

Disaster prevention:

Risk awareness is the key

The series of dramatic natural events is never-ending. 2005 again illustrated that natural disasters are unavoidable. For disaster prevention systems to function properly, investments in raising risk awareness are key.



Photo: Loster

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Every year, new highs are being recorded for economic and insured losses from natural disasters – and the human costs are even greater. 2005 was the most expensive disaster year ever, with economic losses exceeding 200 billion US dollars (USD) and insured losses totalling 75 billion USD. The earthquake in the Kashmir region (India and Pakistan) in October 2005 claimed more than 80,000 lives. 2004 will be remembered as a sad year as well – the death toll in the massive tsunami topped 200,000. Let's cast a glance back at the recent history of disaster mitigation. Responding to the alarming trends emerging in the 1980s, the United Nations designated the 1990s the International Decade for Natural Disaster Reduction (IDNDR). This was followed by the launch of many national and international initiatives, notably the German Committee for Disaster Reduction, Bonn, and the International Strategy for Disaster Reduction (ISDR), Geneva. Their aim remains unchanged to the present day: to establish the best possible disaster prevention systems around the world.

The development of these initiatives has undoubtedly had a positive impact for disaster victims in a number of countries, but there is still no room for complacency. In Bangladesh, for example – hit by severe cyclones and devastating storm surges in 1970 (300,000 deaths) and 1991 (140,000 deaths) – the launch of a disaster preparedness programme has substantially reduced the death toll from natural disasters. An early warning system is now in operation, alerting people to the impending threat in time for them to take refuge in cyclone flood shelters.

But despite this kind of improvement, natural disasters still cause death on a massive scale year after year. And there are already many indications that the scale of disasters around the world is likely to increase further in future. Relevant causal factors include global population growth, the concentration of people and valuables in large conurbations, settlement in and industrialization of extremely exposed regions such as coasts and flood plains, the increased susceptibility of modern

societies and technologies to natural hazards, and above all, global environmental and climate change.

Microinsurance: A solution for large-scale natural disasters?

The UN proclaimed 2005 to be the International Year of Microcredit. The aim is to provide microcredit and microinsurance to help people in developing countries escape from the poverty cycle. A key issue being intensively debated in this context is whether microinsurance is a suitable instrument for disaster regions as well. Is this the key to disaster prevention? In global terms, microcredit and microinsurance solutions are still very much in their infancy, although some initial and very positive progress has been made with regional systems in countries such as Bangladesh, India and Uganda. But had such systems been in place, would they have been effective in the context of the tsunami or the Kashmir earthquake, for example? The situation varies: if a comprehensive microinsurance market had existed in Sri Lanka when the tsunami hit the country in December 2004, it would have done much to cushion the impacts without the market collapsing. The limited geographical area impacted by the tsunami and hence the number of claims made under policies held would have affected a relatively low percentage of the market, which could have sustained these losses without any major adverse effect. Not so in Kashmir: given the almost total devastation across the entire region, the October 2005 quake would undoubtedly have resulted in the collapse of the regional micromarket and led to bankruptcies in this sector – that is, unless an international reinsurance programme had underwritten the system. At present, however, these are purely hypothetical scenarios because large-scale microinsurance solutions are unlikely to become a reality for some years. That being the case, early warning and human- and risk-appropriate disaster risk management systems are the key to preventing disaster-related losses.

Photo: Loster



Early warning and the «last mile»

The 2nd World Conference on Disaster Reduction (WCDR) took place in Kobe, Japan in January 2005. The first had taken place in 1995. More than 3 000 delegates from 120 countries came together to discuss how disaster risk management systems could be improved worldwide. The event was dominated by the tsunami disaster in the Indian Ocean, with the result that at the end of the conference, a number of major disaster management issues remained unresolved: are the current global disaster prevention initiatives adequate? Is there a clear desire for disaster prevention systems and safeguards in developing countries, and is this desire sustainable at all levels? Are the current efforts, projects and programmes tailored appropriately to the affected countries, especially the developing countries which are often hardest hit by disasters?

In the debates about better early warning systems (EWS) at and after Kobe, there has been much talk about the concept of the «last mile». In other words, how can a technically improved warning system – based on satellites, ocean-based data acquisition systems (measuring buoys), alert streams, etc. – reach at-risk individuals and communities more effectively? The «last mile» issue dominates many of the reports and contributions to the disaster management debate. Its main message is that the international community has the capability to develop an early warning system which can send out alerts about impending tsunamis many minutes earlier, so now, it is simply a matter of ensuring that these alerts reach the individuals at risk – the fishermen in Sri Lanka, the tourists in Thailand – in time.

Effective early warning systems are undoubtedly important – but the «last mile» debate is fundamentally flawed. Surely disaster mitigation should start with the individuals and communities at risk and address their immediate needs? Do decision-makers in the donor countries really understand the needs of, say, a basket-weaver in Vietnam or a coastal fisherman in Indonesia? Shouldn't disaster risk management strategies take account of the highly disparate needs of people in different regions and develop an adequate system of protection on that basis – recognizing that at-risk individuals from different cultures with different levels of education and training and interests may well respond in very different ways to natural hazards? If we simply focus on the people on the «last mile», we will have to be prepared for scenes of widespread devastation and human tragedy along the «first mile» in future.

The «last micron»

The USA has excellent early warning systems. Nowadays, Americans can track a hurricane's progress live on TV, with real-time reports being provided on its scale, force, direction and landfall area and the people likely to be affected. But Hurricane Katrina, which claimed 1 280 lives in New Orleans in August 2005 demonstrated very clearly that even the best and most sophisticated warning system is useless if the alerts do not reach the people at risk or if there is little awareness of what risk-appropriate action to take. In New Orleans, a combination of numerous factors meant that many people failed to heed the calls to evacuate – and almost all these factors had to do with poverty. Only if the individuals at risk are aware of the impacts of earthquakes, tornadoes and flooding and know what action they need to take to protect themselves is there any chance of reducing casualty levels over the long term. So it is not about the «first» or the «last» mile; it is about the last micron – the synaptic response in people's brains which triggers appropriate individual action. Risk awareness is the key. If the people around the Indian Ocean had known more about seismic tidal waves and flood risks, many thousands of people could have saved their own lives.

The way forward

In November 2005, the Munich Re Foundation invited 100 participants from 30 countries to an international symposium in Hohenkammer near Munich. Leading representatives of government and non-government organizations such as the International Red Cross, GTZ, the United Nations and the World Bank met with finance and insurance experts for a discussion entitled «Worldwide disaster prevention – Awareness is the key». The debate focused on the most urgent issues for optimized risk prevention. Prominent figures such as Irmgard Schwaetzer (German Committee for Disaster Reduction), Bernd Eisenblätter (GTZ), Sálvano Briceño (UN International Strategy for Disaster Reduction) and Johan Schaar (International Federation of Red Cross) underlined the fact that the key risk prevention tasks would only be solved if politicians, economists, scientists and the people worked in partnership. The conference culminated in the adoption of the Hohenkammer Charter, which defines the ten most important challenges for the future for optimized risk prevention. The Charter lays an important foundation stone to combine and focus global efforts more effectively in future.

The Hohenkammer Charter

The ten most important challenges for optimized risk prevention:

Poverty

People living in poverty are especially vulnerable; poverty relief is therefore a key element.

People

Disaster prevention efforts must reach or start with the people in the areas at risk.

Decision-makers

The swift implementation of viable preventative measures presupposes the committed involvement of decision-makers from communal to national government level.

Dialogue

The exchange of views between those concerned must be actively pursued in order to achieve a common understanding of the problems and solutions.

Partnerships

Politicians, trade and industry, scientists and those affected have to cooperate better and more efficiently. Alliances – public-private partnerships – have to be infused with life.

Development policy

Risk prevention has to be singled out as one of the central components of development cooperation and national programmes, and implemented accordingly.

Propagation

Promising risk prevention initiatives that currently exist at communal level must be transmitted and propagated worldwide.

Incentives

Political, legal and economic incentives are called for, to support investment in disaster prevention, and to accelerate the processes involved.

Insurance

Risk transfer, such as insurance and solidarity networks, helps reduce the vulnerability of governments and people in risk situations.

Awareness development

Developing awareness is the key to the implementation of adequate measures before disaster strike