The world has been shocked by the scale and magnitude of the devastation wrought by the Asian tsunami on 26 December. The death toll is staggering, and still more lives are at risk. The World Health Organisation (WHO) estimates that 150,000 people are now at extreme risk of disease. Continuing relief efforts are critical to preventing further death and suffering – and to help people recover.

What could have been done to prevent such widespread devastation? How could loss of life have been reduced? Some solutions, such as regional early warning systems, depend on political will; but there are also strategies that humanitarian practitioners can adopt.

John Twigg’s HPN Good Practice Review published in 2004 focuses on disaster mitigation and preparedness. Richard Choularton’s Good Practice Review, to be published later in 2005, looks at contingency planning. Below, both authors, experts in their fields, look at what the disaster should teach us about the role of preparedness and contingency planning for future crises.

(Links to a range of relevant papers and articles from HPN are given at the bottom of this article.)

The Asian tsunami: the implications for disaster mitigation

John Twigg, Honorary Senior Research Fellow, Benfield Hazard Research Centre, University of London

When the international community gathers in Kobe, Japan, for the World Conference on Disaster Reduction on 18–22 January 2005, it will be too soon to assess the full impact of the 26 December tsunami, or its long-term consequences.

Nevertheless, the event may still have a major impact. The Kobe conference had threatened to be bland and uncontroversial – the draft framework for action 2005–2015 tabled for approval is rather tame – but now the pressure of public concern may force the governments and international agencies taking part to make stronger commitments to long-term disaster reduction.

The primary lesson likely to be drawn at Kobe is simple and obvious: there should be much greater investment in disaster preparedness and mitigation measures that can
save lives and reduce damage.

There are certainly plenty of challenges in operationalising the wide range of methods and practices that can be used to do this, but there seems to be a growing consensus among agencies and academics behind a comprehensive approach to disaster risk management, one which locates it more firmly within development planning and processes. The tsunami does not change our basic thinking about how to approach disaster reduction, but it does remind us how badly it is needed.

But beyond this ‘more of the same’ message, are there particular issues arising from the tsunami that merit a higher place on the international agenda? At first sight, two stand out.

The first is the transnational nature of the disaster. Disaster risk management requires extensive collaboration between all the relevant stakeholders. Creating effective partnerships of this kind is acknowledged to be a major challenge – all the more so when it involves several countries which may differ widely in their political, institutional and social circumstances.

To date, most international support has gone into building national-level structures. Whilst there are examples of transnational initiatives (e.g. the Mekong River Commission’s work on flood risks in the Mekong Basin) and some evidence of how effective transnational collaboration can be (e.g. the Southern African Development Coordination Conference’s drought mitigation efforts in the early 1990s), this area has been largely neglected by analysts. We need to know much more about how to make transnational processes and systems work.

Second, we must ask what impact post-tsunami recovery and disaster reduction efforts will have on the vulnerability of those at risk. Most disasters see some groups in society being discriminated against when relief aid is distributed, on account of factors such as ethnicity, caste, gender, political allegiance, age or disability.

Anecdotal evidence of this is already appearing from the tsunami-affected countries. Moreover, the history of previous disasters offers little to make us confident that long-term recovery efforts will pay sufficient attention to issues of social justice and equity. There are no more grounds for optimism in expecting these efforts to make communities more resilient to future disasters. Indeed, there are already fears in some aid agency circles that élite groups will take advantage of the tsunami to deprive poor coastal fishing communities of their land rights, under pretence of protecting them against future hazard events.

The current Kobe agenda is strongly slanted towards disaster reduction as a management issue. It skates around the uncomfortable problem that human vulnerability to disasters is to a very large extent the product of human actions: in
particular, political, economic and social processes that undermine resilience and coping capacities.

Finally, we can expect a lot of talk at Kobe about early warning systems. Almost certainly, governments and the international community will repeat their commitment made at the 6 January meeting in Jakarta to establishing a tsunami early warning system for the Indian Ocean and South-east Asia region.

When those responsible do sit down to discuss concrete plans, they must be reminded that there is no scientific-technological ‘quick fix’ here. Warnings are mediated through many institutional and social levels, all of which must be fully engaged in any system. Systems only work insofar as those at risk understand and trust the warnings, and are able to respond to them; without the full participation of vulnerable communities in their design and management, this is unlikely to happen.

Contingency planning and the Asian tsunami

Richard Choularton, Contingency and Response Planning Advisor, Famine Early Warning Systems Network (FEWS NET)

The speed and magnitude of the relief response following the tsunami has been impressive, in large part due to the widespread investment in emergency preparedness by relief agencies in recent years. In the last decade, humanitarian agencies including donors, NGOs and UN agencies, have established emergency response teams, set up emergency reserves of equipment, supplies and cash, and improved their early warning and regular contingency planning. These efforts are undoubtedly paying off today as the humanitarian system works to assist tsunami victims and prevent further loss of life.

Yet despite these significant improvements in preparedness, humanitarian organisations had undertaken virtually no contingency planning for a major tsunami in the Indian Ocean. The most likely explanation for this is a classic dilemma for planners: should you plan for events that are the most likely, or the most destructive? A tsunami, especially of the magnitude of last month’s, is a rare event. Other more ubiquitous problems in the region, such as civil conflict and floods, take precedence for contingency planners because this planning offers the most immediate practical benefits.

While this view has clear merit, the Asian tsunami shows that more emphasis is needed on planning for low probability yet catastrophic disasters. This idea is not new; concern has been growing for some time over the impact of such events, especially given the increasing population density, rapid urbanisation and deepening poverty in the hazard-prone areas of the world, especially in Asia. These and other factors are steadily increasing the potential of natural hazards, like the recent tsunami, to cause
widespread loss of life and destruction – and thus increasing the need for contingency planning.

In Asia, potentially grave disasters threaten in Dhaka in Bangladesh and Katmandu in Nepal. In both, geologists have warned of the risk of catastrophic earthquakes. Imagine the destruction that would be wrought by a magnitude 8.0 earthquake in Dhaka (40 million residents) or in Katmandu (3 million). The lesson of the tsunami is that we should reprioritise our contingency planning efforts to ensure that this type of disaster is considered.

There are a number of ways this can be done. First, investment in emergency preparedness must continue so that, when this scale of event occurs in the future, and it will, humanitarian organisations are better prepared. This requires the commitment of humanitarian organisations and the support of donors.

Second, humanitarian agencies should prioritise contingency planning for low-probability but catastrophic natural disasters, especially in densely populated areas. These efforts should be part of broader contingency planning efforts that also consider more likely crises. This would provide tangible short-term benefits, while at the same time improving preparedness for worst-case scenarios, such as December’s tsunami.

Third, in scenario-based contingency planning the scenarios that are developed more often than not miss the mark. For example, there will undoubtedly now be a focus on planning for tsunamis, yet the next major catastrophe in Asia could be a volcanic eruption or floods. If planning is done in a flexible way that allows adaptation, it can be a very effective operational tool.

The planning process itself develops relationships, understanding and agreement between key response organizations, which become invaluable during an actual emergency response. Moreover, many of the challenges faced in responding to one emergency are often encountered in responding to another. This is especially true for operational and logistical issues, such as securing sufficient air transport capacity – a major bottleneck in Indonesia and other affected countries.

By fostering contingency planning processes in areas prone to natural hazards, humanitarian agencies can prepare for both the more likely situations, as well as low-probability scenarios. They can even prepare for scenarios not yet contemplated. Finally, fostering contingency planning and emergency preparedness at the local level is just as important, if not more so, than the planning undertaken by humanitarians. Contingency planning at the community level increases local resilience before, during and after a disaster.

John Twigg’s Good Practice Review, ‘Disaster Risk Reduction: Mitigation and
Preparedness in Development and Emergency Programming’, is available here. Follow the link at the bottom of the article to download the full text of the Review (you must register as an HPN member first).

Readers may also find relevant the recent HPN Network Paper 'Disaster Preparedness Programmes in India: A Cost Benefit Analysis'

For a full list of HPN articles covering natural disaster-related issues, select ‘Natural Disasters’ in the keyword menu to the top right.

Source: http://www.odihpn.org/ Access time: 01/2005