodologies resulted in

inconsistent statements of what was “very” or “slightly” damaged. Organisations that shared their needs assessment findings found it hard to use others’ data. Despite the clear TEC recommendation, many needs assessments were never shared.

Donors were presented with contrasting figures in different appeals. Some said this caused them to have no confidence in figures cited by the HRP, which may explain its low coverage. According to the Financial Tracking Service, only 38 percent of HRP requirements have been covered (OCHA 2010). Tellingly, despite such low coverage, OCHA and many other agencies report that over 90 percent of needs have actually been met. Many informants suggest that the Indonesian authorities engaged in game-playing. Fearful of not obtaining sufficient external support, the list of requirements set out in the HRP grew. Donors with already strong relationships with the GoI, such as the Australian Agency for International Development (AusAid), tended to use official figures. The damaging impact of faulty needs assessments and the subsequent impact for future disaster responses is a cause for concern as it may lead to donors losing confidence in appeal figures.

DARA conducted a field survey of organisations that received funding in order to capture how well donors had followed *GHD Principles*. Principle 18 calls on donors to support mechanisms for contingency planning. This issue was also raised by the final TEC report which stressed the need to invest in contingency planning. Prior agreement on needs assessments is crucially important. The survey data is revealing. The UN receives by far the lowest score. Organisation for Economic Co-operation and Development – Development Assistance Committee (OECD-DAC) donors also scored below the average for Indonesia, as do all donors generally. Agencies generally assume humanitarian funding cannot be used for contingency planning or preparedness, many reporting they had not applied for such support. When asked how donors could help them prepare better, many mentioned training and capacity building in emergency preparedness and support for pre-positioning of stocks and development of surge capacity.

Needs overlooked?

Donors attended to certain needs while neglecting others. Their prioritisation was not necessarily on needs that were most pressing, but those which were most visible. Thus donors favoured search and rescue teams, mobile hospitals and food supplies, and not support for water, sanitation and hygiene, shelter, early recovery, protection and disaster risk reduction (DRR). We found that early recovery was particularly neglected.

The fact that some donors were preoccupied with funding highly visible interventions created problems for many of their implementing partners. They reported that donors seemed to ignore whole sectors, despite receiving detailed cluster-by-cluster recommendations, and were incapable of taking a holistic view of post-disaster needs.

DRR should be a major donor priority in disaster-prone countries like Indonesia. It is an area of focus for New Zealand and Australia, which supports a US\$60 million programme. However, many donors to Indonesia consider DRR entirely separate from humanitarian assistance. They are not supportive of efforts to integrate DRR into emergency response even though they have committed to do so by agreeing to the *GHD*. Organisations interviewed by DARA reported difficulties obtaining funding for risk reduction, prevention and preparedness. UN agencies who act as donors were the most unsupportive in this regard, with DAC donors also scoring well below average.

The TEC recommended that donors provide flexible, proportional funding, allowing for greater investment in DRR, early recovery and forging linkages between relief, rehabilitation and development. *GHD* Principle 9 calls on donors to “provide humanitarian assistance in ways that are supportive of recovery and long-term development...and transitions from humanitarian relief to recovery and development activities.” Unfortunately, the recent Indonesian experience indicates that donors generally continue to focus on the emergency phase and continue the traditional practice of considering each phase in isolation. Donor support for linking relief, rehabilitation and development received one of the lowest scores of the survey. The same is true of early recovery, which began very late and at the time of the field mission had received little funding.

Many donors place a three-month time limit on their funding, and humanitarian organisations commonly reported difficulties obtaining funding for early recovery, particularly transitional shelter.

Coordination: a work in progress

Effective coordination is fundamentally important in a country like Indonesia, which has hosted so many international organisations over the past five years. In the immediate aftermath of the West Sumatra earthquake, there was an informal agreement between the international community and the GoI that OCHA would manage international organisations and the GoI their Indonesian counterparts. OCHA served as the link between the two, with a representative from OCHA regularly attending government meetings to update them on the “international” coordination system. This “divide and conquer” technique was seen by some as the best way to manage so many organisations, especially at the beginning. However, many field agencies reported that communication with the GoI was often imperfect, especially in the immediate aftermath of the earthquake. Many attributed this to the “language barrier” between the GoI and international agencies but this explanation is somewhat contradicted by the fact that INGOs are primarily staffed by Indonesians.

Transition to democracy has left Indonesia with a complex decentralised political system. This provides further challenges for coordination, both between Indonesians and the international community and between national, provincial and local authorities. The central and regional government were at odds over who should be lead responders. Many donors and field humanitarian organisations felt this complicated the response but also noted that Indonesia has made major progress since the tsunami. One told us: “the Indonesian government was better prepared because of the tsunami. There was a command post in every town. Perhaps they weren’t as functional as they could have been but the local people knew who was/should be in charge. I think that’s because of the tsunami.”

The effectiveness of clusters as fora for coordination was variable. Education and health were reported to have worked well while shelter was weak. Many insisted on the need for experienced people to staff the clusters.

Others pointed out that too many organisations attend cluster meetings merely to listen but not to provide information. “If you want clusters, you need to invest in them, otherwise they are not relevant,” an NGO worker told us.

Coordination among donors could be improved. In the absence of a formal donor coordination mechanism some of the larger donors (ECHO, AusAid, the US Agency for International Development (USAID), the Japan International Cooperation Agency (JICA) and the Canadian International Development Agency (CIDA)) met informally to share information. While some applaud this effort, others believe that donors should share their deliberations with “official” coordination channels. According to some interviewees, too many donors fund the same things and they could do more to align their plans. There is, according to one, “too much coordination for the sake of coordination – it could be more meaningful. Donors could all meet and decide who is going to fund what and help decide partners.” Some donors do regularly coordinate with their traditional implementing partners. Organisations in the field felt, however, that donors should align their decisions to the needs identified in the clusters. They should not stipulate that their funding can only be used for certain sectors or activities. Realising this objective would require a joint needs assessment which enjoys the confidence of both donors and the government.

Given the numerous problems that arose regarding needs assessments, prior to the next disaster it is vital to reach agreement on a common format and procedures for needs assessment and to incorporate these into contingency planning. The attempt to conduct a UN-ECBP joint needs assessment was incorporated into contingency planning and is praiseworthy. Efforts should be made to find simple and practical measures to ensure that in future the common template can be used by all and the right procedures are in place to avoid a repetition of sudden onset emergency chaos. A suggestion from the field was for donors and cluster leads to take the lead on this: “Trying to merge all the formats is a nightmare – donors could agree on a common format and indicators. Cluster leads can also do this by forcing everyone in the cluster to use the same indicators.”

Budding national capacity

A key TEC recommendation was the need to strengthen national disaster response capacity. Bilateral and multilateral donors have been very supportive, funding various capacity-building programmes and providing technical assistance to Indonesian agencies such as the Badan Rehabilitasi dan Rekonstruksi (BRR) (UNDP, BRR & GoI 2005). This investment is beginning to bear fruit. While there is room for improvement, the GoI should be commended for its DRR efforts and their capacity to manage disasters, especially in rapid response. Following the 2004 tsunami and the 2006 earthquake in Yogyakarta, in 2007 the GoI enacted a Disaster Management Law (Law 24/2007) which led to the creation of the National Agency for Disaster Management, or BNPB (Badan Penanggulangan Bencana Nasional). Prior to the law, BAKORNAS (BNPB's predecessor) or ad hoc ministerial groups came together following a disaster. BNPB, however, goes beyond simply managing disaster response, seeking to be much more comprehensive and to include prevention, preparedness and recovery (World Bank October 2009). The law also creates mechanisms to ensure financial accountability and regulate the participation of international agencies and national NGOs.

Like other state institutions, disaster management mechanisms in Indonesia now follow the recently rolled-out decentralisation model. At the provincial level, SATKORLAK is in charge of all aspects of disaster management while SATLAK coordinates at the district level. Both of these structures are ad hoc in nature. Just as BNPB replaced BAKORNAS, both SATKORLAK and SATLAK are expected to be replaced with permanent structures according to the 2007 law (Willitts-King 2009). The implementation of the 2007 law is still ongoing, but capacity certainly seems to have improved since the tsunami. Still a work in progress, things are headed in the right direction.

On a regional level, efforts have been made within the Association of South-East Asian Nations (ASEAN) to integrate preparedness and emergency response. The GoI has played a leading role, hosting conferences in Bali and Jakarta that led to the signing of the ASEAN Agreement on Disaster Management and Emergency Response (ASEAN 2005). The Agreement provides for "effective mechanisms

to achieve substantial reduction of disaster losses in lives and in the social, economic and environmental assets of the Parties, and to jointly respond to disaster emergencies through concerted national efforts and intensified regional and international co-operation" (Ibid). It includes provisions for an ASEAN disaster relief fund and operational procedures to expedite collective responses to disasters.

Humanitarian organisations note that investment in national and local capacity is having an impact. They report that the GoI was clearly committed to being the lead emergency responder and set the time limits for each phase. While the early warning system did not work properly, and the system of local command posts was not functional at the time of the earthquake, it is, nevertheless, clear that the GoI is genuinely committed to improving its disaster management capacity.

A further example of good practice has been the creation of locally managed funding mechanisms. The frequency of natural disasters in Indonesia, and the bureaucratic difficulties that the government faces when responding to concurrent disasters make such mechanisms extremely useful. While they differ in form and function, the Emergency Response Fund, rapid funding mechanisms of donors and the Multi-Donor Trust Fund are examples of good practice.

OCHA Indonesia has managed an Emergency Response Fund (ERF) since 2001. The ERF is exclusively for NGOs and provides up to US\$100,000 to kick start emergency programmes within hours of a disaster. It is designed to provide rapid, flexible funding to meet priority emergency needs for up to six months. Sweden is currently the main ERF donor, but this changes from year to year. Interviewed field staff generally agreed that the ERF had been effective.

Other positive examples of rapid funding mechanisms include those provided by the Japanese embassy, the Danish embassy, and ECHO's primary emergency decision (PED). ECHO's Indonesia office provided €3 million through this fund after the earthquake. The entire process including the call for proposals, decision and receipt of funding was generally completed within three days (although some agencies reported a few extra days). Field organisations were highly appreciative of this

mechanism, as it allowed them to intervene quickly and efficiently.

The Multi-Donor Trust Fund for Disaster Response in Indonesia, which was announced in early 2010, follows the pattern of the Multi-Donor Trust Fund set up by 15 donors, the World Bank and the GoI for recovery and reconstruction of Aceh and Nias after the tsunami and earthquakes of 2004 and 2005. Details are still under discussion, but it is clear it will allow for disbursements in response to disasters anywhere in Indonesia. It is hoped that this mechanism can both prevent recurrence of the kind of disproportionate responses recently seen in West Java and West Sumatra and offer support to under-funded non-visible sectors, particularly early recovery. Interviewees reported that these locally-managed funding mechanisms were far more efficient and timely than the funds provided from outside the country. Central Emergency Response Fund (CERF) funds, for example, are reported to have arrived as late as six weeks after the disaster. Donors would do well to consider expanding these and similar mechanisms.

Lessons learnt and recommendations for the future

More than five years after the tsunami, Indonesia has seen definite improvements in disaster management. By nearly all accounts, local capacity has vastly improved. At various tiers of government, authorities are increasingly able to coordinate and respond to disasters and to draw on local funds and international funds managed in Indonesia.

In a country that experiences natural disasters so frequently, learning from the past is key to ensuring that local authorities and local communities are better prepared to respond to disasters. In an ideal world, the GoI would have the capacity to manage the response itself. With appropriate support from donors this could become a reality. If this is to happen, donors need to:

1. **Incorporate needs assessment into contingency planning.** The chaos surrounding the numerous needs assessments following the Sumatra earthquake shows the need to agree on a highly practical common template and procedure before the next disaster. Donors should not need to conduct

their own assessments. They should support organisations' efforts to be better prepared and inform their partners of the importance of contingency planning, and their willingness to support it.

2. **Allocate funding solely on a sober assessment and prioritisation of needs.** This recommendation is, of course, sadly far from new, but it remains highly relevant. Donors preferred to fund the most visible needs, while neglecting less tangible ones. In the absence of a reliable needs assessment, donors should follow recommendations made by clusters.
3. **Integrate risk reduction and preparedness in humanitarian action.** It is encouraging that there is such Indonesian commitment to disaster risk reduction and preparedness. Donors need to encourage their integration as a part of humanitarian action, instead of insisting on their separation.

References

- Association of Southeast Asian Nations (ASEAN) (2005). ASEAN Agreement on Disaster Management and Emergency Response. 26 July. Vientiane. Available from: <http://www.aseansec.org/17579.htm> [Accessed 20 April 2010]
- Badan Rehabilitasi dan Rekonstruksi (BRR), United Nations Development Programme (UNDP) and Government of Indonesia (GoI) (2005). Technical Support for Badan Rehabilitasi dan Rekonstruksi (BRR) NAD-Nias. Available from: <http://www.multidonorfund.org/media.html> [Accessed 20 April 2010]
- CNN (2009a). "Up to 4,000 buried in Indonesian quake rubble" CNN.com. Available from: <http://edition.cnn.com/2009/WORLD/asiapcf/10/03/indonesia.earthquake/index.html> [Accessed 20 April 2010]

CNN (2009b). "Officials: Indonesia quake toll could soar" CNN.com. Available from: <http://edition.cnn.com/2009/WORLD/asiapcf/09/30/indonesia.earthquake/index.html?ref=alsearch> [Accessed 20 April 2010]

International Federation of Red Cross and Red Crescent Societies (IFRC) (2009a). Indonesia: West Java Earthquake. Information Bulletin No. 3. 11 September 2009. Available from: <http://www.ifrc.org/docs/appeals/rpts09/IDeq11090903.pdf> [Accessed 16 February 2010].

IFRC (2009b). Indonesia: West Java Earthquake. Information Bulletin No. 2. 7 September 2009. Available from: <http://www.ifrc.org/docs/appeals/rpts09/IDeq07090902.pdf> [Accessed 16 February 2010]

IFRC (2009c). West Sumatra Earthquakes. Operations Update No. 6. 30 October. Available from: <http://www.ifrc.org/docs/appeals/09/MDRID0406.pdf> [Accessed 16 February 2010]

UN Office for the Coordination of Humanitarian Affairs (OCHA) (2010a). Indonesia: Fast Facts. Available from: <http://ochaonline.un.org/OCHAHome/WhereWeWork/Indonesia/tabid/6000/language/en-US/Default.aspx> [Accessed 10 February 2010].

OCHA (2010b). Financial Tracking Service. Available from: <http://ocha.unog.ch/fts/pageloader.aspx?page=emerg-emergencyDetails&appealID=887> [Accessed 10 February 2010]

OCHA(2009). Indonesia Earthquake: Situation Report #6. 11-17 September. Available from: <http://ochaonline.un.org/indonesia/SituationReports/tabid/3307/language/en-US/Default.aspx> [Accessed 2 March 2010].

OCHA (2009b). Humanitarian Response Plan. 9 October. Available from: <http://ochaonline.un.org/Default.aspx?alias=ochaonline.un.org/indonesia> [Accessed 25 February 2010]

OCHA Indonesia (2009c). Weekly Humanitarian Bulletin. 13 November. Available from: <http://ochaonline.un.org/Default.aspx?alias=ochaonline.un.org/Indonesia> [Accessed 16 February 2010]

US Geological Survey (USGS) (2009a). Magnitude 7.0 – Java, Indonesia. Available from: <http://earthquake.usgs.gov/earthquakes/recen/teqsw/Quakes/us2009lbat.php> [Accessed 22 February 2010].

USGS (2009b). Magnitude 7.5 – Southern Sumatra, Indonesia. Available from: <http://earthquake.usgs.gov/earthquakes/recen/teqsw/Quakes/us2009mebz.php> [Accessed 22 February 2010]

USGS (2009c). Magnitude 6.6 – Southern Sumatra, Indonesia. Available from: <http://earthquake.usgs.gov/earthquakes/recen/teqsw/Quakes/us2009mfaf.php> [Accessed 22 February 2010]

Willitts-King (2009). The role of the affected state in humanitarian action: A case study on Indonesia. Working Paper. February. Humanitarian Policy Group, Overseas Development Institute. Available from: <http://www.odi.org.uk/resources/details.asp?id=3068&title=humanitarian-action-state-crisis-indonesia> [Accessed 25 February 2010]

World Bank (2009). Helping Indonesia Prepare for Disasters. 2 October. Available from: <http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:22338713~pagePK:34370~piPK:34424~theSitePK:4607,00.html> [Accessed 2 March 2010]

World Bank (2009b). Indonesia's Economic Geography and Fiscal Decentralization 10 years after designing the big bang. Available from: http://siteresources.worldbank.org/INTINDONESIA/Resources/226271-1176706430507/3681211-1180923540599/3842239-1238392628503/IND_Decentralization.pdf [Accessed 24 May 2010]