

Chapter 4

Partnerships, governance and stakeholders

4.1 Introduction

No single group or organisation can address every aspect of DRR. The scale, frequency and complexity of disasters, as both physical and social phenomena, can only be addressed by deploying a wide range of knowledge, skills, methods and resources. Therefore, risk reduction initiatives should be multi-disciplinary partnerships, enabling organisations to share ideas, work more coherently, deliver projects more effectively and influence decision-makers.

DRR partnerships can be of many different kinds: for example, between official/government and civil society organisations, professionals and the public/communities, academics and practitioners, donors and beneficiaries. Partnerships should increase the impact of initiatives by making them more sustainable and replicable. Forming alliances can also make better use of resources. Links with external organisations enable communities to obtain more and better information about hazards, DRR and adaptation. Partnerships can be both vertical (between national and more local actors) and horizontal (e.g. between government, the private sector and civil society). Although partnerships are necessary, they can also be difficult to manage. Some of the challenges in establishing and maintaining partnerships are given in the following sections, together with suggestions of ways to overcome them.

4.2 Creating partnerships

The disaster ‘community’ – those who are professionally engaged in efforts to prevent disasters and deal with their consequences – is diverse, comprising a wide range of disciplines. These include physical scientists (of many different kinds: earth scientists, hydrologists and meteorologists, for instance), social scientists (also of many different kinds, including geographers, anthropologists, sociologists and economists), engineers, architects, doctors, psychologists, development and emergency planners and humanitarian relief workers. It also comprises very different organisations, including international aid agencies, government (at all levels), NGOs and other civil society organisations, academia, consultancies, military agencies and the private sector. All have a role to play in reducing risk – together, of course, with vulnerable communities, who are the main actors in mitigation, preparedness, response and recovery at local level.

Case Study 4.1 A multi-stakeholder partnership for DRR

The Nepal Risk Reduction Consortium (NRRC), launched in 2011, is a partnership of UN agencies, the Red Cross, donors, financial institutions, the Nepalese government, national and international NGOs and technical and research institutes. Its aim is to reduce the country's vulnerability to natural disasters. It has five 'flagship' DRR programmes: school and hospital safety, emergency preparedness and response, flood risk management, community-based disaster risk management and policy and institutional strengthening. Each programme involves a different group of partners, and is coordinated by a government ministry and an international organisation. Collectively, the flagship programmes have activities in most of Nepal's 75 districts. A mid-term review in 2013 found that the NRRC had helped to create and maintain a focus on DRR nationally, and enabled collaboration between a variety of stakeholders. However, this collaboration was complicated, because many of the stakeholders were not used to working together. The programme would therefore need more time to consolidate its results, and more coordination and support would be needed in the longer term.

Nepal Risk Reduction Consortium: <http://www.un.org.np/coordinationmechanism/nrcc>.

Disasters are complex problems demanding a holistic response from these different disciplinary and institutional groups, but in many cases they do not get this. All too often, the disaster community is characterised by fragmentation along disciplinary and institutional boundaries, a lack of understanding and mutual respect between different disciplines, insufficient dialogue between different actors (e.g. between physical and social scientists, between governments and NGOs or between vulnerable communities and so-called 'experts' from outside), a culture of competitiveness and professional jealousy (fuelled by competition for funds) and a greater readiness to talk than to listen.¹ Another critical failing is that disaster specialists and people working on long-term sustainable development programmes tend to act in isolation from each other.

Partnership-building is not simple or straightforward: it requires a great deal of time, negotiation, sustained effort, transparency, trust, commitment and institutional support (see Case Study 4.2: Building and maintaining partnerships). Skilled facilitation is essential, but in some cases strong leadership may be needed to maintain momentum. Organisations

¹ J. Twigg, *Physician, Heal Thyself? The Politics of Disaster Mitigation* (London: UCL Hazard Centre, 2011), http://www.ucl.ac.uk/hazardcentre/resources/working_papers/working_papers_folder/wp1

that take on such leadership roles should seek to support the partnership process, not direct it. Often, it is committed and experienced individual members of staff who play leading roles: this creates a high level of dependence upon those individuals, and partnerships may be damaged if they leave to work for organisations elsewhere. It is also important that a partnership is not over-extended geographically, technically or administratively.

Partnerships that are based upon existing institutions and connections may achieve good results more quickly (see Case Study 4.3: Schools, young people and DRR), although there is

Case Study 4.2 Building and maintaining partnerships

Launched in 1997, Project Impact was a US government initiative to make communities more resilient by bringing local actors – government, businesses, communities and NGOs – together to plan and implement their own DRR initiatives. It marked an explicit shift in the role of government from directing to partnering and facilitating, as well as delegating decision-making to local levels. Pilot projects were set up in seven communities, but many more communities and businesses signed up to the programme nationally.

Evaluations of the seven pilot projects identified a considerable number of DRR achievements, but also pointed out some of the challenges in making multi-stakeholder partnerships work. For instance, all the participants had to make a cultural adjustment to working in a participatory way, particularly government staff and the private sector, who had little experience of this approach. A great deal of time and effort was required to keep initiatives moving. An active and effective local coordinator was vital to help maintain momentum. Outreach work was needed to ensure marginal and vulnerable groups were represented in discussions and involved in the projects.

The evaluations also warned that the pilot projects' high level of dependence on government seed funding raised questions about their long-term sustainability. Shortly afterwards, a newly elected presidential administration brought the programme to a halt. Nevertheless, it appears that Project Impact's ideas and approach have continued to influence DRR practice in some parts of the country.

Project Impact monitoring and evaluation reports in the Disaster Research Center online library (University of Delaware) at <http://udspace.udel.edu/handle/19716/753>; E. Holdeman and A. Patton, 'Project Impact Initiative To Create Disaster-Resistant Communities Demonstrates Worth in Kansas Years Later', *Emergency Management*, 2008, <http://www.emergencymgmt.com/disaster/Project-Impact-Initiative-to.html>.

Case Study 4.3 Schools, young people and DRR

Young people can play an important role as agents of change and promoters of DRR (see Chapter 6). Working with young people opens up the possibility of wider community outreach by communicating DRR information through formal pathways (e.g. local leaders and committees) and informal channels (e.g. families, friends, neighbours). The schools that children and young people attend are also important hubs, with connections to other official institutions.

Plan International's programme in El Salvador to involve young people in disaster prevention worked both with individual school boards and the national Ministry of Education. Linking groups and institutions was central to the strategy. This took a variety of forms, including children's representation on community and municipal DRR committees; integration of DRR into school teaching and protection plans; and promotion of child-centred DRR in the thinking and practice of central government. The initiative began as a pilot project in February 2005, but by July 2007 over 5,000 schools were preparing school protection plans and DRR had been integrated into the national curriculum.

J. Twigg and H. Bottomley, *Disaster Risk Reduction NGO Inter-Agency Group Learning Review* (London: DRR NGO Inter-Agency Group, 2011), http://www.preventionweb.net/files/21185_drrreviewweb5b15d1.pdf.

a risk of such partnerships being too exclusive: inclusion is key to a strong and sustainable partnership. Collaboration around a single common objective is also a good way to start the process of partnership-building (see Case Study 4.4: Developing interagency tools for DRR).

Whatever their focus or scale, DRR partnership-building efforts are likely to face a number of common challenges. Partner agencies may have different aims and mandates, values and ideologies, decision-making structures and ways of working, programming timetables, capacities, skills and funding streams, as well as facing different pressures from their donors. They may also have different perspectives on the problems to be addressed and how to resolve them; even if they use the same core concepts and terminology, they may understand or interpret them differently.

Such issues should be identified and discussed at the outset, when the partnership is being developed. Potential problems should be resolved then, as it is much harder to deal with them when initiatives are under way. Assessment of needs and opportunities could be carried out by an organisation as part of its project planning, through an initial mapping or scoping exercise to identify which aspects of DRR other agencies are currently addressing

Case Study 4.4 Developing interagency tools for DRR

In 2010, a group of humanitarian agencies working in Bolivia began to collaborate on DRR and climate change adaptation. Climate change and associated extreme events are a serious threat to impoverished, minority and vulnerable populations in the country, and agencies needed to work together to tackle such a big and complex issue. The first step was to share knowledge and expertise, from which to build a shared understanding of DRR. From this, a shared Risk Analysis and Participatory Planning (RAPP) tool was developed, derived from existing vulnerability and capacity assessment tools used globally by three of the partners, CARE, Oxfam and World Vision.

The collective development process, facilitated by a consultant from the Emergency Capacity Building Project, ensured staff understanding and acceptance, as well as a product that was adapted to local needs and conditions. As a result, agencies were able to use a common approach when working with communities, local partners and government organisations, and could compare results, pool expertise and communicate more effectively with other stakeholders, including the government.

J. Srodecki, 'Developing Interagency DRR Tools at Field Level: World Vision's Experience in Bolivia', *Humanitarian Exchange*, no. 51, July 2011, <http://www.odihpn.org/humanitarian-exchange-magazine/issue-51>; World Vision, *ECB: Adventures in Partnership, Case Study A: Coming Together To Reduce the Impact of Disasters in Bolivia*, 2011, <http://www.alnap.org/resource/18115>.

in that district. This may be particularly helpful in multi-stakeholder settings, by indicating gaps in agencies' collective coverage and highlighting the potential for new or stronger collaboration on specific issues. Roles and responsibilities may have to be altered during a partnership to respond to needs or opportunities as they are identified.

Finally, it is important to remember that power – the ability to control or influence other people's behaviour and actions – is a component in all relationships between different organisations or groups. This influence can come from possessing formal authority, socio-economic status, education, social capital, specialist knowledge and expertise and money or other material resources. Power imbalances are often found in, for example, partnerships between governments and civil society organisations, international and national or local NGOs, donor agencies and recipient organisations or groups, and technical specialists and the public. Power and influence issues should be identified and acknowledged openly, and clear and effective accountability mechanisms should be put in place to address imbalances.

Box 4.1 Key factors for success in partnerships

The Emergency Capacity Building Project was a global initiative led by six international agencies working through country-level consortia in Bangladesh, Bolivia, Indonesia, Niger and the Horn of Africa. Its aim was to improve the speed, quality and effectiveness of emergency preparedness and response by building capacity at different levels. In reviewing how to make country consortia and other forms of collaboration work effectively, the project identified ten key factors for success:

1. Defining common aims and objectives
2. Ensuring effective leadership
3. Ensuring alignment between partners (e.g. of aims, operating procedures)
4. Demonstrating visible support and reliable commitment
5. Prioritising staff time to facilitate and support the process
6. Ensuring transparent, effective communication
7. Clarifying roles and responsibilities
8. Funding the process
9. Finding common approaches
10. Managing problems within the consortium

Emergency Capacity Building Project, *What We Know About Collaboration: The ECB Country Consortium Experience*, <http://www.alnap.org/ecb/what-we-know-about-collaboration-the-ecb-country-consortium-experience>.

4.3 Governance

Disasters should be seen as a governance issue and DRR as an area of public policy. Broadly speaking, governance is the way in which societies manage their affairs in the economic, political and social spheres. It comprises values, policies, institutions and mechanisms for implementation, and it involves interactions between the state, civil society and the private sector. In the case of DRR, effective governance should include making DRR a policy priority, allocating sufficient resources to it, ensuring effective implementation and facilitating participation by all relevant stakeholders (see Case Study 4.5: Governance and disaster preparedness).²

It is generally agreed that national governments should be the main actors in risk reduction. They have a duty to ensure the safety of their citizens; only governments are likely to have

Box 4.2 Government roles in DRR

Governments play a number of roles in DRR:

- As providers of DRR goods and services (e.g. maintaining early warning systems, emergency response services, evacuation shelters, hospitals).
- As risk avoiders (e.g. ensuring investments in public infrastructure and facilities, such as roads or schools, are protected against environmental hazards).
- As regulators of private sector activity (e.g. creating and enforcing building codes and land use regulation).
- As promoters of collective action and private sector activity (e.g. public education about preparedness and business continuity).
- As coordinators of multi-stakeholder activities and DRR partnerships.

E. Wilkinson, *Transforming Disaster Risk Management: A Political Economy Approach* (London: ODI, 2012), <http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/7555.pdf>.

² United Nations Development Programme, Provention Consortium, UN-HABITAT, United Nations Volunteers, *Governance: Institutional and Policy Frameworks for Risk Reduction* (Thematic Discussion Paper, Cluster 1, World Conference on Disaster Reduction, 18–22 January 2005, Kobe, Japan), <http://www.unisdr.org/2005/wcdr/thematic-sessions/WCDR-discussion-paper-cluster1.pdf>, pp. 3–4.

Case Study 4.5 Governance and disaster preparedness

Cuba is often cited as an example of a country with effective DRR planning and operations. It has a well-organised civil defence structure that reaches down to the grass roots, an effective early warning system backed up by good scientific knowledge, well-equipped rescue teams, emergency stockpiles and other resources. These are supported by strong political commitment to DRR at all levels of government, risk-aware planning and land use management policies and regulations, widespread public trust in the government's ability and willingness to act, extensive disaster education and training programmes, considerable experience of mass mobilisation and a strong sense of solidarity and social cohesion. The state is also committed to reducing the social and economic inequalities that contribute to vulnerability, and invests heavily in public services such as education, health and infrastructure.

The system's effectiveness is particularly evident in the case of hurricanes. Six major hurricanes hit Cuba between 1996 and 2002, but only 16 people died. Hurricane Michelle in November 2001 damaged or destroyed 25,000 homes, but only five deaths were reported. Some 700,000 people (out of a population of 11m) were evacuated. In Havana, electricity was turned off to avoid deaths or injuries from electrocution, and the water supply was turned off in case of contamination. Havana's 2m inhabitants stockpiled water and food, and citizens helped to tie loose roofing down and to clear debris that might have been dangerous if picked up by strong winds. The success of these arrangements was due to an effective warning and communication system, memory of previous disasters (encouraged by the authorities), the ability to mobilise people at neighbourhood level and the general population's trust in official warnings and advice.

It has been questioned whether the Cuban model can be replicated elsewhere. Cuba is a single-party political system in which the government plans and directs the economy, controls the market and the media and is the sole provider of social services. It has also been argued that the country's disaster management system is less effective when it comes to long-term mitigation and post-disaster recovery. Nevertheless, the system contains many key features of good DRR practice that can be adopted or adapted for use elsewhere.

M. Thompson and I. Gaviria, *Weathering the Storm: Lessons in Risk Reduction from Cuba* (Boston, MA: Oxfam America, 2004), <http://www.eird.org/isdr-biblio/PDF/Cuba%20Weathering.pdf>; B. Wisner, *Lessons from Cuba? Hurricane Michelle, November, 2001*, 2001, <http://www.radixonline.org/cuba.html>; IFRC, *World Disasters Report 2002* (Geneva: International Federation of Red Cross and Red Crescent Societies, 2002), pp. 41–43; B. E. Aguirre, 'Cuba's Disaster Management Model: Should It Be Emulated?', *International Journal of Mass Emergencies and Disasters*, 2005, <http://www.ijmed.org/articles/316/download>.

the resources and capacity to undertake large-scale multi-disciplinary initiatives, and a mandate to direct or coordinate the work of others. Governments also create the policy and legislative frameworks within which risk reduction can be accomplished. In practice, however, governments may lack capacity and resources, especially in poorer countries, but attitude and management are often the root problems: failure to recognise the importance of hazards and vulnerability to national development, coupled with short-term planning and inadequate organisation.

Governments are not monolithic. They are divided by function, hierarchy and politics, all of which can work against sustained risk management. In most countries, a large number of government agencies have a legitimate role in disaster management, including civil protection organisations, scientific research institutions, environmental protection agencies and finance ministries. Simply coordinating these may be a major task. In many disaster management systems, integration between higher and lower levels is weak.

Although there has been considerable improvement worldwide in government capacities, institutional systems and legislative provisions for DRR in recent years, progress has been uneven. National changes have often not made a significant difference at lower levels of government, where there is likely to be a significant need for awareness-raising, training and capacity-building.

Government policies can sometimes be a major contributor to people's vulnerability to hazards. Disaster management efforts by one branch of government, such as civil defence, may be undermined by the general thrust of economic, social or environmental policies. For example, the value of establishing tropical cyclone early-warning systems and building cyclone shelters is seriously weakened if coasts are being stripped of natural defences such as mangrove forests in order to build commercial shrimp farms encouraged by export-driven economic programmes. Disaster management can also become subject to political pressures. Casualty and damage figures are often used by political parties for their own purposes: opposition parties may try to blame governments for disasters, or make them look inept or uncaring in their management of crises. In the same way, governments may wish to downplay the impact of disasters to avoid blame, or exaggerate the human and economic casualties in the hope of attracting international aid.

Disasters often reveal weaknesses in the current policy and practice of disaster management, and can stimulate change and innovation (see also Chapter 17: Risk reduction after disaster).³ There is certainly evidence for this, although the nature and extent of such change is unpredictable, changes may be unplanned as well as deliberate and the lessons drawn from one disaster experience are not necessarily relevant to other crises. Case Study 4.6 (Reorganising disaster governance after disaster) is an example of how a major disaster led to significant legislative and administrative changes.

Case Study 4.6 Reorganising disaster governance after disaster

The devastating Indian Ocean tsunami on 26 December 2004 killed more than 165,000 people in Indonesia and affected more than 700,000. Reviewing the experience, the Indonesian government decided on major reforms of its national disaster management arrangements. A new disaster management law that came into force in 2007 recognised the need for a comprehensive DRR approach throughout the country, integrated into development planning and with the participation of all relevant stakeholders, including NGOs and communities. In 2008 a new national disaster management agency was established to coordinate activities in all aspects of disaster management, reporting directly to the president. Authority and responsibility for DRR measures was decentralised to an extent from central to local (provincial, district and village) authorities, with a decree requiring the establishment of local disaster management agencies in all provinces by 2009. Subsequently, DRR and climate change adaptation were integrated into national development policies and plans, and into legislation on land use, urban planning and coastal management. New national DRR and disaster management plans and guidelines were issued. International organisations were encouraged to support these processes.

Establishing this radically new organisational structure and implementing the new DRR agenda proved challenging, mainly because of limitations in technical, material and human capacities, as well as resource constraints. Nevertheless, these innovations mark a fundamental change in the way DRR is perceived and implemented in Indonesia.

C. Gaulin, *Disaster Risk Management in Indonesia: From Theory to Practice* (Paris: Action Contre le Faim, 2013); R. Djalante et al., 'Building Resilience to Natural Hazards in Indonesia: Progress and Challenges in Implementing the Hyogo Framework for Action', *Natural Hazards*, 62 (3), 2012.

³ J. Birkmann et al., 'Extreme Events and Disasters: A Window of Opportunity for Change?', *Natural Hazards*, 55, 2010.

4.4 Decentralisation

Over the past 20–25 years, many governments have progressively decentralised a range of their responsibilities from national to local levels. This has had both positive and negative consequences for risk reduction. On the positive side, sharing responsibilities between central, intermediate and local levels of government helps to mainstream DRR across government structures, as well as giving local levels a greater sense of ownership. Decentralisation can also change how communities and local NGOs interact with state institutions. Being closer to the communities involved, staff in local organisations of all kinds are more likely to understand or even share their needs, and they are more accountable. Local government institutions may be less politicised than those of central government, and it may be easier to develop partnerships between the public and NGO sectors to strengthen local capacities. There is no standard mechanism for DRR partnerships between local government and civil society organisations. It takes time and effort to build up levels of trust and cooperation to the point where they can significantly improve capacity to manage disasters and emergencies. Communities seeking to engage local government as a partner or supporter of DRR often need training in how to lobby officials and work in partnership. Joint planning or VCA exercises can provide an entry point to longer-term collaboration.

Decentralisation can lead to DRR becoming isolated from mainstream government decision-making. Good collaboration between sectors and across different levels of administrative and operational responsibilities is therefore essential. Central governments may simply abdicate their responsibilities, leaving local government and NGOs to take on the task of managing DRR, even though they often lack the capacities, technical skills and finances to do so. Communities do not necessarily lower their expectations of local government to reflect this shift. They may continue to expect it to undertake structural mitigation measures, such as building dykes and embankments, just as they expected the national government to do. Local administrations' room for action may be restricted by parallel or competing governance structures (e.g. traditional leaderships, parastatal agencies) or by higher-level planning decisions and regulations.

Another fundamental, but less visible, weakness of decentralisation is that it puts responsibility for implementation on those who can only address local-level causes of vulnerability. Local government does not have the jurisdiction or political power to address the deeper political, social and economic forces that put people at risk. Under local government direction, disaster reduction can become fragmented into a series of small-scale initiatives, focusing on individual hazard events and artificially separated from the surrounding vulnerability context. The scale of a disaster may overwhelm local resources and capacities.

Case study 4.7 Challenges to institutionalising DRR in local government in Mexico

Official policy in Mexico is to integrate DRR at all levels of government. The country's disaster management structure is highly decentralised, on paper. In practice, however, local municipalities have very limited capacity, especially in poorer and rural areas. They often have to seek funds from state and federal governments, on a case-by-case basis, and there is heavy reliance on external resources during and after emergencies. Municipal civil protection teams have very few staff and there is little continuity (many civil protection directors, who tend to be political appointees, are replaced after elections).

There is little public pressure on the government to reduce disaster risk. Community organisations focus on more pressing day-to-day needs, such as access to improved services (healthcare, education, drinking water), employment and crime. Effective local-level DRR may rely on intervention by other external actors. For example, in Yucatan after 2003, UNDP supported a major community resilience programme, based on training local 'promoters', that reached more than 260 localities. Although popular with communities and civil society organisations, the intervention was viewed with suspicion by many municipalities. Nevertheless, the involvement of UNDP and other local NGOs did help some communities to build more effective relationships with local government to strengthen DRR.

E. Wilkinson, *Building a 'Culture of Prevention': Challenges to Institutionalising Disaster Risk Reduction in Local Development in Mexico* (London: UCL Hazard Centre, 2009), http://www.ucl.ac.uk/hazardcentre/resources/working_papers/working_papers_folder/wp21.

4.5 Widening civil society participation

NGOs (local, national and international) now feature in many disaster reduction plans. Yet they are often regarded as minor players, especially in countries whose governments remain reluctant to concede authority and resources to civil society. They have also found it hard at times to gain acceptance internationally. Governments do not always welcome the growth of civil society and some resist any expansion of its role, especially where this involves criticism of the government. Disasters can open up opportunities for civil society organisations to take on a greater role, but governments may take firm steps to close these down thereafter (see Case Study 4.8: Civil society and the state after disaster). Under particularly authoritarian regimes, more extreme repressive measures may be taken.

Case Study 4.8 Civil society and the state after disaster

In August 1999 an earthquake devastated the Marmara region of Turkey: over 17,000 people were killed and an estimated 100,000 houses and 16,000 businesses destroyed or severely damaged. The scale of the disaster put enormous pressure on emergency management systems. In the first few weeks after the earthquake, state institutions were ineffective and civil society organisations filled the gap. The government's inability to respond adequately drew sharp criticism from the media, NGOs and affected people. The media focused repeatedly on government corruption as a factor contributing to the disaster.

In the months that followed the central authorities regained control and there was a shift in state attitudes towards civil society, from spontaneous acts of collaboration to systematic acts of control and threats. Only designated state authorities and a few state-friendly NGOs were allowed to deliver aid to earthquake victims. Other NGOs were told to leave: if they refused, their depots for donated goods were closed, they were threatened with having water and electricity supplies turned off and some had their bank accounts frozen. Members of the Turkish Association of Architects and Civil Engineers were refused permission to inspect destroyed and damaged buildings, and some lawyers claimed that evidence to convict the building contractors was being destroyed by the government. A Turkish television channel, Kanal 6, was closed down for a week for being too critical of the government's response.

R. Jalali, 'Civil Society and the State: Turkey after the Earthquake', *Disasters*, 26(2), 2002.

Disasters can also open up opportunities for civil society organisations to operate more freely and collaborate with new partners. In Myanmar, where the government had placed severe restrictions on NGO activities, relief and recovery efforts after Cyclone Nargis in 2008 opened the way for more collaboration between local and international NGOs across a range of development and humanitarian sectors, and the number of local NGOs and CBOs increased.⁴

In addition to conventional NGOs, a wide range of civil society organisations can make effective contributions to DRR. Examples include the following (partnerships with grass-roots groups are discussed in Chapters 6 and 7):

⁴ S. R. Saha, *Working with Ambiguity: International NGOs in Myanmar* (Cambridge, MA: Harvard University, 2011), http://www.hks.harvard.edu/var/ezp_site/storage/fckeditor/file/pdfs/centers-programs/centers/hauser/publications/reports/myanmar_report_final_version_2011_09_08.pdf.

- Trade unions are active in promoting health and safety in the workplace, and also give high priority to protecting the natural environment and socially responsible economic development. They have organisational skills and mass membership that could be mobilised to tackle hazards and vulnerability generally. The same is true of other professional or trade associations and cooperatives (see Case Study 4.9: Cooperatives and disaster preparedness).
- Religious institutions and faith-based groups have traditions of supporting the needy and disaster victims. Local faith organisations with established congregations and membership affiliations are often a source of volunteers and sometimes leaders in emergencies, but there is a risk that such groups will favour people of their own religion, and members of minority religions are among the more vulnerable groups in some societies. Nevertheless, the extensive grass-roots outreach of faith groups gives them a potentially significant role in risk reduction.
- Universities and other research institutions are improving our understanding of hazards, vulnerability and disaster management. Academic networks and publications constitute well-established and effective channels for sharing knowledge between researchers. International networking and information-sharing is particularly strong among scientists and engineers. Better interaction between disaster researchers, technical institutions and practitioners is needed, but there are many examples of collaboration, such as scientists providing information about hazards and long-range forecasting, universities undertaking market research to support livelihood product diversification and technical bodies developing guidelines and standards (see Case Study 4.10: Academic collaboration for DRR in Africa).
- The mass media are potentially important partners in risk reduction (see Chapter 10).
- Professional groups with technical skills and experience often offer support on a voluntary basis. Specialist NGOs can help with this, such as RedR (which provides training for aid workers, facilitates sending technical specialists to assist in relief and rehabilitation and supports capacity-building of local organisations) and Operation Florian (through which UK fire-fighters donate used equipment and provide technical training to fire and rescue services in other countries).⁵

4.6 Networks

Many development and humanitarian practitioners have considerable experience of working with vulnerable people to protect them against hazards and help them recover from disasters. Often, this experience is neither documented nor shared, usually because

⁵ See <http://www.redr.org.uk>; <http://www.operationflorian.com>.

Case Study 4.9 Cooperatives in disaster preparedness

The Japanese Consumers' Cooperative Union (JCCU) represents cooperative organisations across the country. With member cooperatives, the JCCU runs disaster preparedness workshops to educate local residents. Workshop participants identify key emergency facilities (e.g. evacuation shelters, fire stations and hospitals) and vulnerable households, and mark their locations on neighbourhood maps. The completed maps are then used in scenario and simulation exercises to identify appropriate preparedness and response actions for the neighbourhood. The initiative was begun in 2004 in Chiba Prefecture by a group of cooperative workers who had survived the 1995 Kobe earthquake. It subsequently expanded to become a nationwide programme with over 20m members. Two hundred facilitators were trained, and in 2008 150 workshops were held, many of them supported by local and national government organisations.

UNISDR, *Private Sector Activities in DRR: Good Practices and Lessons Learned* (Bonn: UNISDR, 2008), <http://www.unisdr.org/we/inform/publications/7519>, pp. 28–32.

Case Study 4.10 Academic collaboration for DRR in Africa

Established in 2006, PeriperiU is a partnership of African universities established to build local DRR capacity. It has ten member universities (in Algeria, Ethiopia, Ghana, Kenya, Madagascar, Mozambique, Senegal, South Africa, Tanzania and Uganda) and involves more than 70 academics. The members have developed and delivered new academic programmes and more than 50 short courses and training modules for practitioners from government and civil society organisations. The consortium is also a vehicle for knowledge exchange between the universities and between different academic disciplines.

Source: <http://www.riskreductionafrica.org>.

Case Study 4.11 Global and national networks for DRR

Established in 2007, the Global Network of Civil Society Organisations for Disaster Reduction (GNDR) has more than 450 members from civil society organisations, including national and international NGOs, community-based organisations and academic and research institutions. Activities undertaken by the network and its members include sharing information (through meetings, online discussions and field visits), taking part in national and global DRR platforms and other conferences and events, organising meetings and engaging with other networks. Every two years GNDR publishes a major survey, *Views from the Frontline*, on progress in implementing DRR at local level and challenges to achieving resilience. This presents the views of communities, civil society organisations and local authorities in areas most affected by disasters: the 2013 edition collected evidence from more than 21,500 local respondents in 57 countries.

Source: <http://www.globalnetwork-dr.org/home.html>.

The Disaster Risk Reduction Network Philippines (DRRNetPhils) is a nationwide grouping of over 300 civil society organisations, communities and practitioners. It was established in 2008 to advocate for improvements to disaster management legislation then under discussion in parliament. Under the influence of the network, the 2010 Disaster Risk Reduction and Management Act put greater emphasis on community resilience, strengthening local DRR capacities and tackling the root causes of vulnerability, in line with the aims of the Hyogo Framework for Action and internationally accepted good practice. DRRNetPhils has also published guidance on the contents of the 2010 act and how to apply it.

See: <http://www.dap.edu.ph/cshd/drrnetphils/index.htm>; E. Agsaoay-Sano, *Primer on the Disaster Risk Reduction and Management (DRRM) Act of 2010* (Quezon City: DRRNetPhils, 2011), <http://drrknowledge.net/primer-on-the-disaster-risk-reduction-and-management-drrm-act-of-2010>.

project staff are too busy and the institutions they work for do not give sufficient priority to organisational learning. Staff are often unaware of similar work in other organisations, or even in other parts of their own organisation.

Better networking – in the broadest sense of the term – is therefore essential. It improves access to, and exchange of, information and expertise, and can help network members to maximise their impact through the synergy that comes from partnerships and greater cooperation. The proliferation of development and emergency networks in recent years, especially at national and international levels, indicates that agencies have recognised the value of better networking. The Humanitarian Practice Network is one successful example of this: it now has almost 9,000 members from around the world, and there were 250,000 visits to its website last year.

A number of significant DRR networking initiatives have been established at global, regional, national and sub-national levels, typically involving academics, technical specialists and other practitioners for research, publication, training, the promotion of good practice and advocacy. The lack of effective inter-disciplinary networking remains a major stumbling block but is slowly being addressed. The UNISDR has promoted the establishment of formal national platforms around the world, with the aim of involving different stakeholder groups in disaster policy-making, improving practice and integrating DRR into development.⁶ Local-level networks tend to focus on particular risk reduction initiatives, such as early warning or watershed management.

There are many types of network and many practical challenges to networking. Common problems faced by networks include a lack of clear objectives, disparate membership, domination by particular organisations or interest groups, excessive centralisation of network administration and communications, lack of critical debate about achievements, competition between participants, lack of resources (and in some cases donor interference) and the difficulty of monitoring and evaluating impact.⁷

Disparity of membership is perhaps the most important problem in disaster reduction networking. Creating a forum at which all the different viewpoints can be adequately represented has proved beyond the capacity of some networks, and others have struggled because of the perceived dominance of particular interest groups. It is easier to form a network around specific academic or practical disciplines (e.g. social scientists, nutritionists) or themes (e.g. arsenic in Bangladesh), but this should not be at the expense of multi-disciplinary networking, to which everyone should be encouraged to devote some of their time.

⁶ See <http://www.unisdr.org/we/coordinate/national-platforms>.

⁷ P. Starkey, *Networking for Development* (London: International Forum for Rural Transport and Development, 1997).

4.7 Private sector partnerships

Businesses are heavily involved commercially in DRR, providing engineers, consultants, software designers, insurers, transporters and suppliers of goods and services of many kinds. The role of the private sector in disaster management is sometimes a contested issue, especially with regard to potential clashes between commercial interests and broader social and humanitarian objectives. Disasters can create profit-making opportunities for businesses.⁸ Nevertheless, attempts have been made to encourage initiatives to mitigate risks that are both commercially viable and support poor and vulnerable groups, for example through micro-insurance (see Chapter 12). More effort is also going into making businesses aware that they depend on local people, resources and infrastructure, and should take steps to protect these as well as their own premises and goods.

There is much potential for corporate social responsibility (CSR) initiatives in risk reduction. CSR involves businesses recognising their impact on society and the environment, and acknowledging some degree of responsibility for making a more positive contribution to sustainable development. It often involves dialogue and partnerships with other stakeholders in government and society. There are many examples of public-private and CSR-inspired initiatives in DRR, such as hardware stores donating materials or providing them at low cost to encourage homeowners to protect their properties, allowing use of business premises as shelters or distribution centres or providing free technical support. As part of an Indonesian government-private sector initiative to prepare for tsunamis (launched in 2008), members of the Bali Hotel Association agreed to open their hotels in an emergency to local people who could not reach safe evacuation locations; they also supported public education events and putting up evacuation route signs.⁹ In the UK, supermarket chains have agreed to provide disaster response agencies with out-of-hours access to obtain food and essential provisions; a hotel chain has offered its hotels as emergency rest centres and restaurants have agreed to provide food vouchers to displaced people.¹⁰ In Project Impact in the United States (see Case Study 4.2: Building and maintaining partnerships), business inputs to local DRR initiatives included home supplies stores giving discounts on products for household preparedness, employees being given time off to take part in projects and supporting public education activities, for example by paying for materials and providing space for displays and airtime for announcements.

Insurers and other firms publish and distribute information on disaster impact and risk reduction measures; insurance and reinsurance companies have sponsored important hazards

⁸ N. Klein, *The Shock Doctrine: The Rise of Disaster Capitalism* (London: Penguin Books, 2007).

⁹ UNISDR, *Private Sector Activities in DRR: Good Practices and Lessons Learned* (Bonn: UNISDR, 2008), <http://www.unisdr.org/we/inform/publications/7519>, pp. 20–23.

¹⁰ K. Williams, *Emergency Planning in the UK: The Players, the Partnerships and the Pressures* (London: Aon Benfield UCL Hazard Centre, 2009), https://www.ucl.ac.uk/hazardcentre/resources/working_papers/working_papers_folder/wp25.

research, and in some public–private insurance schemes premiums are reduced if households or communities demonstrate that they have taken certain steps to protect their property. Business was active in rehabilitation projects in Gujarat after the earthquake in January 2001, and in the Philippines and the United States businesses have created NGOs to address disaster problems. Private sector involvement in technological innovation, such as electronic cash transfers, telecommunications and remote sensing, also supports DRR and humanitarian efforts.

Although companies of all kinds are often keen to give cash and in-kind support to emergency relief, they appear to be far less involved in longer-term DRR, especially in lower-income countries. The degree of business engagement with DRR issues in a particular country may be related to the general level of awareness of these issues in that country. It also seems that commercial pressures on small businesses everywhere make it hard for them and their employees to find time to take part in local DRR activities. Where there is business activity, it is usually ad hoc and short-term and, significantly, addresses only the immediate symptoms of need or vulnerability, not the root causes – for which businesses may in part be responsible.

In some countries, companies have little confidence in government or the NGO sector, preferring to go it alone. Elsewhere, governments and international organisations have to persuade businesses to take part in collaborative activities. Where businesses take the initiative, this often takes the form of unilateral actions closely linked to their own activities (e.g. provision of materials and information) or interests (e.g. sponsorship of research and training). Business leadership and commitment are most likely to come from sectors most closely linked to issues of risk and safety: insurers, principally, but also engineers, retailers, architects and telecommunications enterprises. Such firms have a large commercial stake in risk reduction and understand the problems associated with it.

4.8 Military involvement in disaster reduction

In most countries, armed forces personnel, equipment, transport and other facilities are called upon to support emergency services during disasters. They may take a prominent role in response to major disasters – for example the earthquakes in Pakistan in 2005 and China in 2008 – especially if civil authorities are overwhelmed. Military engineers have sometimes been involved in risk reduction, usually by putting up structural mitigation measures, such as flood embankments. Many disaster management organisations originated in civil defence, while many civil protection/civil defence institutions have military links (which has led to an often uneasy relationship between disaster planners and civil defence agencies).

Civil society tends to be wary of the military's motives in relief assistance and mitigation work, especially in countries where the armed forces have a history of interference in domestic politics. The military's command-and-control approach also goes against modern risk management philosophy, which stresses coordination, participation and partnership. However,

since the military clearly can play a role, and has considerable capacity, greater dialogue and collaboration are needed. For example, civilian agencies could benefit from military expertise in contingency planning and the development of scenarios and training exercises. Joint contingency planning and development of emergency coordination mechanisms can improve disaster preparedness capabilities, as well as building mutual understanding and trust.¹¹

4.9 Regional and international collaboration

Disasters are often ‘shared events’, crossing national boundaries and affecting whole regions. A Caribbean hurricane may go on to hit Central America; where major rivers cross national boundaries, such as those entering Bangladesh or Mozambique, floods that begin in one country can spread to others; volcanic ash can be blown across a whole continent, affecting agriculture and aviation. Countries in the same region tend to face similar hazard threats and often have similar institutional and social structures.

This creates a strong incentive for national governments to collaborate, especially in sharing forecasting and warning data. Systems for sharing scientific information between countries – particularly hydro-meteorological data for early warning – are well established and can be very effective. More wide-reaching regional agreements include the Association of South-East Asian Nations (ASEAN) Agreement on Disaster Management and Emergency Response (AADMER), signed by ASEAN foreign ministers in 2005, which is a legally binding agreement for member states to promote regional cooperation in DRR and disaster preparedness and step up joint emergency responses to disasters in the region. After Cyclone Nargis in 2008, ASEAN played a vital role in brokering collaboration between the government of Myanmar and the international aid community.¹²

Collaboration on DRR between national governments is less common. Disasters may raise tensions between states. The sudden release of a build-up of floodwater from dams in one country can cause severe flooding in a neighbouring state downstream. In South Asia, where large river systems cross national borders, disputes over water use have hindered the establishment of regional flood forecasting and warning systems.¹³ Concern is growing about

11 E. Ferris, *Future Directions in Civil–Military Responses to Natural Disasters*, Australian Civil–Military Centre, 2012, <http://www.brookings.edu/~media/research/files/papers/2012/5/civ%20mil%20disasters%20ferris/05%20civ%20mil%20disasters%20ferris.pdf>.

12 L. Mercado Carreon, ‘Working with ASEAN on Disaster Risk Reduction and Disaster Management’, *Humanitarian Exchange*, no. 50, 2011, <http://www.odihpn.org/humanitarian-exchange-magazine/issue-50>; <http://www.aadmerpartnership.org>.

13 Navin Singh Khadka, ‘South Asia Disunity “Hampers Flood Warnings”’, BBC, 19 July 2013, <http://www.bbc.co.uk/news/science-environment-23358255>.

Case Study 4.12 Regional cooperation in flood management

The Mekong River Commission (MRC), set up in 1995, is an inter-governmental agency working directly with the governments of Cambodia, Laos, Thailand and Vietnam on the joint management of shared water resources and sustainable development of the Mekong River. It plays a key role in regional decision-making and the development of common rules and procedures; it is also a knowledge hub on fisheries, navigation, flood and drought management, environmental monitoring and hydropower development.

Annual floods play a vital role in agriculture and freshwater fisheries, and provide water that can be stored for irrigation in the dry season; but they can also result in loss of life, damage to agriculture, property and infrastructure, and disruption of social and economic activities. The average annual cost of floods in the Lower Mekong Basin is \$60–70m, with most of the damage in Cambodia and Vietnam.

Drawing on data from 138 hydro-meteorological stations, the MRC's Flood Management and Mitigation Centre, based in Phnom Penh, issues daily flood forecasts and warnings to governments, NGOs, the media and the public during the flood season. A regional Flood Forum coordinates flood-management activities with planners, scientists, international organisations and civil society organisations. It is also a platform for sharing experiences, information and lessons learned through training workshops and exchange visits.

Mekong River Commission website: <http://www.mrcmekong.org>.

the possibility of 'water wars' between states as environmental destruction, population growth and climate change combine to make water scarce in already dry regions.

Disasters can also stimulate improvements in political relations. For example, it is generally agreed that the disaster in Aceh, Indonesia, caused by the December 2004 tsunami was a contributory factor towards the successful conclusion of peace negotiations between the Indonesian government and the Free Aceh Movement to resolve a long-running conflict. Both sides were involved in disaster response and peace was essential for relief distribution and rehabilitation.¹⁴

¹⁴ J.-C. Gaillard, E. Clavé and I. Kelman, 'Wave of Peace? Tsunami Disaster Diplomacy in Aceh, Indonesia', *Geoforum*, 39(1), 2008.

A lack of trust between national governments and international aid agencies can hinder collaborative preparedness efforts: this has often been a problem in responding to famine early warnings in the Sahel, for instance. However, there is an important role for regional and international organisations in coordination, information sharing and resourcing (see Case Study 4.12: Regional cooperation in flood management). For example, the Applied Geoscience and Technical Division (SOPAC) of the Secretariat of the Pacific Community has been providing scientific information and technical assistance for over 40 years to Pacific island countries and territories, helping them to manage natural resources more effectively, adapt to environmental change and strengthen risk management practices. Similarly, the Caribbean Disaster Emergency Management Agency (CDEMA) supports island states in the Caribbean to build disaster management capacities, improve knowledge management, mainstream DRR into other sectors and strengthen community resilience, in addition to coordinating response efforts and promoting policy change. The World Health Organisation (WHO)'s Healthy Cities project is a global initiative to engage local governments in health development through greater political commitment, building institutional capacities, collaborative planning and innovative projects. It has a particularly extensive programme in Europe, where more than 1,400 cities and towns are involved in national and regional healthy cities networks.¹⁵

¹⁵ See <http://www.sopac.org>; <http://www.cdema.org>; <http://www.euro.who.int/en/health-topics/environment-and-health/urban-health/activities/healthy-cities>.