Beyond Kobe

A Proactive Look at the World Conference on
Disaster Reduction. 18-22 January 2005, Kobe, Japan

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1. Introduction

The World Conference on Disaster Reduction (WCDR), held in Kobe, Japan, from 18-22 January, 2005 showcased some of the best developments in disaster reduction, but inevitably many good initiatives require sustained commitments and efforts to make it from the neighborhoods and villages all over the world into the official agency and intergovernmental processes. Some fell by the wayside.

This report seeks to analyze the underlying causes of continued disaster vulnerability, to showcase best practice from the field and to highlight some of the key issues emerging from the WCDR Conference at Kobe. It presents 10 key recommendations which the authors believe complement the *Hyogo Framework for Action*.

The process of Kobe linked states to civil society and demonstrated that this synergy can work and can deliver. The challenge now is to keep the synergy alive and focused, to build on the Kobe Consensus.

2. An analysis of Disaster Causality and Response

2.1 Root Causes of Disaster

Over the last two decades, disaster deaths per year have gone down by around 30%, whereas the number of people affected by disaster has gone up by 59%. It is largely the technical fix of warning systems, better communication and cyclone shelters that has reduced the death toll, taken the extreme worst off disasters, but it is the lack of human rights, economic opportunity and global process fixes that are allowing the numbers affected to raise so. Fewer are killed but many more living their lives in abject poverty and on the brink of survival. They are vulnerable to the extreme events which will unfold as the 21st Century rolls along. The "wine glass" distribution of global wealth and world trade (87% controlled by the richest 20% of human beings; while the poorest 20% enjoy less that 2%) appears again in the pattern of death from disasters. There are, in short, fundamental or root causes to disaster vulnerability.

2.2 Economic Globalization

In the decade since Yokohama, economic globalization has continued to weave a tight web of trade that has brought super profits to some, misery and exclusion to others. The World Trade Organization has been awash in disputes as smaller nations; especially those of the former colonized world, perceive little or no progress in evening out the rules that work against them. The power of trade unions has decreased, and in many countries undocumented, illegal workers have arrived in large numbers.

Economic globalization, at least with the corporate model, seeks to externalize risk (external from the corporation that is). It's not that corporations act immorally, they act amorally, but in the process people are attracted into low wage jobs and crowded in shantytowns and in coastal cities. Can economic globalization be re-thought and "tamed" so that people do not suffer increased disaster risk in the process?

The impact of free trade agreements on poor and marginal social groups was said to be the number one risk factor in the region. At the WCDR in Kobe delegates agreed that the impact of free trade on the disaster vulnerability and resilience of these groups needs to be monitored closely and increased vulnerability must be counter balanced by social protection. These concerns were also expressed in the informal meetings of African delegates and those who work in Africa.

Local struggles against the privatization of water supplies and other public goods have resulted in a high level of organization and increased awareness of the life lines such as the water system in a locality. This experience is vital for taking risk reduction to the next step of mass awareness and implementation. The organizational experience of people working on water as a human right or access to urban and rural land rights is valuable for those who would build community based disaster risk management from the bottom up. Besides this organizational head start, the substantive issues involved must also concern risk reduction workers if we are to take seriously the message of Kobe

– that risk reduction must become an integral part of sustainable human development. What lies behind this phrase and behind the MDGs are people, their rights, and their livelihoods. Struggles to protect access to the lifelines and goods that are basic human needs such as water are both basic to development and to risk reduction. So are struggles to protect livelihoods.

2.3 Increasing Violence. Efforts at Peace Making and Conflict Resolution

Where there is war there is little chance of building against disaster using our normal models. In Aceh, Indonesia and Sri Lanka and other places for many people today war or at least violent unrest has been the norm. Internally displaced people fleeing war in Colombia, Congo, Sudan, and elsewhere live in conditions that make them vulnerable to disaster. We can't wait for it to end before mitigating against disaster, so where are the models and approaches to deal with this? Does a "window of opportunity" open up after a disaster that might allow conflict such as those in Aceh and Sri Lanka to be finally resolved?

Violent conflict interacts with natural hazards and technological hazards in a wide variety of ways. Here we highlight nine key interactions:

Violent conflict is often one of the main causes of social vulnerability.
Institutional weaknesses due to past wars combine with natural hazards to produce a downward spiral
Displacement of large numbers of people in war and other violent conflicts can lead to new risks.
Violent conflict can interfere with the provision of relief and recovery assistance.
Participatory methods meant to empower and engage socially vulnerable groups may be difficult or impossible during violent conflicts.
Application of existing knowledge for mitigation of risk from extreme natural events is often difficult or impossible during violent conflict.
Violent conflict often diverts national and international financial and human resources that could be used for mitigation of risk from extreme natural events.
Violent conflict often destroys infrastructure which may intensify natural hazards such as flooding, the effects of drought, or epidemic disease.
Violent confrontations often wreak havoc on vegetation, land, and water, and undermine sustainable development.

Conflict in the Darfur province of Sudan combines with environmental degradation and climate change to drive mass displacement, famine and crimes against humanity.
Photo: Michael Wadleigh

2.4 Accelerating Urbanization

Both conflict and global market forces drive urbanization. In some parts of Asia, Latin America, and Africa, cities are swollen with impoverished people displaced by conflict. Others are economic migrants whose rural livelihoods have been made impossible by swings in global prices for commodities such as coffee, cotton, etc. Export enclaves have sprung up in China and throughout Asia and Latin America where cheap labor and lax environmental regulation attract investment in manufacturing for the world market.

Most population growth today is in urban areas, mostly in the shanty towns of urban areas, and most large cities are on coasts where sea level rise effects them, and where they are exposed to storms and possibly tsunamis. How can urbanization be guided so that vulnerability to such hazards is minimized? Megacity urbanization also puts very large number of people at risk to earthquakes. How can the risk be reduced rapidly in Tehran, Istanbul, Mexico City, Addis

Ababa, Manila, and other large cities facing earthquake hazard?

Critical student of urbanism, Mike Davis, recently reviewed the 2003 *World Urbanization Report* and concluded that we live on a "planet of slums." While this may be hyperbole, the fact is that many people live in conditions of informality on the edges and in the interstices of cities, where they are exposed to many natural and anthropogenic hazards.

The underlying drivers of urbanization - the pushes such as violent conflict and the collapse of rural and small town livelihoods, and the pulls such as the growth of the international tourist industry and low wage jobs in export enclaves grow the shanty towns and illegal settlements of the rapidly growing cities of the south. Poverty, human rights abuses and environmental hazards combine to create a tinderbox of disaster vulnerability.

2.5 Global Climate and Environmental Change

What makes such urbanization particularly dangerous – while also adding to the burden of rural residents still trying to make a living from natural resources – is accelerating environmental degradation. The global trade environment has encouraged investment in more and more forest industries, hydro power development, fossil fuel exploration and development, and industrial scale fishing. Biodiversity, ocean fish stocks, forest cover, and arable soil are all under pressure. Failure of the UNFCCC to control carbon emissions by the richest nations adds to the hazardousness of the situation.

Rising sea levels and more extreme events such as cyclones and other storms mean more disasters: no way round it. The Netherlands is going flat out to adapt to this reality, but where else is adaptation to climate chance taking place fast enough?

Climate change is intensifying the hazards that affect human livelihoods, settlements, and infrastructure. Climate change is also weakening the resilience of livelihoods in the face of constant and increasing/shifting hazards. New hazards such as human, livestock, and plant health hazards are appearing. Population movements in response to climate change may also result in new exposure to hazards and to increased vulnerability. Furthermore, climate change can increase vulnerability to unrelated, non-climatic hazards. For example, an urban earthquake hitting when the elderly population is already suffering from the kind of heat wave that took so many lives in Europe in 2003 would be much more stressful for such vulnerable groups. An earthquake taking place during a drought may find reservoirs and water pressure too low to fight fires adequately. One recent study put forward a scenario that involved an earthquake destroying dikes that separate salt and fresh water in the Sacramento River delta in northern California. Being a major source of water that is piped to Los Angeles, such an earthquake scenario would create technological drought in the Southland – a situation that would be all the harder to deal with in a warmer climate.

The Small Island Developing States (SIDS) were very active at the WCDR, and a paragraph on their particular vulnerability to the hazards of climate change was included in the Hyogo Framework for Action. In addition, some of the panels in the Thematic Session and events in the Public Forum touched on climate change.

Climate change forces communities to adapt rapidly to changing environments or risk disaster. Adaptation in the absence of an understanding of climate change, or the political commitment to support marginal communities, may lead to over exploitation of the land.
Photo: Michael Wadleigh

2.6 Women's crucial role in disaster reduction

How can the potential of women as proactive agents of disaster reduction be acknowledged and fully utilized? Women and children may suffer more in disasters, but women should not be stereotyped as 'victims'. Women have a large contribution to bring to disaster risk reduction and local resilience. They have knowledge, skills, and relevant capacities and experiences. This has been very well documented, but women's contribution is often ignored.

Women's role in creating a culture of safety, in preparedness and mitigation was acknowledged in several of the panels during the Thematic Session at the WCDR and in events organized in the Public Forum. NGO and other civil society representatives brought forward examples of women's positive contributions and leadership role. The Gender and Disaster Network was represented in Kobe and launched a "Broadsheet" of recommendations to be born in mind during tsunami relief and recovery operations.

Women in West Africa prepare soil conservation ridges to slow down water erosion, help capture rainwater and increase agricultural productively. In many communities women provide the bulk of the work force.

2.7 Civil Society Preparedness and Hazard Mitigation

The Intermediate Technology Development Group (ITDG) used participatory wealth ranking in addition to other criteria to identify people who are most vulnerable in southern Zimbabwe in drought prone Chivi district. This was considered important so that a proper cross section of the community would be involved in the process of sharing their own farming practices and considering low-cost "hybrid" practices that combined ideas from the outside. They were also careful to work closely with women's groups so that the gender balance was representative of the community. Whereas colonial-era agricultural extension in this area had been authoritarian and "top down," the approach ITDG took was to explore the potential of indigenous knowledge. For example, local plants were used to produce effective pesticides. Traditional seed selection criteria and seed protection techniques were found to be very effective. "Outside" practices that were introduced and tested included tied-ridging in maize fields so that scarce rainfall percolated better into the soil and local production of clay pipe for sub-surface irrigation of vegetables. Together with farm mapping, "problem tree diagrams" and other tools developed over the past few year in "farmer

first" rural development projects, wealth ranking turned out to be useful.

What took place in the late 1990s in southern Zimbabwe can be called a situational and proactive approach to vulnerability and capacity assessment at the local level. It does not depend on pre-existing "standard" lists of "risk factors" or categories of "vulnerable groups" but develops its own understanding of hazards and vulnerabilities in a particular place, in dialogue with specific people. Another term for this kind of approach is "citizen based vulnerability assessment." (See box 8) These techniques have been widely practiced in Latin America, Asia, and other parts of Africa, and they are the focus of a new internet resource being developed by the ProVention Consortium.

If one were to imagine anticipatory use of citizen based vulnerability assessment in coastal Thailand, for example, before the tsunami, a complex and shifting mosaic of vulnerability factors would emerge. Wealth and access to resources (including information and social capital) would be important. Thus poor rural migrants who are recent arrivals may be more vulnerable than better established households. However, with time, such rural migrants may become well connected. Occupation is also likely to emerge as important. Those reliant on fishing were particularly vulnerable to the tsunami and are more vulnerable to the more frequent cyclones that affect the region. Their vulnerability involves not merely their proximity to the sea, but their tendency not to want to abandon their only assets -- a boat and nets -- even if they learn of an evacuation order. Without insurance, they will also find it very difficult to re-establish their livelihoods. Coming back to the coast of Andra Pradesh eight years after a deadly cyclone there, Peter Winchester found that small farmers and small scale fishermen had made least progress in recovery. A citizen based self assessment of vulnerability might also have revealed the fact that it is not the custom for women and girls to learn to swim (just as in Bangladesh, gender-specific cyclone mortality is caused by the fact that women don't climb trees).

Place and group specific, self assessment is likely to be quite complex. Thus in Malawi, vulnerability to drought is not simply a function of agronomic practices, numbers of disposable livestock (a banking system on the hoof), or savings. Group self assessments there have focused as well on whether an adult in the household is living with HIV-AIDS, the dependency ratio in the household, and whether there is labor power to carry out some of the drought escaping practices that are well known (e.g. multiple plantings during periods of erratic rainfall, tied ridging to maximize rainfall infiltration, earning income from casual labor).

Discussions between disaster mitigation specialists and community leaders and elders in Afghanistan reveal a wealth of information on the interactions of flooding, drought, conflict, the opium trade and social change, providing a vital understanding of the complexity of hazard and vulnerability.
Photo: Antonio Donini

2.9 Local Partnerships for Disaster Reduction

Several of the panelists in the Thematic Sessions highlighted the role local level government – the municipality – in effective risk reduction. Preconditions for local governments to play this role include decentralization of authority and financial resources from the national level, existence of local capacity to govern, accountability and active participation of civil society. None of this should be taken for granted, and one flaw of the WCDR is that "decentralization" was invoked as a panacea in an uncritical way. In reality decentralization can take place in a way that marginalizes a town or region that is out of favor with rulers in the capital – as happened in Nicaragua after hurricane Mitch in 1998 and El Salvador after the earthquakes of 2001. Decentralization can also offer local elites a chance to rob and exploit local people instead of the national elites doing it. Therefore it necessary to consider both the positive and

negative potentials of decentralization and opt for what some call "democratic decentralization."

Partnerships are also at the heart of successful local government experiences of risk reduction. Below we give three key examples from Latin America, Africa and Asia.

Costa Rica: Evolution of River Basin Alliances

In Costa Rica a hierarchy of regions, county, and community emergency committees (CECs) are active in disaster management, under the authority of the National Emergency Commission. Typically the community committees are dormant when there is no emergency, and are mobilized when something like flooding or an epidemic of dengue fever or malaria occurs. However, in the case of the CECs of Barranca and Chacarita, their volunteer members received training and encouragement by a Costa Rican NGO, Alforja, and began to enlarge the sphere of their activities. They formed links with community health networks, and together lobbied and took legal action to keep mine owners from dumping waste in the Barranca River and allowing their heavy machinery to churn up its muddy banks, creating breeding grounds for malarial mosquitoes.

This moved the CECs from a mode of intermittent, response to one of permanent efforts to mitigate and to prevent disasters. It also began to bridge and blur the distinction between "risk management" and "development".

Members of the CECs are unpaid representatives of other civil society organizations active locally. Many of them are retired people, including retired teachers. The training they received included empowerment, problem solving, conflict resolution and management, and negotiation skills.

As the process continued, the CECs recognized that activities upstream in the basin of the river affected downstream settlements by modifying the quality of water and its flood regime. They began to recruit other organizations and communities within the river basin to participate in water management discussions. They identified an upstream garbage dump that was a source of pollution and deforestation as major new targets of their campaigns. They also worked with the Ministry of Public Education to bring awareness of the river and human influences over it into local school curriculum. One should note that numerous civil society organizations in Latin America have recently highlighted the importance of taking the river basin as a unit of planning and joint action.

Eventually a number of municipal governments and national governmental institutions were drawn into the programs launched by this coalition of local bodies – Ministry of Health, Costa Rican Social Security Administration, the Water and Sewer Authority, and the Ministry of Public Education. However, the important point is that these linkages were brought forth from the bottom up and not from top down. The expanding vision and scope of action was a natural outgrowth of the risk management mandate of the original two CECs, once their members redefined that mandate with the help of training by the NGO and some seed money from a Spanish NGO (about US$ 4,000). The Ministry of Health provided some staff time and logistical support.

Nigeria: Local Government and Local Knowledge

One of Africa's most senior and respected social scientists, Professor Akin Mabogunje, has reviewed the potential for civil society organizations in Africa to cooperate with municipal government. He believes there is great untapped potential in pre-capitalist social relations including those based on women's solidarity, age-grades, and hometown associations. Mabogunje and Kates tested this potential in using action research methods in the small Nigeria city of Ijebu-Ode. Over a period of four years a considerable part of the population of 200,000 benefited from neighborhood level consultations that led to numerous small scale economic initiatives supported by micro credit. Unpacking the notion of "social capital" to which the success of this project is attributed, one finds that a wide range of stakeholders were involved, including traditional chiefs, organized market women, and the town council, as well as expatriate Nigerians in various countries who remit income through home town associations. Local knowledge was another of the assets drawn upon. It is such a complex, and truly global, nexus, that may allow towns and cities in many parts of Africa and the world to develop livelihoods, infrastructure, and participatory governance that are the pre-conditions for disaster resistant communities.

Pakistan: Urban Upgrading and Women's Empowerment

Municipal support for physical upgrading of neighborhoods and social organization may provide more resilience to hazard events. Besides the direct benefits from improved housing, sanitation, and draining in this case from Karachi,

Pakistan, households, communities, and the city as a whole benefits from empowerment and increased social engagement by women.

The Orangi Pilot Project (OPP) in Karachi has become one of the best known examples of urban partnership involving low-income households working together to improve conditions in their settlements. OPP, as the NGO, provides technical and organizational support to citizens organized in small neighborhood groups. The pay the full cost of installing basic sanitation and drainage and assume responsibility for regular maintenance and repair. The municipal authority is now helping to fund this approach and OPP is now working with local NGOs and community organizations in other settlements in Karachi and in other urban centers in Pakistan.

Women are active in local groups, sometimes in leadership positions and invariably in collecting and often providing funds out of household budgets. Women's invaluable organizational role both in the provision and maintenance of services was undermined by poor health among themselves and their families - the reason for their interest in improved environmental conditions and sanitation in the first place. Moreover custom prevented women from traveling long distances to clinics and hospitals. In response to women's problems and interests, and linking these to the overall concerns of the poor, OPP developed a health program working through women's groups at the level of "the lane", with health care and advice provided on hygiene, nutrition, disease prevention and family planning.

Partnership between local communities, municipalities, government ministries and aid agencies is the key to addressing disaster hazards and vulnerability in many of today's rapidly growing urban areas.

3. The Hyogo Framework for action

The output document from Kobe, the Hyogo Framework for Action 2005–2015 is 22 pages in length. There is a preamble about how it links with previous initiatives and declarations and then it launches into a scene setting exercise, laying out the parameters that the assembled states see as describing the world of disaster reduction.

The Hyogo framework scores high over previous similar statements in that it is not an ad-hoc wish-list. It is well organized and is internally consistent. It lays down some key public markers.

- Disasters are linked to development.
- Good development reduces them, bad development causes them.
- Sound knowledge and good data are the basis of effective disaster reduction planning.

Partnerships and multi-lateral action are more effective than individual action, especially when dealing with global; threats such as global warming.

The framework leaves to door open for the ISDR secretariat to facilitate the setting of national and international targets for disaster reduction and, as importantly, it allows for these targets to be linked into the Millennium Development Goals, which are the most specific expression we have of an international commitment to improving the lives of the most vulnerable.

4. What Next?

Kobe was a great advanced over Yokohama, a decade ago. Institutional commitments, were made and a coherent framework for taking them forward was laid down. The challenge of disaster remains, so the work of disaster reduction must continue. What then remains to be done? How can Kobe be used as a spring-board for new initiatives and accelerated change?

4.1 Mainstreaming Disaster and Development

Does Poverty = Vulnerability?

The key message of Kobe was that disaster reduction needs to be mainstreamed and particularly needs to be mainstreamed into the development agenda. At some of the sessions at Kobe one heard what seemed like a simple identification of disaster vulnerability with poverty. The situation is, in fact, more complex. Exclusion and marginality in terms of political voice is as important as poverty defined simply in income or defined as a function of the security of basic needs. Access in many forms is important: access to livelihood options, to natural resources, to information, to markets, to political decision making, to the justice system.

Linking up with implementing of the MDGs & Sustainable Human Development

A statement during the first High Level Round Table picks up some essential points about the link between disaster and development:

There is an urgent need to better understand the link between disasters and development and how to incorporate disaster reduction measures into development policies. The UNDP report "Reducing Disaster Risk- A Challenge for Development" (2004) provided the following four conclusions:

1.   *Disasters can wipe out local gains.*
2.   *Disaster losses interrupt and even aggravate development*
3.   *It is the poor and marginalized populations who suffer the most.*
4.   *Development policies can determine whether disaster risk is being reduced or increased. (Some development policies, i.e. the tourism industry, can actually increase disaster risk!)*

These observations, however true, only state the negative case. There are many ways that striving toward disaster risk reduction can simultaneously assist in achieving the Millennium Development Goals, and vice versa. Here are some examples.

CUTTING HUNGER BY HALF

At present, an army of national agricultural extension agents and nutritionists as well as a large number of experts from multilateral organizations such as FAO and FAO, bilateral donors, and NGOs are busy trying to halve the incidence of hunger. They all need to be made aware that *the way and manner* of their work always influences disaster risk one way or the other. This is true of both large policy decisions and small details that might normally be thought of as "only" technical. An example of the former is the decision to build a high dam or to divert water from one basin to another in order to alleviate agricultural water shortage. Did the policy makers who made this decision consider the fact that rural people displaced by this project might end up with increased vulnerability to new risks even as irrigation water reduces other risks for another group of people? A seemingly small, "merely" technical decision such as choice of a new crop or crop variety to introduce in a rural development project may also influence patterns of vulnerability to risk. Is this crop drought resistant? Does its success depend on purchased inputs whose price may rise on the world market? If it is sold and not locally consumed, will its price fluctuate wildly as have the prices of other "cash crops" like coffee and cotton? Where the links between disaster risk reduction and development are concerned, indeed, it is true to say that "the devil is in the details!"

EDUCATION FOR ALL

Within the Thematic Session, a panel presentation on school seismic safety was one in which such detailed links were discussed. Tracy Monk and Ben Wisner noted that MDG3 has generated an "industry" focused on getting

more than 100 million new children into school. However, this "Education for All" campaign has not taken into account the seismic safety of the schools into which children will be placed. Monk and Wisner cite work they and colleagues have done that suggests that over the next ten years as many as 4,500 of these children could die in earthquakes that affect schools. Very detailed designs and technologies exist, many at low cost that would ensure that achievement of this particular aspect of MDG3 is done in a manner that increases – rather than decreases – seismic safety.

It is this level of detail required truly and effectively to link the MDGs and disaster risk reduction.

Key recommendation 1: States and agencies concerned with disaster reduction should systematically review the Millennium Development Goals and in particular the suggested "Quick Wins" to identify where disaster reduction can be mainstreamed into ongoing development indicatives. In practical and operational terms, there also may be opportunities to accelerate MDG implementation *in the course of* risk reduction investments. In other words, risk reduction should not only be seen as an insurance policy taken out to protect investments in development but a vehicle for achieving development in the first place.

Addressing land use planning and urban planning

Speaking at the third High Level Round Table, Daniel Biau of UN-HABITAT summarized the challenge of urban planning and land use very well:

"Cities hold incredible potential as engines of economic growth and social development but many cities are also affected by unemployment, violence, insecurity, substandard living conditions, poor sanitation, insufficient water supplies, pollution, poverty and diseases.

*Many natural disasters are a result of inadequate urban planning, non-respect
of building codes, population over crowding and proliferation of slums. Risk leads to disasters which could be avoided if key conditions for prevention of urban risk were taken into consideration:*

*Urban poverty (unhealthy slums, no water and sanitation) is first to be associated with urbanization. It is possible to address this problem and UN HABITAT is working on this together with governments.
Poor people are often forced to occupy dangerous disaster prone areas which should not be built upon. Local governments must discourage this and provide alternative occupation of land.
Building codes must be realistic and binding. This is a matter of policy and sound governance."*

The urban challenge in the 21st Century is very great. Even if we only consider the 16 cities most likely to be the largest in the world by 2015, the challenges for risk reduction as well as implementation of the Millennium Development Goals is striking.

Nine of these megacities are in zones of high earthquake risk. Eleven have long histories of flooding. Twelve are coastal cities, of which four are subject to tropical cyclones. Five experience landslides in the peripheral zone of the urban region. While some of these have metropolitan governments, some do not, and even with overarching metro regional planning and coordination, cooperation among the many constituent cities that make up a megacity can be problematic. Sprawl, congestion, excessive production of solid and other wastes are universal problems. Provisions of water, food, energy, are all to one or another degree both taken for granted and objectively precarious.

Key recommendation 2: The world's cities – large and small -- share specific disaster risks and possibilities for disaster reduction. Knowledge sharing and common solution identification among municipal authorities across these areas, should be encouraged and supported by the ISDR process. Urban regions of more than 10 million people (megacities) face particularly severe challenges, especially regarding earthquake and coastal storms; however, growing low income populations living in informal settlements in thousands of smaller towns and cities have needs and capabilities that have not yet been fully recognized.

Disaster resilience and climate change

Disaster reduction has emerged as a core element of sustainable development. That consensus was repeated a number of times at the Kobe conference. Development investments and projects can either increase vulnerability to hazards or can reduce vulnerability. Development activities are never risk-neutral. It is in the sustainable develop-

ment policy nexus that the aims of the disaster, development, and climate change communities intersect. Risk reduction is the shared objective, but it is the promotion of resilience that offers the opportunity for more holistic and proactive responses.

The risks associated with future climate change will be determined by the interaction of hazards and vulnerability, as is the case with other types of risk. LDCs are at greatest risk to climate related disasters and those countries unable to cope with current climate related disasters will be the most poorly equipped to cope with the adverse impacts of climate change. Of equal concern are the differential impacts of climate change and the highly skewed costs of adaptation at global and local scales. The vulnerability of societies to climate impacts and the costs of adaptation highlight some pertinent debates in social equity because of the long term and uncertain nature of impacts. The MDCs produce the majority of greenhouse gases but the impact will be most severe on the poorest LDCs.
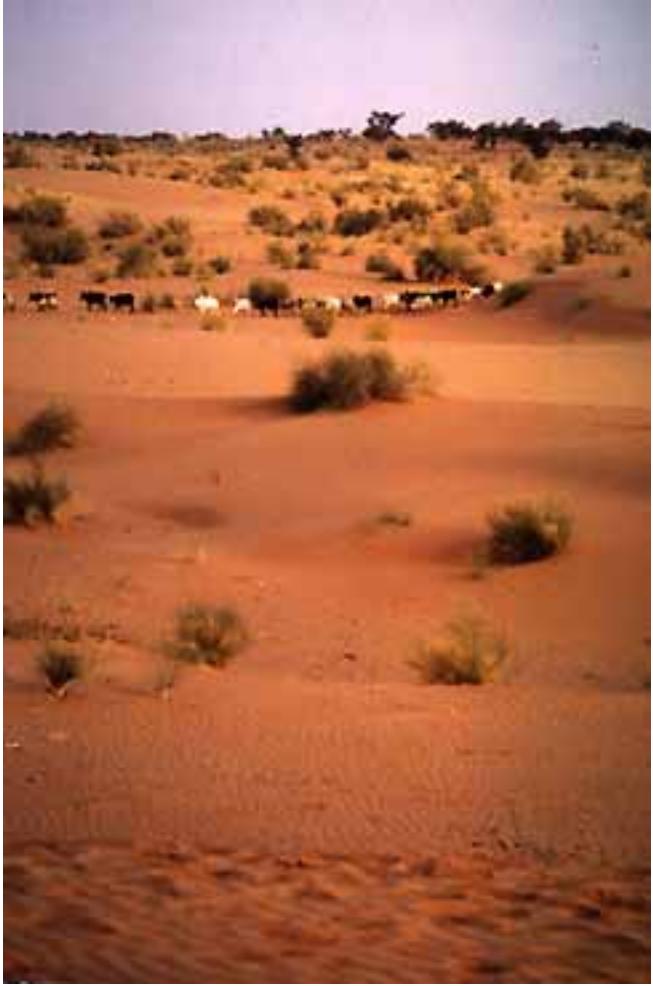
Resilience is strongly linked to vulnerability and adaptive capacity. The UN International Strategy for Disaster Reduction has adopted the term resilience and defines it with reference to natural hazards as:
The capacity of a system, community or society to resist or to change in order that it may obtain an acceptable level in functioning and structure. This is determined by the degree to which the social system is capable of organizing itself and the ability to increase its capacity for learning and adaptation, including the capacity to recover from a disaster.

The concept of resilience captures what should underpin holistic risk management. By this we mean a paradigm that includes adaptation to climate change, hazard mitigation, and sustainable human development, as discussed throughout this report. Applying the notion of resilience to climate change impacts is a matter of finding out how people will cope and helping them to identify where help is needed. This involves specific hazard and vulnerability assessment as well as identification of coping capacities. In the MDCs there are examples of this approach being taken. The United Kingdom Climate Impact Programme has already starting scenario building and is actively trying to identify what changes are likely to occur such as precipitation, vegetation patterns, extreme heat events and sea level rises. In the case of sea level rise, areas have already been identified where managed retreat from coastal areas will be part of the development framework for those areas. In a similar vein the UK National Health Service (NHS) is using predictions by IPCC to undertake studies aimed at protecting the frail and elderly in the event of extreme hot weather that have been predicted to occur with increasing frequency in the 2080s. In LDCs, other policy focused studies are underway to identify the ways that local people and government institutions are likely to cope with climate-related changes in rainfall, agricultural and livestock pests and diseases, river regimes, disease vector habitats (such as that of the malarial mosquito), fresh water and marine fishery productivity, coastal storms, and sea level rise.

A key problem will be trying to reach agreement on what is meant by "dangerous climate change." A recent conference, Avoiding Dangerous Climate Change, held in the UK observed that the effects of climate change were already being felt, but stopped short of defining a dangerous level of climate change. The implications are clear. Climate change projections are scenario based and hence have uncertainties. What constitutes danger will have to be a political decision, and thus climate change adaptation becomes an issue of governance. In reality, national governments will take the lead in identifying the dangers both to communities and to livelihoods that are likely to occur and develop strategies to cope with, and adapt to changing circumstances. It therefore a priority to build the capacity of civil society to engage in such a national discussion, bringing the diversity of local conditions, impacts, vulnerabilities and capacities to the attention of national leaders. This is particularly the case for poorer nations, many of which are currently experiencing the impacts of climate change. Magrath and others observe in the report *Up in Smoke?* that several countries in Africa already have to deal with the impacts of accelerated climate. There is an urgent need to ensure that the capacity to evaluate climate change risk is developed.

Key recommendation 3: Applying the notion of disaster resilience to climate change impacts is a matter of urgency. Policy makers and planners need to understand how people will cope with climate change and how to help them identify where help is needed. National efforts involving government, national academia, civil society and relevant UN and international NGOs, should be specifically encouraged to explore likely scenarios for climate change and its effects.

Combating disasters and seeking sustainable livelihood alternatives are two sides of the same coin. In fragile environments, or where poverty is rampant, or where peoples basic rights are systematically oppressed good sustainable development is the surest road to disaster reduction.

4.2 Confronting the Challenge of Violent Conflict

A comprehensive approach to disaster risk reduction has got to take into account in a strategic and programmatic manner – not just analytically and conceptually – the entanglement of development, disaster risk, and conflict. Listed below are seven key ways in which disasters and violence are entangled.

Violent conflict is often one of the main causes of social vulnerability. In conflict situations today 90% of the casualties are civilians. This contrasts with around 50% during the Second World War and only 5% during the First World War. In addition to death and injury, the civilian population often finds its normal livelihoods disrupted, leading many into more hazardous means of obtaining the necessities of life. Women and children are particularly affected by these stresses. In extreme cases famine may be the result as in Bengal in 1943, Biafra (the Igbo-speaking breakaway territory of southeastern Nigeria) in 1969, Cambodia in the mid-1970s, Angola and Sudan in the 1980s and 1990s.

Institutional weaknesses due to past wars combine with natural hazards to produce a downward spiral. This is evident in the case of Central America where Guatemala, Nicaragua, Panama, and El Salvador all have societies shaped by wars. In the case of El Salvador, few of the elements of the 1992 peace accords had been implemented when hurricane Mitch hit the region in 1998. Questions of land tenure and reform of the police and judiciary bear directly on social welfare and economic development. They were still not settled with an earthquake in 2001, killing more than one thousand people, injuring more than eight thousand and causing damage valued at $2.3 billion. Forty per cent of the country's health centers were destroyed and one-third of the schools. 150,000 homes were destroyed another 185,000 damaged.

Displacement of large numbers of people in war and other violent conflicts can lead to new risks.   There are roughly ten million official refugees in the world today, down from twelve million in 2002. These numbers do not include people who have not crossed a national border in seeking refuge (IDPs). Most of these refugees are fleeing violence. In many cases they face new risks that include exposure to disease and unfamiliar hazards in new rural or urban environments. Deadly outbreaks of cholera and other communicable diseases have affect displaced persons who fled the genocide in Rwanda and, earlier, the civil war that led to the creation of Bangladesh. Refugees from the war in Mozambique are among the poorest residents in the shanty towns of Johannesburg, living in locations most highly exposed to flash flooding. In addition, when international refugees are finally repatriated to their home countries, they often end up in new locations – not their original homes. And these locations are sometimes hazardous. In all these situations, women, children, and the elderly are among the most vulnerable people.

Violent conflict can interfere with the provision of relief and recovery assistance. The wars in Africa during the 1980s and 1990s often challenged the ability of humanitarian agencies to provide essential relief to the civilian

population. In Sudan UNICEF was able to negotiate 'corridors of tranquility' during its so-called 'Operation Lifeline Sudan'; however, more commonly arrangements for relief and recovery assistance have been ad hoc, unreliable, and rapidly changing, as they have been more recently in Afghanistan and Iraq. Worse than this, there is some evidence from case studies, mostly in Africa so far, that middlemen and war lords actually profit from and wish to perpetuate a 'relief economy' in which they are able to trade relief goods they steal or divert for guns or use relief aid they come to acquire to 'buy' support among civilians.

Application of existing knowledge for mitigation of risk from extreme natural events is often difficult or impossible during violent conflict. Over the past three decades, a very large knowledge bank has grown as regards preparedness, mitigation, warning, and response to natural and technological hazards. Flood and cyclone warning systems have improved. So also have early warning systems of food emergencies based partly on satellite surveillance of pasture and croplands and partly on field data routinely reporting market prices and the nutritional status of children. However, violent conflicts disrupt the communication necessary to make application of this knowledge effective. A long history of conflicts, as, for example, in southern Africa, leaves behind weak infrastructure and institutional arrangements. Such a history may have played a role in the breakdown in communications between authorities in Zimbabwe and Zambia who released water from dams on the Zambezi River that took Mozambicans downstream by surprise during the floods in 2000.

Violent conflict often diverts national and international financial and human resources that could be used for mitigation of risk from extreme natural events. On the national scale there is no better example than Ethiopia. During its war with Eritrea during the 1990s, Ethiopia let its national famine early warning system deteriorate. Resources were used for war and not for such social investments as maintenance of the food monitoring system that had been put in place following the famines of the 1980s. This year the Ethiopian government was 'surprised' by a widespread food emergency that it should have been able to detect much earlier. On the international scale, donor attention has been so fixated on post-war Afghanistan and Iraq that little attention has been given to a fulminating combination of HIV/AIDS, flood, and drought in southern Africa, among other 'under-reported' humanitarian emergencies.

Violent conflict often destroys infrastructure which may intensify natural hazards such as flooding, the effects of drought, or epidemic disease. Among the infrastructure targets in recent conflicts have been irrigation systems, dams, levees, roads, bridges, water treatment plants, refineries, pipelines, and electricity systems. Such destruction may rapidly erode public health and also throw large numbers of people into unemployment. Both these effects increase the population's vulnerability to future hazards.

Key Recommendation 4: In conflict affected countries, disaster reduction cannot be postponed until "normality" resumes. It has to become an integral part of peace-building and livelihood support for conflict affected populations. Donor nations and aid agencies investing in humanitarian action and rehabilitation in conflict zones should be encourage by the ISDR to better understand the hazard threats and opportunities for disaster reduction which can be affected by their programming.

Disaster reduction cannot wait for conflict to cease. Conflict resolution, development and disaster reduction must work hand in hand if a sustainable peace coupled with durable livelihood solutions is to be brought to many of today's protracted conflicts.
Photo: Michael Wadleigh

4.3 The International Organization of Disaster Reduction and Disaster Response

"The challenges are to try and figure out how international organizations could organize themselves more efficiently, whether the current UN architecture is adequate and why disaster risk reduction has been neglected for such a long time." This from the first High Level Round Table.

National commitments to overseas development

Kofi Annan, opened his recent address on UN reform and development thus, "Five years into the new millennium, we have it in our power to pass on to our children a brighter inheritance than that bequeathed to any previous generation." States have the power, but will they use it for prosperity or for more narrowly sited national gains?

The interconnectedness of disaster mitigation is profoundly illustrated by the problems of rebuilding in Aceh today following the 2004 Tsunami. The rebuilding of houses and of the estimated 3,000 fishing boats destroyed is going to require an immense amount of timber. In an effort to save Aceh's rain forest, logging quotas were set in 2004, at a level that, if fully diverted to rebuilding could supply only enough timber for the boats, or the building of 1,000 barracks, a fraction of what will be needed to rebuild the entire province. 70% of Aceh's annual timber output is already cut illegally and indications are that the supply needed to rebuild is going to come largely from the same source. Thus issues of international trade, national governance and the use and abuse of military power, local needs and international conservation all impact upon the ability of the surviving citizens of Aceh to rebuild their lives.

In this environment aid financing, whilst small in volume compared with trade, can have a profound effect on people's lives, both as a lever for change and as a direct input. Whilst a hand full of industrialized nations, mostly Scandinavian, have met the UN target of 0 .7% GDP in overseas aid, most have not, and the spending power of total overseas aid has steadily gone down. Added to that, the use of aid has, in the eyes of many, gone desperately astray. The much respected *Reality of Aid 2004* report, put it thus in its introduction.

The following messages came out of the Kobe Conference loud and clear:

- The risk that aid is being diverted from the overriding necessity of eliminating poverty for the many to the narrow end of promoting security for the few;
- The continued domination of global political and economic mechanisms by OECD countries;
Less than five years after they were endorsed by world leaders, the Millennium Development Goals are off track.

This is the message coming from the community groups, national and international NGOs who work on a daily basis to address poverty and mal-governance. Nation states would do well to heed the message.

Key Recommendation 5: Rather than lobby solely for more international aid to flow to disaster reduction, states, community groups and agencies concerned with disaster reduction should renew their lobbying of developed states to meet the 0.7% GDP target for development aid. As nations meet to review the progress of the Millennium Development Goals in September 2005, they should do so within a broader discussion of overall commitments to development assistance and disaster risk reduction.

National Responsibilities for Social Protection

The nation state has prime responsibility for the protection of its citizens Exercising this responsibility is an essential part of sovereign duty. Disaster affected communities are well placed to understand the hazards they face but on their own they are often powerless to affect many of the institutions and policies that turn hazards into disasters.

In earthquake mitigation, the creation of appropriate and workable building codes and planning zone regulations is essential in the creation of a safe urban environment. This cannot be done on a piecemeal basis, community by community. It has to be tackled nationally. For instance, in the post-tsunami context, the competing interests of those who want to make economic use of coastal waters for shrimp farms and those who want to leave mangrove swamps in place to protect land against flooding cannot be decided solely on the basis of market forces. It needs the intervention of national policy, committed to future as well as present generations.

The challenge for nations is to craft long term policies which balance short term economic interests against the longer term good, and which balance the voice of those most affected by disaster against the often much louder

voice of those who exercise political and economic power.

Key recommendation 6: Civil society groups and disaster agencies should lobby at the national level for protection from disasters to be seen as a central duty of the state along side protection from violence and the defense of human rights. The consensus emerging from Kobe parallels the growing movement to build consensus around International Disaster Response Laws.

Issues of accountability and transparency

Disaster mitigation is also impacted by power and the misuse of power. Corruption is defined by Transparency International, one of the leading agencies trying to stem such abuses, as "the misuse of entrusted power for private benefit", it can also be described as representing non-compliance with the 'arm's-length' principle, under which no personal or family relationship should play any role in economic decision-making, be it by private economic agents or by government officials."

The misuse of power can be found in the ongoing environment in which disaster mitigation tries to gain a foothold, and in the effects that disaster and crisis have on opportunities for corruption. One must also consider the opportunities created by the aid efforts and also address accountability and opportunity for corruption within the aid agencies and the aid community.

The focus here is primarily in governance and so it is the environment into which mitigation plays that is of most concern. Transparency International's own Corruption Perceptions Index lists many disasters prone and conflict affected countries near the top of its list of corruption affected countries. This should not surprise us. The economies of disaster affected regions of the world, and particularly those caught up in conflict, exhibit many features which greatly increase the potential for corruption as defined above. They tend to be resource poor countries and countries in which disparities of wealth and power are enormous. Disasters often exacerbate existing disparities in wealth and power, thus increasing the likelihood of corruption.

In addition, most municipal and country authorities, faced with rehabilitating areas where the majority of the infrastructure is destroyed, err towards seeing it as a planning board that needs to be wiped cleaned and planned anew. Such plans inevitably ride rough shod over the needs and aspirations of surviving disasters victims, who are almost always drawn from the poorest and most excluded and marginalized sectors of the community and who have been further forced into marginalization by the disaster.

Key recommendation 7: Accountability and transparency of process are as important in disaster reduction as in any other major economic process. Nation states and disaster reduction agencies should expect to be held accountable for the process of disaster reduction, not just the final impact.

The mind set of disaster response agencies needs to change. They are in the same business as development agencies, need to hold themselves accountable to the same standards of professionalism and need to hold their governments accountable for the consequences of failing to meet internationally agreed targets for aid flows.
Photo: Peter Walker

4.4 Mainstreaming Gender Issues

The fact that women may experience disasters differently and in some cases suffer more has been accepted worldwide. However, we are still a long way from acknowledging and fully integrating women's skills, knowledge, networks, and capacities into efforts to prepare for, respond to, recover from, and to prevent disasters. Much of this

experience has been drawn together by the Gender and Disaster Network. Wherever we have touched earlier in this report on local civil society initiatives, local government actions, and innovations in strengthening livelihoods and community resilience, it is often because of the leadership of women and vigorous involvement of other women. Women should be neither invisible within disaster reduction initiatives, nor visible only as "victims" or "vulnerable," rather, they are competent people who can and should plan and lead.

Key recommendation 8: All national and international disaster reduction initiatives need to positively address their gender cognizance and ensure they are both sensitive to the needs of women in disaster and avail themselves of the leadership of women.

These women in Afghanistan are the very first trained nutrition workers of the Ministry of Health. Their skills, knowledge and determination is indispensable to the ministries mission to address malnutrition and the ravages of drought in the country.
Photo: Annalies Borrel

4.5 Targets, Indicators, Time frame and Reporting

Targets

There are few specific targets in the Hyogo Framework of Action. Nevertheless several target-like statements were made in the Thematic Sessions, in the background papers prepared for each of the five clusters of thematic sessions, and in some of the High Level Round Tables. In many of the 50 panels that made up the 5 Thematic Sessions there were also specific targets suggested.. Unofficial targets included the following taken from the Thematic Session background papers.

1. Political Commitment and Elevating Disaster Risk Reduction as a Policy Priority:

● All new and revised global agreements consider disaster and risk issues and make appropriate recommendations.

● Every country has planned national follow-up to the WSSD Plan of Implementation and every least developed country (LDC) has included disaster risk reduction in its National Adaptation Plan of Action on climate change.
Every country and regional entity has adopted a policy and strategic plan for disaster risk management and has integrated disaster risk reduction explicitly into its other mainstream sectoral policies and programmes.

2. Legal and Regulatory Frameworks:

● Every country has updated its disaster risk management legislation.

● Relevant codes and standards are updated and published accompanied by effective systems to ensure compliance.
The citizen's fundamental right to the highest possible standard of security and protection against hazards is incorporated into legal or constitutional frameworks.

3.   Institutional Frameworks and Structures:

● Every country has reviewed and updated its institutional framework for disaster risk reduction to incorporate all relevant stakeholders at all levels, with roles, responsibilities and resources clearly identified and allocated.
Formal systems for monitoring and evaluating the effectiveness of official institutional arrangements are in place with

transparent procedures and findings that are made public on a regular basis.

4. Multi-stakeholder Participation:

- The rights of all groups in society to participate in disaster risk reduction decision making, policy setting, planning and implementation are explicitly recognized in policy, legal and institutional provisions and the ways and means of such participation are defined.
- The right to information about hazards and risks and the effectiveness of measures taken to address them is set out in policy and law, and systems are in place to facilitate public access.

Every country has an independent, multi-stakeholder and multi-sectoral national platform for disaster risk reduction that is recognized and supported by government.

5. Improving risk and vulnerability assessment as well as early warning by:

- Analysis and interlinking of existing structures and capacities.
- Enhancement of infrastructure to gather, store and exchange data.
- Development of methodologies and their exchange on an international level.
- Mobilization of additional finances, manpower, and technology.
- Institutional analysis with regard to hierarchical structures and responsibilities to act quickly and efficiently.
- Strengthening of the technical and policy basis for the design and implementation of people centered early warning systems.
- Improvement of institutional structures to ensure efficient risk assessment, monitoring, early warning, and unrestricted information flow.
- Education, training and awareness-raising at all levels (scientists, decision makers, local population).
- Partnerships to transfer knowledge and skills at both the institutional and individual levels.
- A permanent feedback of lessons learned, identified shortfalls and gaps into existing structures to improve the systems and the early warning chain
- Implementation of the International Early Warning Programme as called for at the EWC II, 2003.

6. Protecting vital infrastructure by:

Ensuring that health facilities and schools are safe.

7. Provide good governance that facilitates risk reduction:

- All countries should develop and incorporate risk management frameworks in their national legislation that encourage community involvement and enhancement of local government roles in the decision making process of disaster mitigation policies.
- All countries should develop guidelines as national references for implementing local risk management practices (including identification of hazards and vulnerabilities), particularly those that are community-based.
- All cities/villages/townships should incorporate consideration of disaster avoidance and preparedness in their urban and industrial master plans.
- All legislation and procedures related to environmental impact assessments of development projects should include measures taken to manage potential disasters and reduce related risks.
- All urban infrastructure should be designed and located from the perspective of low vulnerability to disasters, for example hospitals, water treatment plants, fuel storage depots, waste treatment facilities, emergency transport links and so on.
- All countries seek to incorporate disaster risk assessments in urban planning, development and management – through codes, standards, guidelines, approval processes, and professional training.

8. Improve effectiveness of disaster response by national and regional authorities agreeing to:

- Undertake a review of existing national legislative and policy frameworks pertaining to preparedness responsibilities and capabilities, by the end of 2006.
- Develop, or modify as appropriate, legislative and policy frameworks to help ensure a holistic and comprehensive approach to preparedness as part of a broader disaster risk management strategy, by the end of 2007.

- Conduct a review of existing regional preparedness mechanisms, including their legislative, policy and operational frameworks, with a view to identifying best practices and potential common standards for wider dissemination and mainstreaming, by the end of 2006.
- Generate a programme of periodic reviews to assess progress and constraints in the realization of clearly established targets and relevance of stated objectives, by the end of 2008.

9. Improve effectiveness of disaster response by the international community pursuing efforts to:

- Support and sustain commitments to the development of enhanced legislation and policy frameworks for preparedness capabilities and related activities by national and regional authorities in the context of expanded disaster risk management agendas.
- Enhance international coordination and collaboration between humanitarian and development organizations, at all levels of the international system, in the area of preparedness, with due consideration to existing mechanisms such as the IASC and the ISDR.
- Advocate for more systematic and stronger investment in preparedness and related disaster risk management activities, including improved transparency and accountability in the allocation and use of resources, as a critical element in the achievement of the Millennium Development Goals.
- Establish rigorous, commonly expected and inclusive post-disaster review audits, conducted in collaboration with all concerned authorities to identify lessons and areas which need to be strengthened, and to facilitate continued enhancement of preparedness systems.
- Continue to enhance UN system disaster preparedness capabilities including support to regional and national level entities.
  Support innovative information sharing and related management capabilities while simultaneously strengthening the effectiveness of specialized preparedness entities such as the IASC Sub-Working Group on Contingency Planning and Preparedness.

Key recommendation 9: The ISDR secretariat should develop a methodology for setting targets, and accompanying generic targets, for nation states to adapt to their own particular situation.

Indicators
Many indicators were suggested in the course of Thematic Sessions of the WCDR.

SUGGESTED INDICATORS FROM THEMATIC CLUSTER : GOVERNANCE, INSTITUTIONAL AND POLICY FRAMEWORKS FOR RISK REDUCTION

- Multi-layer disaster risk management institutions, including policy frameworks, legal and regulatory frameworks, plans, structures and mechanisms in place in countries.
- National and regional platforms established that are multi-stakeholder, multi-sectoral and multi-level.
- Disaster risks are reduced over time together with the vulnerability of populations.

SUGGESTED INDICATORS FROM THEMATIC CLUSTER :KNOWLEDGE, INNOVATION AND EDUCATION TO BUILD A CULTURE OF SAFETY AND RESILIENCE

- Incorporation of disaster risk reduction into curricula at all levels of education.
- Incorporation of disaster research in the science policy.
- Initiatives undertaken in the grass-root levels incorporating indigenous and traditional knowledge bases.
- Civil society organizations conducting community education, training and capacity building activities.
- Development of communication strategy for disaster reduction.
- On-line and on-site disaster education curricula for practitioners and filed workers.

SUGGESTED INDICATORS FROM THEMATIC CLUSTER : REDUCINGTHE UNDERLYING RISK FACTORS

- The MDGs for health were emphasized as being the natural targets for community health.
- Development that can incorporate health factors that relate to disaster risk reduction.
- There was also a range of specific benchmarks suggested for building safety standards these included the expansion of building codes and their enforcement as well as land-use planning controls. Some of the targets suggested related to 2010, other to 2015, to synchronize with the MDGs and as far distant as 2020.
- Indicators were urgently needed to measure the effectiveness of disaster mitigation and preparedness to justify continued financial spending.

SUGGESTED INDICATORS FROM THEMATIC CLUSTER 5: PREPAREDNESS FOR EFFECTIVE RESPONSE

- The extent to which disaster preparedness is mainstreamed into different sectors, key services, and socio-economic development processes will constitute a key indicator of success.
- The incidence and quality of collaborative and joint planning by relief and development entities on the formulation or strengthening of national and local level preparedness programmes.
- The nature and number of reviews, undertaken by governments and civil society actors, of existing legislative and policy frameworks in order to identify and initiate action needed to address weaknesses particularly in relation to roles, responsibilities, and capabilities concerned with disaster preparedness at the national and local level.
- Increased support, financial and technical, for scaling-up the disaster preparedness capabilities of community-level structures so that vulnerable groups are more resilient and are better able to influence, and interact with, national-level disaster risk management mechanisms.
- The organization of reviews to examine existing regional preparedness mechanisms, including their legislative, policy and operational frameworks, in order to identify best practices and potential common standards for subsequent dissemination, and mainstreaming as appropriate, within the regional context.
- Increased level of identifiable funding and annual budgetary allocations by disaster prone countries to strengthening preparedness at the local and national level.

Prior Benchmarking by ISDR & UNDP

In 2003 ISDR & UNDP proposed a framework for evaluating progress toward risk reduction that was enriched by an internet conference in which 300 experts and practitioners from all parts of the world participated. This elaborate and careful work should not be overlooked as steps are taken to implement the Hyogo Framework of Action in concrete terms.

Their framework is composed of thematic areas:
- Political commitment
- Institutional aspects
- Risk assessment
- Impact assessment
- Forecasting and early warning systems
- Information management and communication
- Education and training
- Public awareness
- Research
- Environmental and natural resource management
- Social and economic development practices
- Technical measures.

Thematic areas are broken down into components and characteristics. Criteria for choosing benchmarks for progress in developing each theme are also suggested, and were vigorously debated in the on-line discussion in 2003.

As an example, let us take the theme, "political commitment." This theme was broken down into three components:

policy & planning, legislation, and resources. Each of these had characteristics. Taking "resources" as a very concrete example, this component is characterized as "resource mobilization and allocation: financial (innovative and alternative funding, taxes, incentives), human, technical, material [resources]." In other words, nations would naturally have to mobilize resources if they truly had "political commitment." Such mobilization could be benchmarked and monitored over time if, according to this early and tentative draft, by looking at: the percentage of budget allocation to risk reduction, the number of experienced staff dedicated to risk reduction and other administrative evidence.

Key recommendation 10: The ISDR Secretariat in collaboration with UNDP, building on the substantive work done in 2003, should elaborate a strategy for evaluating progress on risk reduction.

4.6 The Way Forward

Neither specific time frame for nations to report progress, nor any monitoring scheme was set out in the Hyogo Framework of Action. However, in a remark during the first High Level Round Table, it was suggested that "[t]he UN Conference in September 2005 will be an opportunity to see where we are regarding implementation and where risk reduction features on the international agenda." The reference here is to the Special Session of the General Assembly that will be assessing progress toward implementation of the Millennium Development Goals.

A month after the Kobe conference, at a meeting of U.N. agencies, donors, and other international organizations, the question of targets and the monitoring implementation of the Hyogo Framework of Action was re-visited. It now seems likely that the U.N. will propose to the annual meeting of its Economic and Social Committee (ECOSOC) templates for the kinds of specific risk reduction targets member nations should create. Then nations would have one year to formulate their own along these general lines and report back to ECOSOC in 2006. Accountability, then, may not have been totally bypassed by the Kobe meeting.

It is all too easy, as the excitement of the Kobe Conference wanes and the trauma of the Asian tsunami fades from international memory to revert to business as usual, but for present day victims of disaster, and future generations of victims, business as usual is not acceptable. The Hyogo Framework offers an opportunity to change the way disasters are viewed, to ensure that disaster reduction is seen as an integral part of the development process and thus part of the sovereign duty of nation states. The process of Kobe linked states to civil society and demonstrated that the synergy can work and can deliver. The challenge now is to keep that synergy alive and focused, and to build on the Kobe Consensus.

End Notes

[1] Visiting Professor, Environmental Studies, Oberlin College & Research Fellow, Development Studies Institute, London School of Economics & Affiliate, Benfield Hazard Research Centre, University College London. bwisner@igc.org.

[2] Director, Alan Feinstein International Famine Center, Tufts University peter.walker@tufts.edu .

[3] See links to struggles in South Africa, Colombia, Argentina, Philippines, Indonesia, Australia, and the U.S. at International Consortium of Investigative Journalists, *The Water Barons* http://www.icij.org/water/; see also Trevor Ngwane, "Sparks in the Township." *New Left Review* 22, July-August 2003 http://www.newleftreview.com/NLR25603.shtml.

[4] WHO, *The Right to Water*. Geneva: WHO, 2003 http://www.who.int/water_sanitation_health/rightowater/en/.

[5] See Disaster Diplomacy http://www.arct.cam.ac.uk/disasterdiplomacy/ .

[6] Mike Davis, "Planet of Slums". *New Left Review* 26, Second Series (March/ April 2004), pp. 5-34 http://www.newleftreview.net/NLR26001.shtml ; see also Un-Habitat, *The Challenge of the Slums: Global Report on Human Settlements 2003*, London: Earthscan, 2003.

[7] Marc Reisner, *A Dangerous Place* (New York: Pantheon, 2003).

[8] Kuda Murwira, Helen Wedgwood, Cathy Watson and Everjoice J. Win, with Clare Tawney, *Beating Hunger: The Chivi Experience*. A Community-based Approach to Food Security in Zimbabwe. London: Intermediate Technology Publications, 2000. See also Vishaka Hidellage, "Public involvement in decision-making: Stories of encouragement from South Asia and challenges" 11 November 2004
http://www.itdg.org/?id=publicgood_hidellage ;
"Poverty, technology and vulnerability" http://www.itdg.org/?id=reducing_vulnerability ;
 "Reducing vulnerability" http://www.itdg.org/?id=region_southern_africa_reducing_vulnerability.

[9] Developed on the basis of Robert Chambers' classic work, *Rural Development: Putting the last first* (London: Longman, 1983); see Somesh Kumar, *Methods for Community Participation: A complete guide for practitioners*. London: Intermediate Technology Publications, 2002.

[10] Numerous manuals and guides have been produced by members of the group, *La Red*, for use in Peru, Costa Rica, Bolivia, Guatemala, Mexico and elsewhere: see their web site http://www.desenredando . A group of women associated with the Gender and Disaster Network have produced a very good guide for work in the Caribbean, "Working with Women at Risk," http://online.northumbria.ac.uk/geography_research/gdn/resources/Working%20w%20Women%20English%20.pdf ; also see a review of participatory vulnerability and capacity assessment tools in Ben Wisner et al., *At Risk*, 2nd Edition, op. cit., pp. 333-342.

[11] Livelihood based, participatory methods have also been widely used in Asia by groups such as the Disaster Mitigation Institute (http://www.southasiadisasters.net/) and SEEDS (http://www.seedsindia.org/default1.htm), both in India, by ITDG http://www.itdg.org/?id=region_south_asia) in Sri Lanka and the Rural Development Policy Institute in Pakistan (see Madhavi Ariyabandu and Amjad Bhatti, *Livelihood Centered Approach to Disaster Management: A Policy Framework for South Asia*. Colombo & Islamabad: ITDG South Asia and RDPI, 2005), and by a number of groups in Philippines affiliated with the Center for Disaster Preparedness in Manila (see A. Heijmans and L. Victoria, *Citizen-based and Development-oriented Disaster Response*. Quezon City, Philippines: Center for Disaster Preparedness, 2001); while throughout the Pacific the participatory methods developed by Emergency Management Australia have been influential. Some of the institutions involved in the Asian Disaster Reduction & Response Network (http://html.adrc.or.jp/dbs/new/index.asp) have begun to use these methods, and external NGOs active in Asia such as Action Aid (http://www.actionaid.org/) and Tearfund (http://www.tearfund.org/) do so at project level. A network similar to *La Red* for South Asia exists under the name *Duryog Nivaran* (http://www.duryognivaran.org/indexnew.php), which promotes participatory approaches.

[12] A southern African network similar to *La Red* exists, based in Cape Town, called *Peri Peri* (http://www.egs.uct.ac.za/dimp/). It has developed manuals for citizen based VCA (see A. von Kotze and A. Holloway, *Reducing Risk*. Durban: IFRCS & Adult/ Community Education, University of Natal, 1998; ibid., *Living with Drought*. Cape Town and London: David Philip Publishers & Intermediate Technology Publications, 1999).

[13] Ben Wisner et al., *At Risk*. 2nd Edition, op. cit., pp. 253-256.

[14] Alex de Waal and Alan Whiteside, "'New Variant Famine': AIDS and Food Crisis in Southern Africa." *The Lancet* 362 (11 Oct 2003), pp. 1234-37. http://www.earthinstitute.columbia.edu/cgsd/documents/de_waal_lancetarticle.pdf.

[15] Jesse Ribot and Phil Rene Oyono, "Resisting Democratic Decentralization in Africa: State and Elite Strategies for Holding onto Power." In Ben Wisner, Camilla Toulmin, and Rutendo Chitiga, eds., *Toward a New Map of Africa*. London: Earthscan, 2005.

[16] Jesse Ribot and Anne Larson, eds., *Democratic Decentralization through a Natural Resource Lens*. London: Routledge, 2005.

[17] Alice Brenes, "Local Risk Management within the Framework of Development Processes: the case of Barranca and Chacarita, Costa Rica (Proyecto Alforja)." In Allan Lavell, ed. and trans., *Local Risk Management: Ideas and Notions relating to Concepts and Practice*. Regional Programme for Risk Management in Central America. Guatemala City: UNDP & CEPREDENAC, 2003, pp. 72-76, http://www.undp.org/bcpr/disred/documents/publications/regions/america/gestion_riesgo_english.pdf with additional commentary by Alice Brenes.

[18] The "Statement of Latin American Civil Society Groups to the WCDR," signed by more than 100 organizations, recommends "the incorporation of risk reduction of local, regional or global plans and strategies for environmental management, particularly in the management of hydraulic basins, as a way of helping to prevent disasters associated with droughts and floods" (p. 2; see Annex V.

[19] Akin L. Mabogunje, "Institutional Radicalization, the State, and the Development Process in Africa." *Proceedings of the National Academy of Sciences*, 97, 25 (December 5, 2000): 14007-14014 http://www.pnas.org/cgi/content/full/97/25/14007 .

[20] Akin L. Mabogunje and Robert W. Kates, "Sustainable Development in Ijebu-Ode, Nigeria: The Role of Social Capital, Participation, and Science and Technology." CID Working Paper No. 102, January 2004. Cambridge, MA, U.S.A.: Harvard University, Sustainable Development Program, Center for International Development http://www2.cid.harvard.edu/cidwp/102.pdf .

[21] Joanne Beall, Urban Governance: Why Gender Matters, UNDP, Sustainable Development Network, March 1996 http://www.gdrc.org/u-gov/doc-whygendermatters.html.

[22] B. Wisner, I. Kelman, T. Monk, D.Alexander, A.M.Dixit, D. Benouar, O. D. Cardona, R.C. Kandel, and M. Petal, "Falling through the Cracks: School Seismic Safety." In: C. Rodrigue and E. Rovai, eds., *Earthquakes*. Routledge Hazards and Disasters Series. London: Routledge online.northumbria.ac.uk/geography_research/ radix/resources/school-seismic-safety-august2004.doc.

[23] For example, see OECD, *Keeping Schools Safe in Earthquakes*. Paris: OECD, 2004 http://www.oecd.org/document/36/0,2340,fr_2649_33723_33630308_1_1_1_1,00.html .

[24] The Millennium Project, "10 Key Recommendations" http://www.unmillenniumproject.org/facts/facts02.htm (accessed 22 April 2005).

[25]   Paraphrase of his remarks in the ISDR summary of HLRT 3 http://www.unisdr.org/wcdr/thematic-sessions/hlrt-reports/high-level-round-table-3.pdf .

[26]   Data from United Nations, *Urban Agglomerations 2001*. New York: United Nations Population Division, Department of Economic and Social Affairs, 2002, reference and table courtesy of Dr. Jeannette Fernandez, National Technical University, Quito and Pacific Disaster Center, Hawaii.

[27]   This section was originally drafted as a part of Geoff O'Brien, Phil O'Keefe, Joanne Rose, and Ben Wisner, "Climate Change and Disaster Management." Submitted to a theme issue of *Disasters*, Thea Hilhorst and Madeleen Helmer, eds., forthcoming.

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[29] ISDR, *Living with Risk: A Global Review of Disaster Reduction Initiatives*. Preliminary Edition. Geneva: ISDR, 2002, p. 24.

[30]   Frank Sperling, and F. Skekely, "Disaster Risk Management in a Changing Climate" http://www.unisdr.org/wcdr/thematic-sessions/presentations/session1-7/varg1.pdf ; see also the Vulnerability and Adaptation Research Group (VARG) and Frank Sperling, (ed.), Poverty *and Climate Change: Reducing the Vulnerability of the Poor through Adaptation*. Inter-agency report by the African Development Bank (AfDB), Asian Development Bank (ADB), Department for International Development (DFID, UK), Federal Ministry for Economic Cooperation and Development (BMZ, Germany), Ministry of Foreign Affairs - Development Cooperation (DGIS, The Netherlands), Organisation for Economic Cooperation and Development (OECD), United Nations Development Programme (UNDP), United Nations Environment Program (UNEP), and the World Bank, 2003 http://www.climatevarg.org/essd/env/varg.nsf/42ec25f6537f5eff85256dab0048d8e9/b603b3c185bee77485256dab0059aca8/$FILE/Poverty%20and%20Climate%20Change-Part%201.pdf (Part I) & http://www.climatevarg.org/essd/env/varg.nsf/42ec25f6537f5eff85256dab0048d8e9/b603b3c185bee77485256dab0059aca8/$FILE/_1a1nncpbiehsi0obecgg46r39dlgn8p908dk62rj7ckg2q82gc5p78sp068j36_.pdf (Parts II & III).

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[53] Gender and Disaster Network http://online.northumbria.ac.uk/geography_research/gdn/ .

[54] ISDR report on panel 4.7 http://www.unisdr.org/wcdr/thematic-sessions/thematic-reports/report-session-4-7.pdf .
See this collection of ISDR reports on all the panels on the WCDR web site for other examples (http://
www.unisdr.org/wcdr/ . On the right hand column, scroll down to "Thematic Segment." This large body of sug-
gested and debated targets – some more and some less concrete – should be the basis of continuing urgent work
on implementing the Hyogo Framework for Action and not allowed to remain buried in these reports.

[55] Targets 1-4 appear in the discussion paper for the 1st Thematic Cluster http://www.unisdr.org/wcdr/thematic-
sessions/WCDR-discussion-paper-cluster1.pdf .

[56] These targets are mentioned in the discussion paper for the 2nd Thematic Session http://www.unisdr.org/wcdr/
thematic-sessions/WCDR-discussion-paper-cluster2.pdf .

[57] ISRD, Effective Early Warning to Reduce Disasters: The Need for More Coherent International Action, 2003 http://
www.unisdr.org/ppew/info-resources/docs/ewcii-ew-programme.pdf .

[58] In the discussion paper produced for the 3rd Thematic Cluster, the author states: "The right of access to education
should not be compromised by an unsafe physical learning environment; for example, the youngest citizens who
spend their days in school buildings should not be placed at high risk," and also refers to protection of hospitals. See:
http://www.unisdr.org/wcdr/thematic-sessions/WCDR-discussion-paper-cluster3.pdf .

[59] These targets are drawn from the discussion paper for the 4th Thematic Cluster http://www.unisdr.org/wcdr/
thematic-sessions/WCDR-discussion-paper-cluster4.pdf .

[60] Targets 8-9 come from the discussion paper for the 5th Thematic Cluster http://www.unisdr.org/wcdr/thematic-
sessions/WCDR-discussion-paper-cluster5.pdf .

[61] On line conference: *A Framework to Guide and Monitor Disaster Risk Reduction*, 25 August to 26 September
2003 http://www.unisdr.org/dialogue/ .

[62] Taken from ISDR summary of HLRT 1 http://www.unisdr.org/wcdr/thematic-sessions/hlrt-reports/high-level-
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