Introduction to Disaster Preparedness

Disaster Preparedness Training Programme

International Federation
of Red Cross and Red Crescent Societies

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Background and uses

This module is one of nine modules that have been prepared by INTERWORKS for the International Federation of Red Cross and Red Crescent Societies Disaster Preparedness office in Geneva. This module can be used as for independent study, as a reference guide on the subject, and to provide participants at a workshop training event on this topic. It is intended to accompany the trainer's notes on this topic.   Their intended use is global, and they are written for generalists, planners and professionals with disaster preparedness and/or emergency response responsibilities both within the Federation and in the National Societies. Non-governmental organisations interested in disaster preparedness and preparedness planning, government emergency commissions, local disaster committees and civil defence training units may also find these modules useful.

This material can be used as:
- A general reference material on disaster preparedness
- Training and workshop modules and trainer's guides
- An orientation to disaster preparedness for Delegates and NS officers
- A guide for assessing or planning disaster preparedness capabilities

All nine of these modules are revised and updated versions of modules that were initially developed for the Central Asia IFRC Disaster Preparedness Regional Delegation DP project in 1998. This project resulted from recommendations and training needs expressed by Central Asian National Society and Emergency Commission staff attending the IFRC sponsored regional disaster preparedness conference held in Tashkent, Uzbekistan from June 24-26, 1996.

The overall aim of the Central Asia DP training project was to support the National Societies in further developing their own structures for preparedness in conjunction with those of the Emergency Committees, Ministries and Civil Defence organisations in each of the five countries in the region. To date, disaster preparedness in the region has been typified by highly response oriented, well maintained and trained Civil Defence organisations; and largely unprepared, and untrained local populations and non-governmental organisations. Disaster management has traditionally consisted of preparedness for efficient and centralised emergency response, not the development of community-based or localised preparedness capacity. The Central Asia DP training programme was one attempt to change this emphasis and was proposed as a starting point from which revisions, and modifications for use on a country-by-country basis were expected and welcomed.

This material is based on a "multi-hazard" approach, and is typically applicable to preparedness in all of the hazard situations represented. However, the specific country context of the readers and trainees will necessitate a focus on the hazard types that are most applicable to their situation. While the modules and accompanying trainer's notes are written for use at national level workshops, individuals with training responsibilities are encouraged to use and adapt the material for use at more local regions and towns.

The nine disaster preparedness modules and trainer's notes

Introduction to Disaster Preparedness	Preparedness Planning	Risk Reduction
Increasing Community Disaster Awareness	Disaster Emergency Needs Assessment	Disaster Programme Information and Reporting
Improving Coordination	Improving Basic Training Skills	Project Planning

Acknowledgements

These nine modules and their accompanying trainer's notes were prepared for the International Federation by INTERWORKS, a consulting group with disaster management training and consulting experience in over 60 countries worldwide. Review and critique of these modules were provided by a team of Central Asian disaster management specialists, the disaster preparedness officers of five Central Asia National Societies, the Federation disaster preparedness staff in Geneva and delegates in Central Asia, the Caribbean and East Africa.

The following documents served as references for the compilation and writing of this particular module:

1. "Disaster Preparedness" in the IFRC *Handbook for Delegates*, 1997.
2. *Strategy 2010*, IFRC 1999.
3. *People-Oriented-Planning at Work: Using POP to Improve UNHCR Programming*, M. Anderson for UNHCR, 1994.
4. "Report on National and Local Capabilities for Early Warning," Convenor of International Working Group and first authored by Mr. Andrew Maskrey for the IDNDR Secretariat, Geneva October 1997, p. F-8.

Introduction to Disaster Preparedness

Aim and audience

This module provides a common starting point for understanding and discussing disasters, disaster management, and disaster preparedness as part of a National Society's mission, and discusses the potential scope of disaster preparedness measures.

This module is appropriate for anyone who has general responsibilities for disaster management and programme implementation. Non-technical personnel interested in acquiring a better understanding of disaster preparedness and the strategies and measures that may be implemented as part of a preparedness plan can also benefit from reading this module.

Main points

- how disaster preparedness fits into the work of the International Federation and National Societies

- the overarching aims and objectives of disaster preparedness

- definitions of the terms hazards, disasters and vulnerability

- identification of different types of disasters

- the scope of disaster preparedness measures

- the concept of community-based disaster

1.   Overview of disaster preparedness

1.1   Disaster preparedness and the Red Cross and Red Crescent Movement

The purpose of the International Red Cross and Red Crescent Movement, as embodied in its Constitution and the principle of humanity, is to prevent and alleviate human suffering wherever it may be found, to protect life and health and ensure respect for the human being. Disaster preparedness fits within this overarching purpose and has been identified in IFRC's *Strategy 2010*, as one of the "core areas" that National Societies should prioritise and integrate into their overall programming efforts.

Many people and agencies take part in emergency response operations including local populations and community-based organisations, Civil Defence and national emergency structures, fire brigades, Red Crescent/Red Cross Societies, international agencies, NGOs and others. The International Federation and National Societies need to recognise that disaster preparedness, particularly in terms of post-disaster response, is primarily a government responsibility but that the National Society, as an auxiliary of the public authorities, can also make an important contribution. Therefore, National Societies should

communicate and coordinate their plans with those of other government agencies and non-governmental organisations involved in disaster preparedness and response. This will improve planning, reduce duplication of efforts, make plans more realistic and increase the overall effectiveness of NS disaster preparedness and response efforts.

1.2 Aims and objectives of disaster preparedness

Disaster preparedness refers to measures taken to prepare for and reduce the effects of disasters. That is, to predict and—where possible—prevent them, mitigate their impact on vulnerable populations, and respond to and effectively cope with their consequences. Disaster preparedness is best viewed from a broad perspective and is more appropriately conceived of as a goal, rather than as a specialised programme or stage that immediately precedes disaster response.

Disaster preparedness is a continuous and integrated process resulting from a wide range of activities and resources rather than from a distinct sectoral activity by itself. It requires the contributions of many different areas—ranging from training and logistics, to health care to institutional development. Viewed from this broad perspective, disaster preparedness encompasses the following objectives:

- Increasing the efficiency, effectiveness and impact of disaster emergency response mechanisms at the community, national and Federation level. This includes:
  - ➢ the development and regular testing of warning systems (linked to forecasting systems) and plans for evacuation or other measures to be taken during a disaster alert period to minimise potential loss of life and physical damage
  - ➢ the education and training of officials and the population at risk
  - ➢ the training of first-aid and emergency response teams
  - ➢ the establishment of emergency response policies, standards, organisational arrangements and operational plans to be followed after a disaster

- Strengthening community-based disaster preparedness through National Society programmes for the community or through direct support of the community's own activity. This could include educating, preparing and supporting local populations and communities in their everyday efforts to reduce risks and prepare their own local response mechanisms to address disaster emergency situations.

- Developing activities that are useful for both addressing everyday risks that communities face and for responding to disaster situations—for example, health, first aid or social welfare programmes that have components useful for disaster reduction and response.

2. Hazards, disasters and vulnerability

The following terms and their definitions are important to understanding disaster preparedness.

A *disaster* is an extreme disruption of the functioning of a society that causes widespread human, material, or environmental losses that exceed the ability of the affected society to cope using only its own resources. Events such as earthquakes, floods, and cyclones, by themselves, are not considered disasters. Rather, they become disasters when they

adversely and seriously affect human life, livelihoods and property. ***Disaster preparedness***, therefore, seeks to prepare for and reduce these adverse effects.

A ***hazard***, on the other hand, refers to the potential occurrence, in a specific time period and geographic area, of a natural phenomenon that may adversely affect human life, property or activity to the extent of causing a disaster. A hazard occurrence (the earthquake, the flood, or the cyclone, for example) becomes a disaster when it results in injuries, loss of life and livelihoods, displacement and homelessness and/or destruction and damage to infrastructure and property. A cyclone that surges over an uninhabited island does not result in a disaster; however, it would be a disaster if it hit the populated coast of Bangladesh and caused extensive loss of lives and property.

***S*tructural or physical vulnerability** is the extent to which a structure is likely to be damaged or disrupted by a hazard event. For example, a wood frame house with large-headed, roofing nails, rafter tie-downs, anchor bolts and a solid foundation is less vulnerable structurally to severe cyclone winds than a similar-looking house which does not have these structural details.

Human vulnerability is the relative lack of capacity of a person or community to anticipate, cope with, resist and recover from the impact of a hazard. Factors that increase human vulnerability to disasters include rapid urbanisation, population growth, and lack of knowledge about how to effectively resist the effects of disasters and poverty. Of all the factors, poverty is perhaps at the root of what makes most people vulnerable to the impact of most hazards.

> GeoHazards International (GHI), a non-profit organisation dedicated to the reduction of death and injury caused by earthquakes in the world's most vulnerable communities has estimated that in the 20th century, four of every five deaths caused by earthquakes occurred in developing countries. The 1988 Armenian earthquake and the 1989 Loma Prieta earthquake in Northern California were nearly equivalent in their magnitudes and in the number of people in the affected regions, but the results were far different—63 people died in California while at least 25,000 died in Armenia.
>
> This can be explained in large part by the relatively higher levels of human and structural vulnerability to earthquakes in Armenia.
>
> Source: *GHI website http://www.geohaz.org/ginfo/atperil.htm*

Human capacities are the qualities and resources an individual or community can use and develop to anticipate, cope with, resist and recover from the impact of a hazard. According to UNHCR's People-Oriented-Planning Framework, human capacities include material resources (i.e. food, animals, cash, tools); social and organisational capacities (i.e. leadership, previous organising experience, community based organisations and networks); and attitudinal capacities (i.e. beliefs, motivations, work values, ideas, creativity, efficacy) (Anderson 1994). All people and all communities have resources and capacities and therefore a foundation for preparedness and risk reduction that National Societies can support and help build.

3.   Disaster classifications

There are different ways to classify disasters. Classifications matter because preparedness, response and risk reduction measures as well as the specialists and agencies involved depend on the type of disaster. Disasters are often classified according to their cause, their

speed of onset (sudden or slow) and whether or not they are due to "acts of nature" or "acts of humans"—a classification which is often contested, because it is argued that human actions, in fact, also precipitate natural disasters.

3.1 Hazards causing disasters

Disasters classified according to cause are named after the hazard which results in the disastrous social and economic consequences. Thus, this classification includes earthquakes, floods, cyclones, tornadoes, landslides, mud flows, droughts, pest and insect infestations, chemical explosions, etc.

3.2 Speed of onset

The speed of the disaster's onset is another way to distinguish between disasters—and the types of responses that may be required. A *rapid onset disaster* refers to an event or hazard that occurs suddenly, with little warning, taking the lives of people, and destroying economic structures and material resources. Rapid onset disasters may be caused by earthquakes, floods, storm winds, tornadoes, or mud flows. The earthquake that struck western Turkey in August 1999 is one such example. (See insert at right.)

Earthquake in Turkey

In the second half of 1999, two massive earthquakes in less than three months struck north-western Turkey, the country's most densely populated region and industrial heartland. The first, on 17 August 1999 at 03h02 local time, measured between 7.4 and 7.8 on the Richter scale and lasted 45 seconds. Izmit, an industrial city of one million in western Turkey, was the nearest to the epicentre. The official death toll stands at over 17,100, with some 44,000 people injured, nearly 300,000 homes either damaged or collapsed, and more than 40,000 business premises similarly affected. On the day of the catastrophe, the Turkish government declared a state of emergency and requested international assistance. The disaster was followed by more than 1,300 after-shocks, culminating in the second quake at 18h57 on 12 November 1999 which rated 7.2 on the Richter scale and shook Düzce and Kaynasli counties in the north-western province of Bolu, some 100 kms to the east of Izmit. The jolt was felt both in Istanbul (some 260 kms to the west) and Ankara, the nation's capital, 300 kms to the east. According to the latest casualty figures, there is a confirmed death toll of 845, with nearly 5,000 people injured.

Source: IFRC, Turkey: Earthquakes Situation Report no. 37, 14 Feb 2000.

Slow onset disasters occur over time and slowly deteriorate a society's and a population's capacity to withstand the effects of the hazard or threat. Hazards causing these disaster conditions typically include droughts, famines, environmental degradation, desertification, deforestation and pest infestation. The El Niño phenomenon is an example of one such disaster. (See box insert on the next page).

The1997-1998 El Niño phenomenon

The 1997-1998 climate phenomenon of "El Niño" severely affected several countries, with considerable impact in Asia and Central/South America since April 1997. Floods inflicted 41 countries, while 22 others were hit by drought and two countries by major forest fires. El Niño had far reaching effects on crop production, national food situations, livestock and fish production, and forests and natural vegetation in several parts of the world, according to Mr. Abdur Rashid, Chief of FAO's Global Information and Early Warning System (GIEWS). In addition to livestock losses due to heavy rainfall and floods attributed to El Niño in eastern Africa, ideal conditions developed to create an outbreak of animal and human diseases. For example, Rift Valley Fever (notably in Kenya, Somalia and Ethiopia) resulted in extensive deaths and illness, putting large parts of neighbouring countries at serious risk of the epidemic. Regarding its impact on fisheries, El Niño caused severe damage to the area off western South America, which is considered one of the richest fishing regions in the world, producing 12 to 20 percent of the world's total fish landings. One of the greatest El Niño-related threats to forests and natural vegetation was the increased risk of wildfires due to drought conditions.

Source: Food and Agriculture Organization (FAO), 31 Jul 1998.

3.3 Acts of nature or acts of humans

Disasters are sometimes classified according to whether they are "natural" disasters, or "human-made" disasters. For example, disasters caused by floods, droughts, tidal waves and earth tremors are generally considered "natural disasters." Disasters caused by chemical or industrial accidents, environmental pollution, transport accidents and political unrest are classified as "human-made" or "human-caused" disasters since they are the direct result of human action.

A more modern and social understanding of disasters, however, views this distinction as artificial since most disasters result from the actions or inaction of people and their corresponding political, social and economic structures. In other words, humans consciously or inadvertently create the social, political and economic conditions which lead to disasters. This happens by people living in ways that degrade their environment, developing and overpopulating urban centres, or creating and perpetuating political, social and economic systems that result in unequal access to land and resources. Communities and populations forced to settle in areas susceptible to the impact of a raging river or the violent tremors of the earth are placed in situations of high vulnerability because of their destitute economic condition and their relative lack of political power.

4.   Disaster preparedness measures

Disaster preparedness, as already stated, is a broad concept that describes a set of measures that minimises the adverse effects of a hazard including loss of life and property and disruption of livelihoods. Disaster preparedness is achieved partially through readiness measures that expedite emergency response, rehabilitation and recovery and result in rapid, timely and targeted assistance. It is also achieved through community-based approaches and activities that build the capacities of people and communities to cope with and minimise the effects of a disaster on their lives.

A comprehensive disaster preparedness strategy would therefore include the following elements:

1. Hazard, risk and vulnerability assessments	2. Response mechanisms and strategies	3. Preparedness plans
4. Coordination	5. Information management	6. Early warning systems
7. Resource mobilisation	8. Public education, training, & rehearsals	9. Community-Based disaster preparedness

The ninth element, "Community based disaster preparedness" (CBDP), should not be seen as a measure distinct from the other elements. Rather, CBDP is a process that encompasses and incorporates the first eight elements into a locally appropriate and locally "owned" strategy for disaster preparedness and risk reduction. This section will discuss aspects of the first eight elements. Section 5 provides the rationale for and examples of community-based disaster preparedness.

4.1   Hazard, risk and vulnerability assessments

All planning and implementation of disaster preparedness measures should be based on an assessment and prioritisation of the hazards and risks that people face, as well as their ability or inability to cope with and withstand the effects of those hazards. This assessment should:

- Identify the characteristics, frequency and potential severity of the hazards a community faces
- Identify the particular geographical areas and communities that are most susceptible and vulnerable to those hazards
- Identify the main sectors of a community (population, infrastructure, housing, services, etc.) that would be affected by a specific type of hazard and anticipate how they might be affected
- Assess the ability of those sectors to withstand and cope with the effects of hazardous phenomena

4.2   Response mechanisms and strategies

There are many preparedness mechanisms and strategies that will strengthen and increase the effectiveness of an emergency response. These include development or formation of:

- evacuation procedures (including how to disseminate these procedures to the public)
- search and rescue teams (including plans for training them)
- assessment teams (including plans for training them)

- an assessment process and information priorities for an emergency response
- measures to activate special installations, such as emergency or mobile hospital facilities
- procedures for activating distribution systems
- preparations for emergency reception centres and shelters
- procedures for activating emergency programs for airports, harbours and land transport
- preparations for storing or making arrangements for rapid acquisition of emergency relief supplies and equipment

The module "Preparedness Planning" covers these measures and the following in more detail.

4.3   Preparedness planning

The concept of preparedness planning is very important for those involved in disaster management. During an actual emergency, quick and effective action is required. This action often depends on having made and implemented preparedness plans. If appropriate action is not taken or if the response is delayed, lives may be needlessly lost. In a preliminary plan, even though the details of a disaster remain uncertain, you can identify emergency shelter sites, plan and publicise evacuation routes, identify emergency water sources, determine chains of command and communication procedures, train response personnel and educate people about what to do in case of an emergency. All of these measures will go a long way to improving the quality, timing and effectiveness of the response to a disaster.

Disaster preparedness planning involves identifying organisational resources, determining roles and responsibilities, developing policies and procedures and planning preparedness activities aimed at ensuring timely disaster preparation and effective emergency response. The actual planning process is preliminary in nature and is performed in a state of uncertainty until an actual emergency or disaster occurs. The aim of preparedness planning is to identify assignments and specific activities covering organisational and technical issues to ensure that response systems function successfully in the event of a disaster. The ultimate objective is not to write a plan but to stimulate on-going interaction between parties, which may result in written, usable agreements. The written plan is an instrument, but not the main goal of the planning process. Annex 2 provides a sample outline of a National Society disaster preparedness plan.

4.4   Coordination

National Society plans ideally should be coordinated with the plans and intentions of other agencies and organisations. Effective disaster response requires mutual trust and coordination of efforts and resources among the many agencies and people involved in emergency response—including the affected local population and local community based organisations, Civil Defence and government emergency structures, fire brigades, health departments and clinics, Red Crescent/Red Cross Societies, international agencies, NGOs and others.

It often occurs that other agencies and organisations have mandates and activities that overlap with those of the National Society. For example, a Red Crescent Society, a local

religious centre and an international NGO may all provide first aid, shelter and food to disaster-affected populations. In this case, clear coordination of activities is required to ensure that the maximum number of people is assisted in the shortest possible time and to avoid unnecessary duplication of services. One person from each agency should have responsibility for each major type of response activity. Through direct coordination, agencies can clearly divide responsibility for different operations and plan their actions accordingly.

Representatives of various agencies working in one sector (health, shelter and food provision) may organise sub-groups or systems. Working on disaster preparedness planning prior to the disaster helps involved agencies better understand each other's aims, objectives and capacities. Such understanding and communication result in more coordinated efforts, and help avoid duplication and identify gaps and weaknesses in necessary services during an actual emergency response.

Memoranda of understanding, institutional policies, and joint preparedness planning can serve as the basis for coordination. National Societies should also review national legislation or policies delineating the role and relationship between public and non-public institutions, and any specific references dealing with the National Society's role and access to government resources. Besides their involvement on the national, division and local level disaster committees, National Societies can also liase actively with the appropriate government ministries and agencies. (See insert at right.)

> **Ugandan RC Society (URCS)**
> **coordination with the government**
>
> It is important that the disaster preparedness work of the Ugandan Red Cross Society support the government's efforts in [disaster management]. This implies that the URCS must liase with the appropriate authorities in order to ensure that the work done is within the framework of government plans and that URCS does not duplicate government efforts.   The liaison procedure shall, in principle operate through the Secretary General of the URCS. Day to day coordination may be delegated to the Head of Programme Disaster Preparedness if the Secretary General sees fit. URCS will take the initiative to call a meeting twice annually with the Ministry of Labour and Social Welfare, NGOs and any other government agencies which are at the time active in disaster preparedness.
>
> *Source: URCS: Disaster Preparedness Policy.*

4.5   Information management

Disaster preparedness and response depend on gathering, analysing and acting on timely and accurate information before (hazard and early warning information), during (disaster needs assessment) and after disasters (progress of post-disaster recovery). This requires that National Societies pre-determine what information they need, how it will be collected, who will collect it, who will analyse it and how it will be integrated into a timely decision-making process.

If National Societies are to respond to disasters in a timely fashion, they will need to develop procedures and mechanisms for obtaining, analysing and responding to early warning information related to hazard detection, forecasting and alerts. (See section 4.6 on Early Warning systems.)

Once a disaster strikes, National Societies must conduct initial assessments that are timely and that inform emergency responders about critical and immediate life-saving needs. Disaster needs assessments should develop a picture of where people are, what condition they are in, what they are doing, what their needs and resources are, and what services are still available to them. After an initial assessment, more in-depth needs assessments should collect information related to critical sectors and technical areas of concern. The two modules in this series that deal more completely with disaster information, assessment and reporting are: "Disaster Programme Information and Reporting," and "Disaster Emergency Needs Assessment."

4.6 Early warning systems

The purpose of early warning systems is to detect, forecast, and when necessary, issue alerts related to impending hazard events. In order to fulfil a risk reduction function, however, early warning needs to be supported by information about the actual and potential risks that a hazard poses, as well as the measures people can take to prepare for and mitigate its adverse impacts. Early warning information needs to be communicated in such a way that facilitates decision-making and timely action of response organisations and vulnerable groups (Maskrey 1997). Early warning information comes from a number of sources: e.g. meteorological offices; Ministries of Health (for example, disease outbreaks)

> **Cyclone Warning, Andhra Pradesh, India**
>
> Government officials were able to implement a previously planned programme to evacuate 600,000 people from the path of an approaching cyclone within 40 hours. This was possible because the results of meteorological forecasts and warnings were communicated through a combination of advanced and traditional channels to people conversant with the preparedness plan from earlier community exercises. Fatalities numbered less than one-tenth of the more than 10,000 people who perished in a similar cyclone 13 years before. At that time in the same location, neither warning, communications, nor local response capacities were as well established. (UN, 1995)
>
> **Lahar, Barangay Culatingan, Tarlac, Philippines**
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> A lahar onslaught in 1991 partially submerged the houses in this community. A local peasant organization had been organized by the non-governmental organization, CONCERN, as a preparation for the next year of anticipated lahar flows. A disaster response committee was formed as a part of the existing peasant organization. Preparedness involved various activities, including early warning and planning of an evacuation route. The 1992 lahar flows tested their preparedness. Even though another lahar struck the community, most of the houses were left standing and no one was killed in the episode.
>
> **Source:** *Report on National and Local Capabilities for Early Warning, Convenor of International Working Group and first authored by: Mr. Andrew Maskrey for the IDNDR Secretariat, Geneva October 1997, p. F-17.*

and Agriculture (for example, crop forecasts); local and indigenous sources; media sources and increasingly from Internet early warning services.

All too often, those who need to heed early warning alerts have little faith in the warnings. This may be due to a human inclination to ignore what appears inconvenient at the time, to a general misunderstanding of the warning's message or to frustration with yet another false alarm. When developing public early warning systems, planners must account for the public's perceptions of warnings, their experience related to reacting to warnings in the past, and general public beliefs and attitudes regarding disasters and public early warnings.

Even though national governments are ultimately responsible for issuing timely public warnings, National Societies can play a supporting role. National Societies can help raise local awareness of the hazards to which a community is exposed and assist local organisations and vulnerable populations with interpreting early warning information and taking appropriate and timely action to minimise loss and damage. National Societies' efforts to build these capacities should complement local indigenous capacities and knowledge related to disaster early warning and alert.

For example, in September 1994, in Papua New Guinea, on the island of New Britain, community elders who had survived the Rabaul volcanic eruption of 1937, noticed and acted upon several strange "early warning" phenomena that were similar to those that preceded the 1937 eruption. This phenomena included: "ground shaking vertically instead of horizontally, megapod birds suddenly abandoning their nests at the base of the volcano, dogs barking continuously and scratching and sniffing the earth, and sea snakes crawling ashore." This indigenous experience, combined with volcano preparedness awareness raising and evacuation planning and rehearsals that were initiated a decade earlier when the Rabaul volcano threatened to erupt again, undoubtedly contributed to the low death toll in September 1994, (three people died during the evacuation), despite the extensive damage to the city caused by the ash fall.[1]
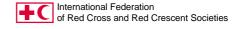
4.7. Resource mobilisation

National Societies should develop strategies, agreements and procedures for mobilising and acquiring emergency funds, supplies and equipment in the event of a disaster. A preparedness plan should spell out the policies for acquisition and disbursement of funds, use of outside equipment and services, and emergency funding strategies. Well before a disaster occurs, National Societies should establish procedures for activating the appeals process for requesting funding support from National Society headquarters, government and Federation funds. International relief appeals are made through the International Federation by the affected country's National Society to the Secretariat. This appeal should follow closely the terms in "The Federation Appeal Format," found in the section "Emergency Relief Appeals," of the International Federation's *Handbook for Delegates*.

4.8. Public education, training and rehearsals

Disaster preparedness must be supported by public education campaigns, training of response teams and rehearsals of emergency response scenarios. The aim of public awareness and education programmes is to promote an informed, alert and self-reliant community, capable of playing its full part in support of and in co-operation with government officials and others responsible for disaster management activities. An essential part of a disaster preparedness plan is the education of those who may be threatened by a disaster. Although television, radio and printed media will never replace the impact of direct instruction, sensitively designed and projected messages can provide a useful supplement to the overall process.

As the preparedness plan is being developed, and upon completion, it is important to rehearse its major elements. Rehearsals invariably expose gaps that otherwise remain

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[1] This example is adapted from that found on the "Planning for Disaster (NOVA on-line) web-site, at http://www.pbs.org/wgbh/nova/vesuvius/planning.html.

overlooked. Rehearsals are most effective when they are systemwide and engage as many of the disaster response players as possible. Rehearsals also keep the plans fresh, during extended periods of time when no disaster strikes. Rehearsals might simulate search and rescue operations, first aid provision, response or needs assessment, coordination meetings between major organisational players and population leaders, relief transport and logistics, and many other aspects of an emergency response.

5. Community-based disaster preparedness

Disaster preparedness and response are not solely the work of experts and emergency responders from National Societies and government disaster organisations. Local volunteers, citizens, organisations and businesses have an active and important role to play before, during and after major emergencies and disasters. Therefore, as stated earlier, Community-based disaster preparedness (CBDP) is a process that seeks to develop and implement a locally appropriate and locally "owned" strategy for disaster preparedness and risk reduction.

Local populations in disaster-stricken areas are the first to respond to a disaster. They are usually involved in search and rescue activities as well as in providing emergency treatment and relief to their families, friends and neighbours. National Societies, ideally in partnership with other community organisations and networks, can play an important role in improving the skills and knowledge of these "spontaneous" disaster responders by providing them with education and training in preparedness measures, basic rescue techniques, and first aid and emergency treatment. The following two examples illustrate the concept of CBDP.

CBDP partnerships in Jamaica

The Jamaican NS is involved in an initiative with a number of large hotels and a well-established insurance company. The NS will train hotel staff in emergency preparedness and response with respect to earthquakes. In return, the hotels will donate an amount equal to one week's room rent to the Red Cross. The hotel will benefit from reduced insurance premiums because their staff have been trained, and in theory, the insurance company will gain, as there should be fewer claims from the hotels as a result of the initiative.

Source: "Learning from the Past": A Draft Report: A Look Back at Evaluations and Reviews of Disaster Preparedness Programmes, prepared by John Mitchell for the International Federation Disaster Preparedness Department, November, 1999.

Community-based DP Programme in Cox's Bazaar, Bangladesh

In a 1996 review of its organisation and priorities, the Bangladesh Red Crescent Society (BRCS) concluded that it needed to shift from a centralised national headquarters-based relief organisation to a proactive disaster preparedness and response organisation with strong operational capacity at the local level. Towards this end, and with German Red Cross support, the BRCS implemented the Community Based Disaster Preparedness Programme (CBDPP) to enable local communities in highly vulnerable areas to deal with the impact of cyclone-related disasters on their lives, in order to reduce loss of lives and property and to mitigate the suffering of the people. Using a participatory approach, the CBDPP formed Village Disaster Preparedness Committees (VDPCs) and conducted a participatory needs assessment in cooperation with various leaders and resource people in each community. The programme activities which were implemented by the respective communities under the guidance of the VDPC's include:

- Mobilisation and organisation of the community (e.g. through the VDPCs and the male and female sub-groups)
- Development of appropriate materials for dissemination and training (such as posters and training manuals) in co-operation with the community
- An extensive public awareness campaign using audio-visual and printed media, as well as face-to-face communication
- Training of the community in disaster preparedness, community based first aid, cyclone warning signals, etc.
- Family level disaster preparedness education (cyclone-strengthening of houses, installation of drinking water facilities, planting life-saving trees, etc.)
- Cyclone shelter construction and maintenance
- Raising gender awareness in the community and promoting protection of the most vulnerable sections of the society since 90% of cyclone victims are women, children and elderly people
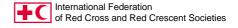
Source: Report on the Community Based Disaster Preparedness Programme, Cox's Bazaar, Bangladesh Red Crescent Society, German Red Cross.

6.   Integrating disaster preparedness with other NS activities[2]

Earlier in this document, it was stated that disaster preparedness is a goal rather than a specialised programme. Thus, it is the result of many activities across a range of sectors including emergency response, primary health care, institutional development, community-based first aid, and local capacity building. This means that disaster preparedness needs to be treated as a continuous and integrated process involving both relief and development.

Since disaster preparedness depends on shared goals and activities across sectors, it is important that the concept be integrated into all on-going projects. In East Africa, for example, attempts have been made to link disaster preparedness to branch-level programmes through community-based first aid. In other cases disaster preparedness was conceptualised within primary health care and nutrition initiatives. This provided a useful connection between the branch level institutional structure and ongoing service provision activities. Red Cross Action Teams, comprising Red Cross volunteers, were the main mechanism for bringing disaster preparedness to the branches.

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[2] This section is adapted from "Learning from the Past (Draft)": A Look Back at Evaluations and Reviews of Disaster Preparedness Programmes, prepared by John Mitchell for the International Federation Disaster Preparedness Department, November, 1999.

Annex 1: Preparedness and Planning for National Societies[3]

It is very important to identify the key level where management of disaster preparedness will occur. Preparedness and effective planning at the local level are very important, but overall strategic development and management are likely to be at the national level in small and medium size countries, whereas in a large country, the intermediate level (state, regional, provincial, district) may be the key level at which decision making, control, co-ordination and information management will be most effectively carried out.
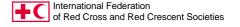
At the local level

- Establish an information base by determining:

    1. What hazards can affect the given area?

    2. Who and what will be most at risk due to the given situation?

    3. What are the main reasons for their vulnerability toward the given hazards?

    4. What resources and capabilities are available for effective response actions during disaster occurrence?

- Identify and implement programs on vulnerability reduction and public education and training through National Society staff and volunteers working in close contact with the vulnerable local population in disaster prone areas.

- Consider ways to reduce risks associated with local hazard phenomena. Often these may be a combination of traditional and modern methods.

- Become familiar with how local people engage in disaster preparedness and then design ways to support them with their efforts. Do the same with regard to response preparedness.

- Mobilise and train volunteers for effective response actions.

- Plan for the rapid acquisition of necessary relief supplies and equipment for use in emergency situation. Designate, stock and maintain warehouses. Investigate options for the delivery of relief supplies to distant or inaccessible areas.

- Establish reliable and appropriate communication lines between responsible local authorities and local organisations as well as inside the Headquarters of the National Society. These communication lines are essential for proper coordination of disaster response actions.

At the intermediate levels

- In large countries, the regional level is the main link between local departments and National Headquarters. Therefore, it is essential to anticipate how an inability to communicate between local, regional and national levels (because of damaged systems) will affect the disaster response.

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[3] This annex is adapted from the International Federation booklet "Disaster Preparedness: Policy," adopted by the General Assembly at its Sixth Session in Birmingham, UK, 25-28 October 1993.

- During a disaster, there may be a situation when officials at the regional and local levels must act autonomously—apart from national headquarters. In anticipation of these situations, an agreement concerning independent decisions and control of disaster preparedness and response should be reached with the national headquarters.

- Relief stocks and equipment must be available (or the system for rapidly procuring them must be in place) at the regional level in order to give rapid assistance to remote local areas.

- There should be a disaster response plan, which considers local branch plans. This will help maintain good interactions with the local level and provide the opportunity to support local departments in case of a disaster.

- The regional level also needs to maintain good communications and coordination with other regional organisations. This will facilitate coordination of activities in the event of a disaster.

At the national level

- The National Society should develop a disaster profile for the country. This profile should include a list of past and possible disasters for the country and identify the most likely hazards, possible risks that may be caused by them, existing vulnerabilities of the people and communities that are the most likely to be affected by the disaster, and the capabilities for disaster response. Such information should be based on data gathered from different sources, including data gathered at local levels of the National Society and data from other local organisations, government, ministries, and academic institutions in the country or region.

- The National Society should also consider possible threats from neighbouring countries, such as epidemics, insects, environmental degradation, contamination, or refugee movements.

- On the basis of information received and in accordance with their role, the National Society should prepare its own program of disaster preparedness, which should include mitigation (risk reduction) and vulnerability reduction strategies, and an assessment of the capacity of the National Society to respond to disasters.

- Disaster preparedness must be reinforced by information sharing among departments with similar roles and objectives inside the country and with analogous organisations in neighbouring countries.

- Disaster preparedness should be considered a link between development and relief and should be included in other programs of the National Society, such as first aid, youth programs and health services, since reinforcement of existing structures and systems is more effective than establishment of new structures. This link should be reflected in the National Society development plan.

- Training staff and volunteers at the national and local levels should be a priority. Local departments should receive training/coaching for skills to help them work with the local

population both to develop a program for addressing local vulnerability as well as to develop their disaster response skills.

- When possible, National Societies should establish food stocks and equipment near possible disaster sites (or should have procedures in place for rapid procurement). In addition there should be a national fund for emergency situations as well as a plan for attracting resources for this fund on an ongoing basis.

- Fundraising activities and the possibility of setting up a disaster emergency fund should be established at the national level.

- Precise procedures should be established that clarify responsibilities and decision-making authority.

- The National Society should try to establish good relationships with other disaster preparedness and response organisations and between the local and international levels.

- The media play an important role in emergency situations. National Societies should accept the role of the media and assign a designated media contact person who will be responsible for providing the national and international media with information.

- Disaster preparedness should be rehearsed, possibly through training and simulation exercises.

Connections to the international level

It is necessary to establish good relations with the International Federation of Red Cross/Red Crescent Societies, the International Committee of the Red Cross and other National Societies within the region. National societies must be ready to receive international assistance in case of a disaster. National societies have an important role to play in convincing the population, media and governments of their countries to help other countries, especially neighbouring ones, in disaster preparedness and response.

Annex 2: Sample National Society Disaster Preparedness Plan Table of Contents

Plan introduction	Purpose of the preparedness plan. Links with other disaster and organisational plans. Description of the planning process and people/offices involved.
NS disaster preparedness (DP) policy statement	An NS policy statement which describes the overarching framework for NS involvement in disaster preparedness
NS DP role and aims	Broad roles and aims of the NS in disaster preparedness
Objectives (to achieve aims)	A list of programme goals or objectives which describes how the broad disaster preparedness aims will be met and the roles fulfilled.
Country disaster profile: disaster history, types and effects.	A description of the disasters that this plan addresses, as well as a brief review of their history and the populations and geographic areas which are most vulnerable to these disasters.
National (government) disaster management policy	Brief statement summarising the National Disaster Management Policy and plans, and the role of the NS within the national government policy or plan.
RC Society disaster structure	Structure of NS and branch offices
District/divisional level role in DP	DP role and responsibilities of district/divisional RC offices
Coordination with IFRC and ICRC	Coordination and communication arrangements with IFRC and ICRC during disaster preparedness and disaster periods.
Coordination with government	Description of coordination links and/or agreements with government ministries and departments during pre-disaster, disaster and post-disaster situations.
Coordination with NGOs and international organisations	Coordination and communication with NGOs and international organisations during disaster preparedness and disaster periods.
Activating NS disaster response system	Describes who has responsibility for activating an official NS response and how this will be done.
NS response activities and resources	Describes the types of response activities that the NS will be involved in and the resources and personnel that they have available.
Early warning system	Describes what type of early warning system and procedures the NS will use to activate a response.
Disaster needs assessment	Policies and operational procedures for conducting and reporting disaster needs assessments
Recruiting and training of volunteers	Describes how personnel and volunteers are recruited and trained for disaster preparedness and response.
Public disaster awareness	NS public/community disaster awareness activities and objectives.
Procurement, storage and distribution of relief supplies	Describes how relief supplies are procured, stored and distributed
Financing arrangements and accounting procedures	Describes procedures and policies regarding financial arrangements and accounting procedures during a disaster response.
Donations and international appeals	Describes policies and procedures related to receipt of donations, fundraising nationally and launching of appeals
Reporting procedures	Describes reporting policies and procedures for relief and emergency operations, from the field level, from warehouses and depots, and from HQ and reporting to local donors
Dealing with the media	Describes policies, procedures and personnel for dealing with the media before, during and after disasters.
Ensuring plan implementation and viability	Describes how resources will be mobilised, plans for preparedness training and rehearsals, and procedures for review and updating of the plan.
Community-based disaster preparedness	Describes policies and objectives for supporting community-based disaster preparedness
Annexes	Maps, budgets, resource lists, supplies, relief stocks, equipment