

plant and harvest. Risk of crop, and hence, livelihood failure increases. While rural communities may have adapted their livelihoods over centuries and developed sophisticated coping strategies to deal with local risks, unexpected hazards such as unseasonal storms or droughts invalidate those strategies and increase risk.

Combined with the additional uncertainty caused by economic globalisation, which may suddenly invalidate the economic viability of local production, climate change makes local risk coping strategies increasingly difficult and the option of successful risk management more challenging.

## 3.2 Cross-Cutting Themes in Disaster-Development

The themes to be discussed in this section are: violence and armed conflict, disease, governance and social capital.

These themes have been mentioned in the preceding discussions, but are critical to shaping patterns of disaster risk and therefore deserve additional scrutiny. The themes are no less important than urbanisation, rural livelihoods, globalisation or climate change. They are presented here to flag their cross-cutting influence.

A lack of internationally comparable and verifiable data on these themes, or the difficulty of meaningfully reducing complex processes into numerical values, forced their exclusion from the DRI model in its search for socio-economic variables that could be associated with natural disaster losses. Despite this, their influence on development and disaster risk seems clear and it is hoped that future runs of the DRI might be able to include such variables. This is a second reason for wanting to present an exposition of their relationship to disaster risk here.

### 3.2.1 Violence and armed conflict

During the 1990s a total of 53 major armed conflicts resulted in 3.9 million deaths (nearly 90 percent of them were civilians).<sup>38</sup>

In 2002, there were approximately 22 million international refugees in the world and another 20 million to 25 million internally displaced people. Even before additional risk factors, including gender, class, ethnicity,

age or disability are taken into account, the very fact of being a refugee or an internally displaced person raises vulnerability.<sup>39</sup>

When the displaced settle in squatter settlements in cities, they are often exposed to new hazards because dangerous locations (river margins, garbage dumps, steep slopes) are the only places where they (and the urban poor) can find shelter. In other cases, internally displaced people and refugees are often forced to degrade their immediate environment to obtain resources such as firewood, even though this may magnify landslide, fire and flood hazard. The environmental impact in Guinea of 600,000 refugees fleeing from conflicts in Sierra Leone and Liberia in the late 1990s was considerable. In formalised camps, they often run the risks of epidemic disease.<sup>40</sup>

The economies of war fuel violent conflicts — control over natural resources exploitation and the production of illegal drug crops are dominant contexts — but are interwoven with social instability and economic poverty that diminish the capacity of people to cope with disaster risks.<sup>41</sup>

A vicious circle appears when as the state's capacity to address everyday hazard and disaster risk diminishes, so does its legitimacy in the eyes of its citizens — resulting in yet greater isolation, corruption and in some cases, ultimate collapse.<sup>42</sup>

Many areas suffering from complex political emergencies are also subject to periodic natural hazards.

The provisional analysis of drought undertaken in the DRI noted armed conflict and governance as factors that can turn low rainfall episodes into famine events. The 2002 food crisis in Southern Africa may have been triggered by drought. But in countries like Zimbabwe and Angola, the impact of the drought must be understood and responded to within the context of political instability and conflict.

At the turn of the 21st century, Afghanistan suffered three years of drought and a major earthquake on top of decades of armed conflict, creating a particularly acute humanitarian crisis.

The volcanic eruption in Goma, in eastern Democratic Republic of Congo, is a similar example of a rapid-onset

natural hazard occurring within an area affected by ongoing conflict. In such contexts, there are currently more questions than answers about what should or could be reconstructed, and if and how institutions could provide a basis for reducing risk.

The fact that there are no self-evident answers is aggravated by the fact that few people are asking these big questions. The divisions between those working on natural disaster risk reduction and complex political emergencies and development have hindered the search for ways to address such situations. But these interrelationships could offer opportunities for reducing disaster risks. The case study of conflict and risk in Colombia in Box 3.12 presents a good example of common action.

Little or no attention has been paid to the potential of disaster management as a tool for conflict prevention initiatives.

At the international level, many examples exist of antagonistic nation states being brought together through the shared loss due to a disaster event, although such improvements are often temporary.

Following earthquakes in 1999, Greek-Turkish relations enjoyed some improvement with a jointly sponsored UN resolution on natural disasters made in November 2001 and high-level talks on Aegean issues in 2002.<sup>43</sup>

In Bosnia-Herzegovina, the relationship between disaster management and the need for local capacity building following conflict has been recognized. Since 2003, the central government's Ministry for Security has taken responsibility for natural disaster management and response in both the political-administrative entities in the country (Republika Srpska and the Federation of Bosnia and Herzegovina).<sup>44</sup>

In Colombia, violently opposed local communities in the Department of Meta have worked together to mitigate the impact of floods as a means not only of protecting livelihoods, but also of building trust and reconciliation.<sup>45</sup>

### 3.2.2 Changing epidemiologies

Epidemic diseases can be seen as disasters in their own right. They also interact with human vulnerability and natural disasters.

#### BOX 3.12 DISASTER RISK AND ARMED VIOLENCE IN COLOMBIA

In Colombia, the violent conflict that in its latest phase has affected the country for the last four decades, is a major factor in the configuration and accumulation of disaster risks. There are a large number of ways in which the conflict interacts with and aggravates already critical levels of disaster risk.

The illegal cultivation of coca and poppy in remote areas can lead to an increase in hydrometeorological hazard. The installation of coca cultivation in areas with fragile tropical forest ecosystems contributes to an increase in hydrometeorological hazard — notably flood, fire, landslide and drought. Additionally, coca cultivation, processing and export are a major source of income for armed irregular groups and thus a factor that 'fuels' the conflict in Colombia. In 2003, the areas under coca cultivation in Colombia had been reduced from 144,800 hectares to 102,000 hectares, partly a result of the policy of fumigating plantations. However, in the same period, dramatic increases in cultivation were detected by the United Nations Office on Drugs and Crime (UNODC) in the Departments of Guaviare, Narino y Arauco, showing that repression in some areas only pushes cultivation to new areas and leads to further environmental degradation.

The conflict has generated internal displacement and the Social Solidarity Network estimates that 964,904 people were displaced between 2000 and 2002. Internally displaced people from the conflict are often forced to occupy the most hazardous locations in the cities to which they move. Migrants can be even more socially and economically vulnerable than pre-existing low-income groups in the city. According to official sources, 73 percent of the displaced population comprises women and children. The displaced are particularly at risk to hazards such as floods and landslides in urban areas. According to the National Human Development Report 2003, some cities have seen their population significantly increase due to internal displacement. The displaced population in Quibdo in Choco Department, for example, reached the equivalent of 20 percent of the city's population at one stage.

The negative impact of hazard events such as floods on rural livelihoods is a force driving people into armed groups, illegal cultivation or migration and contributes to the reproduction of the conflict. According to the DesInventar database, some 1,546,585 hectares of agricultural land were affected by natural disasters in Colombia between 1993 and 2003, and more than 270,000 heads of livestock were lost. Losses on this scale seriously impact rural livelihoods, irrespective of the armed conflict.

In other words, a vicious circle exists where the conflict feeds hazard, exposure to hazard and human vulnerability in a process that generates risk. Risk in its turn feeds the conflict, which creates the conditions for yet greater hazard, exposure to hazard and human vulnerability.

Source: Cooperation Framework between the UNDP Bureau for Crisis Prevention and Recovery (BCPR) and UNDP Colombia (2003); National Human Development Report, (2003); DesInventar, Colombia database; Observatorio Sismico del Sur-Occidente, Universidad del Valle, Cali. (2003)

There is a great deal of variation in the relationships between disease, disaster and development. Following disaster, whether a population experiences a disease epidemic or not is influenced by the type of hazard and the environmental conditions in which it takes

**BOX 3.13 AIDS AND DROUGHT IN SOUTHERN AFRICA**

According to the Southern Africa Flood and Drought Network, rainfall totals during the 2002-2003 wet season were less than half normal levels across much of Swaziland, north-eastern South Africa and the southern-most provinces of Mozambique. In this region, risk from drought and other hazards exacerbates high levels of underlying stress powered by a regional health crisis. In 2002, 28 million people in Sub-Saharan Africa were living with AIDS.

The high incidences of HIV/AIDS combined with severe drought conditions are wreaking havoc on these countries already suffering from poverty. According to UNICEF, roughly 1.5 million Mozambicans are currently living with HIV/AIDS. Now that food is in short supply, many are developing full-blown AIDS and dying sooner as their bodies are weakened because of their poor nutritional intake. Some 300,000 children have already lost their mother or both parents to AIDS. While many orphans are looked after by extended families, those without support are particularly vulnerable to disease and economic exploitation in the struggle for survival.

It is this fight for survival that exposes people all the more to the harsh realities of HIV/AIDS and drought. Extreme poverty is only made worse by failed rural livelihoods and high food prices on the one hand, and the loss of income earners by AIDS and other diseases on the other. Where food is most scarce, nutritional status is weakened and HIV prevalence tends to be high. While women's empowerment and gender equality have been issues on the international development scene since the 1970s, the pathways through which HIV/AIDS is spread reflects the gendered politics of sex. As in most societies, women in eastern and southern African countries fight to gain equal status to men socially and in sexual relationships. Whether in a marriage that the woman relies upon for financial reasons, or in commercial sexual exchanges, the longer term and contingent possibility of HIV infection becomes subordinated to the more acute short-term necessities of economic survival.

In southern Africa, the national consequences of the drought — on top of chronic vulnerability caused by poverty and HIV/AIDS — is crippling. In combination, these three harsh realities intensify the negative impact of each and are having profound consequences for the human resources of this region — which is facing long-term degradation. As poverty and the impact of HIV/AIDS uncoils the traditional coping strategies, the risk of a hazard reinforcing a regional disaster has grown.

Source: UNDP, Expert Reviewer 2002

place, the particular characteristics of those people exposed to the disaster and their access to health services. Hazard events such as flooding or temperature increase in highland areas can extend the range of vector-borne diseases such as malaria. Where people are not used to taking precautions, such as sleeping under a net, the disease can quickly spread.

In some cases, deaths caused by epidemics are higher than deaths caused as a direct result of the disaster, in other cases no deaths are recorded after a major disaster event. Whether the disease profile of a population

makes individuals more or less susceptible to hazard and the impacts of a disaster depends on intervening factors, such as the quality of health services, nutrition, the demographics of the population and livelihood sustainability. In Bangladesh two floods show opposing relationships. In September 1991, a flood killing 100 people was associated with 1,700 deaths from diarrhoea or enteric epidemic. However, in September 1998, a flood causing 1,050 deaths was linked to 'only' 151 deaths from diarrhoea or enteric epidemic.<sup>46</sup>

In this section, the focus will primarily be on the relationship between HIV/AIDS and disaster. But other diseases, such as malaria, cholera, tuberculosis and diarrhoea, have important roles to play in shaping vulnerability and losses to disaster. Cholera can break out among displaced people following disaster. Malaria and dengue fever are common accompaniments of climatic hazards. Economic crisis and poverty also reduce people's coping capacities. During 2000, when Russia was hit by a particularly severe cold winter, the Red Cross reported that tuberculosis had reduced the capacity of the people to respond to the hazard.

In El Salvador, local health centres where parents in the past would have received antibiotics and timely treatment were destroyed in the 2002 earthquake. As a result, they must travel for hours to reach medical care. But because of the drought and low coffee prices, there is no surplus money for travel. Crop failure, due to drought and lack of income from wages on coffee farms, has produced hunger that reduces the children's resistance to infection.

A popular and successful strategy for reducing morbidity among low-income communities has been community-based health promotion. This strategy has great potential for piggybacking information and training in disaster risk reduction and emergency response in neighbourhoods where formal services are inadequate in their coverage.

In efforts to strengthen local adaptive capacity in countries affected by Hurricane Mitch, the Pan American Health Organisation (PAHO) worked through its network of community-level health centres to promote local disaster preparedness with community members involved in key decision-making roles.<sup>47</sup>

In summary, development, disaster experience and health status are tightly coupled. A healthy population

is more productive and likely to be less vulnerable to disaster-related hazards. Despite the powerful arsenal of vaccines and drugs that exist today, infectious diseases are on the increase, particularly in low- and medium-human development countries. They are attacking vulnerable groups and threatening to wipe out entire communities.

The lethal nature of these diseases, such as diphtheria, malaria, cholera, tuberculosis or HIV/AIDS, is being aided and abetted by the ongoing erosion of health systems, the spread of antibiotic resistance, disruption caused by conflict and disasters and above all, poverty.

HIV/AIDS and other diseases can exacerbate the disaster risks brought on by climate change, urbanisation, marginalisation and armed conflict. With HIV/AIDS, the able-bodied, adult workforce whom would normally engage in disaster-coping activities are too weak from the disease, or they are already dead. That leaves households composed of the elderly and very young, who lack labour capacity and knowledge. The staff of frontline public service agencies that might be expected to assist them may themselves also have had their ranks decimated from the disease. Cholera is a well-known disease of poverty and it is particularly deadly among populations weakened by either war or HIV/AIDS.

In 2001, approximately 36 million people were living with HIV and the predictions are that the number is set to rise drastically. According to UNAIDS, HIV/AIDS has emerged as the single greatest threat to development in many countries of the world. In Africa, AIDS impairs almost every activity of government, every sector of the economy, every part of everyone's life. In parts of southern Africa, infection rates are as high as 40 percent of the adult population — and still rising. Unchecked, HIV/AIDS will wipe out development gains where they have been made in Africa.

Rapid improvements are possible if good practice is built upon. In Thailand, Senegal and Cambodia, strong prevention campaigns have come close to containing the disease. Uganda has also shown strong signs of successfully combating the spread of HIV/AIDS.

The importance of transparency in disaster risk reduction is increasingly recognized. An interesting case is China's response to large epidemics such as AIDS.

Estimates of the number of people living with HIV/AIDS in China remain very uncertain. Official figures in December 2001 reported the number of cumulative HIV infections to be only 30,736. UNAIDS estimates that there are more than 1 million HIV cases. Revised estimates from China have come much closer to the UNAIDS figures.<sup>48</sup>

### 3.2.3 Governance

Governance is seen by UNDP as the exercise of economic, political and administrative authority to manage a country's affairs at all levels. It comprises the mechanisms, processes and institutions through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences. It brings together the actions of state, non-state and private sector actors.

Governance has three legs: economic, political and administrative.

- Economic governance includes the decision-making process that affects a country's economic activities and its relationships with other economies. It clearly has major implications for equity, poverty and quality of life.
- Political governance is the process of decision-making to formulate policies, including national disaster reduction policy and planning.
- Administrative governance is the system of policy implementation and requires the existence of well-functioning organisations at the central and local levels. In the case of disaster risk reduction, it requires functioning enforcement of building codes, land-use planning, environmental risk and human vulnerability monitoring and safety standards.<sup>49</sup>

The characteristics of good governance — participation, rule of law, transparency, responsiveness, consensus orientation, equity, effectiveness, efficiency, accountability and strategic vision — are key for sustainable development and disaster risk reduction.

#### *Good governance for disaster risk reduction*

At the heart of good governance is a commitment to sharing decision-making power between the stakeholders in a process. This must be built on the political will to accept power-sharing and see the state as a facilitator in development. This contrasts with the conception of the government as the dominant actor shaping development and disaster risk management. Still,

**BOX 3.14 THE STATE AND DISASTER PREVENTION: CUBA**

In Chapter 2 of this Report, Cuba was identified as exhibiting very low relative vulnerability to tropical cyclones, despite having a high proportion of its population exposed to this hazard. Given Cuba's weak economy, this trend might appear especially surprising. Part of the explanation lies in Cuban social policy and disaster preparedness work.

Disaster reports from Cuba consistently report high economic and infrastructural losses, but low loss of life. In 2002, the International Federation of the Red Cross and Red Crescent Societies (IFRC) reported that hurricanes Isidore and Lili crossed the island less than two weeks apart. But thanks to well-organised evacuation procedures and shelter management, no deaths or injuries were reported. Success in saving lives under conditions of high economic stress is to be applauded. However, despite zero deaths and the evacuation of more than 600,000 people, hurricanes Isidore and Lili led to the damage or destruction of 57,000 homes, most of them in poor rural areas.

The hurricanes have also resulted in the Government's commitment to undertake an important housing reconstruction programme with a strong risk reduction component, with support from the UNDP and the international community. The programme introduces risk reduction approaches into urban development planning through five projects: the reconstruction of damaged buildings in Santa Clara and Cambaito; the renovation of Old Havana; the relocation of 200 families from a slum in La Mercedes; and the improvement of La Coloma, Pinar del Rio. The programme will enhance the capacities of both the national institutions dealing with housing, such as the National Housing Institute, and the communities with regard to local risk reduction issues. The programme is instrumental in closing the gap between the successful disaster response capacity and efficient evacuation system and disaster mitigation and prevention.

Source: Reliefweb (2002), Wisner (2001), [www.onu.org.cu/vivienda/index.html](http://www.onu.org.cu/vivienda/index.html)

government remains a critical actor in development, based on its unique capacity as a mediator between private and public interests and as an actor with local, national and international connections.

In very fundamental ways, all the policy alternatives for ensuring that development contributes to managing and reducing disaster risk have to be underpinned by good governance. The failures of urban planning, building regulation, environmental control and regional development, mentioned in other sections of this chapter, can all be described as governance failures. Successful disaster risk reduction, at all levels, will depend on governance innovation.

Good governance is more complicated than simply downsizing the state. As Box 3.14 indicates with the example of Cuba, the state has — and here continues — to play a lead role in disaster risk reduction. As governance has become a catchword in development

policy, there is danger of its uncritical application. As with other elements of development policy, enacting governance must take into account development history and cultural context.

While governments bear the primary responsibility with regard to the right to safety and security, they cannot and should not shoulder these tasks alone.

At national and international levels, civil society as an important governance actor is playing an ever more active role in forming policies to address risk. Civil society can also promote local participation, accountability and ownership. It is being increasingly recognised that disaster risk management at the local level is a key element in any viable national strategy to reduce disaster risks, building on the quality of community networks, the social fabric and effective municipal governance.

The private sector also has a role to play in moving towards sustainable development that incorporates an awareness of disaster risk. Unfortunately, there are very few recorded examples of corporate social responsibility that have engaged with the disaster risk-reduction agenda in developing countries.<sup>50</sup> There is great scope for encouraging the private sector to incorporate disaster risk issues into their corporate social responsibility planning.

### *Can external interventions build governance for risk reduction?*

In contemporary, externally assisted capacity-building programmes for disaster risk management, a component of institutional strengthening is invariably included. It generally consists of strengthening a national organisation for emergency management, preparing a national disaster management plan, enacting a disaster management law or setting up training facilities.

A problem is that in these approaches, governance in the case of disaster risk management, has been focused narrowly as the creation of disaster specific legislation, administrative arrangements and institutional structures.

These efforts do not always necessarily result in enhanced capacity in disaster risk management. Though national organisations are set up, they are often excessively centralised and at times unable to effectively coordinate across other government sectors

or with civil society. Similarly, centralised organisations can be excessively focused on emergency logistics, preparedness and response rather than risk reduction.

The existence of a national disaster organisation in the capital city may represent progress in countries where disaster risk-related organisations and legislation were previously weak or absent. But they may have little impact on risk-accumulation processes in remote provinces or districts.

### *Mainstreaming disaster risk reduction*

One key challenge today is how to mainstream disaster risk management with development policy. The DRI makes such an agenda more possible by providing baseline data on risk, which then can be used to track the influence of development policy. But much remains to be done.

An example of good practice comes from the British Virgin Islands, one of seven countries in the Caribbean that are implementing a Comprehensive Disaster Management Strategy (CDMS) with support from USAID/OFDA, UNDP and the Caribbean Disaster Emergency Response Agency (CDERA).<sup>51</sup> The main objective of CDMS is to enhance sustainable development in the Caribbean by integrating disaster risk reduction into the development process of CDERA member states.

Also in the Caribbean region, the Caribbean Development Bank (CDB) is currently executing the Disaster Mitigation Facility for the Caribbean (DMFC) with 17 countries from 2001 to 2006. The DMFC has two strategic objectives: to strengthen the bank's institutional capacity for natural hazard management and to assist countries in adopting successful disaster mitigation policies and practices. The aim is to create a development planning framework and culture for effective natural hazard management through the incorporation of natural hazard mitigation into the project cycle.

Weaknesses in governance are frequently sited in assessments of rapid-onset disasters.

After every major disaster, the role of governments, NGOs, and other civil society actors is critically appraised. But the role of the private sector (for example, in underpinning land prices that produced geographies

### BOX 3.15 DECENTRALISED DISASTER RISK PLANNING: HAITI

Haiti is the only Least Developed Country in the Americas. When nearly 200 people died after Hurricane Georges in 1998, UNDP supported the government in the elaboration of a National Risk and Disaster Management Plan.

This National Plan was published in 2001 and established a highly decentralised Institutional National System on Risk and Disaster Management, in line with the importance accorded to participation of the population in the 1987 Haitian Constitution. It was recognised that the central government did not have the capacity to cover the entire country in a large-scale disaster scenario. But a lack of active district level disaster planning pointed to the need for supported decentralisation.

The participatory process of the preparation of the National Plan involved more than 30 institutions and eased the vital process of bonding between partners. Programme III of the Plan tackled local risk management. In this regard, the lack of a clear decentralization framework and operational local institutions led to a research-action exercise. This included a number of pilot projects by which local and national capacities were strengthened, particularly the Direction de la Protection Civile (DPC), which had core responsibility for improving training and monitoring skills. Several international organisations, such as UNDP, USAID/OFDA, the European Community Humanitarian Office (ECHO), Pan American Development Foundation (PADF), OXFAM and the Red Cross family, supported local risk and disaster management committees.

Several important gains have been made in the last four years. At the central level, the National Plan was approved and the process of legal reform was launched, including the reinforcement of the DPC and the consolidation of government-donor partnerships. At the local level, more than 90 local participatory committees have been created since 1999 and trained in high risk and poor areas outside Port-au-Prince. The proactive role of central government — directly or indirectly involved in most of these exercises — has provided more credibility and sustainability to community level interventions.

The increased number of committees, which include local authorities, civil society and private sector organisations, reflects the importance of risk and disaster management for the Haitian population. One lesson learned through this process is that where community-based mechanisms already existed for broader development work, it was more feasible and sustainable to factor risk management concerns in ongoing process — absorbing risk and disaster management functions — rather than creating new parallel community systems.

Source: Government of Haiti (2003), <http://www.ht.undp.org/pnud-hai/projets/Bestpract.htm>

of risk or in assisting workers through the emergency and rehabilitation periods) is rarely assessed.

Dealing with disasters is always a challenge for leaders. Swift and immediate response brings popular approval to the leadership. In extreme cases bad management of a disaster risk and event have resulted in leadership changes.

Popular discontent leading to the overthrow of the Somoza dictatorship in Nicaragua was fuelled by the

**BOX 3.16 THE RELEVANCE OF GOVERNANCE:  
EVIDENCE FROM ZIMBABWE**

On average, large-scale drought hits southern Africa once a decade. In 1992, the worst drought in living memory as it was called, parched the land from the Atlantic to the Indian Ocean. Despite a 75 percent crop loss, the grain-exporting country of Zimbabwe coped as the government reacted early. It had surplus maize from previous years, foreign exchange to import food, an efficient relief program in place and good will from donors. A well-planned relief operation averted a famine.

In 2002, after unseasonably heavy rain and a long dry spell, half of the population of 13 million needed food aid. Yet unlike 1992, reservoirs were full of water and there was plenty of grazing for cattle. Why were things worse? Ten years before, a drought induced by the El Nino weather phenomenon caused the crisis. This time, a combination of governance issues, economic crisis, widespread poverty and the spread of HIV/AIDS added human elements to a natural disaster.

Zimbabwe is the world's fastest-shrinking economy and declined at a rate of minus 10 percent in 2001. Poverty rates have doubled since 1992 and people's coping mechanisms are stretched to the limit. In the past decade, HIV/AIDS rates have soared to nearly 34 percent. As productive adults fall ill and die, households headed by orphans and grandmothers multiply.

Another factor playing a part in the crisis is commercial agriculture. Over the last two years, the amount of land planted and crops harvested by commercial farmers has decreased dramatically. Cereal production has fallen by two thirds since 1999. One million farm workers and their families have lost their jobs and homes — increasing the pressure in an already tense social climate.

The collapse of commercial agriculture means that, unlike 10 years ago, the country has no carry-over maize stocks to cushion the drought's impact. And the government's ability to import food is extremely low. Foreign exchange reserves are just US\$ 65 million, enough to cover only half a month's imports. All of this is aggravated by the costs of supporting the country's military intervention in the Democratic Republic of Congo.

Source: Reliefweb C:\Documents and Settings\karl\Local Settings\Temporary Internet Files\Content.IE5\W9YB0PQR\1\_ReliefWeb Zimbabwe's food crisis what went wrong[1].htm

theft of international funds provided for the rehabilitation of Managua, after a 1972 earthquake destroyed 80 percent of the houses.

Political systems recognise the need for strong intervention following a disaster. The challenge now is to increase the focus on disaster risk reduction as a central element of ongoing development policy. This should be a transitional point on the way to identifying development paths that can generate wealth without producing unacceptable levels of risk. Just what levels of risk are acceptable will be a political decision, requiring information on the disaster-development relationship and appropriate tools to aid transparent decision-making.

As with other development issues, disaster risk policy is sometimes hampered because of disjointed and uncoordinated policy-making. This very often has its roots in a fragmented governance structure.

Problems include competition or a failure to communicate between inter-governmental agencies and the state. Or in large countries, such as China or Brazil, between local, provincial and national tiers of government. That different agencies at the local and national levels hold responsibility for development policy serves to further fragment disaster-development policy.

A key problem caused by inadequate governance is the opportunity it allows for corruption in both the state and non-governmental sectors through a lack of transparency. Some political actors in disaster relief have been observed pursuing discriminatory policies in distributing relief and recovery assistance, favouring one segment of population over others. While this leads to the marginalisation of non-recipients (generally the most vulnerable), it also undermines the legitimacy of responsible organisations.

The example of Zimbabwe, shown in Box 3.16, may echo 1998 Nobel laureate Amartya Sen's argument that no substantial famine has ever occurred in any country with a relatively free press. In addition, data produced in the DRI analysis of drought identifies the Democratic People's Republic of Korea as a high-vulnerability state with respect to human loss from drought, even though it does not appear on the list of countries with large populations exposed to drought conditions.

Political will is critical at the national level to provide an enabling environment for good governance and disaster risk management. Such intention for reform is often most clearly expressed through legislative innovations.

In the last two decades, countries such as Algeria, El Salvador, Nicaragua, Haiti, Madagascar, Turkey, India and China, have demonstrated renewed political commitments to disaster risk reduction.<sup>52</sup> Within these reforms, legislation often remains a critical element in ensuring a solid ground for other focal areas such as institutional systems, sound planning and coordination, local participation and effective policy implementation.

In the mid-1990s, South Africa initiated a long process for reform with respect to disaster-related

legislation, following destructive floods that affected thousands of households on the Cape Flats (see Box 3.17).

Unlike the reform of disaster legislation undertaken elsewhere in southern Africa, the South African experience has been completely owned and driven by South Africa-based partners. As a result, the pressure that accompanies an externally driven process to deliver amended legislation in one or two years (often unrealistic for achieving a broad-based buy-in) has not prevailed.

In the late 1990s, countries such as Nicaragua, El Salvador, Costa Rica and the Dominican Republic revised their legislation. This reform was the result of a fertile south-south cooperation effort initiated by Colombia and shared and developed in Central America after Mitch. The reforms generally increase inter-institutional coordination, institutional prerogatives for disaster risk reduction and offer opportunities for civil society participation.

But the road of legal reform is not easy, as other experiences seem to suggest. Haiti and Madagascar — two Least Developed Countries (LDCs) with high relative vulnerability to climatic hazards — are currently revising their laws regarding disaster risk reduction and opening windows for greater popular participation. Turkey and Algeria (after the recent earthquakes) have also undertaken a serious reform with a strong seismic and technical focus.

The critical issue is what should be achieved through improved governance. Institutional design, legislation and building codes provide ‘technical’ solutions in the short-term. But long-term institutional development requires addressing larger governance issues regarding the distribution and decentralisation of power, structures of decision-making and accountability, and participation of communities in the scheme of governance.

#### *Governance for disaster reduction at the regional level*

The emergence of regional organisations addressing risk management issues has been one of the salient characteristics of the last fifteen years. In addition to developing their own expertise and policy initiatives, regional organisations can provide continuity at the regional scale to help maintain national level progress in development and disaster risk management.

Regional organisations have proved particularly effective in addressing trans-boundary risk issues, for example,

#### **BOX 3.17 LEGISLATION CAN ENABLE DISASTER SENSITIVE DEVELOPMENT: SOUTH AFRICA**

In the 1990s, South Africa initiated a long process for reform with respect to disaster-related legislation. Several key elements have characterised this process: local ownership of legislation; professional pressure for change; a deliberate, slow multi-stage process of change; widespread dissemination of preparatory discussion and policy documentation; commitment to transparent debate and consultation through parliamentary processes; continuity in individuals supporting the process; and a commitment to streamline incoming legislation with best international practice.

While legislative reform has been a lengthy process, it has gradually built the momentum for accepting change at political and functional levels across a range of government ministries. Moreover, the new Disaster Management Act will be enacted in the legal-administrative context of other recent legislation, including the Municipal Systems Act, the National Environmental Management Act and the Veld and Forest Fires Act.

The open deliberations surrounding the Disaster Management Act were critical to shaping the breadth of the final Act. The Act has significant inclusions with respect to vulnerability reduction as well as requirements for more extensive provincial and municipal consultation in disaster management. It also provides scope for applying legislation to disaster-prone areas, communities and households, thus allowing for greater differentiation in efforts, and calls attention to the importance of research and education as well as indigenous knowledge.

Within government, the relative stability of key national personnel driving the process has provided essential continuity. Success has also been built on a critical mass of disaster professionals with international exposure. Nevertheless, the Act reflects almost a decade of sustained effort.

Source: Holloway (2003)

the work of the Mekong River Commission on flood risk in the Mekong River Basin. Regional organisations are also effective in areas where multiple countries are frequently affected by the same hazard events, such as hurricanes and cyclones in small island states in the Pacific or Caribbean, or drought in southern Africa or the Horn of Africa.

The emergence and consolidation of regional organisations has tended to reflect the maturity of disaster risk management as a key governance issue at the national level. Thus the level of development in Latin America and the Caribbean has tended to be relatively greater than in Asia and even more so than in Africa.

Regional organisations are playing a pivotal role in defining and shaping regional level risk management policies, in sharing knowledge between countries and between key agencies and individuals, and in supporting the development of national capacities.<sup>53</sup>

**BOX 3.18 THE ROLE OF REGIONAL ORGANISATIONS AND NETWORKS IN STRENGTHENING CAPACITIES FOR DISASTER REDUCTION**

Regional organisations and networks are playing an increasingly important role in strengthening capacities for disaster reduction in different regions around the world. There are a number of different types of regional organisations:

- Regional intergovernmental organisations with a specific disaster reduction mandate, such as the Caribbean Disaster Emergency Response Agency (CDERA) and the Coordination Center for the Prevention of Natural Disasters in Central America (CEPRENAC).
- Regional intergovernmental organisations that have included aspects of disaster reduction within a broad mandate, for example, the Organization of American States (OAS), Southern Africa Development Community (SADC), the South Pacific Applied Geoscience Commission (SOPAC) and the Stability Pact for South Eastern Europe.
- Academic or governmental organisations with a regional focus on disaster reduction, for example, the Asia Disaster Preparedness Center (ADPC) and the Asia Disaster Reduction Center (ADRC).
- Regional disaster reduction networks of academic and non-governmental organisations, such as the Network for Social Studies on Disaster Prevention in Latin America (LA RED), PeriPeri in southern Africa and Duryog Nivaran in South Asia.

Such regional organisations and networks are currently involved in a number of tasks and functions, which vary widely from one case to another. These include:

- Strengthening national capacities through training, programme support, technical assistance and resource mobilisation.
- Information sharing, documentation and comparative analysis of issues on a regional and sub-regional basis.
- Coordination of regional or sub-regional disaster reduction projects.
- Development of common regional or sub-regional policy platforms and the advocacy of regional policy initiatives in global forum.

Source: UNDP Expert Group Meeting on the Roles of Regional Organisations and Networks in Strengthening Capacities for Disaster Reduction, 2002.

**3.2.4 Social capital and civil society**

In recent years, the concept of social capital has provided additional insights into the ways in which individuals, communities and groups mobilise to deal with disasters.

Social capital refers to those stocks of social trust, norms and networks that people derive from their membership in different types of social collectives. Social capital — measured by levels of trust, cooperation and reciprocity in a social group — plays the most important role in shaping actual resilience to disaster shocks and stress.

When Hurricane Mitch struck Honduras in 1998, the district of La Masica on the Caribbean coast was able to mitigate losses through a process of local level risk management and early warning developed before the disaster struck. No deaths occurred in La Masica, in comparison to neighbouring watersheds with similar characteristics, where hundreds lost their lives.<sup>54</sup>

Civil society and social capital are no longer exclusively local institutions. International NGOs have built support within networks of individuals throughout the world who share similar concerns about risk. Even kinship-based networks are of an increasingly international orientation. This is shown (and demonstrated in Box 3.19) in the growing recognition of how remittances from relatives abroad are often the most important resource for disaster-affected people in meeting survival and reconstruction needs.

Local level community response remains the most important factor enabling people to reduce the risks

**BOX 3.19 INTERNATIONAL SOCIAL CAPITAL**

One of the reasons for strong international attention to the 2001 earthquake in Gujarat, India was the political and commercial strength of the non-resident Gujarati community in a number of developed countries. Shortly after the Gujarat earthquake, the non-resident population living in the United Kingdom managed to raise £2 million for recovery and reconstruction. In April 2001, the American India Foundation, an organisation of non-resident Indians based in the United States, organised a five-day visit to Gujarat and promised to raise US\$ 50 million for relief and reconstruction work. Political representatives and governments in many of these countries were influenced by

the strength of the Gujarati communities in sending relief materials. International assistance in the wake of the Gujarat earthquake, when compared with the 1999 cyclone in Orissa, India in which more than 10,000 people died, could predominantly be attributed to the skills in linking forms of social capital which the Gujaratis commanded.

The flow of remittances has become a widespread strategy for coping with poverty that has reduced the risk of many households. Following disaster, financial remittance flows from unaffected to affected areas has made a significant contribution to reconstruction. Following an

earthquake in 2001, the Central Reserve Bank of El Salvador estimated that Salvadoreans living abroad sent home US\$ 1.9 billion in remittances.

Migration is a well-established survival strategy across low development regions and countries in Africa, Asia, Latin America and the Caribbean. An overview of Africa's rural non-farm sector showed that in areas distant from major cities, migration earnings constituted 20 percent of total non-farm earnings. It was as high as 75 percent in areas close to cities. Worldwide, international remittance flows were estimated in the 1980s to total US\$ 71 billion — exceeding official development aid.<sup>55</sup>

Source: Vatsa (2002)

associated with or cope with disaster. But community ties can be eroded by long-term or extreme social stress. Under conditions of extreme poverty, inter-household ties within the community break down as individual households can no longer maintain relationships. Social networks can also be strong but counter development, as in the case of drugs gangs or ethnically divided communities.<sup>56</sup>

Depletion of social capital is also an important contributing factor in complex emergencies. In this case, social unrest and displacement undermines social networks and traditional safety nets that exist at the community level, and may result in a natural disaster spiralling into complex political emergencies.

Social capital can also be eroded by development policy that purposefully or incidentally breaks local bonds of trust or friendship. Crises in social capital are found in former centrally planned societies as well as those within liberal political economies (see Box 3.20).

Despite economic wealth and political stability in Barbados, in the past civil society was not built up from the island's stock of social capital. This reached a low point in 1999 when only six electoral districts had an active local disaster group — out of a national system of community-based disaster prevention and response organisations organised around the island's 28 electoral districts.

Barbados is not alone in having difficulties in consolidating local social organisation to confront development and disaster risk. This indicates the need for a renewed effort to support local social organisation in the future.<sup>57</sup>

Building social capital and supporting meaningful participation by vulnerable groups and individuals in development is not easy. Principle characteristics of social vulnerability are political marginalisation and social exclusion. Encouraging social integration and political participation to enhance resilience and other quality of life goals is a major challenge to disaster and development policy.

In the past, many programmes sponsored by international organisations and developmental NGOs have claimed that their projects have built social capital by enabling local participation. All too often though, local participation has been captured by local elites and left the vulnerable

#### BOX 3.20 THE EROSION OF SOCIAL CAPITAL AND DISASTER RISK IN MONGOLIA

Known as Zud, the snow disasters in Mongolia in 1999-2001 that left millions of animals dead and threatened the livelihood and food security of the country's predominantly pastoral society are another good example of the impact of the depletion of social capital. The de-collectivisation of pastoral households in Mongolia eliminated a number of support mechanisms available to these households. During the socialist period, substantial safety nets were provided by herding collectives. But during this period of state-supported social security, all other risk management mechanisms traditionally practiced by communities weakened. In the early 1990s, when the process of liberalization started in Mongolia, most of the social security measures were withdrawn. Since the communities had lost their own traditional risk management practices that existed in the pre-socialist period, they had little preparedness and capacities at the individual or communal level. This led to one of the worst disasters in Mongolia's history.

Source: Bass, Batjargal and Swift, 2001

behind. When vulnerable groups are included, there is always a danger that participation can drift into the shifting of development burdens from the state or NGOs and onto local actors, those with the least time, energy or resources to spare.

Examples of the successful and long-term strengthening of local communities do exist, but remain uncommon. A long-term commitment is needed, which is often beyond the funding and staffing cycles of many agencies. Perhaps more difficult is avoiding the trap of communities becoming dependent on well-meaning external agencies.

Following Hurricane Mitch, a pilot project to warp natural disaster prevention within the development agenda at the local level was initiated in Nicaragua in 2001. This UNDP project supported the work of the new Sistema Nacional para la Prevencion, Mitigacion y Atencion de Desastres (SNPMAD) in six municipalities; three in Nueva Segovia and three in Matagalpa.

In this programme, the government of Nicaragua undertook a participatory process of local development planning within a disaster reduction approach. Disaster reduction was factored into a range of planning sectors including infrastructure development, productive sectors, social sectors and environmental management. Disaster reduction was also formally taken into consideration in investment decisions for areas with a history of natural disasters, such as flooding and landslides. Following a risk-mapping exercise, areas of high disaster risk received additional support

through protection measures, including incentives for environmental rehabilitation, the designation of safe areas for urban expansion and demarcation of zones for protection from human intervention.

This programme was itself a learning process. Key elements of success have included the realization that risk profiles and participatory processes in each municipality were different, so strategies should rely on local decision-making and be flexible in approach and implementation. In addition, local plans should be linked with central institutions to access support and blend with national development policy. The involvement of local stakeholders and the embracing of a gendered sensitivity to development, disaster risk management and participation were also key in maintaining local support and generating significant local outputs for disaster risk reduction.<sup>58</sup>

The most appropriate policies for enhancing the positive contribution of civil society will depend on the developmental context. For many countries in Africa, Latin America and Asia that have undergone structural adjustment and participatory development, the challenge may not be so much the creation of a non-governmental sector, as its coordination.

An overly strong civil society can undermine local and national government and undo democratic gains. This happens when private development agencies in civil society funded by the international community are perceived as overshadowing the state in driving local development.

In other cases, the state may still have an overriding control on civil society organisations and reduce their effectiveness and scope of operation. It is a fine balancing act, but the goal should be a strong civil society and a strong state working in partnership with a socially committed private sector.<sup>59</sup>

A final challenge for policies aimed at building social capital is the danger of undermining democratic institutions. It is all too easy to create an impression that non-state funding streams are more accessible, and locally far larger and more responsive, than local and state government agencies. Indeed, the main argument for funding civil society is weaknesses in the state sector. Over the long-term, funding civil society without strengthening the state simply reproduces the lopsided governance that interventions were designed to overcome. Working towards partnerships and

transparency in funding, with support for good policy from state and non-state actors, may be a less rapid but ultimately more constructive approach to building local social capital to enhance resilience.

Disaster risk reduction also offers opportunities for embracing gender sensitivity in development policy and practice. For example, the skills and experience of women in building and maintaining local social networks can be critical for local risk reduction.

This said, the role of women in local decision-making often continues to be sharply constrained by social and economic status. It is not unusual to see women forming the majority of membership in an organisation, while men dominate in leadership positions.

For policy interventions seeking to include a participatory component, preliminary discussions to help map the social relationships within the community are essential if the vulnerable (who are also the socially excluded) are to be reached and helped to build their own levels of resilience through participation.

In Cox's Bazar, Bangladesh, the inclusion of women in disaster preparedness and development organisations (including education, reproductive health and micro-enterprise development groups) has been followed by a huge reduction in the numbers of women killed or affected by tropical cyclones.<sup>60</sup>

The importance of a gendered perspective on risk during the reconstruction period can be seen from the experiences of the civil society group Janpath after the Gujarat earthquake in 2001. Janpath is a network of activists and organisations that aim to enhance the status of women in Gujarati society as a means of building the foundations for more inclusive governance.<sup>61</sup>

### **3.3 How Can Integrating Disaster Risk Reduction and Development Planning Help to Meet the MDGs?**

In Chapter 1, connections between each MDG and disaster risk management were made. Here, the discussion highlights opportunities for win-win policies that could help more people be free from preventable losses caused by disaster as part of a wider programme of meeting human development needs. MDGs 1, 3, 6, 7