



Disaster risk
reduction and
the International
Federation



The International Federation's Global Agenda (2006-2010)

Over the next five years, the collective focus of the Federation will be on achieving the following goals and priorities:

Our goals

Goal 1: Reduce the number of deaths, injuries and impact from disasters.

Goal 2: Reduce the number of deaths, illnesses and impact from diseases and public health emergencies.

Goal 3: Increase local community, civil society and Red Cross Red Crescent capacity to address the most urgent situations of vulnerability.

Goal 4: Promote respect for diversity and human dignity, and reduce intolerance, discrimination and social exclusion.

Our priorities

Improving our local, regional and international capacity to respond to disasters and public health emergencies.

Scaling up our actions with vulnerable communities in health promotion, disease prevention and disaster risk reduction.

Increasing significantly our HIV/AIDS programming and advocacy.

Renewing our advocacy on priority humanitarian issues, especially fighting intolerance, stigma and discrimination, and promoting disaster risk reduction.

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International Federation

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International Federation of Red Cross and Red Crescent Societies

P.O. Box 372

CH-1211 Geneva 19

Switzerland

Telephone: +41 22 730 4222

Telefax: +41 22 733 0395

E-mail: secretariat@ifrc.org

Web site: www.ifrc.org



Introduction

Hurricane Wilma destroyed properties and livelihoods in Florida in 2005.

The frequency and intensity of so-called ‘natural’ disasters is increasing – mainly due to climate change, rapid population growth, unplanned urbanisation and environmental degradation. Recent events such as the South Asia tsunami in December 2004, Hurricane Katrina, which hit the United States in September 2005, and the South Asia earthquake in October 2005 have heightened public awareness of their devastating impact.

Disasters are a humanitarian *and* a development concern. There is a growing body of evidence that not only are countries of low human development disproportionately affected by the occurrence and impact of disasters but that people’s vulnerability to hazards has increased through failed development.²

“Natural disasters exert an enormous toll on development. In doing so, they pose a significant threat to prospects for achieving the Millennium Development Goals – in particular, the overarching target of halving extreme poverty by 2015.”

United Nations Development Programme¹

At its core, disaster risk reduction is about reducing human vulnerability and strengthening resilience to the risks posed by natural hazards. Moreover, disaster risk reduction concerns the collective ability of the International Federation of Red Cross and Red Crescent Societies to deliver on its Global Agenda,³ which commits to “reduce the number of deaths, injuries and impact from disasters”. This paper, therefore, while providing an overview of the global context will seek to explain what disaster risk reduction means for the International Federation and to set out a framework to help the 185 member National Societies make communities safer and more resilient to disasters.

¹ United Nations Development Programme (2004), Reducing disaster risk – a challenge for development. http://www.undp.org/bcpr/disred/documents/publications/rdr/english/rdr_english.pdf

² United Kingdom’s Department for International Development (DFID) (2004), *Disaster risk reduction: a development concern*. <http://www.dfid.gov.uk/pubs/files/disaster-risk-reduction-scoping.pdf>

³ Targets set for the International Federation for the next five years and adopted at the 15th session of its General Assembly held in Seoul, Republic of Korea, in November 2005.

Disaster risk reduction: a global priority

The global context

The impact of natural disasters

While the overall number of people killed by disasters is decreasing, the number of disaster events and those affected by them is rising rapidly – from around 70 million per year in the 1970s to some 213 million a year over the last decade. In the same period, some US\$ 734 billion of damage was caused by disasters. Asia alone accounted for 41 per cent of the total damage.

While sudden-impact disasters with resulting high death tolls, such as earthquakes and tsunamis, tend to make media headlines, meteorological disasters, which typically have low casualties, cause extensive damage and can affect a large number of people. In 2004, for example, floods affected an estimated 110 million people in Bangladesh, China and India.⁴ A further category of disasters are those usually referred to as ‘small-scale disasters’. Such events, which include local floods, landslides and fires, rarely reach the media or disaster statistics. Yet, due to their regular frequency and cumulative effect on livelihoods, these disasters are often as devastating as more sudden-impact events.

Disasters threaten development

In addition to bringing death, injury and illness, disasters also undermine fragile development processes at all levels. Crucial infrastructure is destroyed and livelihoods are disrupted for many and wiped out for some. After Hurricane Mitch struck Central America in 1998, the president of Honduras, Carlos Flores, said, “We lost in 72 hours what we have taken more than 50 years to build, bit by bit.” It can take people years to recover from disasters. They can generate poverty and make life even harder for those who are already poor.

An earthquake in Iran virtually wiped out the town of Bam in 2003.



Furthermore, while there is growing recognition that every dollar spent on disaster risk reduction saves US\$ 3-4 in terms of the reduced impact of disasters on valuable development gains, research has shown that many donor organizations continue to spend less than 10 per cent of their humanitarian aid budgets on reducing disaster risk. Moreover, a significant number of donors, governments and development agencies do not systematically assess disaster risk within their development planning.⁵

Global risk and vulnerability is increasing

Natural disasters affect poor countries and poor communities disproportionately. The World Bank reports that: “This disproportionate effect on developing countries has many explanations. Lack of development itself contributes to disaster impacts, both because the quality of construction often is low and building codes, and registration processes, and other regulatory mechanisms are lacking, as well as numerous other development priorities displace attention from the risks presented by natural events”.⁶

Global risk and vulnerability to natural disasters is increasing. This is due to a range of factors including:

- **Rapid population growth** increases pressure on land, public services, employment opportunities, etc.
- **Unplanned urbanization** has often led to the occupation of marginal land and the growth of informal settlements.
- **Environmental degradation.** Soil erosion in some areas has led to decreased crop yields; deforestation has left slopes exposed and areas more vulnerable to flash flooding.
- **Climate change**, which is leading to an increase in the frequency and intensity of extreme weather events.



A cartonera eking out a livelihood by sifting paper waste in urban Argentina.

“Natural hazards are a part of life. But hazards only become disasters when people’s lives and livelihoods are swept away. The vulnerability of communities is growing due to human activities that lead to increased poverty, greater urban density, environmental degradation and climate change.”

Kofi Annan, United Nations Secretary-General, 8 October 2003, International Day for Disaster Reduction.⁷

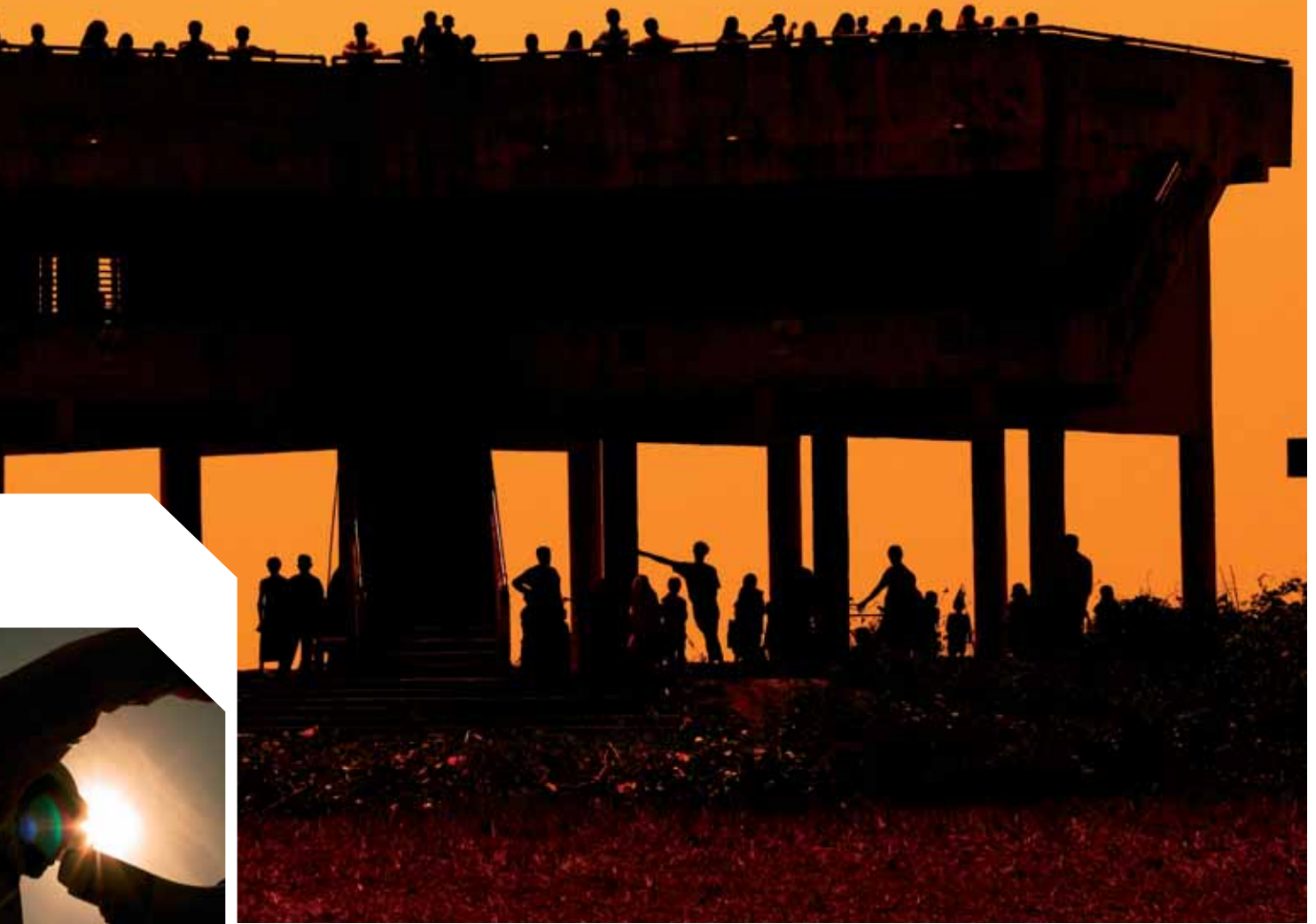
⁴ International Federation (2005), World Disasters Report.

⁵ Tearfund (2005), Learn the lessons.

<http://www.tearfund.org/webdocs/Website/News/Disasters%20Media%20Report%20-%20SMALLER%20VERSION.pdf>

⁶ Hazards of Nature, Risks to Development, World Bank 2006

⁷ http://www.unisdr.org/eng/public_aware/world_camp/2003/pa-camp03-sg-eng.htm



Bangladesh Red Crescent Society shelter provides a safe haven during cyclones.

Defining disaster risk reduction

The extensive scope of disaster risk reduction has meant that it can be understood differently not only by various organisations but, at times, by individuals within the same organisation. It would follow therefore that the successful promotion of disaster risk reduction requires a continued simplification of the term. The following commonly used definitions do provide some help:

“The [...] term ‘disaster reduction’ or ‘disaster risk reduction’ is often used to mean the broad development and application of policies, strategies and practices to minimise vulnerabilities and disaster risks throughout society, through prevention, mitigation and preparedness.”⁸

“The conceptual framework of elements with the possibilities to minimize vulnerabilities and disaster risks throughout society, to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development.”⁹

The three main components of disaster risk reduction can be seen as a continuum:

- **Preparedness for response.** Ensuring adequate systems and capacity exist for a timely and effective local, national, regional and international response.
- **Mitigation/prevention.** These are specific corrective measures to reduce risk and can include strengthening schools or building drainage dykes.
- **Risk reduction fully integrated into sustainable development planning.** This is the key measure to realize ‘safe’ development.

The process of disaster risk reduction typically includes risk assessment and identification, risk analysis, planning for risk reduction activities, implementation, and monitoring and evaluation.

While acknowledging that sound and safe development practice at the macro and micro levels provides the ultimate safeguard to limit disaster risk, for organizations such as the Red Cross Red Crescent working largely at the local level and in some of the least developed countries, disaster risk reduction is about supporting local civil society, communities, households and individuals to lessen their vulnerability and strengthen their capacity to anticipate, cope with, resist and recover from natural hazards (further details about the Red Cross Red Crescent approach can be found below).

Global responses

As the human and economic costs of natural disasters have increased in recent decades, the international community has begun to look more closely at the root causes of disaster vulnerability and to highlight the importance of reducing disaster risk in all aspects of humanitarian and development work.

The International Strategy for Disaster Reduction

The United Nations (UN) declared the 1990s the first ‘International Decade for Disaster Reduction’ and this led to the formation of the International Strategy for Disaster Reduction (ISDR) in 2000. The ISDR promotes international work on disaster risk reduction and supports the implementation of the Hyogo Framework for Action.¹⁰

The Hyogo Framework for Action: 2005–2015

In the wake of the December 2004 Indian Ocean tsunami, the 2nd World Conference on Disaster Reduction (WCDR) was held in January 2005 in Hyogo, Japan.

The conference adopted the Hyogo Declaration, which committed governments to the development and implementation of the Hyogo Framework 2005–2015 (‘Building the resilience of nations and communities to disasters’). This global action plan contains five priorities:

- Ensure that disaster risk reduction is a national and local priority with a strong institutional basis for implementation.
- Identify, assess and monitor disaster risks and enhance early warning.
- Use knowledge, innovation and education to build a culture of safety and resilience at all levels.
- Reduce the underlying risk factors.
- Strengthen disaster preparedness for effective response at all levels.

The ISDR will work with national governments and civil society in the development and implementation of the framework.

The ProVention Consortium

The International Federation hosts the ProVention Consortium. This is a global coalition of governments, international organizations, academic institutions, the private sector and civil society organizations dedicated to increasing the safety of vulnerable communities and to reducing the impact of disasters in developing countries.

For more information about ProVention, visit its web site at: <http://www.proventionconsortium.org>

⁸ Twigg, John (2004). Disaster risk reduction: Mitigation and preparedness in development and emergency programming. HPN Good Practice Review 9. <http://www.odihpn.org/documents/gpr9/part%201.pdf>

⁹ International Strategy for Disaster Reduction (ISDR).

¹⁰ International Strategy for Disaster Reduction (ISDR). For more information, visit <http://www.unisdr.org/>

Disaster risk reduction and the Red Cross Red Crescent

Disaster risk reduction – a strategic priority

The International Federation has been a leading organization in humanitarian assistance for over 85 years. Through its core areas of work in disaster management, health, organizational development and humanitarian values, its 185 member National Societies make a significant contribution to reducing the vulnerability of people living in some of the most hazard-prone areas of the world.

Delivering Strategy 2010: A Global Agenda for the International Federation

Our Global Goals

- Goal 1** *Reduce the numbers of deaths, injuries and impact from disasters.*
- Goal 2** *Reduce the number of deaths, illnesses and impact from diseases and public health emergencies.*
- Goal 3** *Increase local community, civil society and Red Cross Red Crescent capacity to address the most urgent situations of vulnerability.*
- Goal 4** *Reduce intolerance, discrimination and social exclusion and promote respect for diversity and human dignity.*

Our priorities – scaling up our response where needs are greatest

The collective focus of the Federation over the next five years will be to:

- *Improve our local, regional and international capacity to respond to disasters and public health emergencies.*
- *Scale-up our actions with vulnerable communities in health promotion, disease prevention and disaster risk reduction.*
- *Significantly increase our HIV/AIDS programming and advocacy.*
- *Renew our advocacy on priority humanitarian issues, especially on fighting intolerance, stigma and discrimination, promoting disaster risk reduction.*

The importance of disaster risk reduction in all its forms is reflected in the Agenda for Humanitarian Action. This was adopted at the 28th International Conference of the Red Cross and Red Crescent which took place in Geneva in December 2003. At this conference, the Red Cross Red Crescent Movement and the states party to the Geneva Conventions committed to a plan of action that aims to reduce vulnerability in relation to the risk and impact of natural disasters. This commitment has since been reiterated in the International Federation's Global Agenda, which explicitly calls for a "scaling up of actions with vulnerable communities in disaster risk reduction".

The International Federation also fully supports the conclusions of the World Conference on Disaster Reduction and continues to work through its 185 member National Societies and in partnership with the UN, governments, donors and civil society to meet the objectives of the Hyogo Framework for Action.

Disaster risk reduction is addressed by the International Federation through three main strategies: building capacity in disaster preparedness to better respond to disasters, promoting mitigation activities to reduce the impact of hazards and ensuring development projects, such as health facilities, are protected from disaster impact. The following section provides some opportunities for reducing disaster risks.¹¹

Disaster mitigation

Structural and non-structural measures undertaken to limit the adverse impact of natural hazards; for example, planting mangroves to reduce the risk posed by tidal surges or raising awareness of natural hazards through school-based education projects.

¹¹ While disaster response is not typically regarded as disaster risk reduction, the provision of timely and effective food and non-food assistance can help reduce the risk to people already affected by disaster.

Early warning

The provision of timely information enabling people to take steps to reduce the impact of hazards. Early warning is typically multi-hazard and requires genuine ownership of, and participation by, communities and other stakeholders, e.g., access to information by local people concerning an approaching typhoon or tropical storm.

Disaster preparedness

Measures that help ensure a timely and effective 'first line' of response supported by National Societies' volunteers, branches, regional and national capacities, e.g., community action teams backed up by National Society contingency planning and regional and/or international response teams.

Recovery

Decisions and actions taken after a disaster with a view to restoring or improving the pre-disaster living conditions of the affected community, while facilitating necessary adjustments to reduce disaster risk, e.g., assessing levels of future risk when planning housing projects in the aftermath of a disaster.

Support to livelihoods

Projects that strengthen or diversify livelihoods that enable individuals or households to develop strategies to reduce risk, e.g. home gardening can improve nutrition and increase reserves in the time of drought.

Risk reduction campaign

In recent years there has been a growing recognition that strengthening resilience to disasters is not only about disaster management; a community / household with sustainable livelihoods, good levels of health care and access to a strong and accountable civil society is also better able to withstand hazards. However, it is important that these development gains are protected from disasters. Fully mainstreaming disaster risk reduction in to its development work, therefore, continues to remain a priority for the International Federation. The campaign while continuing to promote disaster preparedness and disaster mitigation, will take measures at all levels – governance, policy, management and practice – to mainstream disaster risk reduction.



Restoring livelihoods was a priority in Indonesia to help recover from the tsunami.



Mangrove plantations in Viet Nam mitigate the impact of flooding and support livelihoods.

Case studies

1 Case study 1

Disaster mitigation: Planting mangroves in Viet Nam

Viet Nam is one of the most typhoon-struck countries in Asia. The Red Cross of Viet Nam is working on disaster mitigation strategies that reduce the vulnerability of people living and working in the Red River delta. This is an extensive rice-growing area in northern Viet Nam and is one of the most densely populated regions in the world. Over centuries, the mudflats of the delta have been reclaimed for agriculture by building dykes. Communities also left a band of natural saltwater-tolerant mangrove forest between the dykes and the sea in order to help protect the rice fields from wave, wind and typhoon damage. However, the cutting of the mangrove forests for fuel and the spraying of chemical defoliants during the war in the 1970s have destroyed most of this natural protection belt. Some of the dykes were beginning to erode and there was an increasing risk to people and their rice fields.

The government and several non-governmental organizations (NGOs) have been campaigning to reforest the coastlines. The Red Cross of Viet Nam – with support from the International Federation, the Japanese Red Cross Society and the Danish Red Cross – has planted more than 175 square kilometres of mangrove forest along almost 200 kilometres of coastline. Mangroves have now been re-established along nearly all the coastline where natural conditions allow. Local communities carry out the planting and the planters have the right to harvest marine products such as crabs and mussels in the areas which they have planted for a number of years.

Now that most of the planting is completed, the Red Cross of Viet Nam is focusing its efforts on dyke maintenance, applying other techniques to inland river dykes and developing new activities to support vulnerable people in the area.

The benefits of the project are significant. In financial terms alone, the mangrove project proves that preparedness and mitigation pay. The planning and protection of 12,000 hectares of mangroves has cost around US\$ 1.1 million, but has helped reduce the cost of dyke maintenance by US\$ 7.3 million a year. The Red Cross of Viet Nam also estimates that 7,750 families have improved their livelihoods, hence their resilience to further hazards, through the selling of crabs, shrimps and molluscs.

2 Case study 2

Preparing for climate change in Nicaragua

Globally, the climate is changing at an unprecedented rate. Never in the era of modern mankind – the last 10,000 years – has the change been so rapid. Human activities, in particular the burning of fossil fuels, contribute to global warming which leads to new risks. In particular the increasing number of extreme weather events such as floods, droughts and intense storms is a hazard that the Red Cross Red Crescent Movement will have to understand and address at all levels, from local to global.

The Netherlands Red Cross and the International Federation established the Centre for Climate Change and Disaster Preparedness (Climate Centre) in June 2002. The Climate Centre brings together scientific data on climate change and operational knowledge from the humanitarian field. Its aim is to improve disaster risk reduction for people living in disaster-prone areas. The Climate Centre hopes that this will lead to a reduction in the number of people affected by the impact of climate change and extreme weather events. It also helps National Societies to learn more about climate change predictions in their country and promotes projects and activities that help communities to become more resilient to changes in their local climate.

The Climate Centre supports climate change adaptation programmes in different parts of the world. One such programme in Nicaragua was finalized in December 2005. The programme's aim was to strengthen the capacity of the Nicaraguan Red Cross to carry out local-level activities related to risk reduction and to respond to extreme weather events. Project activities were carried out in two municipalities at high risk of extreme weather events – Puerto Cabezas and Bluefields – and included risk mapping, vulnerability and capacity assessments, training in first aid, family emergency plans and micro projects (such as the construction of shelters and drainage systems) and the installation of radios for communication and early warning.

An important principle was to build local partnerships. The project brought together local, provincial and national government departments, schools and universities, climate change scientists and local community groups.

To find out more about climate change or risk reduction programmes in other countries, visit the Climate Centre's web site at <http://www.climatecentre.org>

A raised building in Nicaragua provides shelter for 150 persons in the event of flooding.





Kenya Red Cross Society rescue workers search the site of the Nairobi bomb blast.

Case study 3

National Society preparedness for response in Kenya

Kenya is prone to a wide range of disasters from annual flooding and recurrent drought to man-made disasters such as local conflicts and traffic accidents. The Kenyan government asked the Kenya Red Cross Society to co-chair the disaster response coordinating committee for national-scale disasters. In this capacity, the Kenya Red Cross Society is often the relief agency that organizes and coordinates the response, drawing on resources from International Committee of the Red Cross (ICRC), the International Federation and a range of development NGOs. Trained Kenya Red Cross Society staff and volunteers carry out detailed needs assessments and coordinate the response.

To reduce the risk posed by hazards, such as floods, the Kenya Red Cross Society has started to establish strategically placed regional stocks of relief items in the provinces most prone to disaster. The Kenya Red Cross Society is able to use its position as co-chair of the disaster response coordinating committee to ensure impartial support for all vulnerable people and to advocate for future disaster preparedness at the national level. A similar role is played by many National Societies around the world.



Case study 4

Awareness-raising and education in Turkey

Turkey's high vulnerability to earthquakes is significantly increased by socio-economic factors. Following two devastating earthquakes in 1999, the Turkish Red Crescent Society and Bogazici University began a series of collaborative activities aimed at community risk reduction. A study undertaken by the university concluded that, of the 50,000 injuries from the 1999 quakes, 50 per cent were the result of non-structural causes. Therefore, up to 25,000 injuries could have been prevented by taking basic preparedness measures at the household level, such as securing furniture and other heavy, tall objects that could fall on people. If people employ simple, preventative measures in the future, the drain on limited medical resources and associated economic losses would be dramatically reduced.

Based on the results of this study and the low level of risk awareness among people hit by the 1999 earthquakes, the university developed, with Turkish Red Crescent Society support, a non-structural mitigation, awareness-raising and education programme. The programme promotes a nationwide culture of mitigation, by providing people with basic information on earthquake risk, demonstrating how to secure potentially dangerous objects in homes, schools or workplaces and outlining key safety actions in the event of disaster.

Key to the programme's success is the collaborative spirit and its basis in sound research and development. With key safety messages identified and the development of educational materials to raise communities' awareness, non-structural mitigation kits and web-based risk information, the university and the Turkish Red Crescent Society produced a 'training of trainers' programme which has developed a cadre of community instructors who can be mobilized across the country.

Collapsed buildings following the 1999 earthquake in Turkey.



Community members clearing debris from a shared water source in the Solomon Islands.

5 Case study 5

Vulnerability and capacity assessment in the Solomon Islands

Vulnerability and Capacity Assessment (VCA) is a community risk assessment tool developed by the International Federation. The participatory methodology helps people living in hazard-prone areas to identify disaster risk. Typically the VCA process is seen as an empowering one and includes the following steps: risk assessment, risk analysis and action-planning whereby concrete steps are developed to reduce vulnerability and risk.

In 2004, VCAs were undertaken in three communities of the Solomon Islands in the Pacific. The process entailed community groups assessing local risks and hazards with the help of the local branch of the Solomon Islands Red Cross. The recommendations in one of the communities led to small-scale mitigation projects undertaken by the community themselves that have resulted in a reduction of seasonal flooding, safer water supplies and a reduction in mosquitoes, as stagnant water sources were cleaned. Through the participatory VCA methodology, the community identified that debris and timber from logging were blocking the river and causing the flooding in their community during heavy rains. The community then put an action plan together and organized a clean-up campaign. The VCA and clean-up campaign involved representatives from two community groups who speak different languages. The process also helped to bring the two communities closer.

The Fundamental Principles of the International Red Cross and Red Crescent Movement

Humanity

The International Red Cross and Red Crescent Movement, born of a desire to bring assistance without discrimination to the wounded on the battlefield, endeavours, in its international and national capacity, to prevent and alleviate human suffering wherever it may be found. Its purpose is to protect life and health and to ensure respect for the human being. It promotes mutual understanding, friendship, cooperation and lasting peace amongst all peoples.

Impartiality

It makes no discrimination as to nationality, race, religious beliefs, class or political opinions. It endeavours to relieve the suffering of individuals, being guided solely by their needs, and to give priority to the most urgent cases of distress.

Neutrality

In order to enjoy the confidence of all, the Movement may not take sides in hostilities or engage in controversies of a political, racial, religious or ideological nature.

Independence

The Movement is independent. The National Societies, while auxiliaries in the humanitarian services of their governments and subject to the laws of their respective countries, must always maintain their autonomy so that they may be able at all times to act in accordance with the principles of the Movement.

Voluntary Service

It is a voluntary relief movement not prompted in any manner by desire for gain.

Unity

There can be only one Red Cross or Red Crescent Society in any one country. It must be open to all. It must carry on its humanitarian work throughout its territory.

Universality

The International Red Cross and Red Crescent Movement, in which all societies have equal status and share equal responsibilities and duties in helping each other, is worldwide.



The *International Federation of Red Cross and Red Crescent Societies* promotes the humanitarian activities of National Societies among vulnerable people.

By coordinating international disaster relief and encouraging development support it seeks to prevent and alleviate human suffering.

The International Federation, the National Societies and the International Committee of the Red Cross together constitute the International Red Cross and Red Crescent Movement.