Education and debate

Smoke and mirrors: deficiencies in disaster funding

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Disasters such as the recent tsunami, which derail development can no longer be viewed as short term blips from which society readily recovers

The headline concern for the tsunami victims, living and dead, will be with us for a few weeks; by contrast, their need for assistance and reform will stretch over decades. Huge sums have been pledged in aid and a bold commitment made to build an Indian Ocean tsunami warning system. But, if past is precedent, only a fraction of recent pledges will materialise and the already overdue warning system will remain a pipe dream for the affected communities. The headlines rightly applaud the compassionate outpouring of the public around the world but fail to question the logic of promoting one-off giving from individuals rather than sustained involvement by governments. Disasters are part of normality, and if we are to have a longlasting effect we need to rethink the way aid is delivered and invest in development to help minimise the effects of natural phenomena.

Record on delivering aid

The pledging of \$5bn (£2.6bn, €3.8bn) for survivors of the tsunami only three weeks after the event, is an impressive expression of global concern. The track record of delivering on such commitments, however, is anything but reassuring (table 1). Pledges fail to materialise for a host of reasons, some rational but some indefensible. Countries affected by disaster may have difficulty in absorbing huge aid flows quickly. Disasters destroy the infrastructure vital to delivering aid. Many of the civil servants, technicians, and local leaders who would normally carry out rehabilitation work may be killed in the disaster, as they were in the Rwandan genocide and the tsunami.

Donors may attach conditions that make contributions difficult to use. These conditions may reflect a policy agenda (such as requiring the recipient country to respect human rights) or express a commercial objective (such as mandating purchase of goods and services from a given donor government). Funds pledged may pay for items that never quite make it into the disbursement ledger, such as the costs of military flights, shipping, and human resources for disaster response. Some of what gets counted as assistance actually takes the form of loans, further increasing poor countries' external debt. The dispassionate observer may be forgiven for wondering whether donors are motivated by the need to be viewed as



Only a fraction of aid pledged for the Bam earthquake has been delivered

pledging or by the desire to make a real difference in the lives and livelihoods of affected populations.

The present funding and aid effort around the Indian Ocean is likely to meet most of the vital needs for survival. We should be less optimistic, however, about the medium and long term. The logic of disaster response tells us that funds should be pledged for identified needs. Needs are identified by local communities, affected governments, non-governmental organisations, and the UN. The UN produces, for most major disasters, a consolidated appeal that pulls together the needs identified by all its agencies in collaboration with the affected communities. The requests are, however, rarely met in full (table 2). The UN appeals are not wish lists; they represent real and immediate needs, and usually minimum needs at that. Any shortfall in funding should be seen as a failure on the part of the international community.

Sadly, aid for long term needs rarely represents new money. Edward Clay, senior research associate at the Overseas Development Institute, London, noted immediately after the tsunami: "The research evidence is that the immediate response to natural disasters involves some new money, but that rehabilitation needs are often met by switching aid money between uses Feinstein International Famine Center, Friedman School of Nutrition Science and Policy, Tufts University, Medford MA 02155, USA Peter Walker director

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Table 1 Disparity between pledging and delivery of aid after disasters

Crisis	Amount pledged (\$)	460m by 1995 <71m by July 1995	
Cambodian war rehabilatation ¹	880m by June 1992		
Rwandan genocide ¹	707m in January 1995		
Hurricane Mitch, central America ²	9bn in 1998	<4.5bn, December 2004	
Bam earthquake, Iran*	1bn in January 2004	116m December 2004	

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

rather than increasing total aid to the countries affected." His speculation is proving correct. The United States has pledged \$350m, and in early January had committed \$44.6m of that to actual programming. Yet US Agency for International Development officials have acknowledged on national news programmes that these funds will come from existing aid budgets rather than new money. This means that those funds cannot now be spent on other priorities—for example, in Sudan or Bam. However, the US administration has so far resisted the suggestion that supplemental funding be sought to respond to the emergency.

Monitoring donations

The present system of tallying aid flows distorts the apparent generosity of different parts of the world, playing up that of Western governments and playing down that of the general public and smaller nations of the world. The figures for funds pledged and spent usually derive from the UN's financial tracking system and, for historical data, from the Organisation for Economic Cooperation and Development's development assistance committee. These sources systematically underestimate global humanitarian giving. Public donations to non-governmental organisations are not reflected fully. Estimates suggest that Western nongovernmental organisations may raise as much as \$2bn annually from the public. Analyst Abby Stoddard estimates that globally some 75% of the humanitarian resources of non-governmental organisations come from the general public.⁶ Funds from Islamic agencies and Islamic government to government funding also tend to be minimised in normal aid reporting. Another undercounted source is the considerable funding from diaspora groups around the world. In early 2001, after the earthquake in Gujarati, expatriate Gujaratis provided hundreds of millions of dollars above and beyond their normal remittances from overseas.7 Finally the investment made by disaster survivors themselves in rebuilding their own communities is rarely calculated.

One of the promising and noteworthy developments from the tsunami response has been the contributions from middle class people in India to relief efforts there and in neighbouring countries. On the government side, the first ever contribution by the government of China to an international relief mobilisation also bodes well for more inclusive and participatory international arrangements. The present

Table 2 Funds requested by UN for disasters and % not met, 2000-43

	2000	2001	2002	2003	2004
Funds appealed for* (\$bn)	1.9	2.6	4.4	5.2	3.4
Average % of appeal not met	40.8	44.7	23.5	24.2	40.0

^{*}Total of all appeals in given year.

system, however, will not necessarily capture these figures.

Meeting longer term needs

The focus during the days after the tsunami, at least in the United States, has been on promoting private donations. The US president, joined by the past two presidents, has been appealing on television for citizens to dig deep and help out. Although the response from the American public has been overwhelming, such appeals hint at responsibility shifting. The emotional response to high profile suffering ensures a generous public response. That motivation, however, is insufficient as a source of funding for rehabilitation, prevention and reduction of future disasters, and tackling long term vulnerability. These more complex efforts should be seen as the common responsibility of states. Governments should not be allowed to shed this responsibility by appealing for private donations. Donor agencies reinforce the problem of longer term redevelopment by putting a premium on rapid disbursement of emergency funds. They have comparatively few funding lines available for rehabilitation and redevelopment activities.

Redevelopment should include measures to mitigate the effects of a given disaster and to prepare to respond to the next disaster. In most development planning, however, disaster resilience, particularly for the poorest and most vulnerable communities, isn't on the agenda. Changes in approaches are needed that take people's livelihood strategies, knowledge, motivations, and other resources seriously, acknowledging the reality of disaster hazards and building disaster resilience into national development plans. Past experience suggests that little of the \$5bn pledged for the tsunami is likely to go to the excellent but unheralded work of local non-governmental organisations that have been trying to provide increased security for the poorest households through microcredit, literacy training, and citizen based identification of hazards. An example of the small but high impact schemes that are often overlooked by major donors is provided by the US non-governmental organisation, Grassroots International, which has a partnership with the Sri Lankan union of small-scale fishermen to help repair and replace boats and nets.

Disaster proofing also involves a great deal of risk judgment. What if the disaster never happens? Ninety per cent of all recorded tsunamis occur in the Pacific. Until now, governments have viewed the extension of the Pacific tsunami warning system (which has existed since 1949) into other ocean basins as a poor use of money on the basis of costs and benefits. This narrow view, however, ignores the possibility of merging cyclone and tsunami warning systems. Cyclones are much more common than tsunamis in the Indian Ocean, and a combined system would make sense.

Geologists, seismologists, and tsunami experts have failed to interact with cyclone experts, and governments have been slow to take up their various suggestions. In 2003, an Australian geologist sought to get the UN's international coordination group for the tsunami warning system in the Pacific to include the Indian Ocean. In a decision that allowed governments to appear to be acting without really doing so, the group

voted "to establish a sessional working group to prepare a recommendation to establish an intersessional working group that will study the establishment of a regional warning system for the southwest pacific and Indian Ocean." Calls from Indian nongovernmental organisations for improvements in the warning system and the extension of cyclone warning to include tsunamis after the supercyclone disaster in Orissa state in 1999 were also ignored (K A Aryal, Disaster and Development Centre, Northumbria University, personal communication).

When the smoke and mirrors clear, the minutes of such international groups reveal a timidity among governments unwilling to take the necessary preventive steps. We hope that the discussions on reducing natural disasters at the World Conference on Disaster Reduction in Kobe on 18-22 January (www.unisdr.org/wcdr) will be animated by urgency and energy born of recent events.

Disasters are increasing

The global picture on natural disasters is changing. Data compiled by the Centre for Research on the Epidemiology of Disasters at Louvain University, Brussels, paints a disturbing picture. Over the past two decades, the annual deaths from disaster have fallen by around 30% whereas the number of people affected by disaster has gone up by 59%. The data also show that the number of disasters, almost all meteorological in nature, is steadily rising year on year, from an average of 150 a year in 1980 to over 450 a year today. Although some of this increase may be due to better reporting, a substantial part represents a very real phenomenon.

Even more striking is the relation between development and disaster vulnerability. Analysing 2557 disasters between 1991 and 2000, the International Red Cross and Red Crescent Federation found that in countries with high human development indices there were 23 deaths per disaster, whereas in countries with low indices 1052 people died per disaster. In other words, development is an investment in disaster mitigation.

The fall in deaths from disasters is partly explained by better warning systems and preparedness for predictable flooding. The data also signal the reluctance of governments to sustain high death tolls in disasters. In the past (for example, Ethiopia in the 1970s), high death rates in natural disasters have led directly to uprisings and the overthrow of regimes. Organised attempts to reduce death rates immediately after disasters have characterised relief work over the past 30 years.¹²

The rise in the number of people affected, and therefore the numbers needing to rebuild and facing future disasters, is concerning. The increase may reflect three factors. The first is climate change, which is producing more frequent extreme meteorological events and an inexorable rise in sea level. The second is the global trend of urbanisation, with most growth being in shantytowns and marginalised areas of cities and most large cities being located in coastal areas. Thirdly, the complexity of the development process tends to increase vulnerability to disaster. Miserable local and national governance (as seen in Haiti in last year's floods and landslides), debt policies, the structure of donor aid, the dynamics of population growth and



High profile pleas for public donations do not lessen the need for long term state funding

forced displacement, and the growing effect of economic globalisation all have their effect.

Reforming disaster management

What is needed is a completely transformed arrangement for responding to large scale disasters. We propose a new system with three main features based on the premise that disasters are here to stay and will radically affect development. Firstly, UN relief agencies should be funded by assessed contributions from member countries rather than having to appeal for money after each disaster. UN peacekeeping operations, equally vital to saving lives, are already successfully funded on this basis. Such a funding mechanism would still leave room for governments to make supplementary voluntary payments, but it would also allow agencies to build reserve funds, to invest in training, and to act more quickly and save more lives.

Secondly, the system for tracking humanitarian pledges, donations, and spending should be greatly refined and extended. It is morally inexcusable for pledges of funds to fade away as the cameras move on and for agreed rehabilitation and disaster proofing programmes to be halted, half funded. States and the global public need a financial tracking system that can trumpet when such abuses are taking place. The system also needs to be adapted to capture the funding provided by the public, which is often of the same order of magnitude as state funding.

Thirdly, the mind set of economic development in areas prone to disaster needs to be radically changed. In northern countries, all new development programmes examine the risk from disaster and seek to protect infrastructure and economic processes from their worst effects. But in the south, where the economic costs of disaster are lower but human costs higher, no such attitude prevails. ¹⁰ This is the most fundamental challenge. States, corporations, and donor agencies need to ensure that vulnerability to disaster is taken into account in economic development strategies and incorporate local knowledge and capacity for self protection. If they have the will to be successful, the next natural hazard could remain just that—a hazard

Summary points

Much of the aid promised immediately after disasters does not reach those affected

More emphasis should be put on rehabilitation after immediate needs are met

UN relief agencies should be funded at least in part from assessed contributions rather than relying on pledges in response to individual disasters from donor governments

"Disaster proofing" should be taken seriously in all development planning

> but not a devastating disaster that compounds with profound vulnerability and leaves massive death and destruction in its wake.

> Contributors and sources: PW worked for 20 years in disaster management and policy development for several international non-governmental organisations and the Red Cross before his current post. BW has written extensively over the past 30 years on natural disaster management and mega-city disasters. JL lectures on disasters, public health, and human rights at Harvard School of Public Health and has recently completed a mission to the Chad-Darfur border evaluating the aid effort there. LM has extensive experience in analysing humanitarian and development policy and operations. This article draws on extensive contacts with governments, NGOs and UN agencies active in the tsunami

disasters and on the official financial and narrative reporting systems of the UN, the Red Cross, and several major NGOs.

Competing interests: PW, JL, and LM have received funding for research from the US Agency for International Development (USAID) in the past five years.

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Commentary: Change will not happen overnight

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Correspondence to: griekspoora@who.int We endorse the view expressed by Walker et al, that short term thinking and related funding mechanisms can undermine efforts for a more sustained approach to reducing the risk of disaster.1 Inequity in the scale of response poses other problems. Over the past decade, about half of the \$2bn (£1bn; €1.5bn) committed to the Inter Agency Standing Committee Consolidated Appeals went to high profile crises such as those occurring in Bosnia, Afghanistan, and Kosovo. Other countries affected by chronic conflict, such as Liberia and Somalia, received much less per person affected, although their needs are at least as great. Rapid onset disasters can also trigger a series of responses that are influenced more by emotions or political motives than by evidence based assessments of needs.2 Some of these responses are harmful and can add to the suffering or chaos, such as rapid burials in mass graves because of unwarranted fear of epidemics.

It is harder to raise funds for disaster prevention, preparedness, and mitigation than for response, even though there is strong evidence that response costs several times more to achieve the same effect. A dollar spent on constructing hospitals and houses to withstand natural hazards, such as hurricanes or floods, can save an estimated \$5-7 on rebuilding after severe damage.4

We agree with the authors' plea that funding arrangements should be revisited, but recognise that change will be incremental. We must make use of win-

dows of opportunity for improvement, including learning from the tsunami experience. Donors are responding to criticism on inequitable funding allocations through the Good Humanitarian Donorship Initiative, in which they endorsed a set of principles and good practices to improve their role in humanitarian interventions.⁵ The initiative also commits to "strengthen the capacity of affected countries and local communities to prevent, prepare for, mitigate and respond to humanitarian crises, with the goal of ensuring that governments and local communities are better able to meet their responsibilities and co-ordinate effectively with humanitarian partners." The tragedy of 26 December 2004 is providing much evidence to support the rationale behind this goal. Thanks to strong institutions, and supported by civil society and non-governmental organisations, the national authorities of countries affected by the tsunami have been active in action and coordination for health since the first hours of relief (box).

Long term changes

Within four weeks of the disaster occurring, the response is already shifting to rehabilitation. It is essential that available funds are also used for a long term strategy, to reduce the vulnerability to future disasters.7 Last week's world conference on disaster reduction in Kobe proposed that 10% of funds for responding to