E9: Disaster Management

Module 2

The management of disasters around the world

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The management of disasters around the world

Introduction

Module 2 discusses the management of disasters around the world. It outlines the responsibilities of governments, the role of the United Nations as well as non-governmental organisations in preparing for and responding to disasters and other humanitarian crises.

Upon completion of this module you will be able to:

Outcomes

- *explain* roles and responsibilities of governments in preparing for and responding to emergencies and disasters

- *describe* policy and institutional frameworks for disaster management in developed and developing countries

- *discuss* the role of the community in preparing for and responding to disasters

- *describe* the International Strategy for Disaster Reduction

- *describe* the roles of the United Nations, non-governmental organisations, as well as the military in responding to disasters and humanitarian crises.

Unit 3

The management of disasters around the world

Introduction

This unit examines the management of disasters around the world.

Learners will consider the roles and responsibilities of individuals, communities, regional governments, national governments, non-governmental organisations, and the private sector. Finally, the importance of legislation and mutual aid agreements are discussed.

Upon completion of this unit you will be able to:

Outcomes

- *identify* the roles and responsibilities of the individual, community, regional governments, national governments, non-governmental organisations and the private sector

- *explain* how non-governmental organisations provide support in all phases of disaster management

- *provide* reasons why the community is so important in effective disaster reduction and emergency preparedness efforts

- *discuss* the private sector's critical role in reducing the negative impacts of disasters, and explain mitigation strategies the private sector can use to enhance community resilience

- *describe* the role of legislation in effective emergency management, and outline the common features it typically includes

- *identify* the common elements of mutual aid agreements.

Terminology

Terminology

Alerting system	A communication system used by local, regional, or national authorities to contact the public to warn them of an impending emergency.
Business continuity planning	A proactive planning process that ensures critical services and/or products are delivered during a disruption.
Hazard mapping	A process whereby areas at risk due to particular hazards, are located and mapped to increase

	community disaster awareness and influence preparedness efforts, for example, mapping areas in a community where flooding is possible or likely.
Mutual aid agreement	An agreement drawn up between agencies and/or jurisdictions to formalise an agreement to assist one another upon request, by furnishing personnel or equipment.
Non-governmental Organisation (NGO)	An organisation which is independent of the government and which has a non-commercial mission to contribute to social, cultural, environmental, educational and/or other issues.
Private sector	That part of the economy run by individuals and groups rather than by the government, such as banks, hospitals and the media.

Emergency management and disaster reduction: a bottom-up approach

Television shows and movies often depict disasters as catastrophic events where streets are filled with helpless victims and rescue and relief is provided by the military and international agencies. In reality, it is usually the people who have just experienced the disaster who are the first responders and the impacted community takes charge of managing the response.

This is not to say that communities and countries do not require outside assistance. In some cases, a disaster may be so devastating that there may be an immediate need for a government to intervene and/or request outside assistance. Recent disasters that have required such interventions include:

- the 2004 Asian tsunami
- the 2005 Pakistan earthquake
- Hurricane Katrina in 2005.

There are also cases in which the emergency or disaster is accompanied by a breakdown of authority, resulting in a loss of political control and the capacity to provide relief and assistance. In such instances (generally referred to as complex humanitarian emergencies), there may be a need for an organisation such as the United Nations to intervene.

It is essential, however, to recognise communities as a cornerstone to effective disaster reduction and emergency preparedness. Emergencies

and disasters can be best prepared for and responded to when efforts are carried out at the local level. This is for a number of basic reasons:

- **Hazards, exposure and vulnerability is local**

  Disaster risk arises from the combination of natural hazards (for example, a fault zone), a population's vulnerability to hazard events (such as a building close to the fault zone), as well as human activities that increase or decrease exposure to these (for example, building earthquake-resistant structures). These are likely to differ from one community to the next depending on both the type of hazards but also the extent a community undertakes mitigation and preparedness activities.

- **The impacts of disasters are cross-cutting**

  Major disasters affect all segments of society: its physical infrastructure, its businesses and economy, not to mention the population and social fabric. To be effective, disaster risk reduction plans must involve all segments of a community including:

  - local government

  - business sector

  - emergency responders

  - non-governmental and community organisations

  - community leaders and the population itself.

- **Disaster risks are subject to change**

  Disaster risks may vary over time depending on such as factors as:

  - population changes

  - urbanisation

  - construction practices

  - environmental degradation.

  This is one of the reasons that many developing countries have become more vulnerable to hazards; overcrowding, substandard housing and inadequate infrastructure make these countries especially vulnerable to the impacts of major hazards such as earthquakes.

- **Responses to disasters are shaped by social influences**

  A community's priorities (including the extent to which it will prepare for disasters) are defined by the perceptions of government, opinion makers, media and community and the values and beliefs of a society.

  These can be expected to differ from one community to the next, in part depending on the sense of public and private responsibility for risk reduction activities. This will often reflect

whether a community has had experience with disasters in the past, which in turn may raise awareness and motivation to be better prepared in the future.

- **Community resilience can enhance disaster response**

  Understanding how communities work is vital for strengthening their capacity to prepare for (and respond to) hazards. The organisations, affiliations and networks that provide support during normal times also play a critical role in sustaining people during crises and disasters.

  By encouraging groups and organisations to work together to assist people in need, emergency managers can strengthen the social capital and response capacities of communities. (UNISDR, 2008)

Roles and responsibilities

People often think of emergency preparedness as the responsibility of the government or military. In reality, effective emergency preparedness and disaster reduction requires the participation of entire communities and all levels of government. This extends from individuals and their families to disaster management offices of national governments.

To understand comprehensive disaster management, one should consider the roles and responsibilities of:

- individuals
- communities and local governments
- provincial governments
- national governments.

In most developed countries, the responsibility to deal with emergencies is placed first on the individual and then on successive levels of government, as the resources and expertise of each are needed.

This recognises that when an emergency occurs people normally see to their own safety first and then seek assistance from local, provincial or territorial governments if necessary. Those governments (in turn) seek national support if an emergency moves beyond their capabilities.

This is illustrated in the example below.

Levels of disaster response
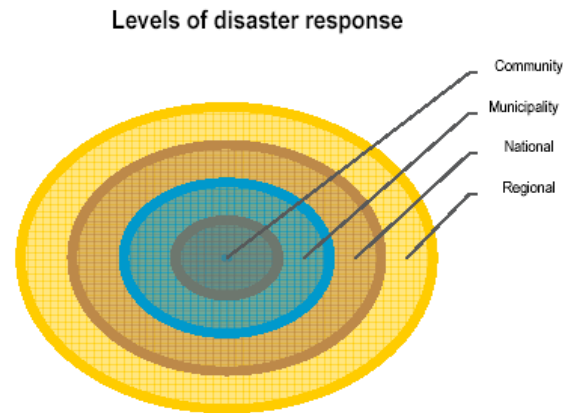
Figure 1: Levels of disaster response.

Source: REDLAC, 2006

The role of the individual

Emergencies (first and foremost) affect individuals and disrupt the normal functioning of families and other small sub-units of a society.

However, individuals should not be seen only as victims. They also have a responsibility to be prepared for emergencies. In many emergencies, people may be left on their own for an extended period as emergency services and resources are focused on limiting the loss of life and casualties.

Individuals and families can help themselves and others by understanding their area's hazards, how they can protect themselves, possible evacuation routes and what to bring when evacuating.

To achieve this goal, emergency managers must ensure there is targeted and regular information for individuals and families. In developed countries, this information usually concentrates on encouraging individuals to have emergency kits which contain the necessities to support survival during emergencies or disasters.

In regions where there are hazards that require evacuation (for example, the coastal hurricane belt in the United States), a central theme in public and household preparedness is having an evacuation plan. (See Appendix A: Red Cross Disaster Services).

This type of preparedness is a reasonable expectation. There is a volume of evidence that indicates that those who prepare for disasters have better chances of survival during emergency disaster and recover more quickly afterwards.

The local community or jurisdiction

Because disasters occur locally, the first response to these events is almost always carried out by the impacted community. Of course, communities can vary widely in their composition, ranging from a small

coastal fishing village to a large urban centre. In both cases, however, there is a responsibility for the community to prepare for potential threats.

Considerable work has been undertaken in developing countries to enhance the preparedness of small communities that are exposed to hazards. Although many of these communities have limited resources, preparedness activities can be taken to enhance the safety of their society.

These include:

- hazards mapping to identify hazards and risks to a community

- alert systems to warn people of emergencies

- evacuation planning to ensure people are able to escape from events like a tsunami by going to higher ground

- identification of vulnerable people, such as the frail elderly, people with disabilities and those who may require assistance evacuating.

Case study

Case study: Radio reaches most vulnerable people

In many developing countries, traditional broadcast radio remains the most widely used channel for disseminating disaster warnings. Warning messages broadcast on radio can quickly reach isolated rural communities where no other form of communication is available.

However, in the poorest communities, even radio ownership is rare. A radio may often be the first "luxury" good procured by a household, but the need to purchase disposable batteries means regular radio use is expensive.

Wind-up and solar-powered radios eliminate the need for batteries or electricity and can provide the poorest households with reliable access to disaster warnings and other lifesaving information.

The Mozambique Red Cross Society has integrated wind-up and solar-powered radios into its cyclone and flood early warning activities and the radios have been credited with dramatically improving the country's ability to prevent a repeat of the devastation caused by the 2000 flood and cyclone disaster.

A disaster preparedness volunteer is charged with guarding the radio on behalf of the community and listening to broadcasts. When a warning is sounded, the volunteer alerts village leaders and a pre-planned response is launched. This low-tech, readily available resource is an effective and lifesaving solution at the community preparedness level.

Source: International Federation of Red Cross and Red Crescent

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A community may also be a large urban area where hundreds, thousands or millions of people live. These communities can also vary considerably in infrastructure and resources, as well as vulnerability.

Currently, almost a billion people live in slums or informal settlements in high-risk areas, with poor infrastructure and often without access to basic services such as clean water and sanitation.

Towns and cities can often be regarded as local jurisdictions with their own governance and legislative structures. In developed countries, jurisdictions and cities generally have the responsibility to incorporate disaster risk assessments into urban planning of human settlements, particularly in highly populated areas.

Every community should have mechanisms in place to identify hazards that affect their local area, and develop and maintain an emergency communications plan and disaster supplies kit. Other preparedness considerations include:

- evacuation
- emergency public shelters
- animals in disaster
- information specific to people with disabilities.

Urban centres should also have in place emergency services to respond to emergencies of all types. These typically include first response agencies such as:

- fire
- police and ambulance services
- search and rescue
- emergency medical care and hospital services
- traffic and crowd control.

Regional governments

In most developed countries, regional governments such as state, provincial or territorial jurisdictions play a key role in emergency preparedness.

Regional governments are usually responsible for the development and oversight of legislative and regulatory frameworks that outline preparedness requirements within their respective jurisdiction. For example, urban centres might be mandated to have plans that:

- identify the hazards common to that area
- include an emergency preparedness element to ensure that the community, as well as its citizens and businesses, are ready to respond to the various hazards
- have in place standard operating procedures for the response to relevant hazards
- include priorities for the recovery of critical infrastructure and services to ensure economic recovery.

Regional governments also have a key role in building and maintaining critical infrastructure, often with the support of federal governments. Preventive action is the most effective way to ensure community safety.

Programmes to renew infrastructure may include hazard mitigation measures such as dykes to prevent flooding and communications to warn populations of pending emergencies.

Other public-sector investments may include hospitals, public schools, and critical government buildings.

During an emergency, a regional government may be called upon to provide assistance to the impacted community or jurisdiction. This may take the form of providing emergency supplies, equipment or personnel – whether directly through supplies accumulated by the community or by co-ordinating assistance from neighbouring jurisdictions. It is important to understand that the local jurisdiction requiring assistance remains in charge, including direction of personnel and allocation of equipment and other assistance.

Disasters that affect multiple local jurisdictions usually require the regional government to co-ordinate and prioritise needs and assistance during the immediate response and recovery periods. As various state and federal agencies become involved, they co-operate to the fullest possible extent.

National governments

When people imagine national government involvement in disasters, many think of the activation of the National Guard or the deployment of government troops.

However, most emergencies are successfully managed at the local government level; some emergencies require regional government support, and a small percentage of emergencies require national level support.

Emergencies that require national level support typically are catastrophic in scale and scope.

When a national government does become involved, it takes a supportive rather than leadership role. The United States National Response Framework (2008) for disaster recovery, for example, describes how the federal government will support state and local authorities, as well as others involved in providing emergency assistance. The fundamental assumption in this framework is that recovery is a co-operative effort, carried out by many participants. Federal agencies, therefore, support and assist rather than supersede state and local programmes during a crisis. Typically, the primary role of national governments is in the development of enabling legislation and policy that transcends regional government boundaries. The purpose of this legislation is to ensure consistency in emergency preparedness across regional or provincial areas, ensuring a degree of commonality in regulations, minimum standards of practice (as well as) inter-operability of essential equipment. For example, a national government might work with provinces and states in a disaster to agree set protocols to be used to communicate, share information, plan and make decisions.

National governments also have a key role in mitigation activities. Mitigation funding is essential to support local and regional governments to implement expensive mitigation projects that may otherwise be unaffordable at the local level.

An example of national mitigation funding is the U.S. Federal Emergency Management Agency's (FEMA) Hazard Mitigation Grant Program which was designed to help New Orleans' parishes prepare for future disasters in response to the aftermath of Hurricane Katrina.

Mitigation funding through this programme has included the following assistance:

- USD 9.5 million (of a total grant of USD 23 million) to elevate and retrofit homes for 48 families in Orleans Parish.

- USD 1.2 million for a floodwall to reduce the risk of flooding for Dozier Elementary School

- more than USD 2 million for the Louisiana Department of Agriculture and Forestry to harden and retrofit buildings in Baton Rouge and Hammond.

To enhance preparedness, federal governments often invest in equipment and supplies that may be drawn upon in regional and provincial government.

These supplies might include:

- stockpiles of medical equipment and medicines

- emergency food

- tents and other lifesaving and humanitarian supplies.

One example of a supplies' stockpile is:

- the United States Strategic National Stockpile (SNS).

This is a national repository of antibiotics, vaccines, chemical antidotes, antitoxins and other critical medical equipment and supplies.

In the event of a national emergency involving bioterrorism or a natural pandemic, the SNS has the capability to supplement and re-supply local health authorities that may be overwhelmed by the crisis, with a response time as little as 12 hours.

The SNS is jointly run by the Centers for Disease Control and Prevention (CDC) and the Department of Homeland Security.

For an overview of various national governments around the world and their emergency management organisations see Appendix B at the end of this module.

The military

In some large-scale emergencies, national governments may be called upon to provide direct assistance. In many countries this is provided by the military or national guard.

Following Hurricane Katrina in 2005, more than 10,000 Army and Air National Guardsmen and 7,200 active-duty troops assisted with hurricane relief operations.

The military relief effort, known as Joint Task Force Katrina, included:

- supporting civil authorities
- removal of debris
- provision of shelter
- food
- medical and law-enforcement support.

The United States Air Force provided search and rescue, aeromedical evacuation, relief supplies as well as medical care to the affected areas. The Air Force evacuated more than 25,000 people in need of medical care.

The Pakistani military played a similar role after the 2005 earthquake in northern Pakistan and the disputed territory of Kashmir which killed about 75,000 people and left an estimated 3.5 million people homeless.

The subsequent relief effort, led by the Pakistan Army, included the deployment of 60,000 troops and their role was to:

- maintain order in affected areas
- clear landslide-affected roads
- replace bridges
- re-establish communications in the difficult mountainous conditions
- help villagers search for those trapped in collapsed houses and buildings.

The military also evacuated more than 80,000 people from the affected areas.

In some international humanitarian cases, another country's military may also be called upon to provide assistance. For example, following the January 2010 earthquake in Haiti, the United States military was deployed to assist with humanitarian aid and recovery projects.

At the peak of the response, there were 22,000 forces deployed and their assigned work included:

- re-opening the airport
- providing medical assistance to more than 8,600 Haitians on a navy hospital ship
- delivering water, food and medical supplies
- contributing to rebuilding efforts.

Non-governmental organisations

A non-governmental organisation (NGO) is an organisation which is independent of the government, and which has a non-commercial mission to contribute to social, cultural, environmental, educational and/or other issues.

The role of NGOs is also essential in building local communities' resilience to disasters and supporting local-level implementation of mitigation and preparedness activities. For example, NGOs may work with communities and schools to increase knowledge of local hazards and show families how they can best prepare and protect themselves should a disaster strike. NGOs may also help communities develop preparedness strategies including alerts, evacuation procedures, and planned support to individuals at-risk in disasters such as the frail elderly, children and people with disabilities.

During (and after) disasters, NGOs may:

- set up temporary shelters

- provide medical care

- distribute food, water and clothing

- provide emotional and psychosocial support to survivors.

Some organisations focus specifically on more vulnerable groups, for example, Help the Aged International works with older people while Handicapped International ensures that needs of people with disabilities are adequately met.

NGOs generally focus their disaster assistance efforts where they have specialised expertise, providing a high level of service in disaster response and recovery. For example, Doctors without Borders (Medecins sans Frontieres) provides teams of doctors, nurses, laboratory technicians and other medical personnel, to provide assistance to people caught in crises around the world.

An organisation such as Oxfam (on the other hand), most often provides assistance such as food, water, shelter and education.

More detailed information on the contributions of non-governmental organisations is provided in Unit 4, *Disaster reduction around the world*.

Private sector

The private sector includes banks, hospitals, hotels, the media, corporations, insurance companies, transportation companies and utilities, among other entities. The private sector is that part of the economy run by individuals and groups rather than the government.

The private sector's participation in a community's emergency preparedness efforts is essential to the well-being and resilience of communities in a disaster. If businesses and critical infrastructure owners are not able to withstand the impacts of a disaster, the entire community's recovery may be compromised.

Stronger partnerships between emergency management and the private sector are needed to ensure safer and more disaster-resistant buildings owned by the private sector, including acute care facilities, private schools and residential buildings. Incentives for private investments in these facilities, improvements to increase the hazard-resistance of residential construction and risk-sharing mechanisms such as insurance, and reconstruction financing are examples of emergency management-private sector partnerships.

The impacts of disasters can also be significantly reduced by effective **business continuity planning (BCP)**.

BCP is a proactive planning process that ensures critical services and/or products are delivered during a disruption. BCP generally involves developing plans and procedures to identify essential emergency staff and ensure that they can maintain their critical services during disruptions. Recovery time and costs can be significantly reduced by preparing and testing business continuity plans and training employees on their emergency roles and responsibilities. This planning not only helps to protect businesses from the negative impacts of disasters, but also reinforces the community's ability to bounce back after disasters.

Case study

Case study: 1995 Kobe Earthquake

In January 1995 an earthquake measuring 7.2 struck the port city of Kobe, Japan. More than 6,000 people died, more than 30,000 were injured, and over 300,000 were made homeless. Damages to houses, businesses, roads and infrastructure totalled over USD 200 billion.

The flow of world trade was disrupted near the port of Kobe, Japan's largest container port. Before the earthquake, Kobe was a hub for the movement of goods to other parts of Asia.

Many businesses experienced significant losses because of the lack of recovery and business continuity planning measures. Businesses' reliance on government to shield their assets did not reduce their losses as expected since government priorities were to save lives and property, not to help businesses resume their normal activities.

Other business – and infrastructure-related impacts resulting from the Kobe earthquake included:

- business closures, including Mitsubishi which had to temporarily close its plants due to the number of missing workers
- extensive damage to railway systems
- more than 845,000 households lost gas service for up to 2.5 months
- delayed restoration of water and wastewater systems to more than 1.25 million households for up to four months.

In the years following the disaster, Japan's central government has been working to develop new strategies that encourage businesses to implement risk-reduction measures and undertake business continuity planning.

The importance of legislation

Legislation is crucial to ensure the speed and effectiveness of emergency response, permitting governments to fulfill their constitutional responsibility to provide for the safety and security of citizens during emergencies.

Emergency legislation usually outlines how local authorities, emergency management organisations and relevant government ministries have to plan for, respond to and recover from emergencies and disasters.

For example, emergency legislation will usually identify which organisation has the mandate for overseeing and co-ordinating emergency preparedness in a jurisdiction, who has the authority to declare a state of emergency in the event of a major disaster, as well as the actions which can be taken to effectively manage the situation, including, compulsory evacuation (if required).

This not only facilitates the co-ordination of disaster management activities from central to local level but can remove potential operational barriers so that critical relief and recovery measures may be implemented in an emergency.

Although emergency legislation will vary from one country to the next, effective legislation typically includes a number of common features:

- Defining the **powers and duties** of relevant organisations to carry out emergency preparedness activities such as preparing and maintaining disaster assistance policies and resources required to effectively respond to an emergency or disaster.

- Defining the **conditions and steps** by which an authorised official can declare a state of emergency in an affected area (local jurisdiction, region or nation). A state of emergency is a governmental declaration that may suspend certain normal functions of government, alert citizens to alter their normal behaviours, or order government agencies to implement emergency preparedness plans.

- Defining **emergency powers** which may be enacted during a declared emergency. These may include such actions as ordering a mandatory evacuation, authorising the use of private property to prevent or alleviate the effects of an emergency, distributing essential supplies such as food, water and medical care, or controlling or prohibiting travel to (or in) the affected locality.

- Defining the **type and amount** of financial and material assistance which may be provided to an impacted locality.

Reading

Examples of emergency legislation include:

Canada: Department of Public Safety and Emergency Preparedness Act. http://laws.justice.gc.ca/PDF/Statute/P/P-31.55.pdf

New Zealand: Civil Defence Emergency Management Act. http://www.legislation.govt.nz/act/public/2002/0033/latest/DLM149789.html

England: Civil Contingencies Act. http://www.cabinetoffice.gov.uk/ukresilience/preparedness/ccact.aspx

Jamaica: Disaster Preparedness and Emergency Management Act. http://www.odpem.org.jm/AboutUs/DisasterActof1993/tabid/88/Default.aspx

Mutual aid agreements

In addition to formal legislation, emergency managers also rely on agreements that enable jurisdictions to support one another during major emergencies or disasters. Mutual aid agreements are an integral part of preparedness planning for all hazards at every level of government. These can be broadly described as pre-incident plans and agreements to share assistance between jurisdictions when local resources are overwhelmed during a disaster or emergency.

Typically, these agreements address legal, technical and procedural issues related to the sharing of personnel, equipment and other resources during an emergency response.

The scope and application of mutual aid agreements may vary considerably. Mutual aid agreements can be between:

- emergency management organisations
- public health authorities
- hospitals
- ambulance services
- other service providers.

Similarly, agreements can also be between neighbouring towns, jurisdictions, regions and even countries.

Reading

Examples of mutual aid agreements include:

- **Tribal Emergency Mutual Aid Compact.** Available at: http://www.usetinc.org/Programs/USET-MutualAid/AboutTEMAC.aspx.

- **California Mutual Aid.**
  Available at: http://www.emsa.ca.gov/pubs/pdf/emsa218b.pdf

Although mutual aid agreements may vary in detail, common elements they share include:

- The type of assistance which can be shared and how it will be used. This may include:
    - equipment (for example, ambulances)
    - supplies (such as, tents, medical supplies)
    - personnel (emergency doctors, nurses).

- The designated official who can request the assistance and the procedures followed for this request.

- Inter-jurisdictional procedures to transport (and receive) assistance.

- Responsibility for managing the provided assistance and personnel during its deployment to the jurisdiction.

- Coverage of maintenance requirements and reimbursement of operating costs incurred during the deployment services and resources.

- Liability insurance for actions by deployed personnel whose actions may unintentionally result in damages or harm to citizens, provided these actions are provided in good faith.

- Coverage of workers' compensation and benefits should deployed personnel suffer injury or illness.

- Emergency-related exercises, testing, or other training activities used to prepare the parties for a possible deployment.

In some cases, entire regions may agree to co-operatively work together to enhance their preparedness and response capacities. An example of this is the ASEAN Agreement on Disaster Management and Emergency Response, which is an agreement between Southeast Asian countries to strengthen their individual and collective emergency preparedness and response capacities.

The objectives of the ASEAN agreement are to:

- Strengthen the technical and organisational capacities of member states to lead, co-ordinate and manage the post-disaster recovery process through proactive planning for early and long-term recovery.

- Strengthen technical and institutional capacities of member states through the provision of capacity development and training programmes.

- Foster closer partnerships and more collaborative initiatives with partner organisations, international organisations, civil society, academia and the military (among others), to promote disaster resilience in regional to local levels.

- Enhance disaster consciousness of the peoples in ASEAN to instil a culture of safety and resilience.

The International Health Regulations (IHR) is an example of countries around the world agreeing to implement regulations designed to prevent the international spread of disease and other public health emergencies without causing unnecessary interference to international travel and trade.

Signed by 94 States, parties of the United Nations (and led by the World Health Organization), IHR set out seven major areas for co-operative action aimed at enhancing national, regional and global public health security by 2012.

The seven areas for co-operative action are:

1. Foster global partnerships so that all countries and relevant sectors collaborate to provide the best technical support available.

2. Strengthen national disease prevention, surveillance, control and response systems so that all countries will develop national action plans that allow the rapid detection and response to the risk of international disease spread.

3. Strengthen public health security in travel and transport so that the risk of international disease spread is minimised at airports, ports and ground crossings in all countries.

4. Strengthen WHO global alert and response systems to ensure timely and effective co-ordinated response to risks and global public health emergencies.

5. Strengthen the management of specific risks so that international management of known risks that threaten international health security is systematically followed.

6. Sustain rights, obligations and procedures so that new regulations are upheld and participating countries have a clear understanding of their obligations to them.

7. Conduct studies and monitor progress to identify and collect indicators to evaluate progress and improve implementation of the regulations.

Activity 2.1

Activity

1. Investigate and summarise the preparedness efforts that your local community has undertaken to increase its readiness for an emergency.

2. Outline the steps you have personally taken to prepare yourself and your family for an emergency or disaster.

Unit summary

Summary

In this unit you learned about the management of disasters around the world.

We explored the roles and responsibilities of individuals, communities, regional governments, national governments, non-governmental organisations, the private sector and the importance of legislation and mutual aid agreements.

Unit 4

Disaster reduction around the world

Introduction

In order to reduce the devastating impact of disasters, countries cannot afford simply to respond to natural disasters. Instead, a proactive attempt is required to reduce the consequences of natural disasters before they happen.

By focusing on disaster risk reduction, countries increase their resilience to natural hazards, encourage a culture of prevention and ensure that development efforts do not augment vulnerability.

Over the past two decades global disaster reduction policies and programmes have been introduced to stem the tide of disaster losses and advance a global commitment to risk reduction efforts.

This unit provides an overview of key programmes which have contributed to a paradigm shift in international emergency management which re-directs the emphasis on disaster response to a focus on disaster prevention and mitigation.

Upon completion of this unit you will be able to:

Outcomes

- *describe* the Yokohama Strategy and Plan for Action
- *outline* the Yokohama Strategy's 10 principles
- *discuss* the Hyogo Framework for Action (2005-2015)
- *explain* the objectives for the UN Strategy for Disaster Reduction.

International decade for natural disaster reduction

In 1987, the United Nations General Assembly declared the 1990s as the International Decade for Natural Disaster Reduction. This action was taken in order to promote internationally co-ordinated efforts to reduce human and material losses, as well as economic and social disruptions, caused by disasters around the world but especially in developing countries.

The specific objectives called upon United Nations agencies to:

- Improve each country's capacity to mitigate natural disasters, with a focus on helping developing countries to:
  - o complete vulnerability assessments

- o establish early warning systems, and

  - o build disaster-resistant structures.

- Create guidelines and strategies to apply scientific and technical knowledge while considering nations' cultural and economic diversity.

- Encourage scientific and engineering initiatives which will serve to close knowledge gaps and reduce loss of life and property.

- Distribute technical information (both new and existing), that will support natural disaster assessment, prediction and mitigation.

- Develop measures to assess, predict, prevent and mitigate disasters tailored to specific hazards and locations through programmes that include:

  - o technical assistance

  - o technology transfer

  - o demonstration projects, and

  - o education and training.

Yokohama strategy and plan of action for a safer world

In 1995, the United Nations developed the Yokohama Strategy and Plan of Action for a Safer World.

The strategy and plan of action set out seven key points:

1. The human and economic impact of natural disasters has risen in recent years and the world has become more vulnerable to natural disasters. Poor and socially disadvantaged groups (in developing countries) are most affected by natural disasters because they are least able to cope.

2. Nations need to incorporate disaster prevention, mitigation, preparedness and relief, along with environmental protection and sustainable development in to their development plans and ensure efficient follow-up measures at the community, national, sub-regional and international levels.

3. Disaster response alone is insufficient because it produces temporary results at a very high cost. A comprehensive and integrated approach which incorporates disaster prevention, mitigation and preparedness should be followed.

4. Because the world is increasingly interdependent, all countries shall work together to build a safer world. Regional and international co-operation will enhance our ability to mitigate disasters through the transfer of technology, sharing of information and creating opportunities for joint prevention and mitigation initiatives.

5. The knowledge, information and technology needed to mitigate natural disasters can often be made available at low cost and should be shared with all freely, especially developing countries, in a timely manner.

6. Active participation and community involvement must be encouraged to gain greater insight into efficient, culturally and organisationally appropriate ways to reduce the impact of disasters and preserve the environment for future generations.

7. The Yokohama Strategy and plan of action will:

    - note that each country has sovereign responsibility to protect its citizens

    - give priority to developing countries, especially least-developed, small island and land-locked countries

    - develop and strengthen national capacities and capabilities

    - promote and strengthen co-operation at all levels in prevention, reduction and mitigation activities, emphasising capacity building, technology sharing, and resource mobilisation

    - be adequately supported by the international community and the UN system

    - recognise that the UN and the world community is at a crossroad in human progress, and that through action the course of events can be changed by reducing suffering from natural disasters

    - be considered a call for action to use the International Decade for Natural Disaster Reduction as a catalyst for change.

Yokohama Strategy's ten principles

The Yokohama Strategy laid out the following ten principles which were to be applied by the participating countries:

1. Risk assessment is the basis of successful disaster reduction policies and measures.

2. Disaster prevention and preparedness are of primary importance in reducing the need for disaster relief.

3. Disaster prevention and preparedness are integral to development policy and planning efforts at all levels.

4. Developing and strengthening capacities to prevent, reduce and mitigate disasters is a top priority for the decade.

5. Early warning systems are key elements of successful disaster prevention and preparedness.

6. Prevention measures are most effective when all levels participate, such as local community, national, regional and international involvement.

7. Vulnerability reduction can be achieved by focusing on target groups while applying proper design and patterns of development, as well as educating and training the whole community.

8. The international community will freely (and in a timely manner), share the necessary technology to prevent, reduce and mitigate disasters.

9. Environmental protection is imperative in the prevention and mitigation of natural disasters and is a component of sustainable development and consistent with poverty alleviation.

10. Each country bears primary responsibility to protect its people, infrastructure and other national assets from the impact of natural disasters, bearing in mind the needs of developing countries, particularly the least-developed nations.

The Hyogo framework for action 2005–2015

In 2005, the United Nations member states established the Hyogo Framework for Action 2005–2015 as a means to implement global disaster reduction.

The overarching goal of the Hyogo Framework is to build the disaster resilience of communities and nations.

The Hyogo Framework's five priorities for action are to:

1. **Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation**. Key elements within this include:

    - strengthening the national institutional and legislative frameworks for risk reduction

    - developing and committing resources for the implementation of risk management

    - promoting community participation.

2. **Identify, assess and monitor disaster risks and enhance early warning**. This includes:

    - strengthening national and local risk assessments

    - establishing institutional and community capacities for effective early warning

    - developing and sustaining technical infrastructure and information management capacities for effective data collection and hazard analysis

    - building cooperation mechanisms for analysing regional and emerging risks.

3. **Use knowledge, innovation and education to build a culture of safety and resilience at all levels**. This includes:

- strengthening networks and mechanisms for information management and exchange

- promoting risk reduction in school and community education and training

- furthering research into risk and hazard analysis and cost-benefit analysis of risk reduction actions promoting public awareness to engage media and community interest.

4. **Reduce underlying risk factors**. This includes:

- integrating environmental and natural resource management with risk reduction

- strengthening safety nets by improving social and economic development practices in health, food security, livelihoods and other sectors

- incorporating risk management into land use planning and other technical measures.

5. **Strengthen disaster preparedness for effective response at all levels**. Key elements in this priority include:

- strengthening institutional capacities, training and learning mechanisms to include risk reduction in all aspects of disaster management

- strengthening contingency and preparedness planning

- promoting community participation.

As the Hyogo Framework for Action indicates, proactive measures for disaster risk reduction are essential in order to reduce recurrent losses and their impact on development. In order for national and international organisations to invest in such measures their costs and benefits must be evaluated.

The Hyogo Framework also notes the importance of including risk reduction in all aspects of disaster management. This is particularly important with respect to post-disaster reconstruction and recovery processes.

United Nations strategy for disaster reduction (UNISDR)

The United Nations Strategy for Disaster Reduction (UNISDR) serves as a global platform to co-ordinate international disaster reduction and management activities.

The UNISDR is the focal point in the UN system created to promote links and synergies between (and the co-ordination of), disaster reduction activities in the socio-economic, humanitarian and development fields, as well as to support policy integration. It serves as an international

information clearing house on disaster reduction, developing awareness campaigns and producing articles, journals, other publications and promotional materials related to disaster reduction.

UNISDR mission

Specifically, the UNISDR "aims at building disaster-resilient communities by promoting increased awareness of the importance of disaster reduction as an integral component of sustainable development, with the goal of reducing human, social, economic and environmental losses due to natural hazards and related technological and environmental disasters" (Source: http://www.unisdr.org/eng/about_isdr/isdr-mission-objectives-eng.htm).

UNISDR objectives

The UNISDR's objectives are to:

- **Increase public awareness to understand risk, vulnerability and disaster reduction globally.**

  The more stakeholders know about risk, vulnerability and how to manage the impacts of natural hazards, the more disaster reduction measures will be implemented. Disaster prevention is based on information.

- **Obtain commitment from public authorities to implement disaster reduction policies and actions.**

  Decision-makers need to commit themselves to disaster reduction policies and actions, and to invite and encourage the participation of communities at risk so that communities are fully informed and participate in risk management initiatives.

- **Stimulate inter-disciplinary and inter-sectoral partnerships, including the expansion of risk reduction networks.**

  Disaster reduction research, information and practices must be shared so that the global body of knowledge and experience will increase. By sharing a common purpose and through collaborative efforts we can increase resilience to the impact of natural hazards worldwide.

- **Improve scientific knowledge about disaster reduction.**

  The more we know about natural and technological hazards and their causes and effects, the more we will be able to reduce risks. We need to bring the scientific community and policy-makers together so that they can contribute to and complement each other's work.

Activity 2.2

Activity

The Yokohama Strategy and the Hyogo Framework for Action are founded on the concept of risk reduction.

Suggest at least five practical ways a community can reduce its disaster risks.

Unit summary

Summary

In this unit you have learned about key programmes which have contributed to a paradigm shift in international emergency management from a focus on disaster response to a culture of disaster prevention and mitigation. These programmes include the Yokohama Strategy and Plan for Action, the Hyogo Framework for Action (2005-2015), and the UN Strategy for Disaster Reduction.

Unit 5

Responding to disasters: The role of the United Nations and non-governmental organisations (NGOs)

Introduction

This unit is concerned with the role of international organisations in the management of disasters.

We will investigate the role of the United Nations and its agencies, regional international organisations and international financial institutions.

Upon completion of this unit you will be able to:

Outcomes

- *identify* the different organisations of the United Nations and their main activities
- *explain* how the United Nations responds to disaster
- *comment* upon the role of non-governmental organisations in disaster preparedness and disaster response.

The United Nations (UN)

Following World War II (as a pledge to preserve the peace), 51 countries met in San Francisco to establish the United Nations (UN) Charter.

Today, the UN has 192 member states, and the Charter has been revised a number of times to reflect changing global politics.

The UN's goals are to maintain international peace and security, develop friendly relationships among nations and to promote human rights, social progress and better living standards.

How the UN operates in a disaster

The UN plays a major role both in the short-term emergency response to disasters as well in long-term co-ordination of rebuilding efforts, particularly in developing countries which often do not have either the structures or resources to mount large scale disaster relief and recovery efforts.

The UN typically works with national governments to prepare for and respond to disasters, meaning that the overall responsibility for an emergency response lies with the government of the affected country.

To co-ordinate the overall response to a disaster, which involves a multitude of UN and non-governmental organisations, the UN has developed the cluster approach.

The Cluster Approach ensures:

- co-ordination among UN agencies
- joint programming
- information sharing
- knowledge sharing on technical and policy issues
- joint formulation to facilitate the sharing of information and decision-making
- identifying humanitarian priorities
- developing joint programmes
- assigning resources and clarifying the division of labour and responsibilities among the various organisations operating within the key sectors of the response (for example, emergency shelter, health, food and nutrition, water and sanitation).

The cluster approach is also used to strengthen operational partnerships and ensure greater predictability and accountability in international response to humanitarian emergencies.

The cluster approach works by ensuring that responding organisations are grouped together in clusters. Each cluster comprises those UN and non-governmental agencies whose mandates are complementary to the mission statement of the cluster (for example, emergency shelter, health, food and nutrition). Additionally, there are partners of each cluster such as governmental counterparts and donors.

Each of the sectors is co-ordinated by a specific UN agency.

Short-term: the emergency humanitarian response

During the initial stages of a disaster response, one of the greatest concerns is ensuring the security and protection of the surviving population. Immediate emergency relief tends to focus on time-critical lifesaving activities such as:

- sanitation
- food security
- safe drinking water
- health care
- transitional shelter.

The United Nations Office for the Coordination of Humanitarian Affairs (OCHA)

When a natural disaster strikes, the UN's Office for the Coordination of Humanitarian Affairs (OCHA) plays the lead role in mobilising, co-ordinating and managing the humanitarian and emergency relief response efforts. This is always in partnership with:

- the affected government

- responding non-governmental organisations

- specialised UN agencies

- others on the ground.

One of the first priorities for OCHA is assessing the needs and humanitarian requirements to ensure that provided relief and assistance is directed where it is needed.

Case study

Case study: OCHA in Afghanistan

Humanitarian co-ordination is a critical need in Afghanistan. National and international humanitarian organisations working in the country include numerous UN agencies and more than 100 non-governmental organisations (NGOs). The security situation is dire in Afghanistan, and UN and NGO workers have been targeted. In these complex circumstances OCHA responds by:

- Developing a common humanitarian response strategy for the government and humanitarian agencies. Because of the complexity of the humanitarian situation and the security situation in Afghanistan, a co-ordinated approach is a pre-requisite to effective relief delivery. OCHA is working to develop an integrated approach which all agencies can use in their humanitarian response efforts.

- Providing a detailed analysis of the evolving humanitarian situation. Large parts of the country are inaccessible for humanitarian workers because of the on-going conflict and criminal activity. Humanitarian aid workers are a target. The Taliban attack on October 28, 2009, on a guesthouse in Kabul which killed five United Nations staff tragically underlines this point. With so many different humanitarian needs and so many actors compounded by the dire security situation and the resulting lack of humanitarian access, OCHA is mandated to support the co-ordination of the humanitarian response.

- Improving co-ordination between the military and humanitarian agencies by working with national authorities and international military to create an operational environment that allows humanitarian access, and in which humanitarian assistance is impartial, neutral and based on needs only. Managing a multi-million dollar emergency relief fund to provide the humanitarian community, especially NGOs, with rapid funding as needs arise so that emergency partners are able to respond without delay.

UN humanitarian agencies

The following are a number of UN humanitarian agencies ready to provide aid and assistance.

United Nations Disaster Assessment and Coordination (UNDAC) Team

Within OCHA, there is the United Nations Disaster Assessment and Coordination (UNDAC) team, which is a stand-by team of disaster management professionals who are nominated and funded by:

- member governments

- OCHA

- UNDP

- operational humanitarian United Nations Agencies such as WFP, UNICEF and WHO.

Upon request of a disaster-stricken country, the UNDAC team can be deployed within hours to carry out rapid assessment of priority needs and to support national authorities and the United Nations Resident Coordinator to co-ordinate international relief on-site.

The UNDAC System consists of four components:

1. **Staff**

   Experienced emergency managers made available for UNDAC missions by their respective governments or organisations, together with OCHA staff. UNDAC Team members are specially trained and equipped for their task.

2. **Methodology**

   Predefined methods for the collection and management of information and assessment as well as structures for co-ordination support during the first phase of a sudden-onset disaster or emergency.

3. **Procedures**

   Proven systems to mobilise and deploy an UNDAC team, so that it can arrive within 24 hours at any disaster or emergency site anywhere in the world.

4. **Equipment**

   Adequate personal and mission equipment for UNDAC teams to be self-sufficient in the field when deployed for disasters/emergencies.

Case study

Case study: UNDAC and Hurricane Dean, Jamaica (2007)

Category 4 Hurricane Dean passed over Jamaica on August 19, 2007. The eye of the hurricane passed within 40 km of the southern coastline of the island, buffeting the entire island with winds of hurricane force. The strongest impact of the hurricane was on the southern coast where tidal waves combined with the high winds to completely destroy buildings within 100 metres of the coast, and disrupt the island's power supply. Eighty-one public buildings were damaged or destroyed, including 20 schools.

UNDAC arrived in Jamaica within 36 hours of the hurricane and contributed to the initial response by:

- Conducting detailed assessments of the affected coastlines and parishes, with the government of Jamaica as well as other UN agencies. These assessments included a special assessment of the environmental impact of the hurricane.

- Visiting other parts of the country to verify damage reports on damage to agricultural production (banana, coffee and sugar cane crops).

- Compiling a list of needs and donations to identify gaps.

UN Children's Fund (UNICEF)

Established after World War II, the United Nations Children's Fund (UNICEF) works in countries around to world to address the problems that children face, including:

- access to quality education

- health care

- human rights

- safety.

Although UNICEF provides humanitarian assistance specifically for children, women are also included as aid recipients because of their important child-care role.

During emergencies where children are especially vulnerable to violence, disease and malnutrition, UNICEF works to provide:

- emergency immunisation

- food and vitamin supplementation

- safe supplies of drinking water

- improved sanitary conditions in communities

- back-to-school programmes for communities whose schools have sustained damage from natural disasters or armed conflict

- protection from gender-based violence

- unification programmes for children separated from their families

- protection for children from recruitment into armed groups.

Case study

Case study: UNICEF in Indonesia

One hundred and fifty thousand lives were lost in Indonesia after the 2004 Indian Ocean tsunami, with more than half a million people displaced. Water, sanitation, schools and roads were destroyed and outbreaks of polio and avian influenza were reported.

In response to this disaster, UNICEF worked with its partners to:

- Provide basic health care including:
    - vaccinations
    - supplements
    - insecticide-treated bed nets
    - ambulances
    - midwifery supplies
    - training.

- Provide safe drinking water and lead efforts to build permanent water and sanitation systems.

- Establish 21 centres to offer psychosocial support and recreation activities for displaced children.

- Create and furnish temporary learning centres, supplied textbooks, and paid teachers' salaries.

- Build 300 new, earthquake-resistant and child-friendly schools in Aceh, the hardest-hit area.

- Vaccinate 30 million children nationwide to stop an outbreak of polio.

- Reunite approximately 2,500 children with their families or place them in foster care.

UN Development Programme (UNDP)

Established in 1965, the UNDP has an important role in promoting risk reduction in the developing world. UNDP's mission is to empower developing nations to build local capacity, through disaster reduction activities, and also in reducing vulnerabilities that make countries more susceptible to disasters.

The UNDP does this by focusing on the priorities.

Crisis prevention and recovery

UNDP works to reduce the risk of armed conflicts or disasters and promote early recovery after crises have occurred. The UNDP does this by supporting local government in needs assessment, capacity development, co-ordinated planning, and policy and standard setting.

The UNDP risk reduction programme includes strategies to reduce the impact of natural disasters, and also programmes to encourage use of diplomacy and prevent violence. Recovery programmes include schemes to:

- reintegrate displaced persons

- restore basic services

- set up transitional justice systems for countries recovering from warfare.

Democratic governance

Good governance is essential to effective planning and decision-making, both of which are critical during disasters. The UNDP provides policy advice and technical support to help countries as they transition to democratic governance. This support is aimed at:

- improving institutional and individual capacity within countries

- educating populations about and advocating for democratic reforms

- promoting negotiation and dialogue

- sharing successful experiences from other countries and locations.

Poverty reduction

Poverty is perhaps the most causative factor which makes people vulnerable to disasters. The UNDP helps countries develop strategies to combat poverty by:

- increasing access to economic opportunities and resources
- linking poverty programmes with countries' larger goals and policies
- ensuring a greater voice for the poor.

UNDP also works to reform trade, and encourage debt relief and foreign investment.

Environmental protection

UNDP seeks to address environmental issues in ways that promote sustainable development, both in terms of enhancing human development as well as in reducing poverty. UNDP works with countries to strengthen their capacity to address global environmental issues (such as) by providing innovative policy advice and linking partners through environmentally sensitive development projects that help poor people build sustainable livelihoods. Sustainable livelihoods means that people have the capabilities, assets and resources to achieve means of living in ways that do not undermine the natural resource base for future generations.

Empowerment of women

Gender equality and the empowerment of women are integrated in all areas of UNDP. For example, within the practice area of democratic governance, UNDP advocates and promotes increased participation of women in public office. Within the area of environmental protection, UNDP helps women's networks to participate in decision-making at the national, regional and global levels on environment and climate change issues.

HIV/Aids

UNDP works to help countries prevent further spread of HIV/Aids and reduce its impacts. The UNDP supports community-level action to address HIV/AIDS and helps build national capacity to manage initiatives that include people and institutions not usually involved in public health.

Case study: UNDP in Ecuador

In 1999, the Tungurahua volcano, located in the Andean region of Ecuador erupted suddenly necessitating a mass evacuation of local residents. The emergency caused major economic loss and created mistrust between residents of the area and the government due to the abruptness of the evacuation. Future eruptions were expected, so disaster preparedness planning is needed to minimise or prevent future losses.

The UNDP contributed funds to:

- support scientific monitoring of the volcano and distribute public information about volcanic activity

- build emergency shelters

- develop an evacuation plan

- purchase and distribute protective masks to be used in disaster response

- organise income-generating activities for the people who live in the high-risk areas

World Food Programme (WFP)

Created in 1962, this UN agency feeds millions of people through its relief programmes. Hunger is an everyday crisis for millions of people and is also a serious challenge in emergencies such as human displacement, drought and famine.

The WFP's five objectives are:

1. **Save lives and protect livelihoods in emergencies** by providing general food assistance and emergency nutrition interventions, emergency needs assessments, logistics and special operations support.

2. **Prepare for emergencies by conducting vulnerabili**ty analysis and mapping, using early warning tools and developing programmes to help communities reinforce their essential food security systems.

3. **Restore and rebuild lives after emergencies** by targeting programmes that facilitate the re-establishment of livelihoods, conducting special operations to rebuild essential hunger-related programmes, including voucher and cash-based schemes and strengthening local capacity.

4. **Reduce chronic hunger and under-nutrition everywhere** by supporting mother-and-child health and nutrition programmes;

developing school feeding programmes; and supporting schemes which address and mitigate HIV/Aids, tuberculosis and other diseases.

5. **Strengthen countries' capacities to reduce hunger** by supporting sustainable food and nutrition programmes which transform food and nutrition assistance into a productive investment in local communities, developing hand-over strategies to encourage national ownership of hunger solutions, helping countries develop their own ability to design, manage and use tools, policies and programmes to predict and reduce hunger.

Case study

Case study: WFP in Sudan

Sudan is WFP's largest operation in the world, and in 2010 the WFP aims to provide food and assistance to 11 million people. Darfur, one of the country's regions most in need of assistance, represents more than 70 per cent of WFP's budget in Sudan.

Some of WFP's projects in Sudan include:

- Provision of over 650,000 tonnes of food in 2010 for people affected by conflict in Sudan.

- Provision of humanitarian air services. This operation provides safe and cost-efficient air transportation to facilitate the movement of aid workers providing humanitarian assistance to Sudanese refugees, host populations and internally displaced persons throughout the country.

- Country Programme (2000–2008) consisted of two main activities:

    1. school feeding, including mother and child nutritional support and

    2. food for work which emphasises increasing food security for women.

UN High Commissioner for Refugees (UNHCR)

Originally established in 1950 to protect and resettle World War II refugees, UNHCR is today one of the world's key humanitarian agencies assisting millions of refugees and displaced people around the world.

The UNHCR is mandated to lead and co-ordinate international action to protect refugees and resolve refugee problems worldwide, with a particular emphasis on safeguarding the rights and well-being of refugees.

To achieve this, the UNHCR carries out the following activities:

- **Protection** – ensuring the basic human rights of uprooted or stateless people by ensuring that refugees will not be returned against their will to a country where they could face persecution.

- **Assistance –** providing emergency, life-saving assistance to refugees and internally displaced persons. This assistance can be in the form of:

    o clean water

    o food

    o sanitation services

    o shelter materials

    o registration assistance

    o providing advice on asylum applications, education and counselling, among others.

- **Protection of the environment** – camps and settlements for displaced persons and refugees can have a negative effect on the environment as well as on host communities and the local economy. UNHCR has developed policies and supports a wide range of projects to reduce or overcome damaged caused by humanitarian operations. UNHCR is also planning responses to population displacement resulting from climate change.

- **Emergency preparedness and response –** UNHCR has established teams of skilled people who are ready to respond to an emergency anywhere and at a moment's notice. The agency has also created emergency stockpiles of non-food supplies in Copenhagen and Dubai available to supplement local aid supplies in areas of need. Training and exercise programmes maintain the agency's response readiness.

- **Durable solutions –** UNHCR works with refugees' countries of origins and host countries to help people return home. Resettlement alternatives are explored and facilitated by the agency. Integration of refugees in host communities helps refugees live in peace and with dignity.

Case study: UNHCR in Democratic Republic of Congo (DRC)

One of the world's most brutal armed militias, the Lord's Resistance Army (LRA), is infamous for its attacks on civilians in eastern Congo. These ongoing militia attacks have forced hundreds of thousands of people to flee their homes. By 2008, the war and its aftermath had killed 5.4 million people, mostly from disease and starvation. Millions more were displaced from their homes or sought asylum in neighbouring countries.

Following the cessation of hostilities, the UNHCR response included a number of reintegration programmes aimed at facilitating the life of returnees and promote peaceful co-existence between the communities. This included the transitional shelter to IDPs and host families in order to:

- reduce protection risks and conflict

- assist income generation activities and vocational skills training

- prevent and provide rapid response to sexual and gender-based violence

- give legal and protection assistance to refugees to ensure their basic human rights.

World Health Organization (WHO)

WHO is the world's central authority on health and sanitation. The agency partners with countries to assist in suppressing epidemics and works to build medical and healthcare capabilities. The WHO also provides training, technical expertise and supports research on disease eradication.

WHO activities address primary hazards, including epidemics and pandemics, as well as secondary health hazards such as drinking water, sanitation and monitoring of diseases, all components of most disasters.

In the event of a disaster, WHO responds by:

- **Addressing the health of victims** by providing effective, efficient and timely interventions to save lives and reduce suffering.

- **Providing ongoing technical assistance to responding agencies**, for example, mobilising teams of public health specialists to identify priority health and nutrition-related issues and ensure that they are addressed appropriately.

- **Serving as an ongoing source of expertise as needs arise** by ensuring that humanitarian health assistance is in line with international standards.

Case study: WHO in Pakistan

In October 2005, Pakistan's North-West Frontier Province experienced a Richter 7.6 earthquake which resulted in the deaths of more than 73,000 people, 150,000 were injured and 2.5 million were left homeless, right before the onset of winter. The WHO responded by:

- deploying emergency relief teams

- providing emergency health kits to meet the immediate basic health needs of people affected as well as surgical kits

- sending generators and fuel to run health facilities

- distributing 100,000 chlorine tablets to disinfect water

- making tetanus vaccine available

- ensuring that measles campaigns were underway

- ensuring that malaria officers were spraying to control mosquitoes.

Long-term – addressing economic development

After the immediate needs of humanitarian aid have been met in a disaster, priorities generally shift to ensuring long-term recovery.

With natural disasters intensifying and increasing over the past decades, it has become evident that they are tightly intertwined with human development. This is due to the fact that the levels of poverty, urbanisation and environmental degradation (prevalent in developing countries) exacerbate a population's vulnerability towards destruction. Additionally, the social, economic and physical infrastructure is often not suited to withstand the unpredictable extremes of catastrophes. These factors increase the consequences of natural disasters and impede recovery.

The UN has recognised the need for post-disaster recovery to go beyond simply rebuilding pre-existent infrastructure, but working towards long-term disaster reduction minded development. For example, the UNDP and International Strategy for Disaster Reduction (ISDR) have begun to use long-term recovery efforts to implement pre-emptive disaster risk reduction tools in development efforts.

Disaster risk reduction is now recognised as a strong feature in post-catastrophe efforts to reduce future loss – this includes building physical infrastructure that can withstand disasters and reducing environmental degradation. Another example is integrating disaster reduction activities into the education system; not only by building stronger and safer schools but by using education as a medium to teach children about what to do in a disaster.

Non-governmental organisations (NGOs)

Non-governmental organisations play a critical role in preparing for and responding to disasters.

"In 2006 alone, 114 NGOs around the world raised USD 2.2 billion in humanitarian assistance (Development Initiatives, 2009). In response to the Asian Tsunami (for example) NGO's contributed more than USD 3.2 billion" (Flint & Goyder, 2006).

As illustrated in the following examples, NGOs play a key role in all aspects of disaster management activities including mitigation, preparedness, and response and recovery activities.

Mitigation

Disaster risk reduction activities performed by development-oriented NGOs can include:

- advocating for disaster risk reduction policies

- educating communities about hazards

- conducting vulnerability and risk assessments

- working with communities to build structural improvements that will serve to mitigate disaster risks.

NGO participation in disaster risk reduction activities is beneficial because NGOs work:

- at grass root levels and take a participatory approach, allowing them to build on local capacities and priorities

- with greater operational flexibility because their organisational structures are less bureaucratic

- on behalf of the most vulnerable, including the poorest and most vulnerable.

Case study

Case study: Malawi

The District of Chickwawa in southern Malawi endured regular flooding from a local river resulting in loss of lives, disruption of agricultural production and destruction of buildings. The flooding reinforced the district's cycle of poverty and eroded gains in community development.

In 2003, international NGO, Tearfund, assessed five villages' specific vulnerabilities to flooding and reviewed their capacities. Root causes of vulnerability were identified and reasons why the flooding happened on a regular basis were determined. Working with the villages, Tearfund initiated mitigation projects including building a wood lot and a storm drain. Subsequently, a community-based task force was created and worked with local government to design and build an earthen dike to restore the original river course. These combined efforts served to mitigate flood losses during the 2005 rainy season.

Preparedness

NGOs also contribute to preparedness efforts including:

- disaster preparedness training

- integrating disaster preparedness into school curricula and textbooks

- developing booklets, brochures and other awareness materials.

NGOs also work with communities to develop emergency plans, alerts systems and evacuation procedures including providing assistance for vulnerable persons who are unable to leave on their own.

Case study

Case study: Kyrgyzstan

Christian Aid worked with five villages and local government representatives in Kyrgyzstan to form rural disaster teams and school disaster teams. Teams were trained how to prepare and respond to disasters, including first aid training. The teams then helped community members become aware of existing and potential hazards and risks and were then able to develop a community disaster response plan.

Response and recovery

NGOs play a significant role in disaster response. Many NGOs have pre-established response teams, ready at a moment's notice to be in the affected area within the first 12 hours of a disaster working alongside first responders. Once the emergency phase is over, these quick-response teams return home and volunteers return to their day-to-day jobs. Examples of quick-response NGOs include:

- Doctors Without Borders

- International Medical Corp. Air-Serv International.

Case study

Case study: 2005 Hurricane Katrina

NGOs contribute to disaster response and recovery operations everywhere in the world, in both developing and developed countries.

Hurricane Katrina was the costliest (as well as one of the five most deadly disasters) in United States history. Following is a summarised view of the contributions made by selected NGOs.

International Medical Corps

The International Medical Corps (IMC) deployed a rapid response team to affected areas to determine the needs in impacted communities and provide medical, technical and financial assistance.

For the first four months following the hurricane, IMC:

- provided volunteer physicians and nurses to run mobile clinics serving more than 13,000 patients;

- offered a psychosocial support programme which provided tools and strategies to school-based staff and volunteers to enable them to cope with their losses and address the needs of affected students; and

- ran structured psychosocial activities for children, adolescents, and their families at temporary housing facilities.

Salvation Army

To support the Hurricane Katrina relief effort the Salvation Army assisted approximately 3.3 million people by:

- serving 5.7 million hot meals to survivors

- dispatching 178 canteens and 11 field kitchens

- providing emotional and spiritual support to over 180,000 people, and

- raising approximately USD 400 million in donations for response and recovery efforts.

Southern Baptist Disaster Relief

Southern Baptist Disaster Relief is made up of approximately 30,000 trained volunteers from Southern Baptist Convention churches across the United States and Canada. In response to Hurricane Katrina, about 5,000 volunteers were mobilised. The Southern Baptist Disaster Relief agency responded to the disaster by:

- preparing more than 750,000 meals out of 56 mobile kitchens

- providing water purification, child care, chain saw and recovery crews, and

- deploying chaplains to provide counselling and comfort to those affected.

Case study

Case study: 2004 Asian Tsunamis

Within hours after the devastating December 26, 2004, Asian Tsunamis, the international community launched an unparalleled disaster response. Approximately 140 NGOs from all over the world were involved in the response and recovery operations. Following are a summarised view of the contributions made by selected NGOs.

CARE International

CARE was already established in the countries affected by the tsunami and because of this ongoing presence, the NGO was able to respond immediately, distributing food, clean water, shelter, clothing, hygiene items and medicine. CARE International contributed USD 93.4 million to tsunami response and recovery efforts.

Caritas

Local Caritas workers were among the first to respond to the emergency, helping the injured, consoling survivors and organising the distribution of relief goods. During the initial emergency phase, the Caritas network assisted close to half a million people in the four countries, providing food, clothing, medicines, medical care, water purification and sanitation. Emergency relief programmes gradually gave way to longer-term projects focusing on shelter, rehabilitation of community infrastructure, improvement of public services, capacity building among local partners and promotion of community and social harmony.

Handicap International

Handicap International was already working in Sri Lanka, and therefore was able to provide immediate support in the form of post-trauma treatment, transporting survivors and providing first aid equipment to the affected districts.

HelpAge International

HelpAge International, an NGO whose main activities include the provision of humanitarian relief, disaster management and mitigation and advocacy for older people in emergencies, assisted over 200,000 people in India, Sri Lanka and Indonesia in the aftermath of the tsunami. HelpAge International focused on ensuring that the most vulnerable older people, their caregivers and families, were identified and registered, their health needs addressed and appropriate aid given. Local partners provided survivors with food, shelter and clothing. HelpAge International also provided healthcare and helped set up older people's associations so that older people could learn new trades and get counselling. Longer-term recovery assistance was provided in the form of cash grants and loans so that older people could set up new businesses.

World Vision International

During the initial acute phase of the emergency, World Vision provided relief to over 500,000 people in Indonesia, India, Myanmar, Sri Lanka and Thailand. Emergency supplies including tents, medicine, survival kits, food, clothing, hygiene items and water were delivered to areas most in need. In Sri Lanka, World Vision International distributed household

items, repaired houses and schools, provided school uniforms and school materials. In Thailand, this NGO set up training and service counselling centres, built shelters and set up food-for-work programmes. Rehabilitation programmes were also initiated in Indonesia where the focus was on social/community recovery, economic development and infrastructure rehabilitation.

The International Red Cross and Red Crescent Movement

Since its inception the International Red Cross and Red Crescent Movement has established an international presence in disaster management and has developed strong partnerships with local institutions and the ability to provide immediate and effective disaster response services. There are three distinct and interrelated components of the movement:

1. **International Committee of the Red Cross (ICRC).** The ICRC is not an NGO, but rather a private Swiss association mandated by the international community of states and founded upon the Geneva Conventions. Because of its international legal mandate, governments, the UN and other organisations, the ICRC is recognised as an intergovernmental organisation which provides protection and assistance to victims of conflict.

2. **International Federation of Red Cross and Red Crescent Societies (IFRC).** With more than 180 member societies, the IFRC is the world's largest humanitarian organisation. The IFRC works on the basis of seven fundamental principles which guide its humanitarian work:

    i. **Humanity** – the protection of life and health and the respect for all human beings.

    ii. **Impartiality** – no discrimination regarding nationality, race, religion, class or political opinions.

    iii. **Neutrality** – no involvement in hostilities or in political, racial, religious or ideological controversies.

    iv. **Independence** – autonomy is maintained.

    v. **Voluntary Service** – all workers serve voluntarily.

    vi. **Unity** – there may only be one Red Cross or Red Crescent Society in a country, open to all.

    vii. **Universality** – IFRC is a worldwide movement, with all societies having equal status and sharing equal responsibilities to help each other.

3. **Red Cross/Red Crescent Societies**

    Almost every community in every country in the world has a Red Cross/Red Crescent society. National Red Cross/Red Crescent societies have pivotal roles in responding to emergencies and provide a range of humanitarian services including disaster relief and health programmes. However, with increasing needs and decreasing

resources in many countries, national societies continue to provide assistance beyond the response phase, and into long periods of reconstruction and recovery. Red Cross/Red Crescent societies also contribute their efforts to mitigation and preparedness efforts.

Case study

> **Case study: Hurricanes Katrina, Wilma and Rita and the American Red Cross**
>
> After the series of three devastating hurricanes that hit the Gulf Coast of the United States in 2005, the American Red Cross:
>
> - deployed a total of 244,000 Red Cross volunteers
>
> - opened more than 1,400 emergency shelters and registered 3.8 million overnight stays in these shelters
>
> - distributed about 347,000 comfort kits which included toothpaste, soap, washcloths and children's toys
>
> - distributed more than 200,000 cleanup kits, containing brooms, mops and bleach
>
> - served 68 million snacks and meals to survivors and rescue workers
>
> - provided emergency financial assistance to 1.4 million families.

Code of conduct for NGOs in disaster relief

The code of conduct for NGOs in disaster relief was developed jointly by the International Federation of Red Cross and Red Crescent Societies and the International Committee of the Red Cross.

The purpose of the voluntary code of conduct is to guard standards of behaviour and maintain the standards of independence, effectiveness and impact to which disaster NGOs and the International Red Cross and Red Crescent Movement aspires.

The ten principles on which the code of conduct is based are:

1. The humanitarian imperative comes first.

2. Aid is given regardless of the race, creed or nationality of the recipients and without adverse distinction of any kind. Aid priorities are calculated on the basis of need alone.

3. Aid will not be used to further a particular political or religious standpoint.

4. We shall endeavour not to act as instruments of government foreign policy.

5. We shall respect culture and custom.

6. We shall attempt to build disaster response on local capacities.

7. Ways shall be found to involve programme beneficiaries in the management of relief aid.

8. Relief aid must strive to reduce future vulnerabilities to disaster as well as meeting basic needs.

9. We hold ourselves accountable to both those we seek to assist and those from whom we accept resources.

10. In our information, publicity and advertising activities, we shall recognise disaster victims as dignified humans, not hopeless objects.

Activity 2.3

Activity

Draw a line to connect the UN agency/programme with its correct description.

UN agency/programme	Description
UNICEF	This UN agency feeds millions of people through its relief programmes.
OCHA	The world's central authority on health and sanitation issues.
WFP	One of the world's key humanitarian agencies, assisting millions of displaced people.
WHO	Addresses problems children face day-to-day, as well as in disaster situations, including education, health care, human rights and safety.
UNDP	Plays an important role in promoting risk reduction in the developing world and empowering developing nations to build local capacity.
UNHCR	Responsible for bringing together national and international humanitarian organisations to ensure an effective response to emergencies.

Unit summary

Summary

In this unit you learned about:

- The role of the United Nations and various UN agencies and programmes.

- How the United Nations operates during disasters.

- The role of non-governmental organisations (NGOs) in disaster reduction and response activities around the world.

In Module 3 we will examine hazards and risks and consider how they can impact communities.

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Further readings

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Activity answers

Activity 2.1

1. Investigate and summarise the preparedness efforts your local community has undertaken to increase its readiness for an emergency.

    Answers may include:

    -   Community risk assessment has been completed.
    -   Hazards have been identified for area.
    -   Capacity and vulnerability mapping has been done.
    -   Disaster public education is on-going.

2. Outline the steps you have personally taken to prepare yourself and your family for an emergency or disaster.

    Answers may include:

    -   My family and I know the risks in our area.
    -   We have discussed an emergency communication plan for our family.
    -   I have an emergency "go bag" prepared and ready to take with me if I need to evacuate.
    -   I have considered any special needs my family would have in an emergency and have planned for them.
    -   I have familiarised myself with my community's evacuation routes.

Activity 2.2

The Yokohama Strategy and the Hyogo Framework for Action are founded on the concept of risk reduction. Suggest at least five practical ways a community can reduce its disaster risks.

Answers may include:

-   Promote private sector business continuity planning.
-   Incorporate risk management in land use planning.
-   Promote risk reduction education in schools.
-   Build partnerships between emergency management and private sector companies.
-   Develop early warning systems.
-   Strengthen legislation which promotes risk reduction.
-   Build community participation in risk reduction efforts.

Activity 2.3

UN agency/programme	Correct description
UNICEF	Addresses problems children face day-to-day, as well as in disaster situations, including education, health care, human rights and safety.
OCHA	Responsible for bringing together national and international humanitarian organisations to ensure an effective response to emergencies.
WFP	This UN agency feeds millions of people through its relief programmes.
WHO	The world's central authority on health and sanitation issues.
UNDP	Plays an important role in promoting risk reduction in the developing world and empowering developing nations to build local capacity.
UNHCR	One of the world's key humanitarian agencies, assisting millions of displaced people.

Appendix A

American Red Cross Disaster Services – your evacuation plan

What to do if a disaster threatens and you need to leave home in a hurry.

The American Red Cross wants you to know what to do if a hurricane, flood, mudslide, landslide, chemical emergency, or other disaster threatens and you need to leave your home in a hurry, or if local government officials request or require evacuation. Use this checklist to make a personal evacuation plan, so you and your family will be ready.

Local government officials, not the Red Cross, issue evacuation orders when disaster threatens. Listen to local radio and television reports when disaster threatens. If local officials ask you to leave, do so immediately!

If you have only moments before leaving, grab these things and go!

- Medical supplies: prescription medications and dentures.
- Disaster supplies: flashlight, batteries, radio, first aid kit, bottled water.
- Clothing and bedding: a change of clothes and a sleeping bag or bedroll and pillow for each household member.
- Car keys and keys to the place you may be going (friend's or relative's home).

If local officials haven't advised an immediate evacuation, but there's a chance the weather may get worse and flooding may happen, take steps to protect your home and belongings. Do this only if local officials have not asked you to leave.

These checklists will help you prepare:

☐ **Bring Things Indoors.**
Lawn furniture, trash cans, children's toys, garden equipment, clotheslines, hanging plants and any other objects that may fly around and damage property should be brought indoors.

☐ **Leave trees and shrubs alone.**
If you did not cut away dead or diseased branches or limbs from trees and shrubs, leave them alone. Local rubbish collection services will not have time before the storm to pick anything up.

☐ **Look for potential hazards.**
Look for coconuts, unripened fruit, and other objects in trees around your property that could blow or break off and fly around in high winds. Cut them off and store them indoors until the storm is over.

☐ **Turn off electricity and water.**
Turn off electricity at the main fuse or breaker, and turn off water at the main valve.

☐ **Leave natural gas on.**
Unless local officials advise otherwise, leave natural gas on because you will need it for heating and cooking when you return home. If you turn gas off, a licensed professional is required to turn it back on, and it may take weeks for a professional to respond.

☐ **Turn off propane service.**
Propane tanks often become dislodged in disasters.

☐ **If high winds are expected, cover the outside of all windows of your home.**
Use shutters that are rated to provide significant protection from windblown debris, or fit plywood coverings over all windows.

☐ **If flooding is expected, consider using sand bags to keep water away from your home.**
It takes two people about one hour to fill and place 100 sandbags, giving you a wall one foot high and 20 feet long. Make sure you have enough sand, burlap or plastic bags, shovels, strong helpers and time to place them properly.

Remember these points:

☐ **Houses do not explode due to air pressure differences.**
Damage happens when the wind gets inside a home through a broken window, door, or damaged roof.

☐ **Tape does not prevent windows from breaking.**
All tape does is prevent windows from shattering. Using tape on windows is not recommended. Cover the outside of windows with shutters or plywood.

Protect your valuables.

☐ **Move objects that may get damaged by wind or water to safer areas of your home.**
Move television sets, computers, stereo and electronic equipment, and easily moveable appliances like microwave ovens to higher levels of your home and away from windows. Wrap them in sheets, blankets, or burlap.

☐ **Make a visual or written record of all your household possessions.**
Record model and serial numbers. This list could help you prove the value of what you owned if those possessions are damaged or destroyed, and can assist you to claim deductions on taxes. Be sure to include expensive items such as sofas, chairs, tables, beds, chests, wall units and any other furniture too heavy to move. Do this for all items in your home, on all levels. Then store a copy of the record somewhere away from home, such as in a safe deposit box.

If it's possible that your home may be significantly damaged by impending disaster, consider storing your household furnishings temporarily elsewhere.

Gather essential supplies and papers.

You will need the following supplies when you leave your homes; put them all together in a duffel bag or large container in advance:

- Torch with plenty of extra batteries

- battery-powered radio with extra batteries

- first aid kit

- prescription medications in their original bottle, plus extra copies of the prescriptions

- eyeglasses (with a copy of the prescription)

- water (at least one gallon per person is recommended; more is better)

- foods that do not require refrigeration or cooking

- items that infants and elderly household members may require

- medical equipment and devices, such as dentures, crutches or prostheses

- change of clothes for each household member

- sleeping bag or bedroll and pillow for each household member

- chequebook, cash and credit cards

- map of the area.

Important papers to take with you:

- driver's licence or personal identification

- social security card

- proof of residence (deed or lease)

- insurance policies

- birth and marriage certificates

- stocks, bonds and other negotiable certificates

- wills, deeds and copies of recent tax returns.

Remember your pets

- Pets are not permitted in Red Cross shelters. Plan to take them to a friend's or relative's home or a hotel that accepts pets during times of emergency.

- Remember to carry them in a sturdy carrier.

- Have identification, collar, leash, and proof of vaccinations for all pets.

- Have food and water for your pets.

- Have a current photo of your pets in case they get lost.

All Red Cross assistance is given free of charge. This is made possible by the generous contributions of people's time, money and skills. One of

the best ways to help the Red Cross assist people affected by disasters is to make financial contributions to the American Red Cross Disaster Relief Fund. Call 1-800- HELP NOW or contact your local Red Cross chapter.

Source: American Red Cross. (n.d.). *Your evacuation plan*. Retrieved March 8, 2011, from http://www.redcrosscpc.org/evac_plan.php

Appendix B

Selected countries and their national approach to emergency management

Australia

The key federal co-ordinating and advisory body for emergency management in Australia is Emergency Management Australia (EMA). Each state in Australia has its own State Emergency Service. The Emergency Call Service provides a national emergency telephone number where people may contact state police, fire and ambulance services. Arrangements are in place for state and federal co-operation.

Canada

Public Safety Canada (PS) is Canada's national emergency management agency. PS co-ordinates and supports the efforts of federal organisations ensuring national security and the safety of Canadians. The agency also works with other levels of government, first responders, community groups, the private sector (including critical infrastructure operators) and other nations.

The work of Public Safety Canada is based on a wide range of policies and legislation through the Public Safety and Emergency Preparedness Act which defines the powers, duties and functions of PS. Other acts are specific to fields such as corrections, emergency management, law enforcement, and national security. Each province and territory is required to set up an Emergency Management Organisation (EMO).

Germany

In Germany the federal government controls the country's disaster relief and civil protection programmes. Local units of the German fire department and the Federal Agency for Technical Relief are part of these programmes. The German Armed Forces, the German Federal Police and the 16 state police forces have also been deployed for disaster relief operations.

In addition to the German Red Cross, humanitarian help is provided by the *Johanniter-Unfallhilfe*, the German equivalent of the St. John Ambulance, as well as by other private organisations.

India

In India, the role of emergency management falls to National Disaster Management Authority of India, a government agency subordinate to the Ministry of Home Affairs.

In recent years there has been a shift in emphasis, from response and recovery to strategic risk management and reduction, and from a government-centred approach to decentralised community participation.

Survey of India, an agency within the Ministry of Science and Technology, is also playing a role, bringing academic knowledge and

research expertise of earth scientists to the emergency management process.

Recently the government has formed the Emergency Management and Research Institute (EMRI). This group represents a public/private partnership, funded primarily by a large India-based computer company, Satyam Computer Services, with a focus on improving the general response of communities to emergencies and disasters. Some of the group's early efforts were the provision of emergency management training for first responders (a first in India), the creation of a single emergency telephone number, and the establishment of standards for EMS staff, equipment and training.

The Netherlands

In the Netherlands, the Ministry of the Interior and Kingdom Relations is responsible for emergency management and operates a national crisis centre. The country is divided into 25 safety regions. Each safety region is covered by three services: police, fire and ambulance. All regions use a Co-ordinated Regional Incident Management system. The Ministry of Defence also has an active role in the country's emergency management.

New Zealand

In New Zealand, responsibility for emergency management begins at the local level. Local government is unified into 16 Civil Defence Emergency Management Groups (CDEMGs). Every CDEMG is responsible for ensuring that local emergency management is as robust as possible.

If an emergency exceeds local capacity, pre-existing mutual-support arrangements are activated. As warranted, the central government has the authority to co-ordinate emergency response through the National Crisis Management Centre (NCMC), operated by the Ministry of Civil Defence & Emergency Management.