

5.4 Networking and partnerships

*Objective of ISDR:
To stimulate multidisciplinary and inter-sectoral partnerships and expand risk reduction networks by engaging public participation at all stages of the implementation of the ISDR.*

Comprehensive disaster risk reduction covers a wide range of disciplines, sectors and institutions, calling for diverse and expanded forms of partnerships. The achievements from networking and resulting partnerships can be far more powerful than the total of individual or specialist contributions, alone. Thanks to Internet and global communications, the emergence of networks between officials from government, the general public, private commercial sectors and professional bodies is technically easy. However, these loose circles based on common interests, can only be successful if participants share the same willingness, motivation, commitment and desire to openly share information and experiences.

Networks and partnerships, ranging from communication exchange networking to full fledged and funded implementation partnerships, have great potential. This section is limited to describing some concrete examples of existing ones.

- Building links to reduce risk - extended partnerships and networking
- Cross-sectoral coordination and collaboration
- Technical and research networks
- Multidisciplinary, networked relationships
- Technical support for community partnerships
- Commercial sector and partnership interests

Partnerships are formed through cooperation. Cooperation results from the coordination of resources and abilities brought together through mutual respect, understanding and trust. Trust is a product of good working relationships between people and organizations. Good relationships and effective endeavours grow from time spent together in addressing common interests that yield mutual benefits.

Building links to reduce risk - extended partnerships and networking

The wide range of actors and diverse community, which deals with different aspects of disaster risk management, is obvious throughout this report. One important challenge which remains is to stimulate and develop ways on how to link the various schools of thought, knowledge bases, key actors and stakeholders relevant to disaster risk reduction.

Multi-disciplinary research, multi-sector policy and planning, multi-stakeholder participation and networking relevant organizations are fundamental, to address the many dimensions in which risk reduction efforts are actualized. Benefits that accrue from such connections include improved efficiency and cost-effectiveness, a unified strategic framework for decision making on issues of common concern,

lessening duplication of efforts, as well as mandating an appropriate division of responsibilities. Additionally, cutting edge knowledge from academic and research institutions can be cross-linked to the practical initiatives undertaken by relevant organizations. Fostering the association of community groups with larger scale organizations will work towards ensuring that a higher resolution of needs, capacities, cultural perceptions and traditional knowledge become more integrated in national, regional and international initiatives.

The spectrum of collaboration, processes and activities goes from various ways of sharing information to joint research and integrated databases through to participatory strategic planning and programming. The latter is the more difficult to achieve, but it is also the more effective. Some examples of the ways in which this process is realized are:



- ✓ communication networks/forums for dialogue;
- ✓ institutional partnerships via memorandums of agreements between agencies and organizations;
- ✓ formalized joint mandates, legislation, policies and plans within public authorities;
- ✓ multi-sector issue advisory groups;
- ✓ multi-disciplinary research projects;
- ✓ integrated databases;
- ✓ search conferences; and
- ✓ other participatory planning processes.

Technical and research networks

Disaster reduction and management require comprehensive knowledge about hazardous events, the likelihood of the occurrence and the possible impacts they can have on societies, as well as the social, economic and environmental implications related to vulnerability. Germany has substantial scientific and technical capabilities in these areas. Two complementary research networks have developed with the aim of using this experience to advance multi-disciplinary approaches to disaster research.

In 1999, the German Committee for Natural Disaster Reduction urged the creation of a *Centre for Natural Risks and Development (ZENEb)* (Zentrum für Naturrisiken und Entwicklung) to focus attention on sociological research about disasters in developing countries. Organized as a network based in the *Universities of Bonn and Bayreuth*, ZENEb involves people in Germany and from other countries who share an interest in the relationships between national development issues and natural hazard risks in developing countries. Within this professional network, general approaches to risk research in the context of sustainable development are examined in depth, and individual investigations and case studies are conducted in developing countries. An interesting feature is the development of indicators to describe the relative risks of different countries, where ZENEb has been collaborating with UNDP. Another undertaking is the set up a database of those indicators that may be used to frame socio-

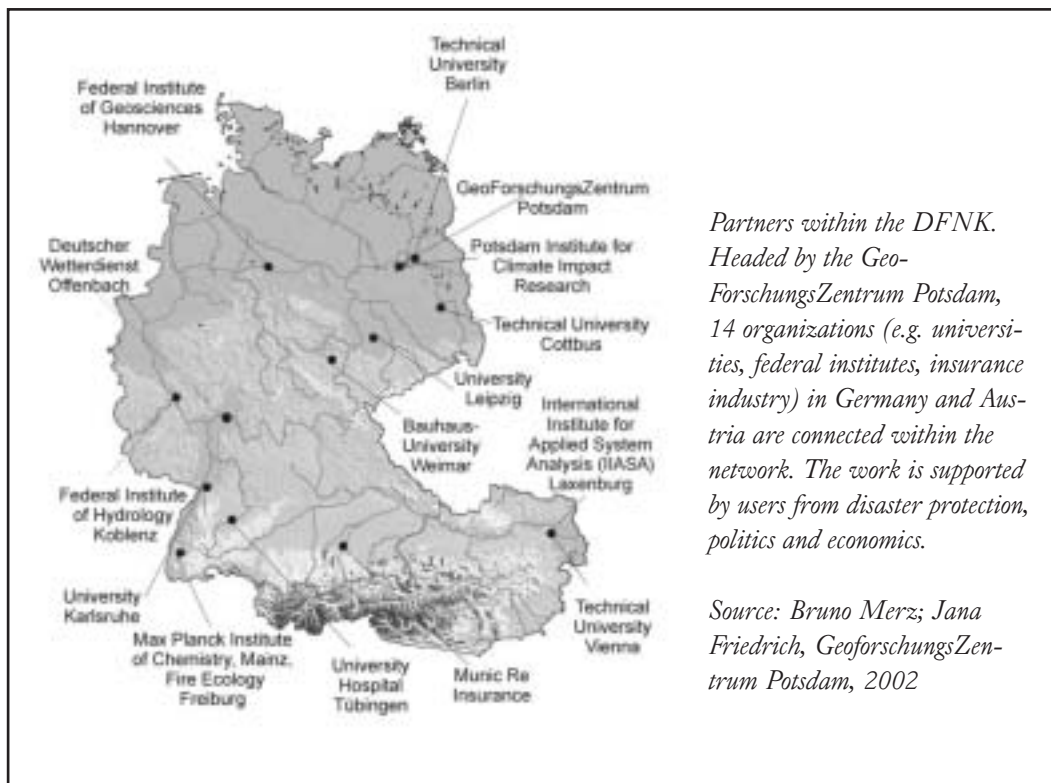
economic early warning systems (see www.zeneb.de).

Focusing more on natural hazard knowledge in the disaster equation, the German research institutions have formed the *German Research Network for Natural Disasters (DFNK)* (*Deutsches Forschungsnetz Naturkatastrophen*).

The goal of the network is to provide the scientific fundamentals of advanced risk management associated with natural hazards and to make that knowledge more widely available for users. Realistic scenarios are developed to estimate current levels of risk and the dynamic features of future risk due to global change in such areas as climate variability, increasing density of population and changing land use values in endangered areas. This information can be used for early warning purposes, in support of decision-support systems in disaster management, and for developing greater understanding of the issues among both political authorities and the public.

The 14 partner institutions shown in the figure below and the projects of the network are grouped into five clusters: storm risk assessment, flood risk assessment, earthquake risk assessment, forest fire simulation system, and databases and information systems. The joint user-oriented research requires close collaboration among the different clusters, which is aided by the information cluster. This provides data, synthesizes information and applies tools for higher-level information systems such as clearing house functions, data warehousing and near-real time transmission.

The city of Cologne was chosen as the initial area of interest for the combined assessment of floods, earthquakes and storms. The respective clusters apply extensive data sets, analytical techniques and simulation models to risk estimation processes so that current risks can be depicted, future risks detected, and safety recommendations made. A second regional emphasis has been placed on the Brandenburg region with Berlin as an adjacent focal point. There, the forest fire simulation cluster is monitoring the hazard, using simulations, and developing an early warning system.



Partners within the DFNK. Headed by the GeoForschungsZentrum Potsdam, 14 organizations (e.g. universities, federal institutes, insurance industry) in Germany and Austria are connected within the network. The work is supported by users from disaster protection, politics and economics.

Source: Bruno Merz; Jana Friedrich, GeoforschungsZentrum Potsdam, 2002

Rural networking support

Case: Mozambique – WFP - FAO – NGOs - Universities

A different form of partnership is required to address the vulnerabilities of rural environments where most Mozambicans live in a precarious balance between subsistence and desperation. Very small fluctuations in climatic conditions, localized flooding, or the outbreak of disease in neighbouring villages can plunge a normally stable family economy into severe difficulty. To identify these most vulnerable populations, a partnership has been formed in a *Vulnerability Analysis Group (VAG)*. Chaired by the government's *Department of Early Warning and Food Security (DAPSA)*, the programme includes the participation of WFP and the *Division of Nutrition in the Ministry of Health* working together with local communities to conduct research into chronic vulnerability. The joint initiative has provided analysis of nutritional indicators for the evaluation of chronic vulnerability and has compiled detailed profiles of food security conditions in virtually all districts of the country.

A number of other partners have contributed to related initiatives in this multi-disciplinary effort. FAO has provided funding to monitor food stocks in the country. In a complementary initiative, an *Agricultural Markets Information System*,

managed by Michigan State University in the USA, has been supported by USAID for nearly a decade, to research food security conditions, particularly in relation to rural markets and smallholder cash crops. This programme is currently developing provincial price information systems that can promote the improved commercialisation of farm products.

FEWSNET, an NGO also funded by USAID, works closely with VAG and has conducted several studies of local food economies, including those areas most affected by flooding in recent years. The project operates in conjunction with the *University of Eduardo Mondlane* in Maputo to produce a *Disaster Atlas for Mozambique* that will make disaster information and maps available online. An earlier initiative, *AEDES*, was originally an emergency information system created by *Medecins sans Frontieres (MSF)* during the drought in 1992, but it gradually evolved into a national vulnerability information system.

Case: Central America – USAID – EU - NGOs

The Central American Mitigation Initiative (CAMI) is an umbrella programme launched in 2001 by OFDA/USAID, with US\$ 12 million being channeled through NGOs for disaster reduction activities over a three year period. IFRC and Red Cross Societies, the Corporate

Housing Foundation, CARE, Catholic Relief Services, and other agencies operating in the region will concentrate on local levels of involvement, principally in municipalities, to create mechanisms that can motivate and involve further commitment from national level institutions. Risk reduction is the primary focus, and while preparedness and disaster response problems also are expected to be addressed, they will be integrated into the overall perspectives of reducing risks.

One of the more innovative CAMI projects is conducted by CARE International with partners in Guatemala, El Salvador, Nicaragua and Honduras. With an overall budget of more than US\$ 3.5 million and support coming from OFDA, the Canadian International Development Agency (CIDA) and CARE-USA, the project will provide training and technical support to develop a range of risk reduction activities in core municipalities in different high-risk zones of the four countries. The project strives to accomplish a trickle down effect among neighbouring communities by using people trained in the core municipalities. Benefiting from its association with LA RED which provided technical and advisory support for the project, CARE expects to fashion its other development projects in the region with more attention given to risk reduction.

During a recent drought in El Salvador, small grants were provided for severely affected population groups to develop pilot *Integral Sustainable Production Units*. These ISP units promote crop diversification, foster improvements in commercial practices, and create opportunities for improved food storage by utilizing crop techniques that are environmentally friendly. Based on the initial experience with this project, CARE-France presented a proposal to the EU to finance similar schemes in two other departments of the country, to improve the food security of 1,000 extremely poor families. Both projects are based on the participation of the population working through collective schemes using common lands to minimize their risks. This approach represents an alternative to the reliance on emergency food relief.

■ Networking support for community partnerships

In the beginning of IDNDR a group of social scientists, NGOs and people interested in the social dimensions of risk reduction in Latin

America got together in 1992 to constitute *La Red de Estudios Sociales en Prevención de Desastres en América Latina (LA RED – The Latin American Network for the Social Study of Disaster Prevention)*. It was initially conceived as a mechanism to facilitate comparative research of natural disasters from a social perspective. It has developed into the focal point for hundreds of individuals and institutions working in the field of disaster and risk management in the different countries of Latin America and the Caribbean.

Inspired by LA RED, a similar network in South Asia has been organized by people committed to promoting alternative perspectives on disaster and vulnerability as a basis for disaster mitigation in the region. *Duryog Nivaran* (“disaster mitigation” in Sanskrit) aims to reduce the vulnerability of communities to disasters and conflicts by integrating alternative perspectives in the conceptual, policy and implementation levels of disaster mitigation and development programmes.

In 1997, *Periperi*, a network of “partners enhancing resilience for people exposed to risks”, was established by the Disaster Mitigation for Sustainable Livelihoods Programme (DiMP), University of Cape Town, with the support of OFDA/USAID and DFID. Originally composed of 16 different organisations from five Southern African countries, Periperi provides opportunities for a diverse range of organizations to work together across disciplines and national borders, to integrate risk reduction principles and technologies into ongoing sustainable development policy.

Case: Guatemala – Germany

The Peten department of Guatemala contains one of the largest tropical forest reserves in Latin America. The occurrence of uncontrolled forest fires during the annual dry season endanger the livelihood of the local population and has led to large-scale impoverishment and destruction of forest ecosystems and biodiversity in northern Guatemala. The government of Guatemala has embarked on a major programme to promote fire prevention and more effective means to combat them when they do occur. The programme is supervised by the influential authority of the Executive Secretary of the Presidency and involves the participation of several other governmental institutions using their own resources.

The *PRECLIF Project for the Local Prevention and Control of Forest Fires* is a complementary project to the government-sponsored programme, which promotes improved prevention and control of forest fires at the local level, employing local techniques in risk management. Project activities train members of the local communities to implement measures that can reduce the risk of fires, working closely in conjunction with the official municipal committees in charge of forest fires. The project has also supported other activities to strengthen community organizations such as the establishment of a radio network that links six rural communities to the *National Coordinating Agency for Disaster Reduction in Guatemala, (CONRED)*. A community network for Central America for risk management (Red Comunitaria para la Gestion de Riesgo) was involved in the implementation at community level.

This spirit of cooperation and expanded professional activities that have characterized the *PRECLIF Project* have also encouraged new and useful relationships between the *Global Fire Monitoring Centre* at the Max Planck Institute of Chemistry in Freiburg, Germany and the Guatemalan institutions involved with forest fire prevention and control. Professional visits have been exchanged, and a successful workshop was held in Peten to share experiences on the topics of forest fire prevention, management, and control.

There are three active volcanoes in Guatemala, and several communities have established themselves on the slopes of two of them. *Project PREVOL* is an effort to strengthen the disaster reduction activities conducted by the *Risk Management Department of CONRED*, and the national *Centre for Disaster Research and Mitigation (CIMDEN)* that works to reduce the risks from volcanic hazards. Both CONRED and CIMDEN have been implementing activities to promote preparedness for possible eruptions of Pacaya and Fuego volcanoes. With the support of the Humanitarian Office of the Ministry of Foreign Affairs of Germany, PREVOL has sought to expand those activities to improve the conditions of both disaster preparedness and risk reduction.

Resources furthered the assessment of local vulnerabilities and the use of locally generated information to manage risks at the community level. They are being used to increase the resilience of existing structures such as hanging bridges and to

protect community water systems. Locally generated data will be digitised and used to generate hazard and risk maps that can be displayed in the rural communities and thereby contribute to the formulation of emergency plans for local communities.

In addition to providing basic early warning equipment and training local emergency committees in 19 communities, PREVOL has been able to assist CIMDEN by improving its methods and abilities to conduct volcanic surveillance. This has included the supply of additional scientific instrumentation to complement efforts already underway by the *National Seismic, Volcanic, Meteorological and Hydrological Institute of Guatemala* and academic interests to monitor volcanic activity at Pacaya volcano.

The partnership has emphasized the crucial role of linking activities in disaster-prone areas with the interests of the national disaster reduction agency to encourage risk reduction. In this respect, all of the operations in PREVOL have been conducted by personnel from the Risk Management Department of CONRED, ranging from the installation of equipment, local community organization and training, and the design of risk reduction measures. Similarly, with respect to the sustainability of the project, a priority has been placed on developing and supporting the capabilities of national institutions, in particular those of the CONRED Risk Management Department.

Cross-sectoral coordination and collaboration

A positive example of an implementation partnership is *Project Impact*, promoted by the American *Federal Emergency Management Agency (FEMA)* in the later years of the 1990s. Project Impact was designed to change the way the U.S. deals with risks before disasters occur. Each community that participated in the programme was required to undertake a preliminary assessment of its natural hazard risks and to prepare a tentative strategy for reducing its long term vulnerability, drawing heavily on both multi-disciplinary and intersectoral partnership capabilities of the community itself. FEMA then offered technical expertise and some financial support as well as involving other federal agencies or neighbouring states in the process.

The objective of the programme was to put the latest technology and mitigation practices into the hands of local communities and to guide these local initiatives

through a complete risk assessment process. This allowed each community to identify and prioritise those risk reduction initiatives that would have the greatest benefits to the community. Within a few years, more than 250 communities, located in every state of the country, had benefited from Project Impact, involving more than 2,500 businesses in the process.

In 2001, FEMA's Mitigation Bureau was merged with the national flood insurance programme to become a very different department, known as the Federal Insurance and Mitigation Administration. Funding for Project Impact has been withdrawn or otherwise reallocated, and in the later part of 2001 the US radically redefined its perceptions of public risk.

There are other professional partnerships which remain to reinforce disaster risk reduction activities as every state in the USA has an office of emergency services. Both the *Network of State Hazard Mitigation Officers (NEMO)* and a *National Emergency Management Association (NEMA)*, which serves as a professional association of state emergency management directors, link wide ranging professional interests and disseminate information across the country.

Partnerships between central and local authorities, and public and private sectors are the most effective means to reduce the impact of hazards.
FEMA (US) Basic Principles, 1996.

In Gujarat, India, following the earthquake of 2001, other forms of effective partnership emerged through the collaboration of NGOs, government authorities, representatives of industry and the affected communities. One of several examples is the *Gujarat Rehabilitation Project*, a partnership forged between CARE-India, the Federation of Indian Chambers of Commerce and Industry (FICCI) and the government of Gujarat (GOG).

In part, because the local operational environment was politically charged, the resulting reconstruction process did not conform to previous or traditional approaches for organizing large-scale public works. There was also a need to foster the most productive forms of synergy between national and international interests, as well as promoting joint economic-governmental-community approaches for efficient implementation. There was a conscious effort to insure that the working partnerships would ensure participation by members of the community and that

processes would ensure that their priorities were represented in a rapidly evolving environment.

As a result, emphasis was given to address the acute shelter needs and to rehabilitate basic services including those related to health and essential needs for livelihood activities. The partnership demonstrated an opportunity to bring a combination of very highly skilled and valuable professional and technical resources to the project that would have been highly improbable were the activity approached solely from the standpoint of a governmental or NGO activity alone.

This initiative emphasized the values of community participation, developing additional livelihood opportunities, and incorporating improved risk reduction measures to minimize the effects of future hazards. The primary motivation of forming such a partnership was the shared interests of the collaborators to motivate a high level of community participation immediately following the disaster and to be responsive to the requirements of sustaining livelihoods in a manner that would establish a safe community environment.

The fact that all plans for housing and community facilities were designed to meet construction standards for both earthquake and cyclone resistance, and that they were approved by both the communities and the appropriate government technical departments, illustrate practical measures that contribute to the future reduction of risks for people who live in a naturally hazardous region. Additionally, by working during a transitional period between response and rehabilitation, the stakeholders could develop better opportunities for community mobilization, vocational training, the establishment of temporary community infrastructure, and to restart essential community activities like schools and markets.

Commercial sector and partnership interests

It is not possible to ignore the increasing economic demands for all businesses to become more efficient, with production schedules tied to smaller inventories and just-in-time deliveries. Elements of globalisation and far-reaching international trading practices expose businesses to potential disruption or loss through natural disasters.

It is because these factors, compounded by several extraordinarily costly and disruptive natural disasters during the later years of the 1990 that there has been a growing commercial awareness of a correlation between disaster preparedness, risk reduction and the survival of businesses. More than 60 per cent of the businesses affected by the Northridge earthquake in California in 1996 were out of business six months after the quake. Six years after the Great Hanshin earthquake in Kobe, Japan, the heavily damaged Port of Kobe has not been able to regain its previous competitive standing as the third busiest Japanese port.

Motivated by a desire to protect their own assets or their competitive standing in markets, commercial enterprises have invested heavily in business continuity services designed to assess and then mitigate physical or operational risks to their businesses. Local businesses, trade groups, corporate interests, labour organizations, NGOs and community leaders are all trying to find effective means to share their respective abilities and resources in the assessment, planning and reduction of the risks they share in their community. In recent years there have been important initiatives of corporate groups and other business-community relationships promoting disaster reduction activities in the common interest. Examples include the *Business and Industry Council for Emergency Planning and Preparedness (BICEPP)*, *Disaster Recovery Business Alliance (DRBA)*, *Public Private Partnership – 2000 (PPP 2000)*, and the *Institute for Business and Home Safety (IBHS)*.

A recent study conducted by the Benfield Grieg Hazard Research Centre of the University College London for DFID concludes that while in quite specific circumstances the potential for public-private partnerships may offer promise, in almost all cases they are neither easy to establish, nor to sustain without a common understanding and commitment to the values of risk reduction being shared by all parties involved. This can be very difficult to achieve considering the different organizational values and motivations, not to mention expectations, generally observed in commercial, government, and public interest organizations.

The proposed *National Disaster Management Policy of Mozambique* recognizes that the potential impact of disasters on commerce, industry and agribusiness can threaten the national economy of the country to an ever-greater degree. It is also aware that as the resources available to state structures relative to the business community diminish and as business enterprises assume responsibility for providing more essential services to the society, the private commercial sector needs to become a more crucial partner in all aspects of disaster risk management. Accordingly, strategies able to dedicate resources more effectively for preventing risks become essential, given the rapid expansion of the national economy.

With this in mind, the *National Office for Disaster Management- Instituto Nacional de Gestao de Calamidades (INGC)* has made collaboration with the private sector a priority, but certain areas of related risk will require much more attention in the future. Most significantly, the threat of serious industrial accidents or environmental disasters has increased with the development of large-scale industrial projects such as refineries or constructions of pipelines. The potential human and economic consequences of a severe cyclone damaging principal urban centres also needs to be fully considered in collaboration with the private sector's own economic interests. Such calculations should factor heavily in national economic policies for assured growth, but also to ensure measures that can protect related and essential public infrastructure.

With the growing economic impact of disasters, the private sector could be encouraged to become active both in their own risk management practices, as well as in the related contingency planning and disaster risk reduction measures of society. A strong case can be made that by lending their important political and economic influence to advocate for national strategies that can protect critical infrastructure and property assets on which their own businesses depend from avoidable losses, they would also be advancing their own strategic commercial interests.



Future challenges and priorities

The major challenges are to stimulate networks and partnerships at local, national, regional and international levels, with thematic or shared interests to work towards the objectives of disaster risk reduction. A need for coherence and unified criteria to support this in a common process is a challenge to address within the ISDR. Related priorities include:

- Enhance the critical relationship by linking actors for risk reduction with those of ecological management, social development and economic growth in order to ensure sustainable development at international, national and local levels.
- Provide incentives for the strengthening and/or building of national, sub-regional, regional and international coordination mechanisms and networks for information exchange, and the promotion of collaborative arrangements that can increase multi-disciplinary disaster reduction capacities.
- At national level, encourage the establishment of national committees or platforms for disaster reduction, with active community involvement and the participation of all relevant sectors, should be encouraged to facilitate common approaches, collection of information, undertaking of risk assessments and support to develop coherent strategies and action plans.
- In academic circles, stimulate cross-disciplinary efforts, networks and partnerships for integrated and applied research in all relevant areas of risk management, including gender-sensitive studies, cultural and social behaviour and resilience to disasters, early warning systems, hazard and vulnerability analysis, among other areas. One challenge in this regard is to pursue a common and widespread understanding of disaster risk and risk reduction practices.

challenges

