

Community-Based Disaster Risk Reduction



Volunteer Manual

Version 2.0 | August 2011



Lao Red Cross

Acronyms & Abbreviations

CBDM	Community Based Disaster Management
CBDRM	Community Based Disaster Risk Management
CBDP	Community-Based Disaster Preparedness
CBDRR	Community Based Disaster Risk Reduction
DDMO	District Disaster Management Office
DM	Disaster Management
DMIS	Disaster Management Information System
DRR	Disaster Risk Reduction
HVCA	Hazard Vulnerability Capacity Assessment
ICRC	International Committee of the Red Cross
IDP	Internally Displaced People
IEC	Information, Education & Communication
IFRC	International Federation of the Red Cross & Red Crescent Societies
LRC	Lao Red Cross
M&E	Monitoring & Evaluation
NDMO	National Disaster Management Office
NFRI	Non-Food Relief Items
NGO	Non Government Organization
PDMO	Provincial Disaster Management Office
SPHERE	Humanitarian charter and minimum standards in disaster response
ToT	Training of Trainers
VCA	Vulnerability Capacity Assessment
VDPU	Village Disaster Preparedness Units

Message

Message/ letter from Lao Red Cross President and/or SG

Contributors

This Community-Based Disaster Risk Reduction (CBDRR) Volunteer Manual is the result of the collective field experience of the Lao Red Cross (LRC) volunteers and staff involved in the actual implementation of community based disaster risk reduction programmes. Further, this manual builds on the excellent foundation laid by the Community-Based Disaster Preparedness (CBDP) Manual developed by French Red Cross.

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Financial assistance for the earlier CBDP Manual came from the Disaster Preparedness programme of the European Commission's Humanitarian Aid department; and from the International Federation of Red Cross & Red Crescent Societies (IFRC) for this CBDRR Volunteer Manual and the accompanying CBDRR Trainer Manual.

Guidance Note

This Lao Red Cross Community-based Disaster Risk Reduction (CBDRR) Volunteer Manual has been developed specifically for use at the village level – by Lao Red Cross Volunteers and Village Disaster Preparedness Units (VDPUs). It is expected that Lao Red Cross branch staff, and Provincial and District Disaster Management Office (PDMO and DDMO) technical staff will be the trainers: and a separate trainer’s guide has also been developed.

This Volunteer Manual has incorporated the experiences of Lao Red Cross and other national society staff with practical experience of implementing CBDRR programmes. The manual is designed to be relevant to the varying contexts found across the whole of Laos PDR; and is designed specifically for the village level – using practical examples and reducing and simplifying disaster-related theory and concepts.

Alongside a general introduction and a short orientation on the Red Cross Movement and disaster management actors in Lao, the Volunteer Manual comprises a total of 30 sessions – grouped into 6 parts following a logical and chronological sequence. This Manual is considered as a living document and will be updated and periodically revised as the Lao Red Cross and its volunteers further strengthen their experiences in implementing CBDRR programmes.

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Introduction



Session 01: Participant introduction & training orientation

Session 02: Overview of CBDRR Training Content

- Objectives:**
1. Participants are welcomed and feel part of a favourable environment for learning where their opinions & experiences are valued and freely shared; and
 2. Participants are aware of the main topics and the order in which they will be presented.

Venue / Seating arrangement

Warm-up

Materials

Duration

Content

- ◆ Introduction of participants & trainers
- ◆ Training format
- ◆ Training ground rules
- ◆ Participant concerns

Introduction**Session 01: Participant introduction & training orientation****Objectives:**

1. Participants & trainers understand who is who and what they expect from the CBDRR training;
2. Trainers address any concerns the participants might have about the training; and
3. A relaxed learning environment is established where all participants feel comfortable & confident to contribute ideas.

Write down the ground rules agreed for the training:

Part	Introduction
Session 01	Participant introduction & training orientation
Learning Objectives:	<ol style="list-style-type: none"> 1. Participants & trainers understand who is who and what they expect from the CBDRR training; 2. Trainers address any concerns the participants might have about the training; and 3. A relaxed learning environment is established where all participants feel comfortable & confident to contribute ideas.
Key Learning Points:	<ul style="list-style-type: none"> ◆ For the training to be successful ground rules must be agreed and followed; and ◆ For the training to be successful all participants need to feel confident & comfortable to contribute ideas.
Methodologies:	Introduction exercise / warm-up
Materials:	Flipchart
Duration:	20 minutes

Participant introduction

The participant & trainer introduction is to help everyone quickly get to know each other and as the starting point for creating a friendly training environment where all participants feel comfortable to actively contribute ideas and experiences. It helps the participants and trainers understand who is who, who is from where, and what he/she has to share and learn.

Trainers can use any “introduction” exercise they wish – however it is recommended that along with some basic information (e.g. name, village, livelihood and/or position) that the participants include some light-hearted information (e.g. favourite colour, food, animal, song, singer, or actor/actress etc.) to help create a friendly and relaxed learning environment. Some simple “introduction” exercises are as follows:

- ☞ **Assigned Format Introduction:** ask participants to introduce themselves one by one – with a given format for introduction (e.g. name, livelihood/position and favourite song).
- ☞ **Pair-wise Introduction:** organise the participants to pair up – and then in each pair the two participants swap their information with each other, and then they take it in turns to introduce their partner to the whole group.

Training format:

- ◆ Adult-orientated learning based on participatory techniques: all adults have useful and valid experiences on which to contribute ideas to the training;
- ◆ Lecture-based with brainstorming and group work activities;

- ◆ Each day will end with a short evaluation by the participants; and each day will start with a brief recap of the previous day by the participants; and
- ◆ Short tests to check participant understanding of the course material.

Ground rules:

Creating a suitable participatory learning environment is one of the key shared responsibilities of both the trainers and participants. To help establish this it is important to agree some ground rules to be followed by both trainers and participants during the training course.

Brainstorm with the participants, and ask one volunteer to write the suggestions on to the flip chart. The trainer should add any necessary rules that the participants have missed. The following ground rules should appear:

Ground Rules	
<ul style="list-style-type: none"> ◆ Respect the start and finish times ◆ Respect diversity of opinion ◆ All participants are equal: outside roles & status do not apply ◆ Active participation ◆ Speak slowly and clearly 	<ul style="list-style-type: none"> ◆ Raise your hand if you wish to say something ◆ Questions can be asked at any time ◆ Mobile phones should be on silent mode; phones calls should be answered outside the training room

Administration and logistics:

Inform all the participants about the administration and logistics for the training:

- ◆ Attendance forms
- ◆ Per diem
- ◆ Travel costs / travel arrangements
- ◆ Refreshments
- ◆ Accommodation arrangements (where applicable)
- ◆ Contact name & phone number for admin/logistics focal person

Participant concerns:

- ◆ Brainstorm to ascertain any remaining concerns of the participants about the training course.
- ◆ Address their concerns

Content

- ♦ Diagram summarising components of Lao Red Cross CBDRR training

Introduction

Session 02: Overview of CBDRR Training Content

Objectives:

1. Participants understand what they will be trained in and understand that the training follows a logical order; and
2. Participants understand that following the training the participants will be expected to carry out activities related to some of the training components.

The Lao Red Cross Community-Based Disaster Risk Reduction (CBDRR) training comprises three main sections:

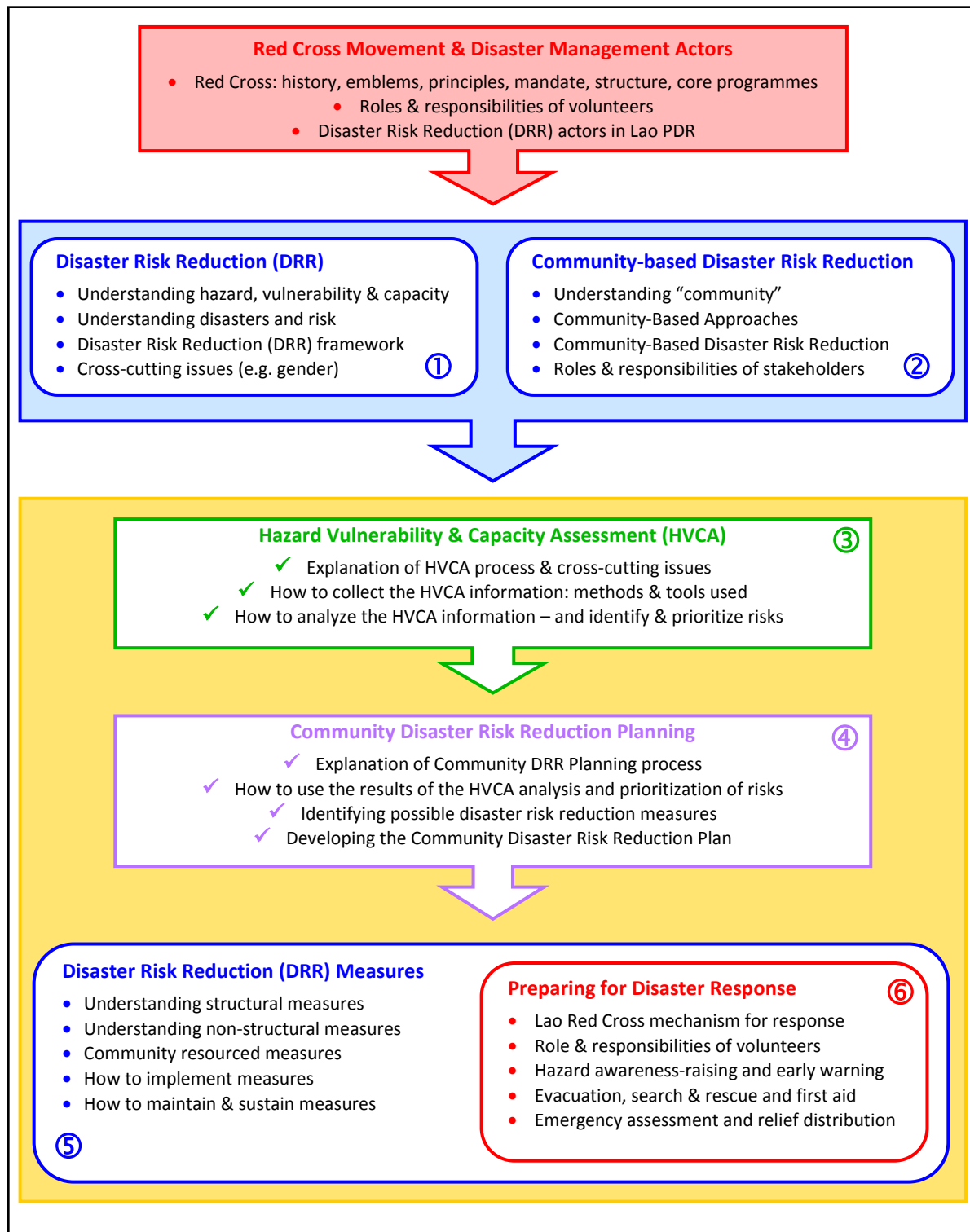
The **first section** is a general introduction to the Red Cross Movement and Disaster Management Actors in Lao.

The **second section** helps the participants to have a common understand the meaning of some important disaster-related words (e.g. hazard, disaster, vulnerability and risk) and to also understand the nature of different hazards in Lao and why they sometimes cause disasters. The second section also considers how the Lao Red Cross and its volunteers can work with communities on disaster-related issues.

The **third, and final, section** focuses on what the volunteers (and Village Disaster Preparedness Units) will be expected to do: the methods, tools and techniques that they will carry out themselves in their communities. This starts with learning how to assess and analyse the hazard and disaster situation in their community; then how use this information to identify solutions to the disaster-related problems; and then followed by how to develop a community plan to ensure these solutions can be implemented – either through external support or through the community's own resources. These solutions are called “disaster risk reduction” measures.

After the first section on the introduction to the Red Cross Movement and the disaster management actors in Lao, the CBDRR training is divided into a total of 7 parts as listed below. Over the page is a more detailed summary of these 7 parts.

Section	Part
Introduction	Intro Red Cross Movement & Disaster Management Actors
Disaster theory & Lao context	① Disaster Risk Reduction (DRR) ② Community-Based Disaster Risk Reduction
Practical Disaster Risk Reduction: what volunteers will be expected to actually do	③ Hazard Vulnerability & Capacity Assessment (HVCA) ④ Community Disaster Risk Reduction Planning ⑤ Disaster Risk Reduction (DRR) Measures ⑥ Preparing for Disaster Response



Red Cross Movement & Disaster Risk Reduction Actors



Session 01: Red Cross Movement

Session 02: Lao Red Cross (LRC) Society

Session 03: Roles & Responsibilities of Red Cross Volunteers

Session 04: Disaster Risk Reduction (DRR) Actors in Laos PDR

- Objectives:**
1. Understand who and what is the Red Cross
 2. Understand the role of Red Cross Volunteers
 3. Be aware of other DRR actors in Laos

Content

- ♦ History
- ♦ Emblems
- ♦ Components (ICRC, IFRC & National Societies)
- ♦ The 7 Principles

Red Cross Movement & Disaster Risk Reduction (DRR) Actors

Session 01: Red Cross Movement – History, Emblems & Principles

Objectives:

1. Participants know the origin, different components and goals of the Red Cross Movement.
2. Participants are aware of the different Red Cross emblems and their use.
3. Participants understand the “7 Principles” of the Red Cross.

History

The Red Cross was started in 1859, when **Henry Dunant** witnessed the battle of Solferino in Northern Italy. Over 40,000 soldiers lay dead or dying on the battlefield without adequate medical attention. Dunant organized people from nearby towns to take care of the soldiers' wounds and to feed and comfort them. Based on his experiences, he later recommended the creation of national relief societies; which eventually led to the establishment of the **International Federation of Red Cross and Red Crescent Societies (IFRC)**.

To promote these ideas, Dunant and his colleagues set up the International Committee of Relief for the Wounded to define its functions and working methods. This later became the **International Committee of the Red Cross (ICRC)**. This committee persuaded governments that the wounded, and those caring for them, should be considered as **non-combatants** and therefore needed **protection**. This concept of the **neutrality** of non-combatants was legally formalised in an **international treaty ensuring the protection of war victims, medical personnel, hospitals and ambulances**. In 1864, twelve participating governments signed the Geneva Convention for the Amelioration of the Condition of the Wounded in Armies in the Field. This treaty, the “**Geneva Convention**” is a milestone in the history of humanity – because this now meant that there was now an international legal agreement about the “rules” of war. It meant that the wounded were to be “**collected and cared for**”; that ambulances, military hospitals and medical staff were to be “**recognized as neutral and as such protected and respected by all sides of the conflict or war**”. The Geneva Convention recognized the symbol of a **red cross on a white background** as a “**protective**” emblem to be used by all armies for identifying medical personnel, hospitals and ambulances.

Emblems

There are 3 different emblems that can be used: the cross, the crescent, or the crystal. They are always red.



These emblems serve two different purposes – protective and indicative:

Protective use

In armed conflicts, the emblems are the visible sign of the protection conferred by the Geneva Convention on (a) humanitarian relief workers; and on (b) medical personnel, medical facilities and medical transport. The emblems should be as large as possible and should be displayed with no other information.

In times of peace, the emblems can be used by (a) medical services and religious personnel of the armed forces; and (b) National Society medical facilities and transport used to provide medical services in the event of armed conflict (with the consent of the national government).

The ICRC and the IFRC may use the emblems at all times (in peacetime as well as in times of armed conflict) and without restriction.

All three emblems may be used as protective devices.

Indicative use

The emblems show the link that a person or an object has with the Red Cross Movement. In such cases, the emblems should bear additional information (e.g. the name of the National Society). The emblems must be small; and they may not be placed on armlets or on the roof of buildings as this will cause confusion with the emblem being used for protective purposes.

In times of peace, the emblems can be used by (a) the institution, persons and objects connected with one of the components of the Red Cross Movement: the National Societies, the ICRC, or the IFRC; and (b) as an exceptional measure for ambulances and first-aid stations exclusively assigned to providing free treatment to the wounded and sick (only if this is consistent with national legislation and with the express authorization of the National Society).

In compliance with national legislation, National Societies may use one of these emblems, on national and on foreign territory. Any misuse of the emblems, whether in times of peace or conflict, will reduce their protective value and undermine the effectiveness of humanitarian assistance.

Components of the Red Cross Movement

The International Red Cross and Red Crescent Movement is the world's largest humanitarian network. The Movement is neutral and impartial, and provides protection and assistance to people affected by disasters and conflicts. It is made up of almost 97 million volunteers, supporters and staff in 186 countries. It has three main components:

- The International Committee of the Red Cross (ICRC)
- The International Federation of Red Cross and Red Crescent Societies (IFRC)
- National Red Cross and Red Crescent Societies

International Committee of the Red Cross (ICRC)

The International Committee of the Red Cross (ICRC) is an independent, neutral organization that provides humanitarian assistance and protection to victims of war and armed violence.

During situations of conflict, the ICRC is responsible for directing and coordinating the Movement's international relief activities. It also promotes the importance of international humanitarian law and draws attention to universal humanitarian principles.

As the custodian of the Geneva Conventions, the ICRC has a permanent mandate under international law to visit prisons, organize relief operations, reunite separated families and undertake other humanitarian activities during armed conflicts.

The ICRC also works to meet the needs of internally displaced persons, raise public awareness of the dangers of mines and explosive remnants of war and trace people who have gone missing during conflicts.

International Federation of Red Cross and Red Crescent Societies (IFRC)

The International Federation (IFRC) is a global humanitarian organization which coordinates and directs international assistance following large-scale disasters in non-conflict situations. Its mission is to improve the lives of vulnerable people by promoting humanitarian values.

The IFRC works with National Societies in responding to disasters around the world. Its relief operations are combined with development work, including disaster risk reduction programmes, health and care activities, and the promotion of humanitarian values. It has 4 main goals:

IFRC Goals:

- Reduce the number of deaths, injuries and impact from disasters;
- Reduce the number of deaths, illnesses and impact from diseases and public health emergencies;
- Increase local community, civil society and Red Cross Movement capacity to address the most urgent situations of vulnerability; and
- Promote respect for diversity and human dignity, and reduce intolerance, discrimination and social exclusion.

National Red Cross and Red Crescent Societies

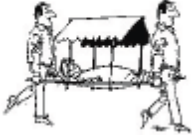






There are 186 National Red Cross and Red Crescent Societies around the world, with more currently being formed. This unique network forms the backbone of the International Red Cross and Red Crescent Movement.

Each National Society is made up of volunteers and staff, who provide a wide variety of services ranging from: disaster relief and assistance for the victims of war, to first aid training and restoring family links. National Societies support local authorities as independent auxiliaries to the government regarding humanitarian issues. Their local knowledge, expertise, access to communities and infrastructure enables the Red Cross Movement to get the right kind of help, to the right people, at the right place – and to do so quickly and effectively.

National Society volunteers are often the first on the scene when a disaster strikes. They remain active within affected communities long after everyone else has come and gone.

This unparalleled network of community-based volunteers and staff also plays a vital role in ensuring that health care and disaster risk reduction programmes are carried out on a day-to-day basis globally. For example, this may involve assisting chronically-ill HIV/AIDS patients in Africa or organizing early warning drills in cyclone & flood-prone areas of South East Asia. The local presence and community-based approach, combined with the Movement's global outreach, resources and know-how, gives the Red Cross Movement a significant and distinct advantage when it comes to dealing with today's complex humanitarian challenges.

7 Principles

<p>Humanity</p> 	<p>The International Red Cross and Red Crescent Movement, created by the desire to bring assistance without discrimination to the wounded on the battlefield, endeavours in its international and national capacity, to prevent and alleviate human suffering wherever it may be found. Its purpose is to protect life and health and to ensure respect for the human being. It promotes mutual understanding, friendship, cooperation and lasting peace amongst all peoples.</p>
<p>Impartiality</p> 	<p>It makes no discrimination as to nationality, race, religious beliefs, class or political opinions. It endeavours to relieve the suffering of individuals, being guided solely by their needs, and to give priority to the most urgent cases of distress.</p>
<p>Neutrality</p> 	<p>In order to continue to facilitate the confidence of all, the Movement may not take sides in hostilities or engage at any time in controversies of a political, racial, religious or ideological nature.</p>
<p>Independence</p> 	<p>The Movement is independent. The National Societies, while auxiliaries in the humanitarian services of their governments and subject to the laws of their respective countries, must always maintain their autonomy so that they may be able at all times to act in accordance with the principles of the Movement.</p>
<p>Voluntary Service</p> 	<p>The International Red Cross and Red Crescent Movement is a voluntary relief movement not motivated in any manner by desire for gain.</p>
<p>Unity</p> 	<p>There can be only one Red Cross or one Red Crescent Society in any one country. It must be open to all. It must carry out its humanitarian work throughout its territory.</p>
<p>Universality</p> 	<p>The International Red Cross and Red Crescent Movement, in which all societies have equal status and share equal responsibilities and duties in helping each other, is worldwide.</p>

Content

- ◆ History & Mandate
- ◆ Vision & Mission
- ◆ 4 Core Programmes
- ◆ Disaster Management
- ◆ LRC Structure

Red Cross Movement & Disaster Risk Reduction (DRR) Actors

Session 02: Lao Red Cross – Mandate, Structure & Core Programs

Objectives:

1. Participants understand the history & role of the Lao Red Cross.
2. Participants understand what the Lao Red Cross seeks to do – and how – particularly in regards Disaster Management.

History & Mandate / Vision & Mission

The Lao Red Cross was established in 1955 and became a member of the International Federation of Red Cross & Red Crescent Societies (IFRC) in 1957. Since 1992 it has independent status but remains very close to the Lao government as a “social organization auxiliary to the government in humanitarian services”. The government continues to decide on governance & management appointments as well as human resources throughout the National Society.

Vision: To assist and improve the lives of the most vulnerable people based on their primary basic needs in order for them to live with human dignity, rights and values.

Mission: Lao Red Cross, as a social organization, auxiliary to the government in humanitarian services, aims to meet the urgent basic needs of the most vulnerable, by preparing the community to respond to disasters and improving their health conditions, guided by the Fundamental Principles and Humanitarian Values of the Red Crescent Movement.

“Be it either in development or emergency work, in time of either peace or conflict, the Lao Red Cross always commits itself to promote humanitarian values respecting the beneficiaries and affected people as human beings, rather than objects, through inclusion and participation. It also works to promote tolerance, non-discrimination and human dignity”.

Core Programs

The Lao Red Cross have 3 core operational programme areas:

- **Core Area 1: Disaster Management.** This seeks to prepare and respond to disasters, and assist in risk reduction and local recovery from disasters by building and strengthening partnerships, providing and scaling-up short and medium term relief, and building resilience. The Strategic Aim is to contribute to a reduction in death, injury, illness and loss of livelihood caused through natural and man-made disasters.
- **Core Area 2: Health and Care in the Community.** This seeks to educate and prevent the health-related emergencies in the community by developing community-based institutions in health and care, communicable disease prevention, and public health in emergencies. The Strategic Aim is to reduce illness, death and the impact of disease and public health emergencies.

- **Core Area 3: Humanitarian Principles and Values.** This seeks to promote, protect & enforce social inclusion and a culture of non-violence and peace by educating and raising awareness on the 7 Red Cross Fundamental Principles, International Humanitarian Law, and Humanitarian Values; Community-based Landmine/UXO Risk Education (LMRE); preventing human trafficking; and providing assistance to disadvantaged groups. The Strategic Aim is to promote a human dignity, humanitarian values and respect fundamental principles.

In support of these 3 core operational areas the Lao Red Cross has a 4th core programme area, **Organizational Development and Strengthening**, that develops the foundation for the 3 operational areas.

Disaster Management

The Lao Red Cross is mandated to save lives, alleviate human suffering, damage and losses and to protect, comfort and assist people affected by disasters and crises. It is the basic obligation of the National Society to be well prepared and to use all effective means to help and meet different needs of men, women and children – wherever and whenever possible.

The Lao Red Cross is recognised as the leading humanitarian institution in Lao – but with emerging challenges there is still much to be done in disaster risk reduction and response by the Lao Red Cross. The Lao Red Cross as an organisation needs to be stronger to meet the challenges in the coming decades, including a changing climate, a growing population, urbanization, road accidents, and emerging diseases. This means highly trained, effective, and well-equipped emergency response teams throughout the country and strengthening partnerships at all levels to make communities stronger and more resilient in disaster preparedness and risk reduction are of critical importance.

For the 2010 – 2015 period the Lao Red Cross plans to achieve the following 4 results:

1. Strengthened Lao Red Cross institutional and technical capacity on preparedness for response, and on risk reduction, to successfully deliver relevant services to communities in need.
2. Improved preparedness, prevention and mitigation in every community to cope with disasters and emergencies.
3. Increased knowledge and skill of targeted communities, local authorities to implement community driven disaster preparedness, response and risk reduction interventions using community empowerment approach.
4. An increase in the resilience of households and communities in preparation for and after disasters and crises.

Structure

The Lao Red Cross maintains a presence in each province with varied capacity, depending on localisation issues such as its ethnic diversity, topography.

Exercise / 10 minutes

- Ask each participant to give an example of the Lao Red Cross core activities.

- Take notes on the board and identify with participants the main fields of activities: Health care (first aid), emergency relief, DRR, restoring family links internationally.

Content

- ♦ Meaning of “Volunteer”
- ♦ Expectations of RCV

Red Cross Movement & Disaster Risk Reduction (DRR) Actors**Session 03: Roles & Responsibilities of Red Cross Volunteers****Objectives:**

1. Participants understand clearly what it means to be a “volunteer”.
2. Participants understand what is expected of the Red Cross Volunteer – so that they are better able to understand their role & duties

What is the meaning to be a volunteer?

It is important that you understand clearly what it means to be a “**volunteer**”.

In general, a volunteer is a person who willingly dedicates him/her-self to providing social services without accepting any personal benefit (such as salary, remuneration, gifts, etc.), in an impartial manner, and for the betterment of the society.

Thus, all people who work for the betterment of the community are community volunteers. You have been selected as volunteer by your community because they think of you as a good person who will work for their betterment. As a Red Cross Volunteer you are obliged to provide support and services to the community before, during and after a time of disaster. It is human nature to help alleviate suffering during disasters – and this should be without regard to personal reward.

Moreover, they have selected you because they believe you will be an active and competent volunteer for disaster risk reduction (DRR) in your community. You will contribute to reducing the risk from disasters in your community by committing yourself to the values and ideals of a volunteer.

You, as a community volunteers are participating in this training because:

- + You are a skilled volunteer selected by the community. You are here to represent your community – with the understanding that you will perform a special type of function for it;
- + Similarly, development and disaster risk reduction actors (including the Lao Red Cross and local authorities) will place trust in you to perform functions actively & responsibly. They have trusted in you because you are an able person selected by the community;
- + Your actions as a Red Cross Volunteer are watched with special interest by the community – and also by local authorities and non-governmental organizations (NGOs). Your advice and recommendations are valued because they understand your responsibilities to your respective communities; and
- + As a Red Cross Volunteer, you are at all times the centre of trust for community members, the Lao Red Cross, local authorities and NGOs. This CBDRR training is prepared with the view to help you to perform your duties effectively. It will provide information on how you have to behave as a volunteer in the community and how you should carry out responsibilities well – so that you will continue to return the trust that community members and the Lao Red Cross have placed in you.

Volunteers are essential to the Lao Red Cross Society – as they are to all national societies. Volunteers help to strengthen communities by learning skills and developing social ties. Volunteering is a way of helping communities to build capacities to cope with, and respond to, disasters and other issues that affect them. The Red Cross and Red Crescent Movement has approximately 100 million members and volunteers worldwide – of these, an estimated 20 million donate their time to their national societies as volunteers.

What are the expectations of a Red Cross volunteer?

Once you are a volunteer, you are expected to dedicate yourself to delivering a service for your community. For example, Red Cross volunteers dedicate themselves to:

1. work according the Red Cross principles and values and disseminate them locally;
2. follow the rules and regulations concerning the Red Cross symbol and prevent its misuse;
3. deliver a high quality service;
4. fulfil duties without discrimination of nationality, sex, religion, class and political ideology;
5. offer equal respect to all the community;
6. respect the privacy of the persons who have been helped;
7. increase mutual understanding; and
8. understand the needs and requirements of other people.

In this way, as a volunteer you can help everybody.

Exercise 01

Prepare your **own** list of roles as a Red Cross Volunteer in your community:

What is the community expecting from you?	What do you want to contribute?	What are your fields of expertise?

Your role will be more deeply explained during this training.

Content

- ♦ Community members
- ♦ VDPU
- ♦ NDMO
- ♦ UN Agencies & NGOs

Red Cross Movement & Disaster Risk Reduction (DRR) Actors**Session 04: Disaster Risk Reduction (DRR) Actors in Laos PDR****Objectives:**

1. Participants aware that there are a number of different stakeholders involve in DRR in Lao at all administrative levels

The different stakeholders have to work together to ensure efficient, timely and relevant support for victims in case of disaster. Each stakeholder is involved according to their respective capacities and responsibilities.

Community Members

Role of community members are:

- Know about hazards and disasters in the region and in the community
- know what has happened (good and bad) during previous disasters
- Learn about recent changes to the environment (deforestation, roads, construction) which could change the environment
- Know who needs special help in the community and who can help others in the community
- Learn which government departments, NGOs, organizations are able to help during a disaster
- Inform on how the community is dealing if/when a disaster strikes

Village Disaster Preparedness Units (VDPUs)

Village volunteers – who included Red Cross Volunteers – as members of the Village Disaster Preparedness Units (VDPU) are the first people to be involved in the response, as well as offering support for the duration of the disaster. The VDPU team shall work closely with the different stakeholders – before, during and after the disaster.

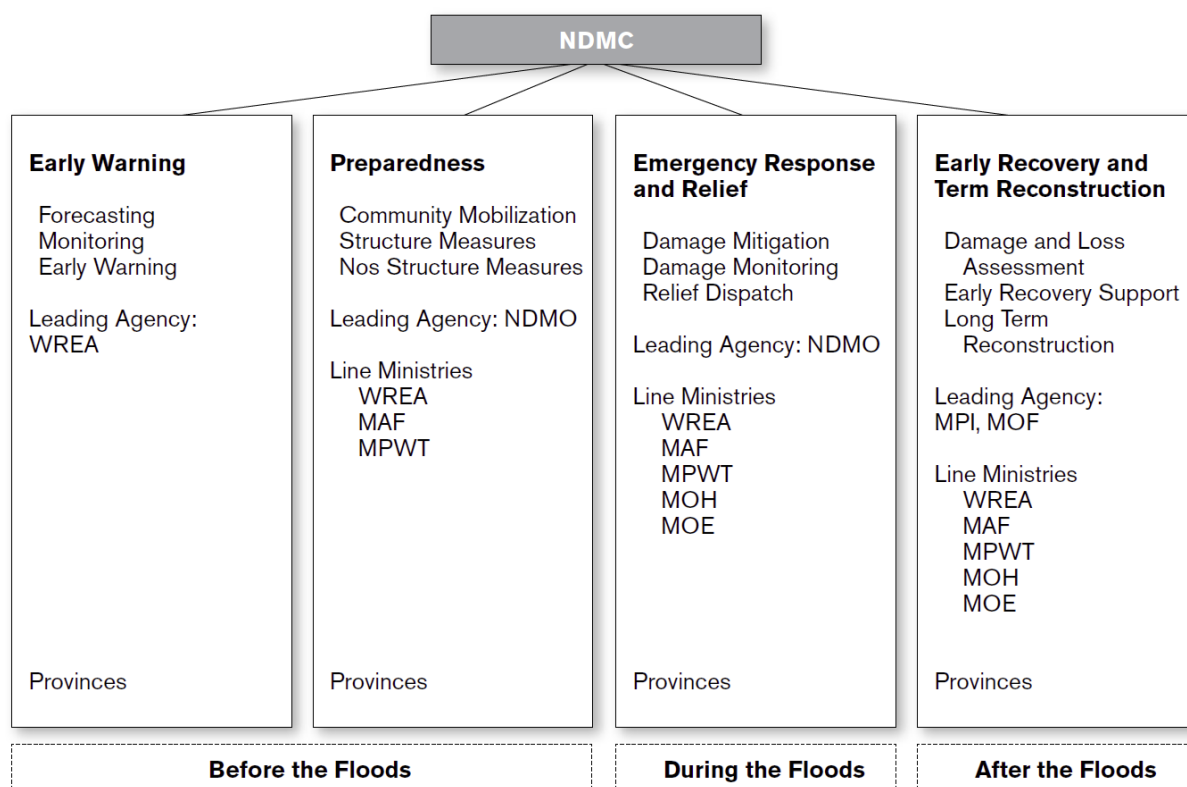
Lao Red Cross to add

National Disaster Management Office (NDMO)

The NDMO was created in 2000 based on the Government / Prime-Minister decree of 1999, with a function to:

- Coordinate different ministries, NGO's and the United Nations System
- Coordinate disaster preparedness planning, rescue, relief and rehabilitation
- Advocate Disaster Preparedness training and raise awareness

The NDMO has grass-root branches, in each province (Province Disaster Management Committee) and each district (called District Disaster Management Committees). These committees are composed of several stakeholders (governmental officers, Lao Red Cross, Youth or Women's groups).



United Nations Agencies and NGOs / Disaster Management or Risk Reduction

United Nations Agencies

In Lao PDR, the following United Nations agencies work on disaster-related issues:

WFP: World Food Program, mandate to provide support for food insecure communities

UNICEF: United Nations Children's Fund – working mostly in Water and Sanitation issues

FAO: Food and Agriculture Organization

WHO: World Health Organization

Their functions include:

- National level preparedness for response, and disaster risk reduction, planning;
- Development of disaster management organization structures, centres, offices and sections;
- Stockpile and prepare emergency items, like generators, chain saws, shovels, cooking equipment; &
- Providing training (overseas and in-country).

Non-Government Organisations (NGOs)

- Coordinate and cooperate with all the other agencies and organizations;
- Raise awareness about disaster risk reduction (with communities and organisations);
- Share information about disasters and their impact on lives & livelihoods; &
- Build capacity of individuals & communities to effectively prepare for, mitigate, respond to, and recover from disasters.

Several NGO's are working in Lao PDR, but there are few that work on Disaster Risk Reduction activities. The main organizations are Concern, Save the Children, World Vision, Care and Action Against Hunger.

Part 01 | Disaster Risk Reduction (DRR)



Session 01: Understanding Hazards

Session 02: Hazards and Disasters in Lao

Session 03: Vulnerability & Capacity

Session 04: Disaster Risk Reduction & Disaster Cycle

Session 05: Cross-cutting Issues

- Objectives:**
1. Identify the most common hazards in Lao PDR
 2. Describe the adverse effects associated with hazards
 3. Understand the concept of disaster risk reduction and how this applies to the Lao context

Content

- ♦ Hazard definition
- ♦ Hazard characteristics

Disaster Risk Reduction (DRR)

Session 01: Understanding Hazards

Objectives:

1. Participants understand the different types of hazards
2. Participants understand that each particular hazard can be described in terms of its different nature and behaviour

Hazard Definition



Hazard

an event that has the **potential** for causing loss of life, injury, loss of livelihood, or damage to property or the environment.

At its most simple, hazards can be classified into two main categories: natural and man-made hazards

Hazard Type	Examples
Natural	Floods, storms & cyclones, earthquakes, volcanic eruptions, disease epidemics
Man-made	Pollution, household fire, road traffic accidents, UXOs, conflict

However, in reality, many hazards are categorised somewhere in-between natural and man-made hazards.

For example if we consider flooding: normally we would think that flooding is caused by too much rainfall (nature). However if there has been deforestation or new roads built (man-made) then this can also cause flooding: either in new areas that were never flooded before or with less rainfall than was previously needed in flood-prone areas. This situation is therefore a combination of natural and man-made hazards.

Additionally, one hazard may then cause another hazard. We call this a “secondary” hazard. For example, a flood hazard may cause disease epidemics such as diarrhoea, dengue fever and skin diseases.

Note: “hazard” is **not** the same as “disaster”. The term “disaster” is used **only** when there has actually been “loss of life, injury, loss of livelihood, or damage to property or the environment”.

Hazard Characteristics

Below is a table showing the characteristics of hazards – with particular reference to the Lao context. Hazards in shown in *italics* are not common in Lao.

Nature	Behaviour	
Hazard types (Force)	Water	rain, slow-onset flood, flashflood, drought, hail, fog, dyke failure, and hydropower dam water release. (and outside Laos – in coastal areas storm surge & tsunami).
	Wind	storm
	Land	landslides, riverbank erosion, mudflow, sedimentation by river
	Fire	forest fire (or wild fire), household fire
	Seismic	earthquake
	Biological	disease epidemics (HIV/AIDS, Pandemic Influenza, Malaria, Dengue, Cholera etc.), livestock diseases, crop pest infestation, snake bite
	Industrial or technological	pollution, road traffic accidents, boat/ferry sinking, UXOs, <i>radioactive materials</i>
	Human-related	social problems – gambling, drugs
	Conflict	<i>civil unrest or other action leading to displacement of people (either internally or from other countries)</i>
	Volcanic Eruption	<i>lava flow, ash</i>
Warning Sign	The indication that a hazard is about to impact or become dangerous. It can be scientific (e.g. satellite storm weather forecast) or it can be from traditional knowledge (e.g. red ants climbing from the ground to the top of trees).	
Forewarning	The time , in seconds, hours, days, weeks or months, between warning and impact.	
Speed of onset	How quickly it takes the hazard to arrive (or impact). We can distinguish between hazards that occur almost without any warning (fire, earthquake or flashflood), and a hazard that can be predicted three to four days in advance (slow on-set flood or storm) to a very slow-onset hazard like drought and famine	
Frequency	How often the hazard occurs (e.g. once a year, 3-4 times a year, every 5-10 years, etc.)	
Period of occurrence	Does the hazard occur at a particular time of the year (e.g. during the wet or dry season, early part of the wet season, in the cold windy season, near to the full moon, etc.)?.	
Duration	For how much time is the hazard happening? e.g. an earthquake is only a few seconds or minutes, whereas a flood can be for days, weeks or even months.	

Exercise 02:

Some hazards found in Laos PDR:

- Slow on-set flood
- Flash flood
- Storm
- Earthquake
- Drought
- Landslide
- Forest fire
- Dengue Fever epidemic
- Cholera epidemic
- Livestock disease epidemic
- Crop Pest Infestation

Classify the 11 different types of hazards shown above according to their **frequency** (how often they occur) in your area of Lao:

Hazard Frequency (how often)		
Low	Medium	High

Now classify the same 11 hazards according to their **severity** (how strong the impact is):

Hazard Severity (how strong)		
Low	Medium	High

Now combine your results from these two tables into the matrix below:

		Hazard Severity (how strong)		
		Low	Medium	High
Hazard Frequency (how often)	High			
	Medium			
	Low			

Content

- ◆ Disaster definition
- ◆ Slow on-set floods
- ◆ Flash floods
- ◆ Tropical storms
- ◆ Drought
- ◆ Landslide
- ◆ Disease epidemic
- ◆ Forest fire
- ◆ Household fire
- ◆ UXOs

Disaster Risk Reduction (DRR)**Session 02: Hazards and Disasters in Lao****Objectives:**

1. Participants understand the term disaster
2. Participants understand the different hazards that can affect Laos, their characteristics and what happens when the hazards become disasters

Disaster Characteristics**Disaster**

a disaster happens when a hazard affects a vulnerable population and causes damage, casualties and disruption which exceed the ability of the affected community or society to cope using its own resources.

Disasters result from a combination of several factors:

- ◆ the nature and severity of the hazard itself;
- ◆ the vulnerable conditions of the population affected – including the degree of exposure; and
- ◆ the capacity of the community or society to cope with the effects of the hazard

This will be discussed in more detail in Session 03

Hazard & Disasters in Lao PDR

This section focuses on the main hazards that are most relevant to the Lao context. This therefore includes both the mountainous and the flat floodplain areas along the major rivers. These hazards are:

- | | | |
|---------------------|--------------------|------------------|
| • Slow on-set flood | • Drought | • Forest fire |
| • Flash flood | • Landslide | • Household fire |
| • Storm | • Disease epidemic | • UXO |

For each hazard we will consider (a) why they occur; (b) their characteristics; (c) their predictability; (d) the factors contributing to vulnerability; and (e) adverse effects.

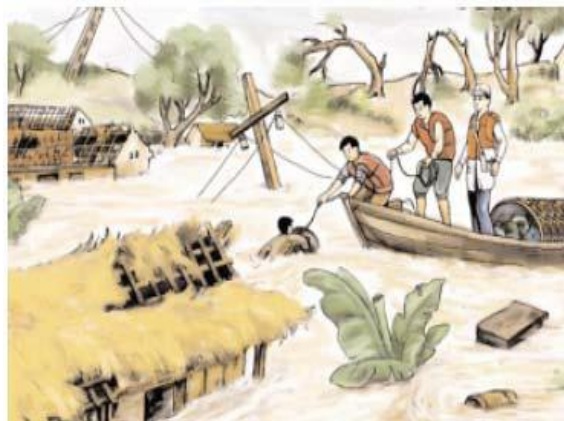
Slow on-set floods

Why do they occur ?

The **natural** occurrence of river flooding is due to intense rainfall associated with seasonal weather patterns.

Human changes to watersheds, floodplains, drainage basins & wetlands (e.g. from deforestation, road construction and urbanisation) can also result in flooding.

In Laos, **significant** floods are caused by increases in the volume and speed of water in the Mekong River and its tributaries, due to intense monsoon rainfall upstream (and to cyclones coming from northern & central Viet Nam).



Characteristics

Occur mainly in the lowlands (and to a lesser extent in the mountain areas); and are characterized by river water flowing at a higher level than normal – usually caused by intense rainfall upstream. Their affect is usually over a wide area – affecting entire districts and even several provinces at one time

Factors affecting the degree of danger: depth, speed & rate of rise of water; duration & time of year of the flood.

Predictability / Warning

These are usually seasonal floods and warnings are possible **days or weeks in advance**. Official warnings can come from TV, radio, mobile phone, and by local announcements (local authorities, Lao Red Cross branch & its volunteers)

Factors contributing to vulnerability

- ◆ communities located near to rivers
- ◆ limited awareness of flood hazard
- ◆ poor access to weather forecasts
- ◆ poor access to flood early warning system
- ◆ housing & infrastructure not flood resistant
- ◆ deforestation causes rainfall to flow into rivers more quickly
- ◆ unprotected food stocks, standing crops & livestock
- ◆ climate change (and el niño and la niña)

Adverse effects

Casualties and health (human & livestock): drowning; injury due to collapsed buildings, floating debris & electric shocks; human disease epidemics (e.g. malaria, diarrhoea, typhoid, cholera, dengue, skin & eye infections); and livestock disease epidemics (e.g. haemorrhagic septicaemia in cattle).

Physical damage: destruction or damage to houses, public buildings (temples, schools, health centres, markets, etc), bridges, roads, drinking water sources, irrigation & electricity infrastructure. Household possessions (e.g. important family documents & photos, TVs & radios, motorcycles) and livelihood equipment & tools can be damaged or lost.

Water supplies: contamination of drinking water sources (river water, wells & boreholes & ponds).

Essential services: access to health, education, police (security), markets, electricity and communication lines can be temporarily disrupted in both the immediate and short- to medium-term depending on the duration of the flood and extent of damage to hospitals, health centres, clinics, schools and market buildings.

Livelihoods: reduced income for (a) farmers whose crops are destroyed or damaged (b) villagers who have lost livelihood assets (c) most villagers who can not undertake normal livelihood activities until the flood waters subside; and in some areas under some conditions increased income for fishermen.

Crops and food supplies: rice & other crop harvests and thus seed stocks may all be destroyed – or yields diminished. Other food stocks may be damaged. Livestock & farm tools might be lost.

Flash floods

Why do they occur ?

The **natural** occurrence of flash flooding is due to intense rainfall at any time of year.

Human changes to upland watersheds (e.g. deforestation – where trees & plants have been destroyed and so the rain runs off the land too quickly and the soil does not have time to absorb water) and from release of water from dams for hydro-electric power can result in flash floods.



Characteristics

Occur mainly in the mountain areas and also lowland communities next to Mekong River tributaries; and are characterized by stream & river water flowing at a much faster and higher level than normal – usually caused by intense rainfall upstream associated with accelerated run-off. Their affect is usually over a limited and narrow area – affecting communities living along one particular stream or river.

Factors affecting the degree of danger: depth, speed & rate of rise of water; time of day/night of the flood.

Predictability / Warning

Warnings are possible only minutes or hours before impact (depending on the distance downstream from the start of the flash flood).

Factors contributing to vulnerability

- | | |
|---|--|
| ◆ communities located alongside streams & rivers or downstream of dams for hydro-electric power | ◆ housing & infrastructure are not resistant to floods |
| ◆ limited awareness of flash flood hazard | ◆ deforestation causes rainfall to flow into streams & rivers more quickly |
| ◆ poor access to flood early warning system | ◆ unprotected food stocks, standing crops & livestock |
| | ◆ climate change (and el niño and la niña) |

Adverse effects

Casualties and health (human & livestock): drowning; injury due to collapsed buildings, floating debris & electric shocks.

Physical damage: destruction or damage to houses, public buildings (temples, schools, health centres, markets, etc), bridges, roads, & drinking water sources. Household possessions (e.g. important family documents & photos, TVs & radios, motorcycles) and livelihood equipment & tools can be damaged or lost.

Water supplies: contamination of drinking water sources (wells & boreholes & ponds).

Essential services: access to health, education, police (security), markets, electricity and communication lines can be temporarily disrupted in both the immediate and short- to medium-term depending on the duration of the flood and extent of damage to hospitals, health centres, clinics, schools and market buildings.

Livelihoods: reduced income for (a) farmers whose crops are destroyed or damaged (b) villagers who have lost livelihood assets

Crops and food supplies: rice & other crop harvests and thus seed stocks may be destroyed. Other food stocks may be lost or damaged. Livestock & farm tools might be lost.

Tropical Storms

Why do they occur ?

These types of intense storms start far away to the east of Laos in the South China Sea – and especially around the Philippines. When the sea water gets very hot, large amounts of water evaporate into the clouds. As the warm air rises from the sea it creates stronger and stronger winds. The clouds then move over cooler seas and towards the land and as a result the water in the clouds condenses and falls as heavy rain



Characteristics

Characterised by very strong circulating winds and intense rainfall. The winds can reach speeds of 100 – 200 km/hour and the storm itself can travel over land at 10 – 30 km/hour and can affect an area of 200 – 500 km in diameter.

The strong circulating winds blow towards the centre of the storm and circulate anti-clockwise around the centre of the storm (the “eye of the storm”). The wind is weakest in the eye of the storm, the sky is clear and there is no rain. The “eye of the storm” can be a few tens of kilometres in diameter.

Factors affecting the degree of danger: wind speed, intensity of rainfall; time of day/night and time of year.

Predictability / Warning

It is possible to predict the likely path of a tropical storm: when and where it will strike land and how severe it will be. Using modern equipment (e.g. satellites and radar) storms can be detected when they first appear near in the South China Sea – and then followed to see how quickly they grow, how fast the wind speeds are and where they are likely to go. However a tropical storm can change direction very suddenly or can “blow itself out”. So as the storm travels closer and closer to land the direction it takes becomes more and more certain.

As a result the first warnings are only general and can be 3 or 4 days in advance, but final warnings are much more specific about where and when the storm will hit and are available from 6 to 12 hours before they strike.

Factors contributing to vulnerability

- ◆ communities located next to large areas of open water (especially during flood season), or amongst large areas of open farmland with limited wind protection from trees & bamboo
- ◆ limited awareness of tropical storm hazard
- ◆ poor access to weather forecasts
- ◆ housing & roofing not resistant to high winds
- ◆ destruction of trees for new farmland and for firewood in and around settlement areas
- ◆ climate change (and el niño and la niña)

Adverse effects

Casualties and health (human & livestock): death & injury due to collapsed housing & buildings or from flying debris (e.g. weakly attached metal sheet roofing).

Physical damage: destruction or damage to houses, public buildings (temples, schools, health centres, markets, etc) – especially roofing. Household possessions and livelihood equipment & tools can be damaged.

Water supplies: generally not affected.

Essential services: access to health, education, police (security), markets, electricity and communication lines can be temporarily disrupted in both the immediate and short-term depending on the extent of damage to hospitals, health centres, clinics, schools and market buildings.

Livelihoods: reduced income for (a) farmers whose crops are destroyed or damaged & (b) fishermen whose boats or fishing gear are destroyed or damaged.

Crops and food supplies: rice harvests & thus seed stocks may be lost (due to water damage). Livestock & farm tools might be lost.

Droughts

Why do they occur ?

Immediate cause: insufficient rainfall

Possible underlying causes: (a) climate change (b) el niño and la niña phenomena

Human induced changes in land surface (e.g. clearing of forests for rice fields, filling in of wetlands) and excessive ground water extraction (e.g. for irrigation).



Characteristics

A temporary & significant reduction of water or moisture availability compared with the normal situation.

Meteorological drought: is a reduction of rainfall compared with the normal situation.

Hydrological drought: is a reduction in water resources compared with the normal situation. This often occurs as an “extended dry season” drought

Agricultural drought: refers mainly to rain-fed rice production when there is a reduction in the rainfall during critical stages in the rice growth cycle. It is also affected by the presence of alternative water sources (e.g. surface water for pumping or groundwater), the moisture retention capacity of the soil, the timing of the rainfall and the adaptive actions of the farmers.

Factors affecting the degree of danger: duration of lack of rainfall, and time of year.

Predictability / Warning

Periods of unusual dryness are normal in all weather systems. Rainfall and hydrology data must be carefully analyzed to accurately predict droughts; however, advance warning is usually possible several months before.

Factors contributing to vulnerability

- ◆ communities settled in arid areas – where dry conditions are increased by drought
- ◆ Farming on marginal lands: subsistence farming or areas of low soil retention
- ◆ communities reliant on shallow ring wells during dry season
- ◆ limited coping strategies for drought hazard
- ◆ poor access to long-term weather forecasts
- ◆ Lack of irrigation infrastructure
- ◆ Lack of seed reserves
- ◆ Poor access to agricultural inputs to improve yields
- ◆ crops grown are not drought resistant
- ◆ large-scale destruction of trees changes local rainfall patterns
- ◆ climate change (and el niño and la niña)

Adverse effects

Casualties and health (human & livestock): illness (death or loss of livelihood) due to insufficient water for drinking – or from having to collect drinking water from contaminated water supplies. Malnutrition & illness (death or loss of livelihood) due to insufficient water for rice or other crop production.

Physical damage: soil erosion (especially fertile top soil from farmlands).

Water supplies: rain-fed agriculture (rice or other crop) receive insufficient rainfall during critical periods of the crop growing cycle [*agricultural drought*]. Water storage reservoirs receive insufficient rainfall for dry season irrigated rice crops [*meteorological drought*]. Drinking water supplies are insufficient for needs or dry up completely [*extended dry season*].

Essential services: not affected.

Livelihoods: reduced income for farmers

Crops and food supplies: rice & other crop harvests and seed stocks may be totally destroyed or yields diminished.

Landslides

Why do they occur ?

Naturally due to earthquakes, changes in the water content of the soil, and weathering (& erosion) of the slope.

And also due to **human** induced changes to the direction of water flow in streams and channels, the removal of slope foundations or building construction on the slope.



Characteristics

There are 2 types of landslide: (a) **falling** rocks and boulders; (b) **flow** of mud, sand and small stones. Landslides are earth, mud and rocks moving rapidly down a slope, often occurring in mountains and hilly areas and may cover several kilometres. Landslides are often triggered by other hazards - such as intense rainfall from storms or vibration from earthquakes.

Factors affecting the degree of danger: duration of lack of rainfall, and time of year.

Predictability / Warning

The frequency, geographical location & area, and the impact of landslides can be estimated in advance. Rainfall, earthquake risk, slope angle, type of soil and rock underneath, and vegetation cover all have an effect on the risk of landslides.

Factors contributing to vulnerability

- | | |
|--|--|
| ◆ communities built on steep slopes, softer soils or on cliff tops | ◆ buildings with weak foundations |
| ◆ communities built at the base of steep slopes, at the mouth of streams from mountain valleys | ◆ buried or old pipelines |
| ◆ roads & communication lines in mountainous areas | ◆ poor understanding of landslide hazard |
| | ◆ unplanned exploitation of resources (e.g. deforestation) |

Adverse effects

Casualties and health (human & livestock): death & injury is very common with landslides.

Physical damage: anything on top or in path of a landslide will be destroyed or damaged. It may block roads and waterways and cut lines of communication and electricity.

Water supplies: can be destroyed or blocked if in the path of the landslide.

Essential services: can be destroyed if in the path, or access can be prevented in the immediate and short-term.

Livelihoods: loss of access to/from external markets can affect traders.

Crops and food supplies: generally unaffected unless in direct path of landslide

Disease epidemics

Why do they occur ?

Under certain conditions some (human) diseases can quickly become very common in the community. If many people are affected by the same disease at the same time it is known as an epidemic.

There are many types of diseases and the reasons why they become epidemics depend in part on the type of disease.

Epidemics can occur in particular from quickly deteriorating conditions as a result of a disaster (e.g. flood, landslide or earthquake):

(a) where people are living in unhygienic conditions with poor access to safe water and sanitation; and (b) where there are favourable conditions for insects (e.g. mosquitoes) and animals (e.g. rats) that can spread diseases.

Epidemics of certain types of diseases (infectious diseases) can occur because they are easily passed from one person to another e.g. influenza, cholera, typhoid & measles. This can happen because of unhygienic behaviour, where vaccination coverage against these particular diseases is low, and where there is increased movement of people (e.g. seasonal migration) from one area to another.



Characteristics

Diseases are part of normal human existence – and it is when the prevalence of these diseases suddenly rises that there is potential for a disaster. In terms of disasters there are two main stages of disease progression:

- ◆ **epidemic:** when a disease is caused by certain conditions and affects large numbers of people in the community at the same time.
- ◆ **pandemic:** this usually refers only to infectious diseases and is when an epidemic affects many people in different places and different countries all at the same time.

Predictability / Warning

Depending on the particular disease, epidemics can often be predicted in advance: sometimes months or years, and sometimes only hours or days. Prediction is normally only possible through disease surveillance by hospitals & health centres.

Factors contributing to vulnerability

- | | |
|---|---|
| ◆ hazard conditions (floods, earthquake, etc.) | ◆ poor vaccination coverage |
| ◆ high density populations | ◆ lack of health care & hygiene programs to create awareness and behaviour change |
| ◆ poor access to safe drinking water and sanitation; and poor hygiene behaviour | ◆ immuno-compromised persons (HIV/AIDS, TB etc..) |
| ◆ contamination of drinking water or food | ◆ malnutrition |
| ◆ poor access to health services; poorly resourced health services | ◆ climate change (and el niño and la niña) |

Adverse effects

Casualties and health (human): illness (death or loss of livelihood)

Physical damage: none.

Water supplies: contamination of drinking water sources by people infected with water-borne diseases (e.g. cholera, typhoid & diarrhoea).

Essential services: health services may be overloaded due to the epidemic; schools & markets may be temporarily closed.

Livelihoods: reduced income due to loss of livelihood (victim and family carers).

Crops and food supplies: farm work may be affected due to loss of labour force (victim & carers) .

Forest Fire

Why do they occur ?

A combination of natural conditions and man-made causes. Often following prolonged periods of no rainfall vegetation is very dry – forest fires can start by accident (cooking fire left unattended or not put out properly, or a casually discarded cigarette) or on purpose (to clear vegetation for upland rice & crop planting).



Characteristics

Fire can spread very quickly and become dangerous to the human & livestock life, housing and possessions. Factors affecting the degree of danger: duration of lack of rainfall, distance to settlements, and presence of firebreaks (e.g. streams, rivers, roads).

Predictability / Warning

Potential for forest fires can normally be known several weeks in advance; however once a fire is started warnings may only be minutes or hours.

Factors contributing to vulnerability

- ◆ traditional “slash & burn” agriculture
- ◆ dry conditions (lack of rainfall)
- ◆ poor awareness of forest fire hazard & risks
- ◆ lack of natural & man-made firebreaks

Adverse effects

Casualties and health (human & livestock): death or injuries from burns or smoke inhalation.

Physical damage: destruction of housing and public buildings (temples, schools, health centres, markets) as well as household possessions (including important documents) and livelihood equipment (including transportation means).

Water supplies: can be damaged.

Essential services: can be destroyed if in the path of the fire; or access can be prevented in the immediate term.

Livelihoods: destruction of natural resources can affect certain livelihoods dependent on certain forest products (e.g. resin & medicinal plant collection, hunting).

Crops and food supplies: crops can be destroyed if in the path of the fire; wild food products & animals from the forests can be lost.

Household Fire

Why do they occur ?

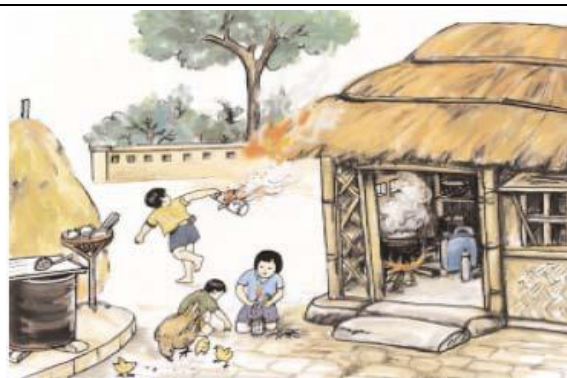
They can also occasionally be caused by natural causes – e.g. lightning or as a direct result of forest fire.

However they are more usually **human**-induced, and can be caused by accident or on purpose.

accident: cooking fires can be left unattended (e.g. by people cooking having to attend to other livelihood activities or to attend to babies and

young children), easily flammable materials can be placed too close to the fire (e.g. curtains blowing in the wind; or petrol, oil or alcohol stored too close).

on purpose: fire can be deliberately started by an angry family member, neighbour or other person(s).



Characteristics

Household fire can spread very quickly and become dangerous to the human & nearby livestock life, housing and possessions. Household fires can spread very quickly to neighbouring houses especially where they are close together and made of wooden & thatched materials.

Predictability / Warning

Household fires start without warning. Neighbouring households may have several minutes warning once the fire has started.

Factors contributing to vulnerability

- ◆ houses made from wood or bamboo
- ◆ houses with thatch or palm leaf roofing
- ◆ cooking inside or under the house
- ◆ lack of easy access to labour resources and to very nearby water source to help put out the fire
- ◆ sudden gusts of wind

Adverse effects

Casualties and health (human & livestock): death or injuries from burns or smoke inhalation.

Physical damage: destruction of housing as well as household possessions (including important documents) and livelihood equipment (including transportation means).

Water supplies: unlikely to be damaged.

Essential services: not affected.

Livelihoods: loss of livelihood equipment & tools inside the house.

Crops and food supplies: seeds and stored food supplies can be burnt or smoke damaged

UXOs

Why do they occur ?

These are **human**-induced and in Lao are principally the legacy of the war between the USA and Viet Nam in the late 1960s and early 1970s (although the other earlier conflicts also contributed to this). These are mainly large bombs, shells and rockets that were dropped by American planes and which failed to explode at the time.

The UXOs explode due to a number of reasons: handling of UXO e.g. for scrap metal (24%), farming (22%), collecting forest products (14%), lighting fires & other domestic activities (12%) and playing with UXOs (11%).



Characteristics

Large numbers of unexploded large bombs, shells, rockets, cluster munitions and a smaller number of landmines affect all 17 provinces and about ¼ of the more than 10,000 villages in Laos.

UXO accidents occur mainly in village centres (32%), rice fields (31%), forests (12%) or paths & roads (7%)

Predictability / Warning

UXO risk areas are relatively well known but precise locations of UXOs are usually not well known – as they are mainly left over from American bombing raids in the 1960s and 1970s. Location of landmines are however in some places more precisely known.

Factors contributing to vulnerability

- ◆ livelihood activity – scrap metal merchants, farmers & those collecting forest products
- ◆ adults & children playing with UXOs
- ◆ poor awareness of UXO hazard & risk

Adverse effects

Casualties and health (human & livestock): death or serious injuries (loss of arms, legs & eye sight)

Physical damage: if detonated inside or next to housing the nearby houses can be damaged or destroyed.

Water supplies: unlikely to be damaged.

Essential services: not affected.

Livelihoods: loss of arms, legs or eye sight can seriously affect the victim's livelihood ability.

Crops and food supplies: unlikely to be damaged.

Content

- ♦ Vulnerability definition
- ♦ Capacity definition

Disaster Risk Reduction (DRR)

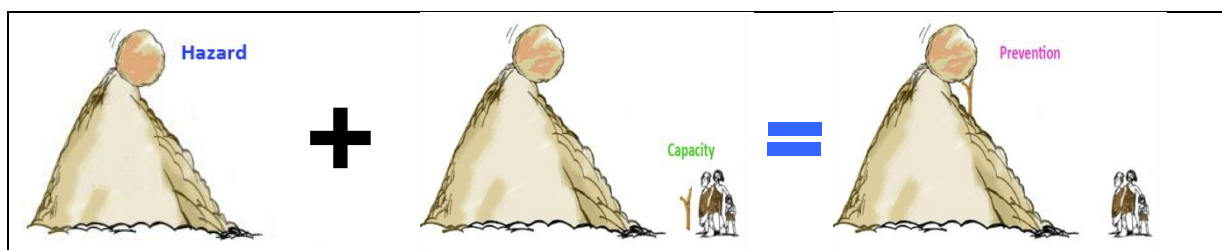
Session 03: Vulnerability & Capacity

Objectives:

1. Participants can explain the terms vulnerability and capacity
2. Participants understand the relationship between hazard, vulnerability and capacity

To understand disasters it is necessary to understand two opposing concepts: **vulnerability** and **capacity**. Understanding vulnerability and understanding capacity and how these both relate to particular hazards is the key to understanding disasters and how to prevent, or reduce the risk from, disasters.

The following pictures help to show how hazards, vulnerability and capacity relate with each other. After the pictures, the concepts of vulnerability and capacity will be explained in detail.



Vulnerability



Vulnerability

a set of conditions
which make a household or community
susceptible to damage from a particular hazard
by adversely affecting
the ability of that household or community
to prevent, prepare for, cope with, or respond
to that hazard.



Vulnerability is a complex **combination** of **many interrelated** factors. Vulnerability is often classified into 3 different categories: (1) physical or material vulnerability; (2) social or organisational vulnerability; and (3) motivational or attitudinal vulnerability. The table below gives some examples of this:

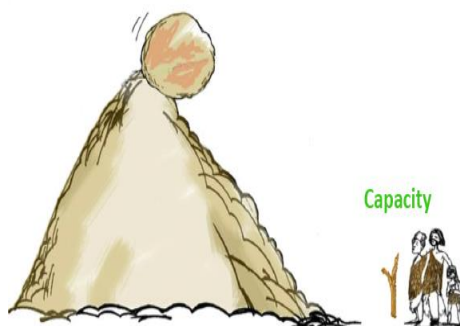
Vulnerability	Set of conditions
<p>Physical & Material Resources & skills: is determined by the level of risk an individual or community is exposed to due to the location, nature of livelihoods, physical proximity to hazards, physical disabilities, and lack or absence of resources</p>	<ul style="list-style-type: none"> ◆ hazard-prone location of houses, community, public buildings (health centres, schools, markets, temples etc.) infrastructure (roads, bridges, irrigation structures etc.) and farmlands; ◆ risky livelihoods e.g. fishing by boat (storms), mining (floods & earthquakes) and scrap metal trading (UXO); ◆ limited livelihood diversification; lack of livelihood opportunities & markets for non-traditional products & services; and unemployment; ◆ lack of, or limited, access to means of production – land, agricultural inputs (tools & machinery, seeds, fertilizer, draught livestock), and cash; ◆ lack of, or limited, access to credit at reasonable interest rates; and dependence on money lenders (with high interest rates); ◆ food shortage (not enough food) and malnutrition (not enough of the right food for good health and growth); ◆ limited educational level and skills; ◆ lack of, or limited, access to essential services: education, health, shelter, safe drinking water, sanitation, roads, electricity & communication; ◆ high rates of disease (death & illness); ◆ dependence on chemical fertilizers & pesticides to increase agricultural production ◆ unsustainable over-exploitation of forestry and fishery resources; and ◆ exposure to social problems (e.g. domestic violence, drug & alcohol abuse, gambling).
<p>Social & Organisational Relationships between people and organisations: lack or absence of government basic services, civil society, religious and cultural institutions that can provide and maintain the social needs of the community.</p>	<ul style="list-style-type: none"> ◆ lack of leadership and organisational structures to discuss and solve problems; coupled with limited capacity for management, negotiation, consultation & participation by various groups (women, men, children, ethnic groups, etc...) ◆ weak family or kinship structures; ◆ ineffective decision-making; some people & groups are ignored by decision-makers; ◆ unequal participation in community affairs – social exclusion due to gender, ethnicity, age, physical or mental disability, people living with HIV/AIDS etc. ◆ rumours, divisions & conflicts: ethnicity, social class, religion, politics etc.; ◆ injustice and lack of access to political processes; ◆ absence of national, municipal and community development plans; ◆ weak law enforcement (e.g. to protect common property resources & environment) ◆ lack of, or weak, community organizations (formal & informal; government & civil); ◆ weak, relationship with government administrative structures; and ◆ isolated from outside world.
<p>Motivational & Attitudinal Individual, family & community ability to change</p>	<ul style="list-style-type: none"> ◆ negative attitude towards change; ◆ passivity, fatalism and hopelessness – resulting in an outlook where people believe that however hard they work, they will always remain poor and neglected; ◆ limited initiative; no “fighting spirit”; ◆ limited unity, cooperation and solidarity; ◆ negative beliefs and ideologies; ◆ lack of, or limited, awareness about hazards and their consequences (e.g. poor hygiene behaviours); and ◆ dependence on external support.

Capacity



Capacity

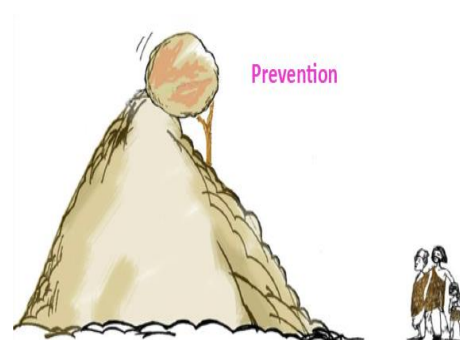
The strengths and resources (e.g. skills, leadership, materials, money, social structures, solidarity, compassion, etc.) that are available within a community and that can be used to prevent, prepare for, cope with, or respond to a particular hazard



Capacities are what are used by communities in preparing for, coping with, responding to and recovering from disasters. This means by using existing skills & resources available in the community.

However even though communities have capacities it is not always the case that the communities use that capacity. For example village health workers may have skills but may lack essential equipment or medicines. Some families may have tall flood-resistant houses but are unwilling to allow non-family members with flooded houses to stay during flood times. It is only by using existing capacities (or by strengthening or building capacities) that the impact of disasters can be reduced or even prevented.

In the picture to the right the community have taken the tree trunk (existing resource) and joined together (solidarity) to climb up the hill (labour resource) and secure in place the tree trunk as a brace to prevent the boulder from rolling down the hill.



Capacity	Set of conditions
Physical & Material Resources & skills: which enable the community to prepare for hazards, mitigate the impact of hazards, respond to and recover from disasters.	<ul style="list-style-type: none"> ◆ skills and abilities (e.g. farming, livestock breeding, carpentry, masonry, health care, teaching, swimming) ; ◆ access to, and control over, resources (food & clean water), essential services (health & education) and sanitation, markets, roads, electricity & communication lines; ◆ access to common property resources (these are resources that are not privately owned but can be used by anyone – such as lakes for catching fish or crabs, forests for harvesting bamboo, timber, wild vegetables & fruits, medicinal plants, or hunting wild animals etc.); ◆ Food stocks (e.g. post-harvest, or dried, pickled, salted etc.); and ◆ Resources such as tools, seeds for crops, livestock (including draught animals), cash, jewellery, other items which can be used, sold or pawned/mortgaged.
Social & Organisational Relationships between people and organisations	<ul style="list-style-type: none"> ◆ communities that are close-knit and have strong social networks for support; ◆ communities with good leadership and with caring local and national institutions; ◆ people who share the physical resources in times of need. ◆ presence of government agencies that provide the community with basic services such as education, health, food and security; ◆ the existence of community organizations and civil society groups that advocate for people's rights and provide support services and augment government services to the community such as clubs, societies and groups; and ◆ religious and cultural institutions that provide moral support and spiritual services to the community (e.g. temples and monasteries).
Motivational & Attitudinal Individual, family & community ability to change	<ul style="list-style-type: none"> ◆ coping well in adverse situations; ◆ active ways of solving problems, methods for handling stress & defence mechanisms; ◆ positive attitudes - resiliency and hope which keeps people going even in the face of adversity; ◆ sense of humour even during crises; and ◆ pro-active attitude – e.g. to address prevailing concerns in a communal way.

Content

- ♦ Disaster risk definition
- ♦ $R = H \times V/C$
- ♦ Disaster Cycle – before, during & after
- ♦ Disaster Risk Reduction
- ♦ Community resilience

Disaster Risk Reduction (DRR)

Session 04: Disaster Risk Reduction & Disaster Cycle

Objectives:

1. Participants can explain the term disaster risk
2. Participants understand the relationship between disaster risk, hazard, vulnerability and capacity
3. Participants understand the disaster cycle
4. Participants understand the term disaster risk reduction & community resilience

Disaster Risk

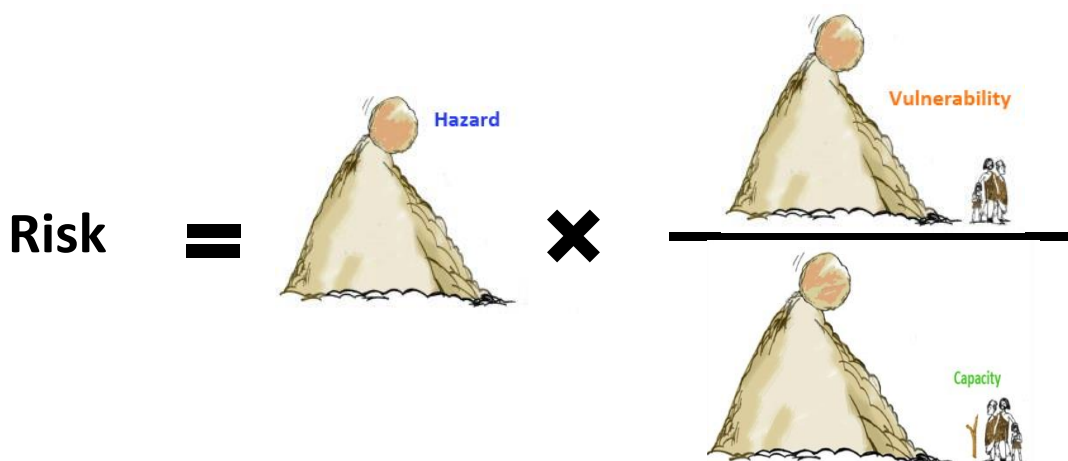


Disaster Risk

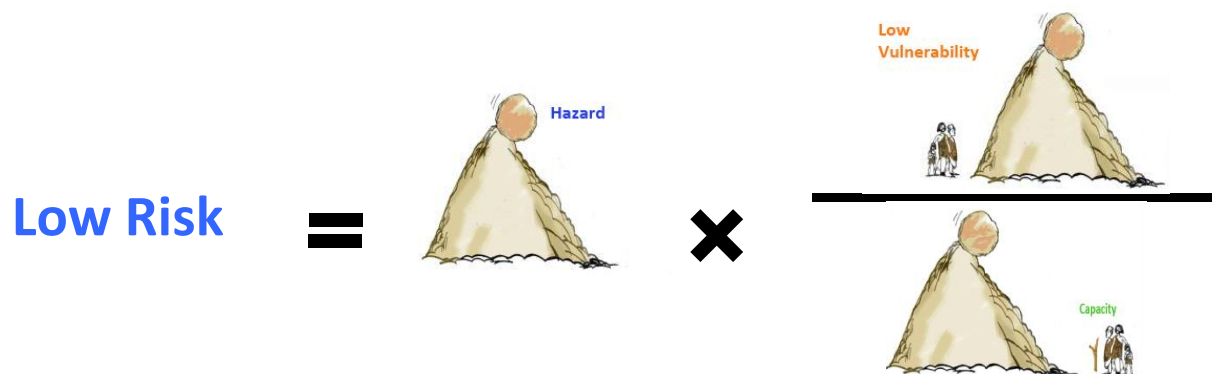
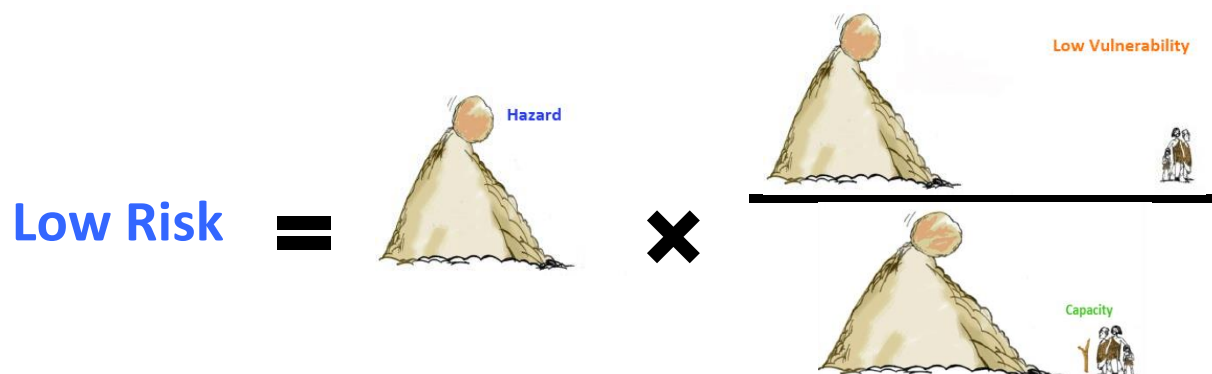
the probability that harmful consequences or losses (e.g. death, injury, destruction of housing & other infrastructure, disruption of essential services, loss of livelihood & food production, etc.) result from a particular hazard. The probability is dependent on a combination of the severity of the **hazard**, the **vulnerability** (vulnerable conditions) and the **capacity** of the community

Disaster risk is commonly represented by the equation below:

$$\text{Risk} = \text{Hazard} \times \frac{\text{Vulnerability}}{\text{Capacity}}$$



To give a few examples:

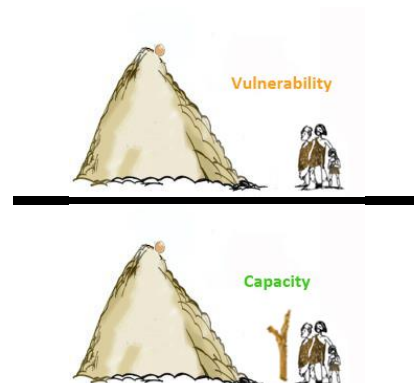


Very
Low Risk

=



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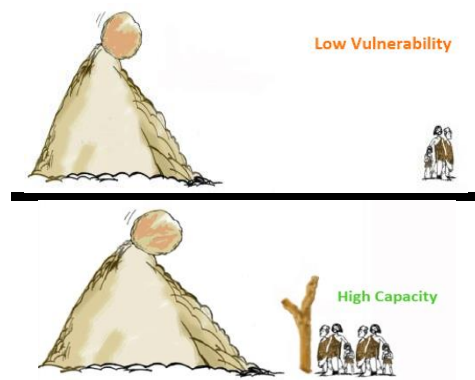


Very
Low Risk

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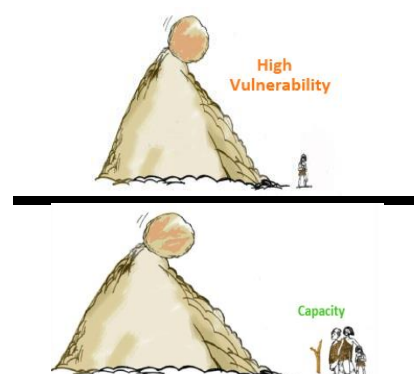


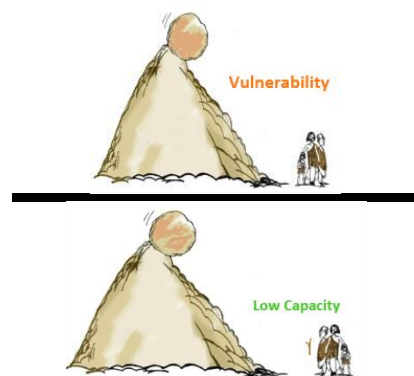
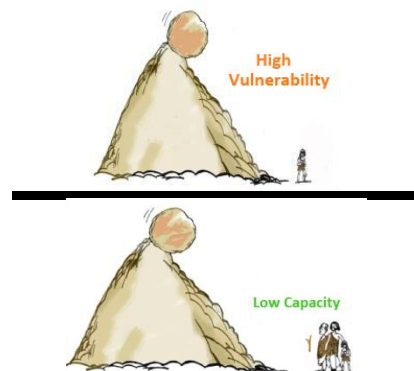
High Risk

=



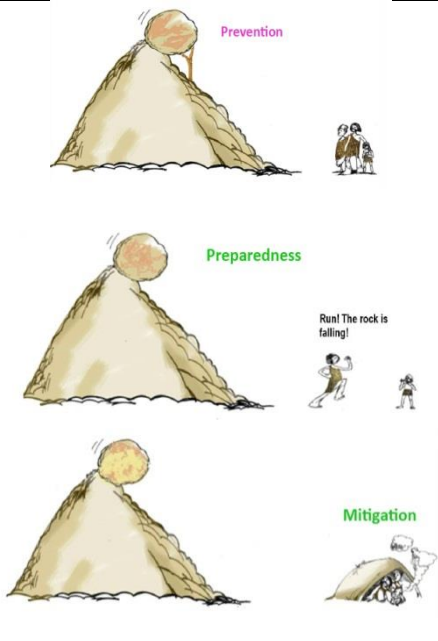
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High Risk**=****×****Very High Risk****=****×**

Disaster Cycle and Disaster Risk Reduction

When we think about disasters we often consider the time **before** the hazard event, the time **during** the disaster and the time **after**. The time before the disaster we normally think of a “normal” and following a disaster and the immediate **response** to that disaster there is a period of **recovery** before the situation returns to “normal” again.

Before	Development: ensuring hazard risk & disasters are factored into local and national development planning	
	Disaster risk reduction: a comprehensive approach to reduce vulnerabilities & hazard risks – by avoiding adverse hazard impacts through prevention , or by reducing (or limiting) adverse hazard impacts through mitigation and preparedness .	
	<ul style="list-style-type: none"> ♦ Disaster prevention: activities designed to provide permanent protection from the adverse impact of hazards. It includes engineering and other physical protection measures and also legislative measures aimed at avoiding disasters completely. <i>e.g. tropical storm shelters, typhoid vaccination, and disaster management laws.</i> ♦ Disaster preparedness: activities and measures taken in advance to ensure timely and effective response to the impact of hazards. <i>e.g. flood early warning systems, evacuation planning, awareness-raising about dengue risk, and the training & equipping of search & rescue teams.</i> ♦ Disaster mitigation: measures taken in advance of a disaster aimed at reducing the hazard impact on society and the environment; these measures could be either structural or non-structural. <i>e.g. construction of embankments, construction of water supply & sanitation facilities in safe areas, and reforestation.</i> 	 <p>The illustrations show three scenarios of a large rock on a hill. In the 'Prevention' scenario, a person is on the hill with the rock. In the 'Preparedness' scenario, a person is running away from the rock with the text 'Run! The rock is falling!'. In the 'Mitigation' scenario, a person is building a shelter from the rock.</p>
During	Emergency Response: activities undertaken immediately following the disaster. It includes emergency needs assessment (e.g. food, water, shelter, medical, & security), immediate relief (distribution of food, relief items & provision of essential services – health, education, security), search & rescue, first aid, and debris clearance.	
After	Recovery: the restoration (and improvement) of facilities, livelihoods and living conditions of disaster-affected communities; including specific efforts to reduce the risk of disasters in the future: <ul style="list-style-type: none"> ♦ Rehabilitation: activities to help the victims return to “normal” life. It includes restoration of repairable public utilities, housing and resettlement; also provisions for re-establishing livelihood activities ♦ Reconstruction: returning communities to their pre-disaster situation, which includes the replacement of infrastructure (roads, irrigation works, water supply), essential facilities (e.g. hospitals, schools, markets, communication lines). 	
	Development: ensuring hazard risk & disasters are factored into local and national development planning	



Disaster Risk Reduction

A comprehensive approach to reducing the risks of disaster through systematic efforts to analyse and manage the causal factors of disasters: including reducing exposure to hazards, reducing the vulnerability of people and property to hazards, improved preparedness for hazard events, and the wise management of land and the environment.

Disaster risk reduction has five key elements:	
Risk awareness and risk assessment	Focusing on identifying the hazard risks and understanding what factors contribute to these risks – what are the causes of the risk? This then subsequently helps in identifying appropriate measures to address disaster risks. For LRC this is achieved by conducting Hazard, Vulnerability & Capacity Assessments (HVCA), and in response to disasters - emergency assessments. The results of these assessments are used in developing disaster risk reduction plans and disaster response plans.
Knowledge development	Including creating materials (such as posters, leaflets, DVDs, radio & TV plays, etc.,) that can be used to raise awareness and understanding about hazard risks, solutions to those risks, and about other disaster risk reduction issues. These materials are called Information, Communication & Education (IEC) materials. IEC materials can be used for the raising awareness with the general public, for advocating with policy makers and decision-makers, and as materials for training staff and volunteers. The aim of most IEC materials is to help change people's behaviour. For example a poster that informs the public about the risk from dengue, and that it comes from the bite of the female Tiger Mosquito, and the need for infants & young children to sleep at all times under mosquito nets, is only successful if family members always ensure that infants & young children actually do sleep at all times under mosquito nets.
Public commitment and institutional frameworks	Mobilizing and organizing the general public through community approaches, and through institutional commitments from government and non-government partners. In LRC, this is practiced through the Community-Based DRR approach, the inclusion of DRR in the new LRC Strategic Plan 2011-2015, and coordination & collaboration with the government and NGO partners.
Application of measures	Implementing various measures to address disaster risks which include mitigation & preparedness, and response & recovery. The measures are identified based on the results of the HVCA and emergency Assessments.
Early warning	The Early Warning System (EWS) itself: the interpretation of warning signals and the identification of evacuation routes and safe areas for evacuation – for example in relation to slow on-set or flash floods.

In the past much disaster risk reduction work has focused principally on reducing vulnerabilities to disasters; however recent work moves beyond this – where the goal is now improved **community resilience** to disasters. This takes the disaster risk reduction work further by putting a greater emphasis on what communities can do for themselves and how to strengthen their capacities.



Community Resilience – is the capacity to:

- anticipate, minimize and absorb potential stresses or destructive forces
- manage or maintain certain basic functions and structures during disastrous events
- recover or “bounce back” after a hazard event or disaster

The figure below summarises all of the above in a “disaster cycle” which has at its centre, and goal, community resilience and risk reduction.



Content

- ♦ Definition
- ♦ Development
- ♦ Gender
- ♦ Age
- ♦ Disabilities
- ♦ PLWHA
- ♦ Climate change
- ♦ Disaster & Development
- ♦ DRR mainstreaming

Disaster Risk Reduction (DRR)**Session 05: Cross-cutting & Other Issues****Objectives:**

1. Participants are aware of a number of cross-cutting issues that impact on disaster risk reduction

Cross-cutting Issues**Cross-cutting Issues**

are issues that should be considered at **all** stages, and in **all** aspects, of disaster risk reduction work if the goal of community resilience is to be achieved.

In regards vulnerable groups:

Disasters affect all parts of the community, minorities and majorities, the able-bodied and persons with disabilities, young and old, men and women. However, some people are especially vulnerable in disaster. Specific factors, such as gender, age, disability and health status, affect vulnerability and shape people's ability to cope and survive in a disaster context. In particular, women, children, older people, people living with disabilities, and people living with HIV/AIDS (PLWH/A) may suffer specific disadvantages in coping with a disaster. These groups are at increased risk due to the physical, cultural and social barriers that prevent their access to services and support to which they are entitled and their inclusion in Community-Based Disaster Risk Reduction, recovery and development activities.

Prejudice, discrimination, and exclusion can multiply the devastating impact of a disaster upon people's lives. Discrimination can arise from incorrect assumptions about particular vulnerable groups – particularly when these groups have not been given the opportunity to voice their interests & concerns, or have not participated in decision-making. For example 'women and children' are often considered as one group but children have their own needs (indeed boys and girls will also have differing needs). The contribution that vulnerable groups, like women, children and the elderly, can make to disaster risk reduction is often underestimated by the community, local authorities and by organisations. People with disabilities are too often treated as if they are one homogeneous group – when the reality is that there are many different types and experiences of disability all with different disaster risk reduction interests and concerns. For example in a flood the needs and concerns of a leg amputee will be different from someone who is blind, who will be different from someone who is deaf, who will be different from someone who has a mental illness. These vulnerable groups can be remarkably resourceful and resilient in the face of disaster, and initial assessments should take account of

their capacities and skills as much as of the needs of the affected population.

In disaster contexts it is thus important that steps are taken to ensure inclusion of these vulnerable groups at all stages in Disaster Risk Reduction, Disaster Response & Recovery and in development activities. In particular, their participation in the planning and decision-making processes of disaster risk reduction & disaster response activities helps to ensure equitable and effective programming that is responsive to everyone's needs and maximises the capacity of the whole community (of which they are a part). Community-Based Disaster Risk Reduction is a process that should involve and benefit the whole community.

Gender

Disaster Risk Reduction is more effective when activities are based on an understanding of the different needs, vulnerabilities, interests, capacities and coping strategies of men and women, and on the differing impacts of disasters upon them. Women are often much worse affected than men when a disaster strikes and benefit less when recovery begins.

Age (children & the elderly)

Children are especially at risk in disaster situations. Although vulnerability in certain areas (e.g. malnutrition, exploitation, abduction and recruitment into fighting forces, sexual violence and lack of opportunity to participate in decision-making) can also apply to the wider population, the most harmful impact is felt by children and young people.

Older people make up a large proportion of the most vulnerable in disaster-affected populations, but the elderly also have key contributions to make in survival and recovery. Isolation is the most significant factor creating vulnerability for older people in disaster situations – and isolation exacerbates existing vulnerabilities derived from chronic health, mobility, and potential mental issues. Older people are more likely to be aid givers than receivers. If supported, they can play important roles as care-givers, resource managers and income generators, while using their knowledge and experience of community coping strategies to help preserve the community's cultural and social identities and encourage conflict resolution.

Disabilities (physical & mental)

People with disabilities are among the most vulnerable groups in disaster. This can be due to their disability itself and any special requirements that they may have that can be interrupted in times of disaster, but also due to pre-existing social constraints. People with Disability tend to encounter significant barriers, discrimination and exclusion from opportunities in day-to-day life. Marginalised by laws, customs, practices and attitudes, in addition to having a difficult physical environment, they are excluded from educational and livelihood opportunities. They are also the poorest of the poor and have limited access to health care, shelter, food, education and employment. In disasters people with disabilities suffer particularly high rates of mortality and morbidity (i.e. death, illness and injury). In addition to those who had a disability before the onset of disaster, many more become disabled as a result of disaster and a range of factors such as poor medical care, breakdown of support structures, interruption of preventative health care programmes, invisibility to emergency registration systems. Apart from specific needs determined by the nature of disability, people with

disabilities will have differing social needs. Disabled men's and disabled women's needs will differ as will the needs of the elderly and the young disabled

People Living With HIV/AIDS (PLWHA)

People living with HIV/AIDS (PLWH/A) often suffer from discrimination, and therefore confidentiality must be strictly adhered to and protection made available when needed. This debilitating disease not only affects individuals but also their families and communities, as young people in their most productive years, especially women, are disproportionately affected – physically, psychologically and financially.

Climate Change

In recent years it has been observed in many parts of the world that the “normal” climate is changing and has become more unpredictable. Where before farmers were reasonably sure that the rainy season would start in a particular month – and finish in a particular month – this does now not happen every year as it used too. Further, the amount of rainfall is sometimes much more or much lower than “normal” and winter night-time temperatures are warmer.

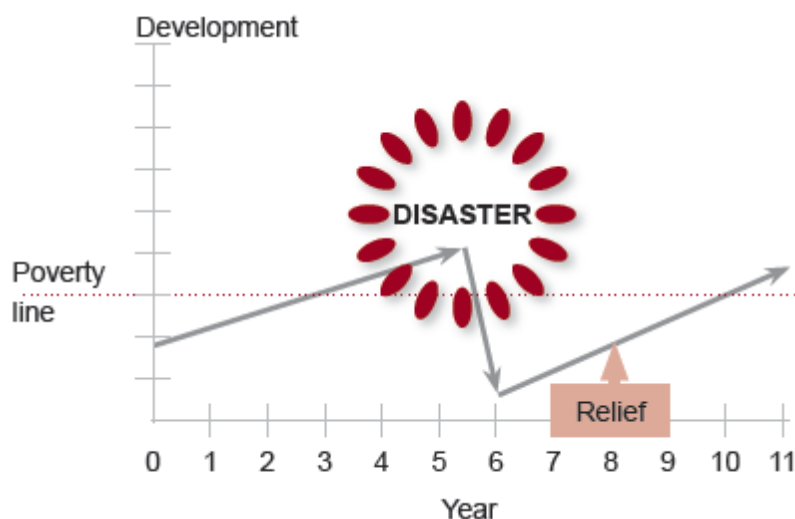
Many people believe that human activities have contributed to this problem through amongst other things:

- an increased level of carbon dioxide in the atmosphere resulting from the burning of fossil fuels (coal, petrol, diesel & natural gas) for electric power stations and from engines (cars, motorbikes, trains, boats, planes); and
- changes in land use patterns (in particular deforestation)

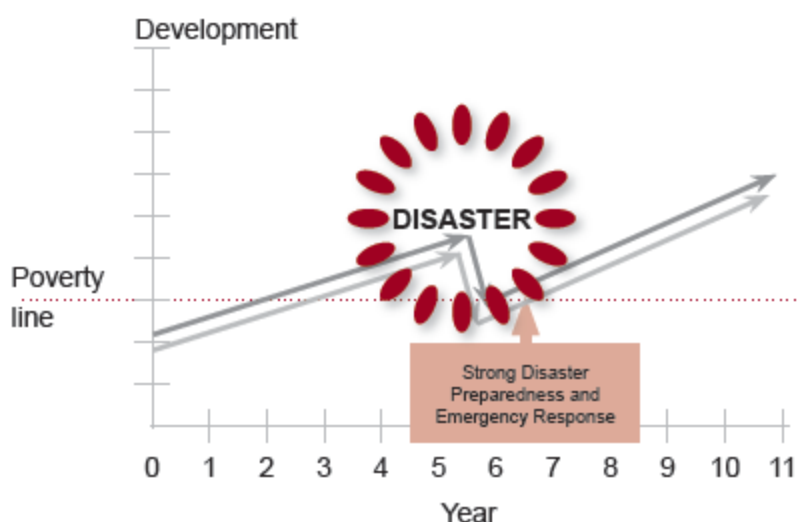
Disasters and Development

There are two key issues as regards disasters and development: firstly, how disasters impact on development itself; and secondly, that if disaster risk reduction is to be successful and sustainable it must be mainstreamed in the development planning process.

Disaster impact on development: in normal times, the community itself, and government & non-government organisations, work together to improve the conditions of the community and its members: this is called “development”. However when a disaster strikes it often significantly reduces many of the gains that have been achieved through development. For a family this might mean that they have to sell household assets such as gold, livestock, TV or motorbike or take out an expensive loan to help them recover. It may also mean that health centres and schools have been affected and they are not able to provide health & education services for some time. It often takes a number of years to return to the same level of development as before the disaster. This is shown in the next figure:



However, the aim of disaster risk reduction is to reduce the impact of the disaster – and to generate a quicker recovery from the disaster. These two features are shown in the figure below.



Disaster Risk Reduction mainstreaming in development planning: Previously disasters were viewed only as unpredictable & unavoidable events that had to be dealt with by disaster specialists. However we now understand that disasters are unresolved problems of development – where exposure to hazard risk is seen as a fundamental dimension of poverty. It is also understood that poorly planned development can create new forms of vulnerability or exacerbate existing ones – sometimes resulting in disasters. For example the construction of a new road, with not enough consideration to adequate drainage during heavy rainfalls, may cause or exacerbate flooding of housing settlements.

Another example would be the construction of a normal water point in known flood-prone areas – so that expected floods damage or contaminate the water point: if the water point had been raised (or flood-proofed) then not only would it not be damaged or contaminated but it would also still be able to provide reliable safe drinking water during flood times. This example highlights the other benefit of thinking about disasters when planning development projects. Constructing a raised water-point would cost perhaps 30% more than a

normal water-point but would not be flood damaged, would not require cleaning after flooding and would provide safe sinking water and so helping to reduce serious diseases like diarrhoea, typhoid & cholera. The cost of repairing and cleaning damaged wells, and of health treatment for seriously ill villagers would be considerably more than the 30% cost of making a raised water-point; and it also might save some lives.

DRR mainstreaming has three main purposes:

- ◆ ensure that all development programmes and projects are designed with consideration for potential disaster risks and designed to resist hazard impact;
- ◆ ensure that all development programmes and projects do not inadvertently increase vulnerability (social, physical, economic or environmental) to disasters; and
- ◆ ensure that all disaster relief and rehabilitation programmes and projects are designed to contribute to developmental aims and to reduce disaster risks in the future

Part 02 | Community-Based Disaster Risk Reduction (CBDRR)

Session 01: Community-Based Disaster Risk Reduction (CBDRR)

Session 02: Roles & Responsibilities of Stakeholders

Objectives: 1. Identify

Content

- ♦ Community
- ♦ Community based approaches
- ♦ Participation

Community-Based Disaster Risk Reduction (CBDRR)**Session 01: Community Based Disaster Risk Reduction****Objectives:**

1. Participants understand the term community
2. Participants understand how community-based approaches are different from other approaches
3. Participants understand how their community can participate in CBDRR activities

In Community-Based Disaster Risk Reduction (CBDRR), the community is usually taken to mean a group of people in a particular location – where they share the same environment (either location or livelihood) and are exposed to the same hazards – although they may have different levels of vulnerability or exposure to those hazards. They therefore share common problems, interests, hopes and behaviours – and this forms the basis for establishing common objectives in disaster risk reduction.

Such communities are not a homogenous group – where people and households are all very similar – the group is characterised by diversity in gender, ethnicity, language, religion, educational background, wealth, age, health status, livelihoods, etc. And this diversity contributes to clear differences in people's perceptions, interests, values and attitudes from the same community. The community-based approach seeks to give voice and decision-making that encompasses all of this diversity. The table below summarises the differences of community-based approaches and other approaches:

Other approaches	Community-Based Approach
LRC staff directly implement a project in community	LRC staff facilitate community members to implement the project in the community through their network of volunteers in the community
LRC staff conduct the community assessment	Community conducts their own assessment – guided & advised by LRC staff
LRC consult with community	Community consult with LRC – throughout all stages of the project cycle
LRC mobilises community members	Local authorities and volunteers, guided by LRC staff, mobilize community members
LRC develops plans for the community	Community members identify and prioritize the solution to their problems – facilitated by volunteers. LRC staff provide additional technical support
LRC works for the community	LRC is a partner with the Community

In practical terms for CBDRR this means community participation and ownership in:

1. target area and beneficiary selection processes (including criteria for selection)
2. hazard, vulnerability and capacity assessment and analysis
3. identification & prioritisation of DRR measures;
4. development of the Village DRR Plan – and in implementing that plan;
5. monitoring & evaluation of the DRR activities and of the plan itself; and
6. strengthening the role of the community (and mobilising community members and resources), and in reducing external dependency on resources and capacities.

This means that local people are at the heart of decision-making and of the implementation of disaster risk reduction activities. The involvement of the most vulnerable is vital - as is the strong support from those that are least vulnerable. The local authorities are included in this and their role is supportive.

Summary of the CBDRR approach	
Participatory and inclusive	<ul style="list-style-type: none"> ◆ all community members, including all vulnerable groups, should be involved in all stages of the CBDRR process; ◆ it is the community who benefits directly from risk reduction and development; and ◆ all stakeholders in the community should be able to participate – and their concerns considered.
Responsive	<ul style="list-style-type: none"> ◆ DRR measures taken should be based on the needs & interest & capacities of the community (the community's perception); and ◆ priorities should be based on the requirements specified by the community (the community has ownership of the process)
Integrated	<ul style="list-style-type: none"> ◆ pre-, during-, and post-disaster measures are planned and implemented by the community; and ◆ community has linkages with other communities, organisations and government agencies at all levels.
Proactive	<ul style="list-style-type: none"> ◆ emphasis is on pre- disaster measures i.e. prevention, mitigation and preparedness.
Comprehensive	<ul style="list-style-type: none"> ◆ should include structural and non-structural preparedness and mitigation measures: <ul style="list-style-type: none"> ✓ Structural measures: physical construction & “things”; ✓ Non-structural measures: health, literacy, public awareness, skills training, livelihood enhancement & diversification, community organising, advocacy, natural resource management and environmental protection; ◆ DRR measures should address short-, medium- and long-term vulnerabilities.
Empowering	<ul style="list-style-type: none"> ◆ CBDRR processes aim to give increased access to, and control of, resources and basic social services; more meaningful participation in decision-making in issues that directly affect them; increased control over their natural and physical environment; and increased confidence; and ◆ use of local knowledge – as well as external technical support – in DRR measures.
Developmental	<ul style="list-style-type: none"> ◆ contributes to addressing and reducing the complex relation of conditions & factors that influence hazard vulnerabilities - including poverty, social inequity and environmental resource depletion and degradation.

Content

- ♦ Community members
- ♦ RCVs & VDPU
- ♦ Local authorities & NGO
- ♦ Red Cross & DDMC

Community-Based Disaster Risk Reduction (CBDRR)**Session 02: Roles & Responsibilities of Stakeholders****Objectives:**

1. Participants are aware of the different roles of different stakeholders at the different local administrative levels

Role of community members

- ♦ know and understand about hazards, disasters and risks in their community, their district and in Laos
- ♦ know what has happened (good and bad) during previous disasters
- ♦ Learn about recent changes to the environment (deforestation, roads, construction, etc..) which could change the environment and change the nature of the hazards and vulnerabilities that they face, or introduce new hazards;
- ♦ know who needs special help in the community and who have skills to help others in the community in time of disasters
- ♦ learn which government departments, NGOs, organizations are able to help during a disaster
- ♦ share information on how the community is affected by, and coping with, disasters.

Role of Red Cross Volunteers and Village Disaster Preparedness Unit

	Red Cross Volunteers (RCVs)	Village Disaster Preparedness Unit (VDPU)
Before		
During		
After		

Role of local authorities and of local & international Non-Government Organisations

	Local Authorities	Local & International NGOs
Before		
During		
After		

Branch Red Cross and District Disaster Management Committee (DDMC)

	Branch Red Cross	District Disaster Management Committee
Before		
During		
After		

Part 03 | Hazard Vulnerability Capacity Assessment (HVCA)



Session 01: HVCA Process Overview

Session 02: Elements at Risk & HVCA Matrices

Session 03: HVCA Methodology & Tools

Objectives:

1. Participants understand the HVCA Process and its place in DRR
2. Participants are able to identify “elements at risk” and understand the different HVCA matrices
3. Participants can use the various HVCA tools to collect information

Content

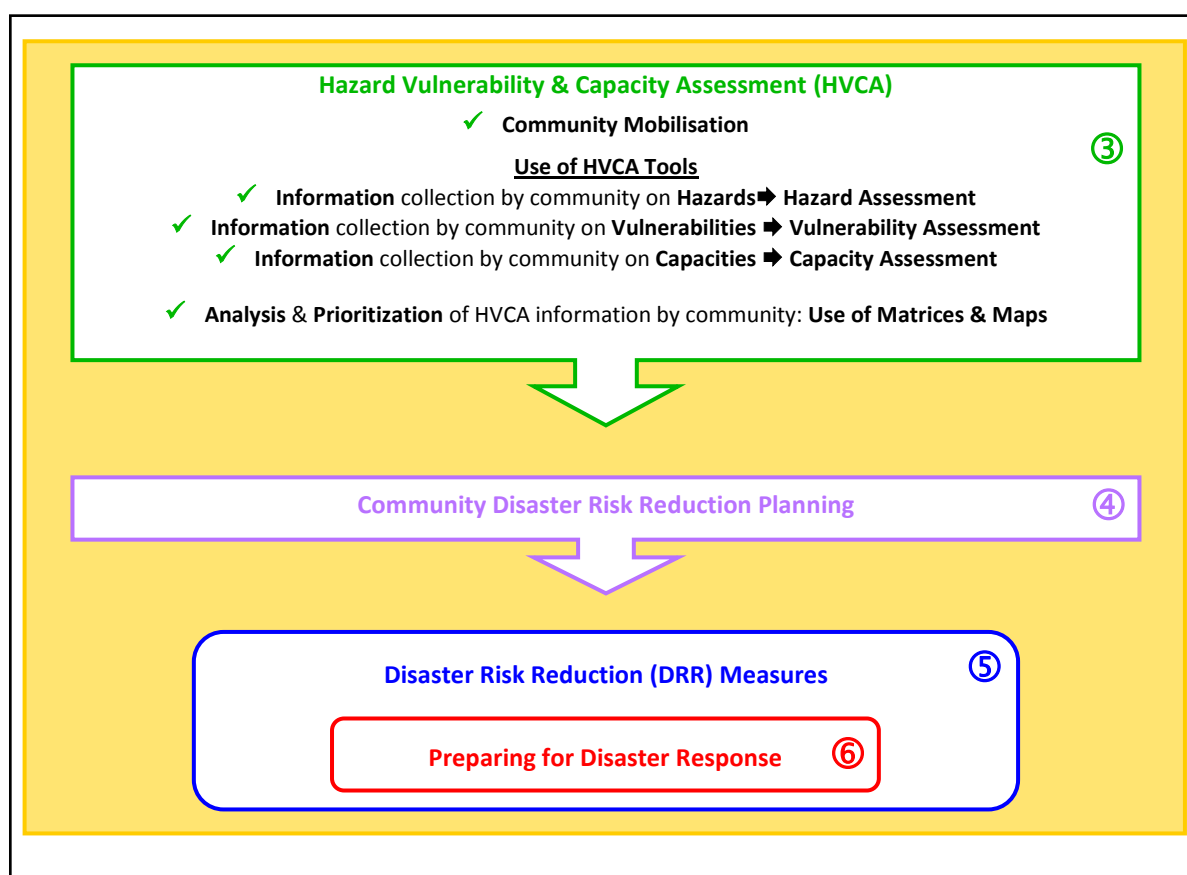
- ◆ HVCA Process Overview
- ◆ HVCA explanation
- ◆ Cross-cutting issues
- ◆ Roles & responsibilities

Hazard Vulnerability Capacity Assessment (HVCA)

Session 01: HVCA Process Overview

Objectives:

1. Participants can explain the different components of the HVCA and how the resultant information is used
2. Participants are aware of the different roles of the various stakeholders in the HVCA process



The **Hazard Vulnerability & Capacity Assessment (HVCA)** (or sometimes called the participatory risk assessment) – as shown in the Green Box ③ in the above diagram – is the process by which communities identify and prioritize the **main risks** that they face and to also identify what **skills** and **resources** they have to prepare for, cope with or respond to disasters themselves. The results of the HVCA then enable the community to identify and prioritise **possible solutions** to the main risks – and then **plan** for how these solutions can be implemented – both through their own skills and resources and through external assistance where needed (Purple Box ④). These solutions to be implemented are called **Disaster Risk Reduction (DRR) measures** (Blue Box ⑤) – which help either to prevent a disaster from happening, or help to reduce the impact of a disaster if it does happen. Some of these DRR measures are actions or activities that can be planned for and organised (or skills that can be developed) before a disaster actually happens – so that when the disaster

happens people can respond quickly and effectively to deliver the right assistance to the right people in the right place at the right time (Red Box ⑥) – this is **preparing for disaster response**. DRR measures (⑤) tend to be one-off measures (that for sustainability need to be maintained); whilst “preparing for disaster response” tend to be action or activities that need to happen regularly and routinely (e.g. every year) – so that the community is always **ready** to respond.



Hazard Vulnerability & Capacity Assessment (HVCA)

The **Hazard Vulnerability & Capacity Assessment (HVCA)** is exactly what its name suggests it is: it is a combination of 3 separate assessments about:

- ◆ **hazards** faced by the community (historical and future hazards);
- ◆ **vulnerabilities** to the specific hazards identified. People and things that are most at risk are identified and the root causes of why they are most at risk are identified. The vulnerability assessment takes into account the physical, geographical, economic, social, political and psychological factors that cause some people or things to be more at risk than others; and
- ◆ **capacities (skills & resources)** of individuals, households and communities for coping with or addressing the specific hazards identified.

Each of these 3 assessments use similar **tools** to collect information, and then use similar matrices (or tables) to help organise and analyse the information collected. For the Lao Red Cross the main tools used in these 3 assessments are:

- ◆ **Village profile**
- ◆ **Historical (& disaster) profile**
- ◆ **Community mapping** (of hazards, of vulnerabilities, and of capacities/resources)
- ◆ **Seasonal calendar**
- ◆ **Social & institutional network analysis** (Venn diagram)
- ◆ **Livelihood analysis** (optional)

The purpose of each of these tools and how to apply the tools is explained in the following Session 02. The information collected through these tools is brought together during focus group discussions & community meetings and in ranking exercises to determine priorities – from which 3 separate matrices are completed:

- ◆ **Hazard matrix**
- ◆ **Vulnerability matrix**
- ◆ **Capacity matrix**

Each tool can help collect information for two or all three of the assessments at the same time – as shown in the table below:

HVCA Tools	Information collection						Analysis		
	Village Profile	Historical (Disaster) Profile	Community Mapping	Seasonal Calendar	Social & Institutional Network	Livelihood Analysis	Ranking	Matrices for presentation and analysis	
Hazard Assessment		✓	✓	✓		✓	✓	Hazard Matrix	Risk Assessment Matrix
Vulnerability Assessment	✓	✓	✓	✓		✓	✓	Vulnerability Matrix	
Capacity Assessment	✓	✓	✓		✓	✓		Capacity Matrix	

The results of the Hazard, Vulnerability and Capacity matrices are then summarized in the **Risk Assessment** matrix – and this forms the basis of the disaster risk reduction planning process that then follows. Overall the objectives of the completed risk assessment process can be summarised as follows:

- ◆ it enables communities to systematically assess the level of risk, and prioritise those risks, for each specific hazard that they face in their community;
- ◆ it is an essential precursor to community decision-making about possible DRR measures to address the disaster risk related problems that the community have identified – and allowing community actions and resources can be allocated accordingly; and
- ◆ it contributes to raising community awareness about potential disaster risks.

Session 02 of Part 03 will first explain the Hazard, Vulnerability, Capacity and summary Risk Assessment matrices – and Session 03 will then give detailed information about how to use the various tools for collected the information in order to complete these matrices.

Cross-cutting Issues

In carrying out each hazard assessment, each vulnerability assessment and each capacity assessment it is important to always consider a number of cross-cutting issues (as described earlier):

- ◆ Gender
- ◆ Disabilities (physical & mental)
- ◆ Governance
- ◆ Age (children & elderly)
- ◆ Livelihoods
- ◆ Climate change

HVCA - Roles and Responsibilities

As already indicated the purpose of the HVCA is primarily to collect relevant information – but simply through discussing and collecting this information it also importantly serves to raise awareness and focus the **community's attention** on hazard, vulnerability, capacity and risk –related issues. In terms of using the tools the roles and responsibilities are as follows:

Who		Role	Responsibility
DDMC and Lao Red Cross team		Main facilitator	<ul style="list-style-type: none"> ◆ Inform and gain approval from community leadership for HVCA & risk assessment process; ◆ Organise HVCA scheduling and prepare tools & necessary materials in advance; & ◆ Facilitate each tool with expected participants;
Red Cross Volunteers		Co-facilitator	<ul style="list-style-type: none"> ◆ With community leadership approval, inform community members about the HVCA process; ◆ Organise appropriate meeting place(s) & ensure expected participants arrive on time; & ◆ Co-facilitate each tool.
Other stakeholders (e.g. international or local NGOs)		Participant	<ul style="list-style-type: none"> ◆ Contribute to information collection by sharing relevant knowledge and experience; & ◆ Start to identify possibilities for linkage or partnering with community and/or DDMC & LRC to address priority risk areas identified by the community.
Community	Leaders	Process supporter and participant	<ul style="list-style-type: none"> ◆ Support HVCA process & methodology; ◆ Inform community about the HVCA process prior to the visit from the DDMC/LRC team; ◆ Help ensure community expectations are not unduly raised; ◆ Accept participatory approach and allow & encourage community members to openly voice their thoughts, experiences, concerns and hopes; & ◆ Contribute to information collection by sharing relevant knowledge and experience.
	Key Influencers	Participant	<ul style="list-style-type: none"> ◆ Contribute to information collection by sharing relevant knowledge and experience; & ◆ encourage community members to openly voice their thoughts, experiences, concerns and hopes
	Community members	Participant	<ul style="list-style-type: none"> ◆ Contribute to information collection by sharing relevant knowledge and experience.

Content

- ◆ Elements at Risk
- ◆ Hazard Matrix
- ◆ Vulnerability Matrix
- ◆ Risk Prioritisation table
- ◆ Capacity Matrix
- ◆ Risk Assessment Matrix

Hazard Vulnerability Capacity Assessment (HVCA)**Session 02: Elements at Risk & HVCA Matrices****Objectives:**

1. Participants can identify “elements at risk”
2. Participants are able to complete Hazard, Vulnerability, Capacity, and Risk Assessment matrices
3. Participant understand the format for the Village Participatory Risk Assessment Report

Elements at Risk

Common to all 3 matrices are “**elements at risk**” and so it is very important to understand clearly what this means. There are 4 categories of elements at risk – and each is considered in terms of hazard (impact), vulnerability (why at risk) and capacity (skills & resources available to reduce risk).

Elements at Risk		
1.	People	<ul style="list-style-type: none"> ◆ Lives ◆ Health
2.	Household & Community Structures, Facilities and Services	<ul style="list-style-type: none"> ◆ Houses (including household assets) ◆ Schools ◆ Hospitals & Health Centres ◆ Markets ◆ Pagodas, Churches, Mosques ◆ Irrigation infrastructure (dams, reservoirs, embankments, canals, drainage channels & water gates) ◆ Water points & latrines
3.	Lifelines	<ul style="list-style-type: none"> ◆ Roads & railways ◆ Bridges ◆ Electricity lines ◆ Communication lines (phone & internet)
4.	Livelihoods & Economy	<ul style="list-style-type: none"> ◆ Agriculture (crops, livestock, fisheries, etc.) ◆ Livelihood assets (tools, equipment, transportation, etc.) ◆ Natural resources & environment ◆ Business & trade







Hazard, Vulnerability, Capacity and Risk Assessment Matrices

The following pages show each of these matrices with one example entry completed in blue font.

HAZARD MATRIX					
Hazard type: Flood					
Description		Element at Risk	Impact: how it will affect: ①		
			My Family	My Community	
Force / type	<ul style="list-style-type: none"> Water (slow on-set) Biological (disease) Land (river bank erosion & sedimentation) 	People	<ul style="list-style-type: none"> our children get severe diarrhoea – difficult & expensive journey for expensive medical treatment. ... 	<ul style="list-style-type: none"> other children in the community also get severe diarrhoea – some children die. ... 	
Warning Sign	<ul style="list-style-type: none"> River water levels rising Intense rainfall upstream TV & radio weather forecast 	Structures, facilities & services	(household) <ul style="list-style-type: none"> our house collapses and we have to spend time and money to collect materials to repair the roof, wall and some pillars. ... 	(community) <ul style="list-style-type: none"> the school is flooded and desks & chairs are damaged, classrooms need to be cleaned up and the well is contaminated with dirty flood water. ... 	
Forewarning	2-3 days	Lifelines	<ul style="list-style-type: none"> Our house is not connected to the electricity so we are OK, but we can not get to the market because the road is flooded and the bridge is destroyed. ... 	<ul style="list-style-type: none"> roads and bridges to health facilities and markets are cut so difficult and expensive to seek medical care, and buy & sell food or other essential items at the market. Electricity power lines are cut. ... 	
Speed of onset	Slow on-set				
Frequency	Every 3 – 4 years	Livelihoods & Economy	<ul style="list-style-type: none"> Our rice crop is destroyed 	<ul style="list-style-type: none"> All rice farmers have lost their crops – only some have seeds to replant. those with boats and fishing nets are able to fish near to the house and catch more fish. ... 	
Period of occurrence	Mid August to late October				
Duration	4 – 8 weeks				

VULNERABILITY MATRIX					
Hazard type: Flood					
Element at Risk	Describe the risk (potential impact) ①	Risk Prioritisation			Describe vulnerability ③ (combination of factors that contribute to the identified risk)
		How often Frequency (H / M / L)	How strong Severity (H / M / L)	Priority ② (H / M / L)	
People	A) Children become severely ill with water-related diseases (diarrhoea, typhoid, cholera, skin & eye infections) (including identification of vulnerable groups)	H	H	H	A1. Children without access to safe water & sanitation A2. Children & care givers have poor hygiene behaviour A3. Difficult, dangerous & expensive journey to health services
Structures, facilities & services	(household)				
	(community)				
Lifelines					
Livelihoods & Economy					
Any other relevant vulnerability information:					

Risk Prioritisation ②:

		Risk / Impact: how strong (Severity)		
		Low	Medium	High
Risk / Impact: how often (Frequency)	High			
	Medium			
	Low			

Based on this table – of the frequency and severity of hazard impact – each risk is assessed as:

- ◆ H = High Risk [high frequency and high severity]
- ◆ M = Medium Risk [high frequency & medium severity, medium frequency and medium severity, or medium frequency & high severity]
- ◆ L = Low Risk [high frequency & low severity, or low frequency and high severity]
- Not assessed [medium frequency & low severity, low frequency & medium severity, or low frequency & low severity]

This helps in trying to prioritise the perceived risks and later in prioritising what action to take.

CAPACITY MATRIX		
Hazard type: Flood		
Element at risk	Vulnerability ③	Available Existing Resources (Materials and Skills) or Coping Strategies ④
People	A1. Children without access to safe water & sanitation A2. Children & care givers have poor hygiene behaviour A3. Difficult, dangerous & expensive journey to health services	A1. Unsafe flooded wells and flood water / Firewood & kettles / Roofing for rainwater harvesting A2. Village Health Workers / Red Cross Volunteers / Teachers / Monks A3. Boats with engine
Structures, facilities & services	(household)	
	(community)	
Lifelines		
Livelihoods & Economy		
Any other relevant vulnerability information:		

VILLAGE RISK ASSESSMENT MATRIX					
Hazard type: Flood					
Element at Risk	Risk		Vulnerability ③	Available Existing Resources (Materials and Skills) or Coping Strategies ④	Action Priority * (H/M/L)
	Description (potential impact) ①	Priority ② (H/M/L)			
People	A) Children become severely ill with water-related diseases (diarrhoea, typhoid, cholera, skin & eye infections)	H	A1. Children without access to safe water & sanitation A2. Children & care givers have poor hygiene behaviour A3. Difficult, dangerous & expensive journey to health services	A1. Unsafe flooded wells and flood water / Firewood & kettles / Roofing for rainwater harvesting A2. Village Health Workers / Red Cross Volunteers / Teachers / Monks A3. Boats with engine	
Structures, facilities & services	(household)				
	(community)				
Lifelines					
Livelihoods & Economy					
Any other relevant information:					

* **Note:** the final column “Action Priority” will be completed later during the Village Disaster Risk Reduction Planning process that follows (step 02).

Village Participatory Risk Assessment Report

The DDMC & Lao Red Cross teams need to make a number of **Participatory Risk Assessment Summary Reports**: a summary report for **each village** targeted and then an overall summary of these for **each district** targeted. The report format is the same in both these cases. The Village and District Participatory Risk Assessment Summary Reports are based on the information collected with each village – as well as and from direct observation and interviews or focus group discussions by the team during field visits to the village – and is cross-checked with available secondary data sources.

Step 01: Village Participatory Risk Assessment – Summary Report

The DDMC & Lao Red Cross teams facilitate and support Red Cross Volunteers from target village to present back to their village leaders and village members the risk assessment matrix for verification and finalisation. This then forms the basis for the DDMC & Lao Red Cross teams to compile a Participatory Risk Assessment Summary Report for each village – and hard copies are then shared with village leaders and each Red Cross Volunteer (if possible the DDMC & Lao Red Cross team should obtain the village chief signature on the report before copying for sharing). This report should contain the following:

	Section	Detail
1.	Introduction	<ul style="list-style-type: none"> ◆ location of the village; geographic features ◆ village demographics; main livelihoods; and ◆ logistical access: including conditions during normal and disaster (e.g. flood or earthquake) times.
2.	Main findings	<ul style="list-style-type: none"> ◆ hazard / disaster profile – including hazard prioritisation; ◆ hazard, vulnerability & resource maps; ◆ completed vulnerability matrix – including vulnerable groups; ◆ completed capacity matrix – skills & resources, coping strategies; including current village disaster preparedness and risk reduction measures; ◆ risk prioritisation; ◆ table summarising any other relevant information (e.g. from secondary data) about water, agriculture, education and health services, etc. – during normal and disaster (e.g. flood) times; & ◆ other comments (e.g. from direct observation).
3.	Conclusion	<ul style="list-style-type: none"> ◆ Completed Village Risk Assessment Matrix

Presenting back to the community the results of the HVCA and the Village Risk Assessment Matrix is an important step in continuing to keep the community deeply involved and committing to supporting the whole process. Ideally the summary report should be presented by the Red Cross Volunteers – and if possible the village leader – with additional support from the DDMC & LRC team as needed. The Red Cross Volunteers should present the report to all those involved in the HVCA process and in sharing information – especially the vulnerable groups identified and key influencers in the village.

Content

- ♦ Village Profile
- ♦ Historical (Disaster) profile
- ♦ Village Mapping
- ♦ Seasonal Calendar
- ♦ Social & Institutional Network Analysis
- ♦ Livelihood Analysis
- ♦ Ranking

Hazard Vulnerability Capacity Assessment (HVCA)**Session 03: HVCA Methodology & Tools****Objectives:**

1. Participants understand the various HBCA tools – how and why to use them – and who should be involved

As mentioned in the previous session, the **Hazard Vulnerability & Capacity Assessment (HVCA)** uses a number of tools to collect information:

- ♦ **Village profile**
- ♦ **Historical (& disaster) profile**
- ♦ **Village mapping** (of hazards, of vulnerabilities, and of capacities/resources)
- ♦ **Seasonal calendar**
- ♦ **Social & institutional network analysis** (Venn diagram)
- ♦ **Livelihood analysis** (optional)

These are described below and the outputs of these tools are used to complete the hazard matrix, vulnerability matrix and capacity matrix – and then summarised in the risk assessment matrix.

Village Profile

What:	Public meeting, to introduce the aim of the visit and have a general presentation of the village.
Why:	<ol style="list-style-type: none"> (1) Gather basic information concerning the village, allow the facilitators (Lao Red Cross team and Red Cross Volunteers) to understand the context better, and think about the possible vulnerability and capacity of the village; and (2) Initiate and establish relationship between the facilitators, the village leadership and the village members
Who:	Village leaders in particular, plus members of the community including vulnerable groups as well as elders, teachers and others knowledgeable about the village
How:	<p>Plenary meeting, with presentation of the village leader(s). The general information should cover the following topics:</p> <ul style="list-style-type: none"> ♦ Demographics (male, female & total): total number of people, number of elderly (over 60 years), adults (17-59 years) and children (under 16); ♦ Any people/group of people that need special help? Who, Why ?; ♦ Main livelihoods; and ♦ Land area: total, village settlement, agricultural cultivation, other uses.

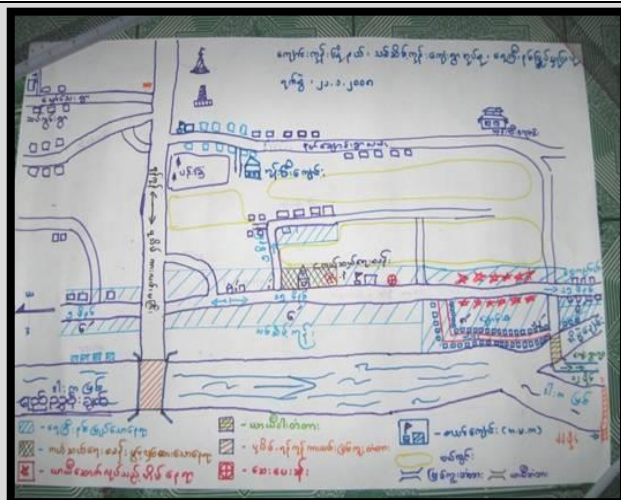
Historical (Disaster) Profile

YEAR	Demographics		Livelihood		Natural Resources				Disasters
	Houses	People	Farm area	Livestock	Trees	Animals	Rivers	Fish	
Past	before 1950								
	1950								
	1960								
	1970								
	1980								
	1990								
	2000								
Now	2010								
Future	2020								
	2030								
What:		Gathering information about what happened in the past in order to better understand the current situation.							
Why:		(1) gain insight into past hazards & disasters – including changes in the nature, frequency, severity and impact of these hazards & disasters; and so make villagers aware of these changes; (2) help understand the link between these hazards and household & village vulnerabilities; (3) make villagers aware of trends and changes; and (4) identify possible impacts in the future – based on past history of disasters in the village							
Who:		Village leaders, members of the village including vulnerable groups as well as elders, teachers and others knowledgeable about the village. Village elders (male & female) often have extensive historical knowledge of disasters in their community.							
How:		(1) Plan & schedule focus group discussion to ensure that key-informants (e.g. leaders, elders, leaders, teachers, etc.) are able to attend. Invite as many people as possible, especially the young children so they can hear the history of their community. (2) Ask people if they can recall major events in the village, such as: <ul style="list-style-type: none"> ◆ Major hazards and their effects or impact of any disasters ◆ Changes in land use (crops, forest cover, etc.) & natural resources ◆ Changes in land tenure ◆ Changes in food security and nutrition; changes in livelihoods ◆ Changes in administration and organization ◆ Major political events (3) The facilitator can write the stories down on a blackboard or large white paper – starting in chronological order (from newest to oldest stories)							
Variations:		◆ Life histories - Individual informants give a detailed account of their family history in regards a specific hazard or disaster-related issue. ◆ History tracing - Individuals or groups start with current experiences and to go back in time in order to find reasons or causes which contributed to the occurrence of a certain hazard or disaster-related experience.							

Seasonal Calendar

		Month											
		01	02	03	04	05	06	07	08	09	10	11	12
Seasons			Hot Dry			Rainy Season					Cool Dry		
Hazard	Flood							☔	☔☔	☔☔	☔☔	☔	
	Storm								■	■	■	■	■
	Drought				**	***		*					
	Forest fires		▲	▲	▲								
	Dengue				○	○○	○○	○	○	○	○		
	Diarrhoea		◆	◆◆	◆◆	◆◆	◆◆	◆	◆	◆	◆		
Capacities & Livelihoods	Rice planting & harvesting					Plant						Harv	
	Maize planting & harvesting	Harv	Plant		Harv	Plant						Plant	
	Hunger gap							⊗	⊗⊗	⊗⊗⊗			
	Fishing	🐟							🐟	🐟🐟	🐟🐟	🐟🐟	🐟
	Out-migration from village	▲	▲	▲	▲								▲
	Men available free time		□	□□	□								
	Women available free time			□	□□	□							
	Important religious festivals				😊						😊		
What:	<p>Making a village calendar showing in which months various events or activities happen:</p> <ul style="list-style-type: none"> ◆ main hazards ◆ main livelihood activities ◆ important socio-cultural events ◆ seasons (weather) <p>The above should be considered from the perspective of men, women & children</p>												
Why:	<p>(1) Identify periods of stress, hazards, diseases, hunger, debt, etc. (i.e. vulnerabilities)</p> <p>(2) Identify what people do in these periods: how they diversify sources of livelihood, when do they have savings, when do they have time for village activities, and what are their coping strategies (i.e. capacities).</p> <p>(3) Identify gender specific division of work in times of disasters and in normal times</p>												
Who:	<p>Village leaders, members of the community including vulnerable groups as well as elders, teachers and others knowledgeable about the village. Focus Group Discussions</p> <ul style="list-style-type: none"> ◆ should be held separately – one with men and another with women. ◆ can also be held separately with each of the main livelihood groups (e.g. one with rice & secondary crop farmers, one with fishermen, and another with small business owners). 												
How:	<p>(1) Use 'blackboard' or large white paper. Mark off the months of the year on the horizontal axis. Ask people to list the main hazards, livelihoods, and socio-cultural events, etc., and arrange these along the vertical axis.</p> <p>(2) Mark off the months for main hazards (including diseases – e.g. diarrhoea, malaria, dengue), weather seasons, socio-cultural events etc.</p> <p>(3) For each livelihood, ask people to list all the different types of work they do (e.g. ploughing, planting, weeding, etc.) and mark on the calendar the months and duration, adding details about gender (male and/or female) and age (children and/or adults and/or elderly).</p> <p>(4) Facilitate analysis by linking the different aspects of the calendar: (a) how do disasters affect sources of livelihood? (b) When are workloads heaviest? (c) when are periods of food shortage, out-migration, etc.?</p> <p>(5) Continue the discussion on coping strategies, and on change in gender roles and responsibilities during times of disasters, or other issues you think are relevant.</p>												

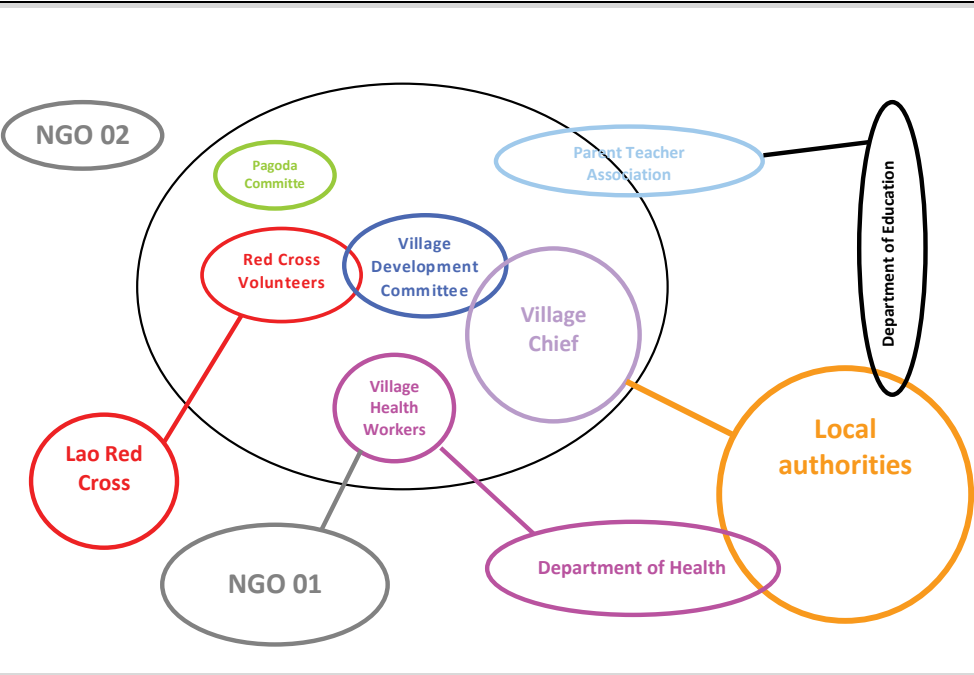
Village Mapping



What:	Making a spatial overview of the area's main features and landmarks; areas that are affected by hazards; households and community facilities vulnerable to particular hazards; location of resources which can be mobilized for preparedness, mitigation or emergency response.
Why:	<p>Maps facilitate communication and stimulate discussions on important issues in the village. Maps can be drawn for many themes or topics:</p> <ul style="list-style-type: none"> ◆ Spatial arrangement of houses, fields, roads, rivers, land use (base map) ◆ Hazard map ◆ Vulnerability map (of elements at risk) ◆ Resource map showing local capacities (material resources and skills etc.) ◆ Evacuation map (for all) and mobility map (for people with disabilities)
Who:	Village leaders, members of the community including vulnerable groups as well as elders, teachers and others knowledgeable about the village; representatives of local associations & of local government agencies.
How:	<ol style="list-style-type: none"> (1) Find men and women who know the area and are willing to share their experiences; (2) Choose a suitable place (ground, floor or paper) and medium (e.g. sticks, stones, seeds, pencils or markers) for villagers to draw the map; (3) Help the villagers to get started but let them draw the map themselves; (4) Start with the "base map" which shows the spatial arrangement of houses, water points, fields, irrigation infrastructure, roads, bridges, rivers, lakes, mountains and other land uses, temples, markets, schools etc.; (5) If the ground and sticks & stones were used for villagers to draw the map, then volunteers should transfer this information onto large white paper; (6) Make sure there is a map legend to explain what each feature on the map is (follow symbol guide provide by Lao Red Cross); (7) Present map to all participants to ensure all agree that the map is a good representation of their village and that all major features are included and are in the correct location; (8) Then use and clear plastic overlay sheet to add relevant hazards already identified. For example for flooding - the areas prone to flooding and the direction & strength of water flow; (9) Again present the map to all participants and gain agreement;

	<p>(10) Then use a new clear plastic overlay sheet to add the information about vulnerabilities (including elements at risk): in particular households with elderly people, chronically ill, people with disabilities, families with many children under 10 years old, households living in areas liable to flooding etc.</p> <p>(11) Then use a new clear plastic overlay sheet to add the information about capacities: locations of material resources (boats, medicines, common property resources that may be useful during disasters, etc.) or people with skills (e.g. village health workers, teachers, Red Cross Volunteers, etc.)</p> <p>(12) The use a final clear plastic overlay sheet to add evacuation routes and safe areas ; and also to identify access issues & solutions for people with disabilities (mobility map)</p>
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Social & Institutional Network Analysis (Venn diagram)

		
What:	A diagram that shows the key organisations, groups and individuals that are part of the community, or that work in or have responsibility in the community – in terms of development or disaster response. The diagram shows the type of relationship and the strength of that relationship.	
Why:	<ol style="list-style-type: none"> (1) Identify organisations (local & outside), their role and importance, and the perceptions that villagers have about them; and (2) Identify individuals, groups, organisations that play a role in disaster response and can support community 	
Who:	Community leaders, members of the community including vulnerable groups as well as elders, teachers and others knowledgeable about the village; representatives of local associations & of local government agencies.	
How:	<ol style="list-style-type: none"> (1) Become familiar in advance with the names of the organisations & groups; (2) Ask people to list the organisations & groups working in their community. As well as identifying external organisations it is equally important to identify any groups or associations that are community-based such as pagoda committees, parent teacher associations or fishermen's association (as these are community capacities that can be used and strengthened to help DRR initiatives); (3) Invite the community to determine criteria for the importance of an organisation and to rank them according to these criteria; (4) Ask people to what extent organisations are linked to each other; note the type of relationship; (5) Draw circles to represent each organisation or group; size of circle indicates importance; (6) Continue focus group discussion on history of organisations; what do they do ?; How well do they function – are they active ?; How good is coordination ?; Which organisations, groups, individuals are important in times of disasters ? etc. 	

Livelihood Analysis

Hazard:			
Livelihood activities	Available resources for livelihood	How livelihood is affected by hazard or why livelihood is unsafe	Ways to strengthen livelihood or make livelihood safer

What:	individual household interviews or focus group discussions with families engaged in the same main livelihood (e.g. rice farming, fishing, charcoal making, small business etc..) – to make diagrams presenting different income and food sources.
Why:	to understand livelihood strategies in normal and disaster times and identify particular livelihood groups that are more vulnerable to specific hazards – or livelihood groups that have capacities to address specific risks either for themselves or for their community.
Who:	Community households with the same main livelihood
How:	(1) Review information already collected and identify main livelihood activities; (2) Decide whether to (a) hold individual interviews and decide how many, or (b) hold focus group discussions with each identified main livelihood group and decide how many participants in the group; (3) Draw block or pie diagrams to facilitate discussion on livelihood sources – most households will be reliant on several main livelihoods throughout the whole year; (4) Explore how each main hazard effects each livelihood activity or why a particular livelihood activity is unsafe – and then explore ways that the livelihood could be strengthened to better withstand the disaster or how it could be made safer; (5) Continue discussion on how the household copes in disaster times (material / social / motivational) – in terms of money and food.

Ranking



What:	Ranking means placing “things” in an specific order. It is a tool for finding out what criteria people use for measuring or prioritising these “things” and for better understand their choices in prioritising these “things”.
Why:	(1) Quickly identify important problem areas and preferences for solutions of the community; (2) Have the community themselves decide what priorities need to be addressed;
Who:	Community leaders, members of the community and especially including vulnerable groups as well as elders, teachers and others knowledgeable and influential in the village
How:	(1) Similarly to the mapping, this can be done on the ground or on a large price of paper – with sticks, stones, seeds, pencils or markers); (2) Agree the items to be compared or ranked – put these along one length of the ranking matrix or table (e.g. X axis); (3) Facilitate the community members to discuss and agree the criteria to be used for the ranking. Put these agreed criteria along the length of the other axis (e.g. Y axis); (4) For each item being ranked, points are given for each criteria. The total points for each item are then compared to establish the ranking order; There are two ways to assigned points: (a) for each item a value of 1 to 5 can be assigned for each criterion; or (b) a total of 10, or 20, or 50 or 100 points can be assigned for all the items for a particular criteria and these points must then all be distributed amongst all the items; (5) Verify priorities, and discuss and analyse the results.

Part 04 | Village Disaster Risk Reduction Planning



Session 01: Village DRR Plan Process & Overview

Session 02: Village Disaster Risk Reduction Plan: Steps 01 - 03

Session 03: Village Disaster Risk Reduction Plan: Steps 04 - 08

Objectives: Participants understand what the purpose of a Village DRR Plan and how to create it based on information and analysis from the HVCA

Content

♦ Village DRR Plan

Community Disaster Risk Reduction Planning

Session 01: Community DRR Plan Process & Overview

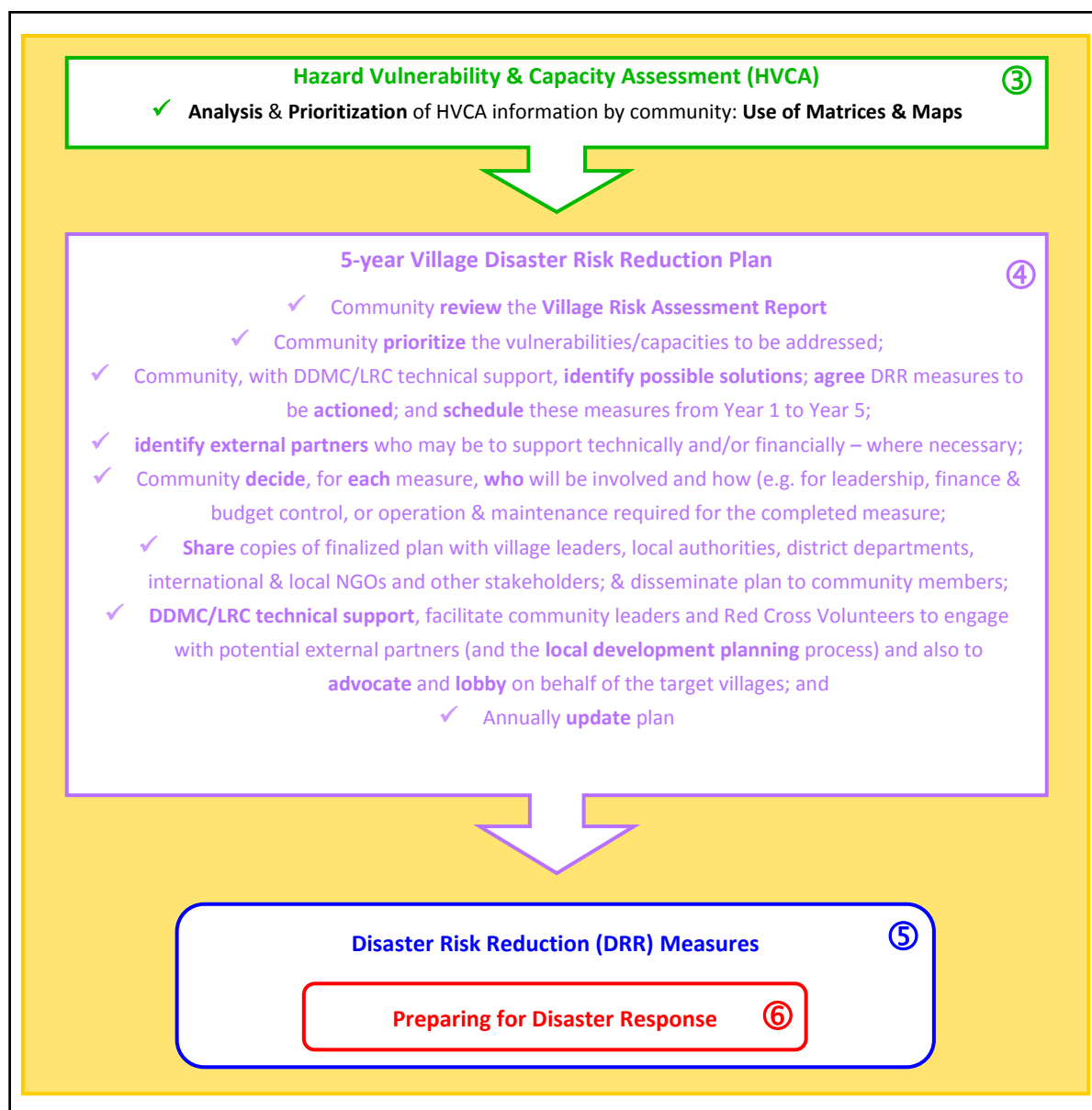
Objectives:

1. Participants understand what the Village DRR Plan is, why it is created and who is involved

5-year Village Disaster Risk Reduction Plan

What	<ul style="list-style-type: none"> ♦ the Village Disaster Risk Reduction Plan is a “road map” or “action plan” for transforming a community with a high risk from disasters to a community that is much more resilient to disasters in the future; ♦ it is a 5-year Plan: that recognises that it takes several years to address the main risks, to build local partnerships, to better organise the community, and to bring about lasting changes in behaviour, motivation and attitudes; ♦ for different hazards, the plan addresses specific risks that are prioritised by the community members themselves; ♦ the plan identifies appropriate solutions (DRR measures) to these risks, and the skills and resources required for implementation; ♦ the DRR measures ⑤ can be a “one-off” activity such as constructing a raised flood-proof water point or can be an activity that is scheduled every year such as Red Cross Volunteers, Village Health Workers and school children to conduct dengue awareness raising and clean up campaign to eradicate mosquito breeding sites; ♦ the plan has a sub-plan for “Preparedness for Disaster Response” ⑥ which includes early warning, evacuation & safe area management and search & rescue; ♦ the plan indicates who will take responsibility for the different aspects of implementation of each DRR measure, and who will take responsibility for the plan as a whole. It also helps clarify roles and responsibilities of all stakeholders before (preparedness, and preparedness for response), and during and after disasters happen (response and recovery); and ♦ the plan is a “living” document that is updated annually.
Why	<ul style="list-style-type: none"> ♦ the plan articulates clearly what the problem is, how to solve the problem, who will be involved, and when it will be done: it represents the desires of the community and demonstrates their commitment to becoming a more resilient and safer community; ♦ all stakeholders – including vulnerable groups, Red Cross Volunteers and village leaders – share a common understanding of what is expected and who is responsible; ♦ having a written plan focuses local authority and village leader attention in trying to ensure various DRR measures are achieved in particular a timeframe; and ♦ external supporters are much more likely to invest in the community and support specific DRR measures if there is an overall plan that demonstrates to them that the community has a clear vision of how to make their community more resilient; in short, NO PLAN = NO SUPPORT (money / technical support).

Who	The 5-year Village Disaster Risk Reduction Plan is drafted by the Red Cross Volunteers, with technical support and facilitation from DDMC & LRC teams, in the presence of the village chief, key influencers, vulnerable groups and other stakeholders (e.g. local & international NGO representatives).
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The Village DRR Plan usually includes information and a number of supporting documents, including the Village Risk Assessment Report and matrix:

VILLAGE RISK ASSESSMENT MATRIX				
Hazard type:				
Element at Risk	Risk		Vulnerability ③	Available Existing Resources (Materials and Skills) or Coping Strategies ④
	Description (potential impact) ①	Priority ② (H/M/L)		
People	A) Children become severely ill with water-related diseases (diarrhoea, typhoid, cholera, skin & eye infections)	H	A1. Children without access to safe water & sanitation A2. Children & care givers have poor hygiene behaviour A3. Difficult, dangerous & expensive journey to health services	A1. Unsafe flooded wells and flood water / Firewood & kettles / Roofing for rainwater harvesting A2. Village Health Workers / Red Cross Volunteers / Teachers / Monks A3. Boats with engine
Structures, facilities & services	(household)			
	(community)			
Lifelines				
Livelihoods & Economy				
Any other relevant information:				

- ◆ List of the most frequent hazards
- ◆ VCA summary and hazard map
- ◆ Identification of pre, during and post disaster community requirements to address vulnerabilities
- ◆ Identification of available resources and capacities the community can build on or has to mobilize from outside (boats, vehicles, communication equipment, evacuation site, volunteers...)
- ◆ The organizational structure of the community and VDPU
- ◆ Roles and responsibilities of leaders and VDPU
- ◆ Warning systems
- ◆ Evacuation protocols and routes
- ◆ Evacuation centre management plan
- ◆ Mitigation measures

If time and resources are available, the plan can go further into details and also include:

- ◆ Database of houses, buildings and construction types
- ◆ Timetable of activities to implement the plan or schedules to conduct simulation exercises to test the effectiveness of the plan
- ◆ List of community members: names, family, composition of households, age, gender
- ◆ List of volunteers
- ◆ Directory of key people, NGOs, local officials, temples etc. that can be contacted
- ◆ Organizational structure of the community with roles and responsibilities.

Content

- ♦ Village Risk Assessment Report Review
- ♦ Prioritisation of vulnerabilities & capacities to be addressed
- ♦ Potential solutions
- ♦ Menu of DRR Options

Village Disaster Risk Reduction Planning**Session 02: Village Disaster Risk Reduction Plan: Steps 01 - 03****Objectives:**

1. Participants are able to complete Steps 01 – 03 of the 08 Steps of the Village DRR Plan

There are **8 steps** in the Village Disaster Reduction Planning:

Step 01: Community review the Village Risk Assessment Report

Step 02: Community prioritize the vulnerabilities/capacities to be addressed

Step 03: Potential solutions identified and DRR measures for inclusion agreed & scheduled

Step 04: External partners identified (where necessary)

Step 05: Roles & responsibilities agreed and written plan finalised

Step 06: Plan shared with stakeholders and disseminated to community

Step 07: Follow-up with potential external partners & local development planning

Step 08: Plan updated annually

Step 01: Community review the Village Risk Assessment Report

At the end of the HVCA process the Red Cross Volunteers presented the Village Risk Assessment Report to their community. At the start of the Village Disaster Risk Reduction (DRR) planning process it is necessary to ensure all community stakeholders are reminded of their village risk assessment matrix and how it was generated.

The DDMC & LRC team and Red Cross Volunteers should therefore review the finalized Village Risk Assessment Report with the community members, key influencers and Village Chief. This review can be brief or can be more detailed depending on how much time has passed since the report was presented to the community at the end of the HVCA process. Sometimes the Village DRR Planning process starts immediately after the HVCA process; and sometimes there can be a gap of several weeks – so the longer the gap the more in depth the review should be. The key part of the report to highlight in the review is the completed Village Risk Assessment Matrix. However, a minimum of 30 minutes should be spent on this review because it is very important that all those involved in the planning process are freshly aware of “whole” content of their completed risk assessment matrix – as this will then make the subsequent prioritisations in Step 02 much easier and much quicker.

Step 02: Community prioritize the vulnerabilities/capacities to be addressed

Using the Village Risk Assessment Matrix as the starting point, for each hazard the community need to first consider the different risks that the community assigned a “high” priority ②. For these the community then needs to look at both the vulnerabilities and associated capacities (existing resources) and agree an “action” priority – high / medium / low – which reflects how urgently the community feel that this particular vulnerability (& associated capacity) needs to be addressed. A way to think about this is to consider “high” = “Year 1” and “medium” = “Year 2 or 3” and “low” = “Year 4 or 5” of the 5-year plan. Using the example given already in the Village Risk Assessment for Flood – see the final column “Action Priority”:

VILLAGE RISK ASSESSMENT MATRIX					
Hazard type: Flood					
Element at Risk	Risk		Vulnerability ③	Available Existing Resources (Materials and Skills) or Coping Strategies ④	Action Priority * (H/M/L)
	Description (potential impact) ①	Priority ② (H/M/L)			
People	A) Children become severely ill with water-related diseases (diarrhoea, typhoid, cholera, skin & eye infections)	H	A1. Children without access to safe water & sanitation	A1. Unsafe flooded wells and flood water / Firewood & kettles / Roofing for rainwater harvesting	A1 = H
			A2. Children & care givers have poor hygiene behaviour	A2. Village Health Workers / Red Cross Volunteers / Teachers / Monks	A2 = H
			A3. Difficult, dangerous & expensive journey to health services	A3. Boats with engine	A3 = M

In carrying out Step 02 the Red Cross Volunteers, Village Chief and community members need to keep in mind several points:

- ◆ not everything can be done in the first year, or even in the second and third years – the community needs to think realistically about what they think can actually be achieved; and
- ◆ some things naturally go together – for example if the community are addressing A1 (ensuring access to safe water & sanitation;) then it is sensible to ensure that A2 (improved hygiene behaviour) happens at the same time. If A1 and A2 go together they should be prioritised for action at the same time.

Step 03: Potential solutions identified and DRR measures for inclusion agreed & scheduled

For each hazard, and for each particular risk identified there are a set of vulnerabilities (and associated existing capacities) that can be addressed. Step 02 helped prioritise those vulnerabilities (and associated existing capacities). Step 03 is where, with technical support from the DDMC & LRC teams, the community and Red Cross Volunteers now:

- ◆ **identify** for each particular set of vulnerability (and associated existing capacities) a number of *possible* DRR measures that will help address that vulnerability (or enhance that associate capacity). A “**Menu of DRR Options**” provided by LRC will help community members to be aware of what types of measures are possible (and guidance on what types of measures are not possible); and
- ◆ **agree** for each particular set of vulnerability (and associated existing capacities) the actual DRR measures (from their list of *possible* DRR measures) that the community want to include in their 5-year Village Disaster Risk Reduction Plan need to be agreed.

The “Menu of DRR Options” helps this decision-making process in a number of ways:

- ◆ it provides clear guidance on what can be included and what can not be included – and so this allows the community to focus on what can be done and not waste time on what can not be done;
- ◆ in particular it helps communities understand that the measures have to have a clear relation to hazards and disasters – and that “development” measures are not part of the Village DRR Plan. For example a village that has no school or a school with only one room can not include a new school building in the Village DRR Plan because this does nothing to reduce the impact of a disaster. This request should be made to the authorities in charge of local “development” planning. However, if the school is frequently affected by flooding and is sometimes damaged then including a raised flood-proof school building is acceptable as a DRR measure for inclusion in the Village DRR Plan – because it reduces the impact of a flood disaster;
- ◆ it also helps bring “new” ideas to community members to solve “old” problems;
- ◆ it also helps give legitimacy and encourage “old” ideas for community members – ideas from their own community, from neighbouring communities or from other parts of Laos PDR.

From using the “Menu of DRR Options” the community and Red Cross Volunteers should however keep in mind that the Village Disaster Risk Reduction Plan **is not**, and **must not be thought of as**, a “wish list” or “shopping list” of measures that the community want an external organisation to fund and come and implement in their village. It is a plan that at its heart is the community itself and its members – it is a plan that is made on information collected and analysed by the community, on prioritisation and decisions made by the community members themselves with a primary objective of the community becoming more resilient to disasters. For this to be achieved, in addition to external support, it is absolutely critical that the community also identify and implement DRR measures that they can implement entirely through their own resources (materials, skills and capacities) – with no external assistance. Thus in identifying DRR measures the community must be mindful to always be looking for measures that they can do by themselves – as well as those measures for which they know they will require external resources.

Indeed it is exactly these communities that can identify and commit to achieving some DRR measures entirely through their own resources that are most likely to receive continued external support for other DRR measures – because it is these communities that are demonstrating success and positive moves towards greater self-reliance, better mobilisation of its own resources and increased resilience. Conversely a community that only asks for external support, and takes no steps to achieve some DRR measures through its own resources, serves only to demonstrate that it is unlikely to become resilient – and so the community, the Red Cross Volunteers and LRC will fail to achieve the programme objective.

In terms of scheduling, it is suggested that the community follow the “action prioritisation” of Step 02, where “high” = “Year 1” and “medium” = “Year 2 or 3” and “low” = “Year 4 or 5” of the 5-year plan. It is not necessary to be specific about Year 2 or Year 3, or about Year 4 or Year 5, because the main focus of actual implementation will initially be Year 1. Towards the end of Year 1, the Village DRR Plan will be updated – some DRR measures will have been completed and some will not have been completed or attempted – and so with the updated plan there will then be a new prioritisation and scheduling – with a new Year 1, and a new Year 2 or 3, and a new Year 4 or 5.

Content

- ♦ Village Disaster Risk Reduction Plan format
- ♦ Scheduling of DRR measures

Village Disaster Risk Reduction Planning

Session 03: Village Disaster Risk Reduction Plan: Steps 04 - 08

Objectives:

1. Participants are able to complete the final Steps 04 – 08 of the 08 Steps of the Village DRR Plan

There are 5 remaining steps of the Village Disaster Risk Reduction Planning:

Step 01: Community review the Village Risk Assessment Report

Step 02: Community prioritize the vulnerabilities/capacities to be addressed

Step 03: Potential solutions identified and DRR measures for inclusion agreed & scheduled

Step 04: External partners identified (where necessary)

Step 05: Roles & responsibilities agreed and written plan finalised

Step 06: Plan shared with stakeholders and disseminated to community

Step 07: Follow-up with potential external partners & local development planning

Step 08: Plan updated annually

Step 04: External partners identified (where necessary)

Based on the agreed DRR measures to be included in the Village DRR Plan, there will be a number of measures that clearly need external assistance – e.g. funding, technical advice, or skills training. The LRC will have some funds (a limited amount per community per year) and is able to provide technical advice & skills training for some of the DRR measures identified (e.g. first aid, search and rescue, hygiene promotion, etc.). However there will be other DRR measures that require not only additional funding but require technical advice that the LRC is not able to provide.

The Village DRR Plan **is not** simply a list of DRR measures for LRC to implement – it is a plan for **all** of the DRR needs of the village and one of the **most critical roles of the DDMC & LRC team is to link the community with other external partners** (district authorities, UN agencies, International and local NGOs) who can provide the additional funding and necessary technical advice that is required (see Step 07). This is why the social and institutional network analysis tool and results from the HVCA process are so important: knowing **which** organisations are present in the target area and knowing **what** they do allows the communities, and DDMC & LRC, to match identified DRR measures with the appropriate organisation. It is only then that DDMC & LRC can help facilitate linkages between the community and those organisations, and lobby and advocate on behalf of the communities for specific assistance to achieve the DRR measures.

Step 05: Roles & responsibilities agreed and written plan finalised

The decisions made by the community in Steps 02 - 04, with technical support from DDMC & LRC, are then added to the formal written Village DRR Plan. The community, again with technical support from DDMC & LRC, discuss and decide **who** does **what** and **when** for each DRR measure that is to be achieved. However the focus should be on Year 1 DRR measures – because the plan will be updated and lessons will have been learned by the end of Year 1 and decisions about who does what when may change as a result.

There is a specific format for the plan – with a sub-plan for preparedness for disaster response activities. The plan focuses on risks – rather than hazards – so for example children with severe diarrhoea could be the result of flooding, or of drought, or of disease epidemic and many of the appropriate DRR measures will be the same for all three hazards. The plan is however a summary – it does not include detailed information for each DRR measure such as beneficiary numbers, objectives or indicators of success (these are included in written proposals for *any* DRR measure that is to be implemented).

Risk	Hazard	DRR Measure	Who is responsible	When		Resource		
				Year	Month	Community	External	
						What	Who	What
A) Children become severely ill with water-related diseases (diarrhoea, typhoid, cholera, skin & eye infections)	Flood	A1. Raised flood-proof ring well	VDC	Y2	March	Labour, soil, sand & water for platform construction	District Water Supply Office	Additional concrete rings Technical advice
		A1. Stockpile of dry firewood for boiling water	VDPU	Every	April	Harvest and store	-	-
		A1. Household Rainwater harvesting	RCVs	Y1	May	Guttering & down-pipes	NGO 01	220 litre plastic water storage barrel
		A1. Raised flood-proof latrines	VDC	Y2	Feb	Labour, sand & water for construction. Cash.	NGO 02	Concrete rings Water-seal pan
		A1. Access to boat with engine for emergency medical treatment	Village Chief	Every	July - Nov	Boat with engine & driver Fuel & oil	-	-
	Flood Drought Epidemic	A1. Household ceramic filter	RCVs	Y1	Jan	Cash contribution to cost	LRC	Subsidised filter Training in filter use & care
		A2. Hygiene Promotion	RCVs	Every	March July	RCVs, VHVs, Teachers & school children, Monks	LRC & DoH	Hygiene training IEC materials
				Every	Feb - April July - Oct	RCVs & family caregivers	-	-
	Drought	A1. Deepen ring wells	VDC	Y3	March	Labour & tools Smaller diameter concrete rings Water pump	District Water Supply Office	Technical advice
		A1. Deepen household & community ponds	VDC	Y3	March	Labour & tools	-	-

PREPAREDNESS FOR RESPONSE SUB-PLAN					
DRR Measures	Who is responsible	When	Resource		
			Community	External	
			What	Who	What
Public awareness raising					
Early Warning Systems					
Evacuation management					
Safe area management (or evacuation centre management)					
Light search & rescue					
First Aid					
Emergency Situation & Needs Assessment					
Relief distribution					

In general for the Preparedness for Response sub-plan it is the Village Disaster Preparedness Unit (VDPU) that is responsible for the measures included under the sub-plan. The VDPU are assisted by the Red Cross Volunteers. All of the measures require an initial training (including but not limited to the Red Cross Volunteers) and then subsequently either follow-up activities or mock drills for practice. Every couple of years refresher trainings will be beneficial. Training in most cases will be provided by DDMC and LRC.

Step 06: Plan shared with stakeholders and disseminated to community

Once the plan has been completed (and signed and authorised if required) it is extremely important to share the plan with two different groups of people:

- ◆ **community members themselves.** Written copies of the plan should be shared with the village leadership, the Village Development Committee (VDC) and Village Disaster Preparedness Unit (VDPU), as well as with the Red Cross Volunteers. With support from the village leadership the VDPU & RCVs should disseminate the details of the plan and inform them that they can access the plan, at anytime they wish; and
- ◆ **external stakeholder and potential partners** who are required either for financial and/or technical support to any of the proposed DRR measures. The VDPU will need to take steps to share the plan with organisations that are already working in their village; whilst the DDMC & LRC will share the plan with external organisations – and advocate and lobby on behalf of the community for necessary support.

Step 07: Follow-up with potential external partners & local development planning

As a result of Step 06, there will be some external stakeholders that are interested in supporting, or becoming partners with the community, in order to achieve some of the DRR measures. This will need to be followed-up on a regular basis. This may not be possible for many of them in Year 1 because they will already have their own annual plans and budgets but it may be possible for them to include in their own budgets for Years 2 or 3.

If the Village Disaster Risk Reduction Plan is to be successful it **must** be linked with the **local development planning processes** at village, district and provincial levels. Again, one of the main responsibilities of the DDMC & LRC team is to make that link happen. In doing so, this ensures that not only the needs and interests of the community, but more specifically their DRR needs and interests, are clearly communicated – and accepted – by the district and provincial levels. This allows these levels to then plan for, and budget for, better addressing these needs and interests.

Step 08: Plan updated annually

In all communities the situation changes over several years. Children are born, people die or become chronically ill, some families become wealthier, some families become poorer, new livelihoods are tried, access to natural resources change. Development brings roads, schools & better education, water points, irrigation infrastructure, new skills & techniques etc. but it also brings new hazards and changing vulnerabilities and risks (e.g. traffic accidents, gambling & drugs, urban migration, dependency on new seed varieties, etc.).

It is useful and necessary to update the plan every year to make adjustments for such changes. This starts with updating the HVCA information, matrices and then the plan itself.

In addition, it is normal that in the first year (and in subsequent years) communities and Red Cross Volunteers improve their understanding of vulnerability, of capacity and of the different hazard risks they face. They also, through the participatory process, are better able to consider cross-cutting issues like gender and age, and to identify more specific “most” vulnerable groups. By deliberately applying this new understanding, the community is subsequently able not only to update, but is able to improve the quality of, the plan in terms of better defined risks & vulnerabilities and more specific target beneficiaries and hence better designed DRR measures tailored to these specific needs.

Part 05 | Disaster Risk Reduction Measures



Session 01: DRR Measures and Menu of DRR Options

Session 02: Proposal Writing

Objectives: 1. Participants

Content

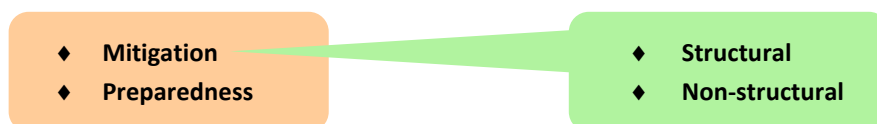
- ♦ Mitigation vs. preparedness
- ♦ Structural vs. non-structural
- ♦ Menu of DRR options

Disaster Risk Reduction Measures**Session 01: DRR Measures and Menu of DRR Options****Objectives:**

1. Partic

Mitigation and Preparedness; and Structural & Non-structural Measures

Disaster Risk Reduction measures can be any action or activity (**people** or **plans** or **systems**) or physical structure (**things**) that can help either to prevent a disaster from happening or to reduce the impact of a disaster if it actually happens. Refer back to Part 01 Session 04 on “Disaster Cycle and Disaster Risk Reduction” for an explanation of DRR measures. DRR measures are commonly categorised as **mitigation** or **preparedness** and these terms were also defined in Part 01 Session 04 on “Disaster Cycle and Disaster Risk Reduction”. However, in short, mitigation measures can be considered to **reduce** the impact of a disaster if it actually happens; whereas preparedness measures either **prevent** the disaster from happening (e.g. through early warning) or similarly can reduce the impact of a disaster if it actually happens (and in this case this refers to having systems – people with skills & resources – in place prior to disaster events so that they are able to respond quickly and effectively to the disaster). Mitigation measures are often categorised into **structural** (meaning physical “things”) and **non-structural**. Non-structural measures tend to focus more on building individual and communal capacities and help to strengthen household and community resilience by changing attitudes and behaviours through enhancing knowledge, awareness and skills.



Mitigation and preparedness aim to deal directly with the effects of a particular hazard. However (for ease of understanding) various other risk reduction measures that aim to deal with the underlying causes of the hazard vulnerabilities, or to strengthen existing coping strategies and strengthen & diversify livelihoods are also included within the above categorisation of mitigation and preparedness. Some examples below will help to understand the above categorisations:

Category		Example
Mitigation ⑤	Structural	<ul style="list-style-type: none"> ◆ Construction or reinforcement of flood embankments [flood] ◆ Raised flood-proof water points and latrines in flood areas [flood] ◆ Water points & community latrines in “safe areas” [flood / earthquake] ◆ House reinforcement (roof anchors, wall braces,) [flood / storm / earthquake] ◆ Slope stabilisation [landslide / flood / earthquake] ◆ Firebreaks [forest fire] and use of fire-resistant building materials [house fire] ◆ Reforestation / afforestation [flood, storm, earthquake, landslide, drought]
	Non-structural	<ul style="list-style-type: none"> ◆ Human & livestock vaccination campaigns [epidemic] ◆ Relocation of at risk families & housing [landslide / flood] ◆ Land-use zoning [flood / landslide / earthquake] ◆ Livelihood strengthening & diversification (home gardening, fish raising, ...) [all] ◆ Improved rice field preparation & land husbandry [drought] ◆ Community / household rationing of water use [drought] ◆ Food storage (e.g. rice banks) & preservation techniques [flood / drought] ◆ Training builders in improved cost-effective construction techniques [flood / earthquake / storm] ◆ Designation of safe areas [all] ◆ Community management of common property resources [all] ◆ Community disaster savings fund [all] ◆ Freeze or reduction on interest to micro-finance institutions [all] ◆ Setting of maximum price on commodities by Government during disaster [all]
Preparedness ⑥		<ul style="list-style-type: none"> ◆ Evacuation plans & drills [flood / earthquake] ◆ Pre-positioning of fuel, food, safe water, medicines, emergency kits [all] ◆ Early Warning Systems [all] ◆ Public hazard & risk awareness campaigns (e.g. dengue, road traffic, etc..) [all] ◆ Teams trained in search & rescue, and in first aid [all] ◆ Emergency fund generation [all] ◆ Advocacy, networking, coordination, seeking & developing partnerships [all]

Menu of DRR Options

The above table gives a number of examples of possible disaster risk reduction measures – but there are **many** other possibilities. To help communities and Red Cross Volunteers a “Menu of DRR Options” will be given during the Village Disaster Risk Reduction (VDRR) planning phase – **after, and not before – the community has prioritised the risks that it want to address over the 5-year lifetime of the VDRR plan.** This “Menu of DRR Options” helps communities to:

- ◆ identify appropriate solutions to the specific risks that they have identified and prioritised;
- ◆ understand the DRR measures that can be included under the VDRR Plan (and conversely other measures that cannot be included and that should be part of the Village “Development” Plan); and

- ♦ introduce new ideas or solutions – from other parts of Laos or other countries – that the community might not have heard about or seen before.

The “Menu of DRR Options” is supplied as a separate handout.

In selecting the DRR measures to be included the community should use a simple checklist of questions to guide decision-making. To be acceptable to be included in the VDRR Plan the proposed measures should pass (be **acceptable**) all the checklist questions:

Checklist questions for inclusion of proposed DRR measure in the Village Disaster Risk Reduction Plan		Response	
		Acceptable	Not acceptable
01.	Will the measure really reduce the risk or impact of a disaster?	YES	NO
02.	Will the measure really benefit the most vulnerable to that risk?	YES	NO
03.	Is the community able to contribute sufficient cash or in-kind resources (cash, materials, skills, time, labour)? – if needed	YES	NO
04.	Is the community willing to contribute sufficient cash or in-kind resources (cash, materials, skills, time, labour)? – if needed	YES	NO
05.	Is it likely the community can access the necessary technical skills (either from within their community – or externally)?	YES	NO
06.	When the measure is completed is it likely that the community will be able & willing to manage, maintain and sustain the measure themselves for the long-term ?	YES	NO
07.	Will the measure have any significant negative impacts within the community?	NO	YES
08.	Will the measure cause any significant negative impacts to communities or the environment outside of the community?	NO	YES
TOTAL		/ 08	
Is the likely budget for the DRR measure acceptable to the community and any external financial supporter?		YES	

Content

- ♦ LRC DRR measure proposal format

Disaster Risk Reduction Measures**Session 02: Proposal Writing****Objectives:**

1. Partic

Based on the Village Disaster Risk Reduction Plan it is likely that DRR measures that expect external funding will require a written proposal to any potential donor. This includes any DRR measures that might seek funding through LRC. In general, all proposals for such small-scale DRR measures will follow a similar format. The proposal format given here is for the LRC.

Format to be supplied by LRC / FRC.

Recommendation: unless one of the fundamental aims of the CBDRR project is to build the capacity of village level to apply for local funding then it is recommended that individual villages do not submit proposals for each and every type of DRR measure that appears in their Village DRR Plan. This involves far too much work for unpaid villagers & volunteers – and for likely limited obvious and quick benefit. Further it is likely the capacity of the village level to draft good quality proposals will be an additional constraining factor.

Since the administrative level above village in Laos is district – it is recommended that LRC groups proposals by district and by type of DRR measure. i.e. all target villages in a particular target district who prioritise for example raised flood-proof water points would be grouped together in one proposal. This proposal will summarise the risk & vulnerability, the criteria for beneficiary selection, the type of measure and how it will be realised and indicative budget. The proposal would contain annexes that further detail the relevant information per village such as village name, number of beneficiaries, community contribution, etc.

It is recommended that the LRC and DDMC identify several of the best volunteers from the target area to help prepare the proposals with the support of the LRC & DDMC technical team. Since there are potentially very many villages in a district it may be appropriate to divide up the villages into more manageable numbers – for example grouping all villages along lowland rivers into one sub-group and all villages in mountain areas into another sub-group.

CRC has a good standard format for this “grouped” approach to proposal writing.

Part 06 | Community Level Disaster Response



Session 01: Disaster Response and Preparing for Disaster Response

Session 02: Role of Lao Red Cross & Volunteers

Preparing for Disaster Response (before disaster event)

Session 03: Public Awareness-raising; Drills & Simulation

Session 04: Early Warning for Communities

Disaster Response (during & after disaster event)

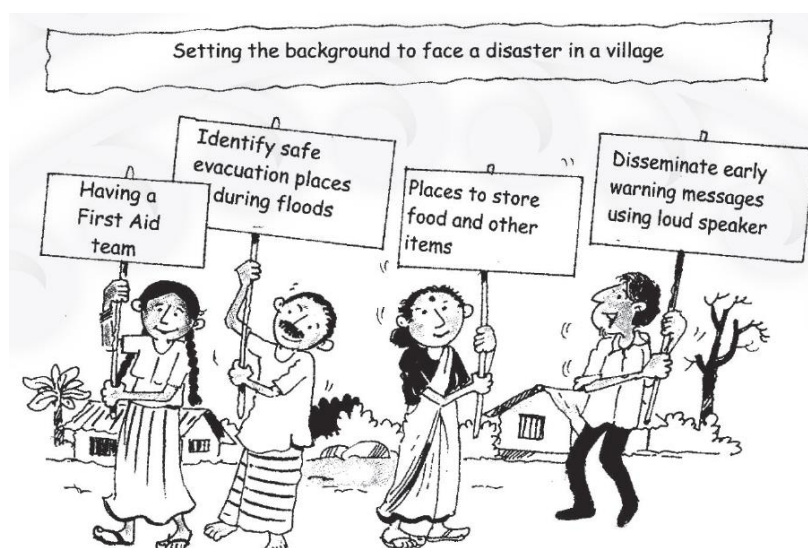
Session 05: Emergency Situation and Needs Assessment

Session 06: Relief Distribution

Session 07: Light Search and Rescue

Session 08: First Aid

1.



Content

- ♦ Preparedness, Recovery & Relief
- ♦ DRM Cycle

Community Level Disaster Response**Session 01: Disaster Response and Preparing for Disaster Response****Objectives:**

1. Participants understand the need for preparing for disaster response

Large-scale disasters, by definition, are events that overwhelm the response and recovery capabilities of the affected communities and may require outside assistance (for example from the Laos Government, the Lao Red Cross and/or International NGOs). To deliver what is really needed to the right people – in the right place – as quickly as possible – requires planning in advance so that the right agencies & organisations with the right skills, equipment and resources know what to do and know what each other are doing.

- Disaster preparedness and response plans and procedures guide rapid response and recovery actions.
- It is essential to communicate information contained in disaster preparedness and response plans and procedures to potential target audiences through awareness raising, education and training.
- Activities such as drills, simulations and demonstrations enhance team building among response and recovery personnel, identify necessary improvements to disaster plans and procedures, improve response and recovery capabilities and accelerate the response and recovery process.
- Encouraging participation in developing a disaster preparedness plan will contribute to sustainable development.
- Preparedness can strengthen communities to better respond to disasters.

Preparedness

Activities and measures taken in advance to ensure effective response to the impact of hazards, including the issuance of timely and effective early warnings and the temporary evacuation of people and property from threatened locations (UNISDR, 2004).²

Preparedness activities include the development of disaster response and recovery plans and procedures to guide rescue efforts, medical assistance, the issuance of timely and effective warnings and the temporary removal of people and property from a threatened location, the distribution of disaster supplies and equipment, etc.

Recovery

Decisions and actions taken after a disaster with a view to restoring or improving the pre-disaster living conditions of the stricken community, while encouraging and facilitating necessary adjustments to reduce disaster risk.

Recovery (rehabilitation and reconstruction) affords an opportunity to develop and apply disaster risk reduction measures.

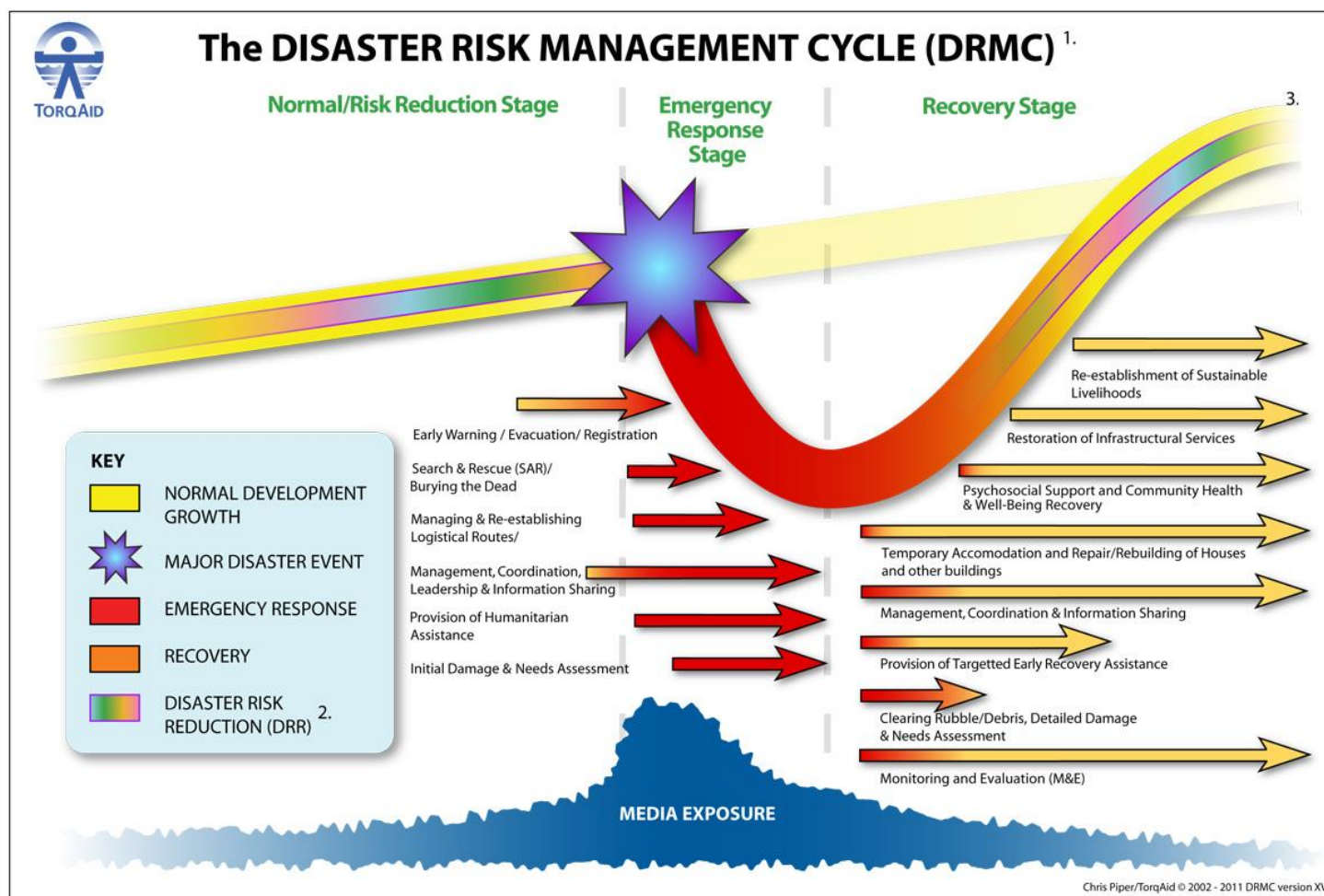
Response / Relief

The provision of assistance or intervention during or immediately after a disaster to meet the life preservation and basic subsistence needs of those people affected. It can be of an immediate, short-term, or extended duration depending on assessments, needs and capacity (UNISDR, 2004).

Preparedness activities, including response and recovery planning, training and education, simulation and demonstration activities and the purchase of disaster supplies and equipment, provide the foundation for an effective and rapid disaster response and recovery. The ability to immediately deploy and manage disaster response and recovery teams depends on the presence and understanding of disaster plans and procedures.

The ability to immediately deploy and manage disaster response and recovery teams depends on the presence and understanding of disaster plans and procedures. Critical tasks include search and rescue (SAR), medical assistance, food and shelter, damage assessment, restoration of essential infrastructure and the distribution of resources to those most affected.

The initial response will be provided by the directly affected community itself, emphasising the need for preparedness at all levels. As response and recovery efforts escalate and there is time for those outside the affected area to mobilise, central governments, lead agencies, donors, NGOS, private organisations, volunteers, etc. who are willing to offer assistance.



¹ This mainly applies to a relatively quick-onset disaster (such as Cyclone, Flood, Earthquake, Tsunami, Bushfire etc), rather than a slow-onset one such as Famine (due to Drought/War)

² For details of this see the Disaster Risk Reduction (DRR) diagram ³ Ideally in the recovery stage the community is able to 'Build Back Better'

Diagram reproduced with kind permission of TorqAid www.torqaid.com

Content

- ♦ Risk Reduction roles
- ♦ Preparedness roles
- ♦ Response roles

Community Level Disaster Response**Session 02: Role of Lao Red Cross & Volunteers****Objectives:**

1. Participants understand clearly their expected roles in Community Level Disaster Response

As mentioned in the earlier sections the Lao Red Cross and its volunteers have a very important role in terms of reducing the risk from disaster – responsibilities and activities that take place in “normal” times

Carry out risk reduction measures

- Risk, vulnerability and capacity assessment to identify the most vulnerable in the communities
- Hazard assessment/mapping
- Advocacy to relevant authorities concerning specific communities likely to be at risk from a specific hazard(s)/land use control and specific legislation
- Advising and assisting communities/individual households to move away from high-risk areas
- Protect water sources and wells

General preparedness measures

- Undertake a public awareness program
- Preparedness planning
- Warn people likely to be affected by the hazard(s)/development or improve existing early warning systems
- Monitoring hazard situations
- Rehearsals – particularly for evacuation
- Fund raising
- Undertake training of volunteers in hazard-specific preparedness measures
- Help organize community activities to prepare for disasters

Typical post-disaster needs

- Search and rescue
- First aid and other medical assistance
- Humanitarian needs assessment
- Provision of potable water
- Provision of evacuation points/emergency shelter
- Short-term provision of emergency food/other provisions, e.g. plastic sheeting, blankets
- Burial of the dead
- Clean up operations (including disposal of dead animals)
- Assist with epidemiological/other health/nutrition surveys
- Maintaining communication and logistical networks
- Support to the most vulnerable households to help with economic recovery
- Psychological support to household members

Impact assessment tools

- Need assessment forms
- Assist with socio-economic surveys
- Evaluate response operations and agree with authorities on necessary improvements

The table below should be completed during the CBDRR training

	Lao Red Cross Branch & DDMC	Volunteers & community level
Emergency assessment		
Rescue and medical assistance		
Health services		
Water, sanitation and hygiene promotion		
Food and nutrition		
Relief		
Shelter		
Restoring family links		
Protection, safety and security		
Logistics and transport		
Information technology (IT) and telecommunications		
Communication and reporting		
Monitoring and evaluation		

Content

- ♦ Public Awareness
- ♦ 6 steps
- ♦ RCV public awareness activities

Community Level Disaster Response**Preparing for Disaster Response (before disaster event)****Session 03: Public Awareness-raising****Objectives:**

1. Participants understand role of public awareness
2. Participants understand 6 steps in creating public awareness

Public awareness

- aims to increase the community's knowledge about disaster risks, preparedness plans and practical household level preparedness and mitigation measures, including warning signals. It also aims to bring about change in their attitudes and behaviours to risk and influence their decision-making;
- is a process of disseminating information by which people living in hazard-prone areas come to realise and understand that they live in areas of risks, know the specific dangers that they are exposed to and the warnings that are issued, and know the appropriate actions to be taken to protect their live and minimise property damage;
- helps people understand about hazards, reduce vulnerability and increase the existing capacity to undertake a variety of disaster preparedness activities.

In particular respect of disaster preparedness plans, and preparedness for response plans, all people involved must be made aware of the existence of the plan, their roles and responsibilities. If a wide cross-section of the population is involved, it is important to launch an effective public awareness campaign to communicate this information.

Training and education is not enough to ensure a rapid, efficient disaster response or recovery. Exercises, drills, simulations, etc. for different target audiences are necessary as well. Exercises include disaster preparedness plan orientations to provide general information on plan content and structure; 'table top' exercises to apply the plan to disaster scenarios in a group setting; and, functional exercises to test one or more aspects of the plan. There must be verification of the plan through simulation and demonstration involving all stakeholders.

Features of public awareness:

- **On-going process** - public awareness is an on-going process, not simply a set of products such as posters, brochures, etc.
- **Participatory** - target population are active participants in both design, planning, implementation & monitoring – in partnership with individuals having the necessary technical skills
- **Community specific** - an assessment of specific hazards is the essential basis for developing public awareness programmes
- **Target population specific** - must be based on need of specific user groups for information, which are essential to them (women, children, and indigenous people)
- **Integral part of local warning and response system**

6 Steps in public awareness programme**1. Establish the need**

- What do people know about the hazards they are prone to?
- What do they do to prepare for such hazards? Are these adequate?
- Do people understand the meaning of warnings and what they should do when they hear these?

2. Planning the public awareness programme

- Identify the target groups. Who should be informed? Who are the most vulnerable? What are their habits, preferences, what is the common means through which they get information?
- Define how people will behave before the hazard impact, during the impact and after the impact
- Define the critical elements of the program. What type of hazard, potential effects? Who will be involved in the implementation? How can it promote self-reliance and uphold sound indigenous practices? How can results be sustained?
- Determine the best media of communication that can be understood by the target group/s (e.g. TV, radio, posters, theatre, leaflets, etc..)
- Involve others

3. Resource mobilization

- List down resources needed and sources

4. Implementation**5. Evaluation****6. Improvement of the programme****What are some activities that Red Cross volunteers can do to help in public awareness?**

- Attend community meetings
- Participate in community discussion groups
- Make wall sheets, posters, newsletters
- Write/create plays depicting disaster situation
- Distribute available leaflets, manuals, handbooks, brochures, books, comics
- Organise forum or meetings
- Public speeches, letters to the editors, articles in the printed media
- Participate in radio & TV programs

Content

- ♦ EWS
- ♦ Drills & simulation
- ♦ Communication systems

Community Level Disaster Response**Preparing for Disaster Response (before disaster event)****Session 04: Early Warning for Communities****Objectives:**

1. Participants understand the components of an early warning system

The provision of timely, reliable, effective & trustworthy information, through identified institutions, allows individuals, families and communities that are exposed to an impending hazard to take action to avoid the hazard, to prevent a disaster, or reduce their risk by preparing for effective disaster response.

Early warning systems include a chain of processes:

- understanding and mapping the hazard;
- monitoring hazards and forecasting impending possible disaster events;
- disseminating timely understandable warnings through clear smooth functioning communication channels to national & local authorities and the general population – including possible impacts on people, their livelihoods & infrastructure and recommended actions for decision-makers (i.e. authorities and general public at risk themselves); and
- undertaking appropriate and timely actions to protect lives, livelihoods and property in response to the warnings (i.e. what to do to prevent, avoid or minimize damage, destruction & death; and information on when and where to evacuate to – and how to go).

Building good hazard forecasting mechanisms and early warning systems has resulted in a reduction of severity of the impact of natural disasters. However, for effectiveness, systems must be integrated and linked to all stakeholders to form a reliable communication chain between those disseminating the forecasts & warnings, the community as a whole, and the individuals & families that make up those communities. Key to this is that the information at the community level (the end users) needs to be timely, accurate, reliable and understandable – so that the community can then make quick and effective decisions.

Also for the early warning to be effective, it should:

- be hazard- and audience- specific;
- give clear & specific advice on what to do; it should inform or update the community of the forecasts, and of any warnings, using symbols, colours, words or sounds that everybody can understand; and inform about possible effects of not following the advice; and
- be understood easily by the whole community (symbols, choice of non-technical words, etc.). the warning is given in simple form and in the local dialect
- Inform the people of the different phases of the warning and their meaning (e.g. alert, alarm)
- “Information boards” can be placed in strategic or conspicuous areas like pagodas, schools, health centres, markets, taxi stands & bus stops, ferry points or government buildings and other places where people frequently pass or gather.

Drills or disaster simulation exercises should also be conducted regularly to test the early warning and disaster preparedness system of the community.

Example flood warning

“ATTENTION: *Fellow residents of Red Cross Village: Based on the latest warning of the Department of Meteorology & Climate Forecasting, Typhoon Ketsana may pass our region within 24 hours. Floodwaters are expected to flow through Mekong River and shall inundate Red Cross Village, which is located near the Banghiang River. Red Cross village shall be inundated by floodwaters burying houses and farms by as much as 10 feet.*

All residents are advised to evacuate to their designated evacuation sites. Please bring the following: food, cooking utensils, bed sheets and water. Farm animals shall be evacuated at the stable atop the hill.

We have three hours to prepare before our organised evacuation.

Proceed to the village square where vehicles are waiting to pick us up going to the evacuation centre. It is estimated that floodwaters will recede within three days. We can go back to our homes then on the fourth of November”

Communication Systems

Communication failures commonly accompany disaster events. Multiple systems provide options in case one or more systems become non-operational. VHF radio systems, cell phones (voice & text messages), TV and local radio provide such a “multiple” system. Battery & wind-up radios are found to be most reliable in dissemination of information – even in remote areas during disaster events. In case such communication systems fail (i.e. major disaster event) volunteer runners can carry information within & between communities.

Content

- ♦ Early Notification Report
- ♦ Disaster Situation Report
- ♦ Needs Assessment
- ♦ Principles of Red Cross assistance
- ♦ Targeting criteria

Community Level Disaster Response**Disaster Response (during & after disaster event)****Session 05: Emergency Situation and Needs Assessment****Objectives:**

1. Participants understand the format for an Early Notification Report and Disaster Situation Report
2. Participants understand the format for a Needs Assessment
3. Participants understand the principles of Red Cross assistance and the criteria for targeting beneficiaries

DDMC & Red Cross staff are responsible for collecting data and information during a disaster – from when it first strikes, through assessment of the needs, and to recovery and reconstruction. In this task they are reliant on information from the communities and local authorities and on the help of the Red Cross Volunteer network. Collecting data & information is not a one-off activity but needs to be regularly undertaken – to reflect the changing situation and also that as the immediate emergency passes there is more time to collect accurate and complete data & information.

Collecting timely, regular, accurate & complete information is essential to facilitate effective decision-making, fund-raising efforts and efficient use of resources: however in the time immediately following a disaster often decisions need to be made on information at hand and information that can be incomplete.

Early Notification Report (within 10-12 hours)

In the first few hours and days of a disaster, decisive action is necessary to limit the loss of additional lives and livelihoods. In sudden onset disasters a “preliminary Early Notification Report” should be completed as soon as possible after the disaster event: preferably within the first 10 hours. This alerts the Lao Red Cross HQ that a disaster has occurred, gives an indication of the extent of the damage, the location and numbers affected – and indicates any immediate humanitarian needs. The figure below summarises the content of the Early Notification Report:

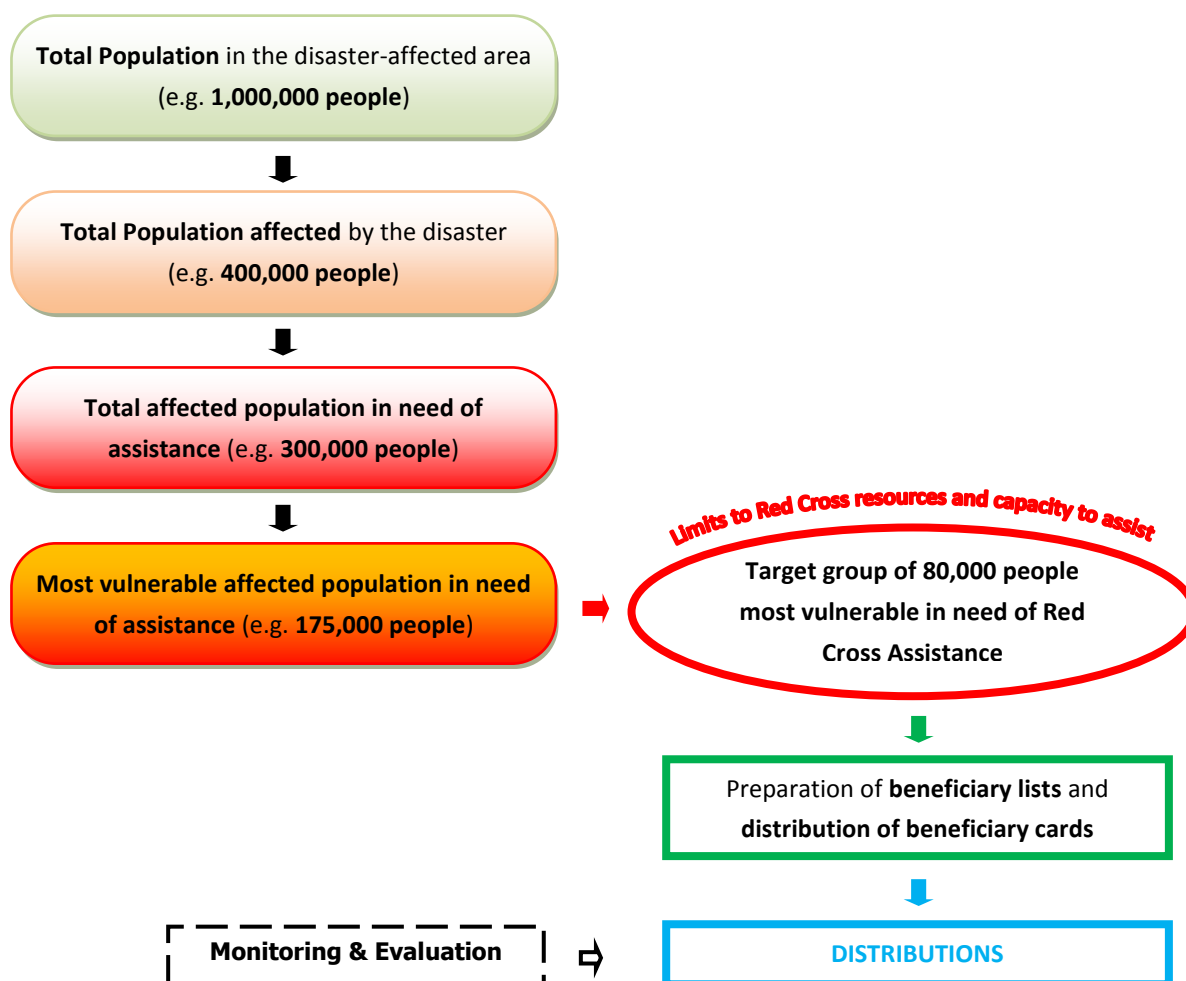
Lao Red Cross		
Province:	District:	Date:
Disaster Early Notification Report <i>Complete as much as possible and submit within the first 10-12 hours after the disaster event</i>		
1) Disaster / Emergency Notification A. Type of disaster/emergency B. Date of event: C. Names(s) of area affected: Approx. size of area (km ²)		
2) Disaster Effect <i>(estimate numbers)</i> A. Number of Deaths B. Number of Injured C. Number in need of Evacuation D. Number of houses completely destroyed		
3) Red Cross Requirements <i>(Evacuation, Search & Rescue)</i> A. Number of boats B. Number of life-jackets C. Rescue teams (YES / NO) D. First Aid Kits E. Other urgent needs ...		

Disaster Situation Report (within 12-36 hours)

The Early Notification Report is then followed by a more detailed Disaster Situation Report – usually within the first 12-36 hours after the original disaster event. The Disaster Situation Report provides more details but concentrates mainly upon urgent needs and priorities – and on actual response measures already being undertaken. These reports are submitted as required – usually every week or every two weeks.

Lao Red Cross		
Province:	District:	Date:
Disaster Early Notification Report		
<i>Complete and submit within the first 12-36 hours after the disaster event. This report should be based on a visit to the disaster location, on first-hand information, interviews & direct observation.</i>		
1) Disaster / Emergency Notification		
A. Date, time, type & magnitude of disaster B. Total area and location affected (<i>list all districts & villages. Attach map identifying affected areas</i>)		
2) Disaster Effect (<i>for each state as a fraction of the total population in the affected area</i>)		
A. Number of Deaths (<i>e.g. 672 deaths / 32,345 total population</i>) B. Number of Missing C. Number of Injured D. Number in need of Evacuation E. Number of persons sleeping out in the open F. Number of persons sleeping in public buildings (<i>e.g. schools, pagodas, etc.</i>) G. Number of persons without food H. Number of houses destroyed		
3) Local Response & Resources		
A. Describe action taken by Provincial & District Red Cross, DDMC, local government, NGOs in the affected area. B. What response actions are being taken by the local community themselves.		

Needs Assessment



The starting point for deciding the level of Red Cross assistance is the information needed to decide who, among the disaster-affected population, should be assisted. Often the very first starting point in identifying the most vulnerable is from census data and poverty lists.

It is impossible to visit every household in a disaster-affected region so it is important to identify and then visit smaller areas that are representative of the wider disaster-affected population.

At provincial level: make a **list of disaster-affected districts**, their **total population** and total **number of people on the poverty list** in each district



Visit the affected districts that are most representative of the disaster-affected areas.

Interview district leaders & authorities and other key informants – asking about:

- Number of people affected; and number in need of assistance
 - Type of assistance needed
- What types of vulnerable groups are most affected
- What has been the response of the district; & what is its capacity to respond?



Visit a number of villages that are representative of the disaster-affected district.

In each village **interview** village leaders & at least 5 households selected at random from the poverty list. Find out:

- the extent to which the household has been affected by the disaster;
- their current coping strategies; and
- what assistance can help strengthen their coping strategies.



Based on the result of the district and village interviews the Red Cross can then estimate the **% of households on the poverty list** which:

- have been **affected by the disaster**;
- are in need of assistance

as well as what type of assistance they need.

The Emergency Needs Assessment provides **guidance** – and a structured questionnaire is used. Information from district and village levels are compared. When information from the different levels in the same area are similar it is more likely that the information is accurate.

In all assessments, as well as possible subsequent distributions, it is important to involve the target communities in the decisions about the most vulnerable – as well as to involve women and children to ensure that their needs are fully considered. The involvement of Red Cross Volunteers from the affected communities, particularly in the organising and managing of distributions helps to avoid potential problems during distributions.

Basic principles of Red Cross assistance:

Throughout, the 7 Fundamental Principles should be adhered to, especially:

- **Humanity:** to prevent and alleviate human suffering;
- **Impartiality:** to relieve the suffering of individuals based solely on their needs; and
- **Independence:** the Red Cross, is auxiliary to, and not an arm of government, and we must always maintain our autonomy.

Criteria for targeting the most vulnerable

Vulnerability is related to poverty: even though the rich can be affected they are often affected less or able to recover more quickly and more effectively – and are able to do so without external assistance. However amongst the poor there are vulnerable groups who are more affected than others. When identifying vulnerable groups the following households/individuals should be given special consideration:

- those affected by the most recent disaster and who are on the current poverty list;
- with no labour resources;
- receiving no significant support from other sources; and
- with loss of livelihood / income generating capacity

Households with:

- Disabled members (physical and mental)
- Elderly
- Young children (0-5 years)
- Female-Headed Households
- Pregnant & lactating women
- Lost family member during current disaster
- Loss or collapse of house
- Chronic disease (PLWHA, TB etc..)

However it should be noted that not all people who belong to these groups are vulnerable

Beneficiary list and beneficiary cards

In most circumstances the resources available and capacity to respond of the Lao Red Cross will not be able to address all needs of all people identified as “in need of assistance”. It is very likely that other organisations will also be active in addressing the needs of households affected by the disaster and it will be important for good coordination & communication between all organisations to ensure that assistance does not overlap in some places or that there are gaps that no one is addressing.

For Red Cross the households to be targeted are listed on a standard Lao Red Cross Beneficiary List. A representative of the Lao Red Cross compiles the list in close cooperation with local authorities, village leaders, RCVs and community members. The list should be cross-checked by the District level Red Cross by randomly checking names against the poverty list. The Beneficiary list should be printed and made available for all community members to see – as well as a clear and accessible process for registering complaints.

Beneficiary cards (for subsequent distributions) should be issued by the District Red Cross based upon the names on the Beneficiary List.

Content

- ♦ Distribution
- ♦ Organisation
- ♦ Security

Community Level Disaster Response**Disaster Response (during & after disaster event)****Session 06: Relief Distribution****Objectives:**

1. Participants understand how a relief distribution should be organised and carried out

Distribution

The main questions to answer when planning relief distributions are:

- Total number of target households;
- Are there any special vulnerable groups to consider;
- Location and number of distribution points (factoring logistical access, proximity to warehouses and security issues);
- How are the affected communities going to be involved ? (who ? how many ? what are their capacities and how can they be involved?);
- Who specifically to distribute to ? (normally heads of households – but need to think about elderly and orphans for example);
- What to distribute and when (e.g. sometimes it is best to carry out the full distribution in stages – first food & provision of safe water, then household items, and then reconstruction materials & tools);
- When to end the distribution.

Distribution point

The location of the distribution point should be determined on its convenience for the targeted households as well as logistical & security considerations for the Red Cross. To be manageable a distribution point should serve less than 2,000 households.

Organising distribution

Efficient distribution is only possible with the active participation and support of the target household members. For example provide additional volunteers (voluntary & unpaid as part of community contribution) for distribution and warehouse duties – however distribution & warehouse managers should be Red Cross staff.

2 – 3 days in advance of the planned distribution, RCVs should inform community members of their rights to receive distributed supplies, the system to be used for distribution, and the date, time and location of the distribution. During the distribution itself RCVs should inform the household representatives about their exact entitlement; and the entitlement should be clearly posted in the language of the beneficiaries at the distribution point. Access to water and sanitation facilities at the distribution point should be considered if it is expected that people might have to queue a long time.

Points to remember:

- Collaborate fully with local authorities and with representatives of the target households;
- Create the most convenient conditions for people so as to minimise their waiting time: remember people may still be traumatised or in shock from the disaster event;

Arrangement and set-up

- Choose distribution points carefully; carefully determine the size of the area needed – factor on providing shelter from sun & rain, water & sanitation, and for recipients to sit down if it is expected that they will have to queue and wait for long periods;
- The distribution area should be separated from the storage area – by distance and by secure fencing or walls. Access to the storage area should be by authorised people only;
- The distribution area should have only one entrance and only one exit – with each permanently manned by Red Cross staff acting as watchmen or guards;
- A registration desk should be set up at the entrance to the distribution area
- The distribution itself should be organised so that people cannot move back through the distribution area after receiving supplies. People should wait outside the distribution area to be called – and when called they should present their ID cards and Beneficiary Cards at the registration desk – and then proceed to the actual distribution area to collect their supplies and then leave through the exit gate.

Organisation and communication

- Ensure good communication between distribution staff and target households (e.g. use megaphones with large crowds); Keep beneficiaries **regularly** informed and updated.
- All Red Cross staff and RCVs should be immediately recognisable as being from Red Cross – preferably with a bright Red Cross uniform, vest and cap each clearly showing the Red Cross emblem. All Red Cross staff should be wearing official Red Cross ID badges; RCVs from the target households should be accepted to assist with the distribution where possible.
- Take care about the quantity of supplies – people are calmer if they know that *everybody* will get there expected allocation – the last in the queue will get the same as the first in the queue;
- Speed is necessary – start early in the morning. Do not force people to wait – especially after dark;
- During distributions it is likely that there will be some issues either with individual beneficiaries or perhaps with individuals not included. To avoid disruptions to everybody else and to help settle these issues, a specially designated community or local authority representative together with a member of the distribution team should listen to and handle these issues on an individual basis outside of the distribution area itself;
- Have a strategy and be prepared to keep the majority of the people calm if individuals or small groups start creating trouble. If it seems likely that the disturbance will get bad then be ready to leave the distribution point immediately without notice;
- Never have any fund-raising activity at a distribution point!

Maintaining security

Any distribution of relief supplies has the potential to cause a security problem. It is necessary to take a few simple measures to reduce this risk considerably. In particular:

- Distribution sites should be located outside of towns;
- Local authorities should always be informed, in advance, of the exact time and location for the distribution – and ideally should either be present at the distribution or easily available if the situation requires their urgent attendance;
- Better planned and organised distributions are much more secure. When beneficiaries see that the distribution is not well organised, and where they are not kept regularly informed as to what is happening, they become concerned that they will not receive their own share of the relief – they become nervous and aggressive and one small problem can quickly become misunderstood and magnified so that it very quickly become a large problem;
- Ideally changes should not be made during distributions (process, location, timing etc..) – but if changes are absolutely necessary the beneficiaries must be informed;
- Never refuse to deal with individual or group requests or questions - but don't allow this to interrupt or block the on-going distribution. Deal with the issue off-site.
- Always make sure there is sufficient supply of relief items for the entire day's distribution.
- Having large numbers of people in one place is always a potential security risk. Try to arrange to distribution scheduling so that there are a number of small distributions throughout different times of the day rather than one large distribution covering the whole day. This also helps reduce long-waiting times for beneficiaries.
- The most critical moment for security is the end of the distribution. The distribution team should be ready to move immediately the distribution finishes.
- The presence of police (often provided or preferred by authorities) should be kept to a reasonable minimum.

Content**Community Level Disaster Response****Disaster Response (during & after disaster event)****Session 07: Light Search and Rescue****Objectives:**

1. Participants understand how to carry out light search and rescue

Every year in Laos disasters and accidents continue to happen – causing death, injury and suffering that in many cases can be avoided or reduced. In nearly all situations it is the local community, relatives, friends & neighbours, and indeed Red Cross Volunteers, that are first at the scene to provide life-saving assistance. It is therefore extremely important to make sure that local communities and Red Cross Volunteers are prepared to work as emergency responders and are trained to do so.

This module provides some very basic instruction about search and rescue within the scope and capacity of such village level responders. As the first people on the scene their prompt and skilled action will certainly save lives.

Community Responder - is usually a member of the general public who has been trained to safely respond immediately after a disaster or emergency.

Light Search and Rescue consists of three separate operations:

Size-up: assess situation and determine safe action plan.

Search: locate victims and document their location.

Rescue: procedures & methods required to extricate victim



Goal of Community Light Search and Rescue operations is to:

- Rescue the greatest number of people in the shortest amount of time; and
- Rescue lightly trapped victims first.

Roles & responsibilities: When a disaster or emergency occurs in a certain community and where professional responders are not immediately available, the community responders can assist by:

- Conducting an initial size-up in their homes or workplaces.
- Reducing imminent dangers by turning off utilities, suppressing small fires, evacuating the area, and helping others.
- Extricating surface injured persons.
- Providing basic treatment to injured persons.
- Working with other community members and volunteers to establish a command post, staging area, and medical triage and treatment areas.
- Collecting damage information and developing a plan of operation based on life-saving priorities and available resources.
- Establishing and maintaining communication with responders.
- Liaising with professional responders and assisting them as the need arises

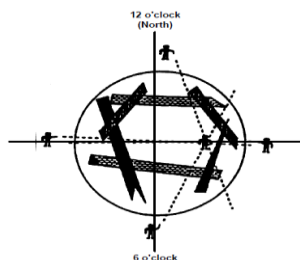
Scene Size-up (9 steps)

Step 1: Gather Facts	Time	<ul style="list-style-type: none"> Does the time of day or week affect search and rescue efforts? How?
	Type of Construction	<ul style="list-style-type: none"> What type(s) of structure(s) is (are) involved? What type(s) of construction is (are) involved?
	Occupancy	<ul style="list-style-type: none"> Are the structures occupied? If yes, how many people are likely to be affected? Are there special considerations (e.g. children, elderly)? If yes, what are the special considerations?
	Weather	<ul style="list-style-type: none"> Will weather conditions affect your safety? If yes, how will your safety be affected? Will weather conditions affect the search and rescue situation? If yes, how will the search and rescue situation be affected?
	Hazards	<ul style="list-style-type: none"> Are hazardous materials involved? If yes, what hazardous materials? Are any other types of hazards likely to be involved? If yes, what other hazards?
Step 2: Assess & Communicate Damage		<ul style="list-style-type: none"> Check integrity of the building. Is the damage beyond the team's capability? If yes, what special requirements or qualifications are required? Are normal communication channels functioning?
Step 3: Consider Probabilities	Life Hazards	<ul style="list-style-type: none"> Are there potentially life-threatening hazards? If yes, what are the hazards?
	Additional Damage	<ul style="list-style-type: none"> Is there great risk or potential for more disaster activity that will impact personal safety? If yes, what are the known risks?
Step 4: Assess Your Own Situation		<ul style="list-style-type: none"> What resources are available with which you can attempt the search and rescue? What equipment is available? <p>Remember that each step is a building block to another step.</p>
Step 5: Establish Priorities		<ul style="list-style-type: none"> Can a search and rescue be safely attempted by the Community responders? If no, do <i>not</i> attempt a search and rescue. Are there other, more pressing needs at the moment? If yes, list. <p>Factors in Structural Triage When performing structural triage, it is necessary to gather as much information as possible about the following factors:</p> <ul style="list-style-type: none"> Type of structure Condition of the structure Mechanism of damage Day, date and time of collapse Prior information Availability of resources Location of utility shut-offs Possible presence of hazardous materials
Step 6: Make Decisions		<ul style="list-style-type: none"> Where will deployment of available resources do the most good while maintaining an adequate margin of safety?
Step 7:		<ul style="list-style-type: none"> Determine how personnel and other resources should be deployed.

Develop Plan of Action	
Step 8: Take Action	<ul style="list-style-type: none"> • Put the plans into effect.
Step 9: Evaluate Progress	<p>Continually size up the situation to identify changes in the:</p> <ul style="list-style-type: none"> • Scope of the problem • Safety risks. • Availability of resources <p>Adjust strategies as required.</p>

Search and locate

After conducting scene size-up, the next step is to locate missing and trapped injured persons. Now that your team has initial data from your size-up your team leader will designate and prioritize the area(s) for search. These search methods have been very effective:

Hailing Search Method

1. Team leader gathers each team member to draw a rough sketch of the area to be searched. Using North as 12 o'clock for reference of searchers position.
2. Team leader assigns one member to check structure integrity and reports back for any findings.
3. 4 to 5 members surround the structure to be searched – keeping in a safe location as close as possible around the search area.
4. In a clock-wise manner, begin the search by calling out to possible trapped persons inside the building. Shout something like, "If anyone can hear my voice, knock 3 times on something solid."
5. All searchers then listen and point in the direction of any potential response and immediately noted to the site sketch forms. Repeat steps if necessary.
6. If any victims respond, give them further directions such as "we hear you and please calm down we are trying our best to help you". Ask victims who respond for any information that they may have about the building or others who may be trapped.

Physical Search Patterns for Interior spaces - Multiple rooms

1. **Enter:** Go **right** and **stay right** - **Stay in contact with the wall**
2. **Exit:** Go **left** and **stay left** - **Stay in contact with the wall**
3. Bottom / up: Top / down

Mark searched areas to document results. Make a **single diagonal slash "/"** next to the door just before entering a structure. Make an opposite slash "\" – so creating an **"X"** – when all occupants have been removed and search and rescue efforts have been completed. The **"X"** signals to other potential searchers that the area has already been searched. This method (a) indicates the rescuer location; and (b) prevents duplication of effort.

Report the results. Keep complete records both of removed victims and of victims who remain trapped or who are dead. Report this information to professional rescue team when they reach the scene.

Rescue (on land)

Basic equipment needs

Ladders	• Axes	• Torches
Ropes	• Steel tubes	• First Aid Kits
Spades (& Shovels)	• Wooden planks	• Heavy-duty gloves
Picks	• Buckets	• Thick cloth / blankets
Crowbars	• Hose pipes	

Search and Rescue in collapsed buildings

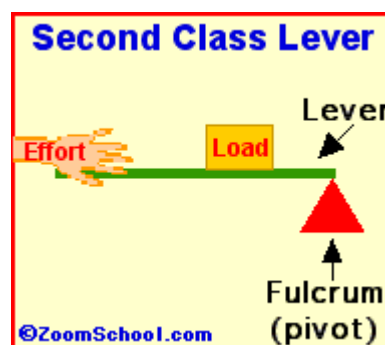
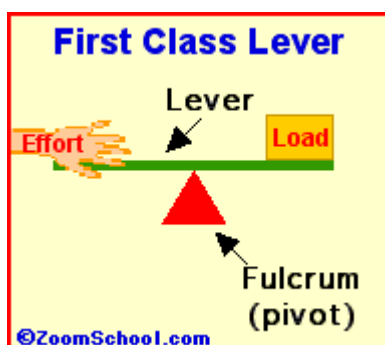
- Damaged buildings should only be approached from the least dangerous side; move carefully over unstable surfaces
- When searching for casualties avoiding walking over rubble, do not enter collapsed buildings, do not walk near badly damaged buildings and walls;
- When removing rubble from collapsed buildings do not allow abrupt jerks, shaking or strong blows at the collapsed site; When dismantling or clearing ruins, first drag away or put out any smouldering or burning objects;
- If there are electric cables on the surface or buried in the rubble use metal spades, picks and tools very carefully to avoid electric shock; if an electric cable is discovered, make it visible and suspend it in order to avoid further damage. Do not step on electric cables.



Lifting Heavy Objects: you may encounter situations in which debris needs to be moved to free victims. In these situations, Community Responders should consider leveraging and cribbing to move and stabilize the debris until the rescue is complete.

The Lever

The lever is the simplest method for lifting a load. A lever is a rigid bar that is free to move on a fixed point - a point that supports the load. Levers can be used to (a) move a load that is too heavy to move by hand; (b) pulling or hauling; or (c) raising or lifting.

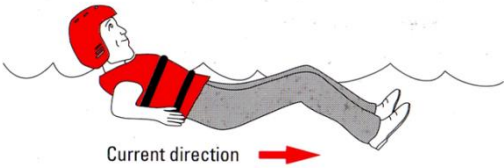
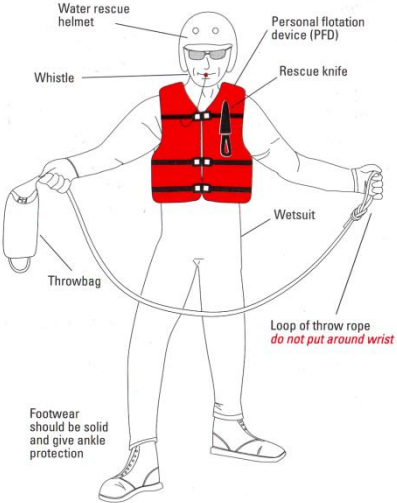
For search & rescue there are 2 main types of levers:











	<p>Before Lifting or Moving a Load</p> <p>The following factors must be examined before lifting or moving a load: (a) the weight of the load; (b) consequences when the load is moved (what will happen); and (c) selection of the method for lifting or moving the load</p> <p>Leveraging is accomplished by wedging a lever under the object that needs to be moved, with a stationary object underneath it to act as a fulcrum. When the lever is forced down over the fulcrum, the far end of the lever will lift the object.</p>	
<p>Crib a wooden framework used – in conjunction with levers – in order to support the load or to strengthen the structure</p>	<p>Box cribbing Arranging pairs of wood pieces alternately to form a stable rectangle.</p> 	<p>Platform cribbing Arranging multiple pieces of wood pieces alternatively to form a stable rectangle.</p> 
<p>Leveraging and cribbing are used together by alternately lifting the object and placing cribbing materials underneath the lifted edge to stabilize it. Safety (of rescuers & victims) is the number one priority.</p> <p>Leveraging and cribbing should be gradual: step by step (one layer at a time) — both for stability and to make the job easier. It may also be necessary to use leveraging and cribbing at more than one location (e.g., front and back) to ensure stability.</p> <p>Always wear proper personal protection.</p> <p>When you are able to achieve sufficient lift, remove the victim and reverse the leveraging and cribbing procedure to lower the object (for future safety).</p>		
<p>Four Types of Structural Collapse Disaster Rescue Situations</p>		
<p>Injured, Not Trapped</p>	<ul style="list-style-type: none"> • Injury is usually caused by falling debris hitting the victim or the victim falling and hitting the ground. • Removing the victim to a safe location and treatment of wounds is required for rescue. • Usually accounts for 50% of victims. 	
<p>Non-Structural Entrapment</p>	<ul style="list-style-type: none"> • Building still looks like the original building. • Building contents like file cabinets, book shelves, refrigerator, and small pieces of debris will trap victims. • Locating the victim and lifting the building contents or small pieces of debris off them is usually accomplished with common hand tools. Removing the victim to a safe location and treatment of wounds is required for rescue. • Usually accounts for 30% of victims. 	

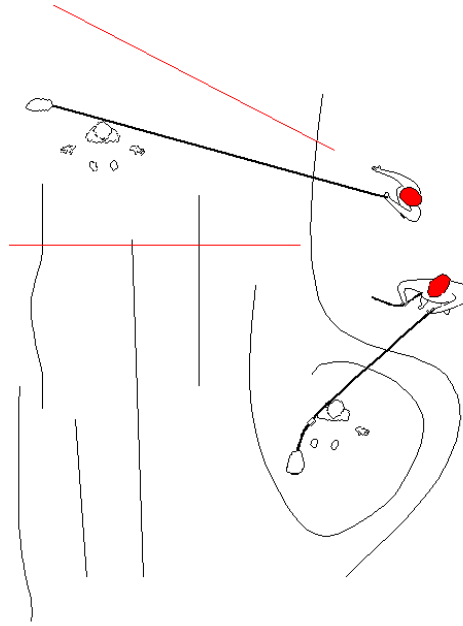
Void Space Non-Structural Entrapment	<ul style="list-style-type: none"> • Building no longer looks like the original building. Partial or complete collapse has occurred. This is a hazardous and dangerous situation. • Victims are still trapped by the building contents such as file cabinets, bookshelves, refrigerator, and small pieces of debris - but they are located inside void spaces created by the collapsed building structure. • Securing the structure, locating the victim, lifting the building contents or small pieces of debris off them, removing the victim to a safe location, and treatment of wounds is required for rescue. • Rescuing a victim in this category usually takes about four (4) hours. • Usually accounts for 15% of victims.
Entombed	<ul style="list-style-type: none"> • Building no longer looks like the original building. Partial or complete collapse has occurred. This is a very hazardous and dangerous situation. • Victims are trapped by structural components like walls, floors, and roofs. • Securing the structure, locating the victim, lifting, removing or breaching the structural components away from them, removing the victim to a safe location, and treatment of wounds is required for rescue. • Rescuing entombed victims usually takes longer than four (4) hours. The average time is about eight (8) hours. • Usually accounts for 5% of victims.
<p><i>Note: At least 80% of the injured and entrapped victims of past structural collapse disasters have been rescued within the first 24 hours following the incident.</i></p>	
Safety Hazards around Disaster Sites	
Secondary collapse of unstable structures	<ul style="list-style-type: none"> • Fractured or leaning buildings, walls, electricity poles, etc. • Moving piles of debris and contents in buildings
Overhead Hazards	<ol style="list-style-type: none"> 1. Heavy items may be suspended overhead – by cables or other that are not designed to hold such a weight. 2. Low hanging wires (electricity, phone, television cable, etc.) may be a hazard for electrocution, tripping or entanglement.
Ground Level Hazards	<ol style="list-style-type: none"> 1. Sharp objects like glass, nails, re-bar, and broken concrete 2. Slippery and uneven surfaces 3. Surface water: electrocution if in contact with electric cables; and drowning 4. Contaminated atmospheres: flammable (stored fuel), toxic (stored pesticides) etc.

Water Emergencies

Drowning doesn't have to happen in a lake, river or swimming pool. Drowning occurs in all manner of water, from the biggest ocean to the smallest puddle	
Common water emergency	<ul style="list-style-type: none"> • Near Drowning • Diving in shallow water • Man overboard • Hypothermia • Soft tissue injury
Causes	<ul style="list-style-type: none"> • Heavy rains • Dam Failure • Strong current • Accidents • Boat accidents or Capsized boats
Water Hazards	<ul style="list-style-type: none"> • Low head dam/hydraulics • Strainers • Floating debris • Foot entrapment • Stationary objects • Panicked swimmers • Contaminated water • Hypothermia • Dehydration
Survival	Floating <ul style="list-style-type: none"> • Open water • Swift water • Flood water 
	Personal Floatation Device (PFD) & Improvised Floatation Device <ul style="list-style-type: none"> • Life Vest • Ring Bouy • Water container • Tire Interior Tube (from tyre) • Styrofoam box • Floating wood (tree trunk, timber)
Personal Protective Equipment	<p style="text-align: center;">Personal Protective Equipment</p>  <p>Footwear should be solid and give ankle protection</p>
Whistle	<ul style="list-style-type: none"> • One blast (-) = stop, look at me, listen for instructions

signal	<ul style="list-style-type: none"> Two blasts (- , -) = begin action agreed by whistle blower Three blasts (- , - , -) = distress, need help, repetitive
Life Saving on Water Emergencies	
Basic knowledge on Ropes and Knots – Rope is a common material found almost anywhere. It can be used to secure equipment and people for safety. Correct application of knots and its use is important.	<p>Joining ropes</p> <div style="display: flex; justify-content: space-around; align-items: center;">    </div>
	<p>Anchoring (Securing) ropes</p> <div style="display: flex; justify-content: space-around; align-items: center;">    </div>
STEPS OF A WATER-BASED RESCUE	<p>Drowning victims are probably the most dangerous to try to rescue. In a panic, drowning victims are likely to claw at rescuers and climb to the surface at all costs. NEVER attempt a direct rescue of a conscious drowning victim without proper training.</p> <ul style="list-style-type: none"> Use the fastest and most direct route to get to a distressed swimmer. Use floatation device. Have rescue equipment, keep it handy, and know how to use it. <div style="border: 1px solid black; padding: 5px; text-align: center; color: red; font-weight: bold;"> <p>Reach to assist or throw a rope. Whatever you do, don't become the next victim when trying to help a drowning</p> </div>
How to help a drowning person:	<ol style="list-style-type: none"> Stay Safe. Wear a personal flotation device if available. The most important thing to remember is <i>not to become a victim yourself</i>. If more than one rescuer is available, have someone call for help immediately. Remember, be sure to say your location carefully and do not hang up until the emergency dispatcher tells you to do so. If the victim is conscious, try to reach the victim with something rigid enough to pull him or her back. An oar, branch of tree or wooden handle of broom is a good option. If nothing will reach, throw the victim a rope and encourage him or her to grab on. A life-preserver with a rope attached is a very good option. If the victim is too far for a rope, then there are few additional options for untrained rescuers. Make sure help (emergency number) has been called. If enough people are available, try making a chain by holding hands out to the victim. <i>A rescuer may try</i>

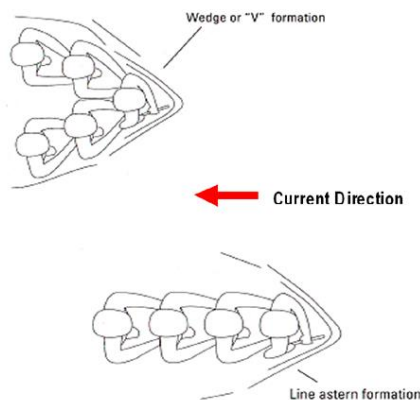
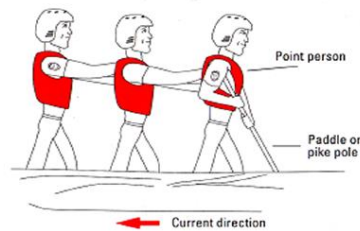
	<p><i>swimming out to the victim, but follow these steps:</i></p> <ul style="list-style-type: none"> • Tie a rope around the rescuer's waist before heading out to the victim and have someone on shore or on a nearby boat holding the rope. • Take a pole, oar, rope, or other object to reach the victim. Rescuers should not attempt to directly touch a panicking drowning victim. <p>6. If the victim is unconscious, take a boat to the victim or tie a rope around the rescuer's waist and let the rescuer pull the victim to shore.</p> <p>7. Once a drowning victim is safely out of the water, perform basic first aid. In cold weather, remove the victim's wet clothing - all the way. Cover the victim with a blanket and watch for symptoms of hypothermia. If the victim is not breathing, begin CPR.</p> <p>Tips:</p> <ul style="list-style-type: none"> • All victims of near drowning need medical attention. Water in the lungs, even small amounts, can lead to them filling with fluid later. Called "dry drowning," this condition can be fatal. • Closely watch anyone who chokes on water while swimming. • If an unconscious victim is found in the water with no witnesses, always assume the victim has a neck injury.
<p>Extension Assist</p>	<p>REACH – The easiest and most desirable form of rescue is to reach out or extend an object to the person in trouble.</p> <p>Reach subject with:</p> <ul style="list-style-type: none"> • Pole • Paddle / oar • Tree branch  <p>Procedure:</p> <ul style="list-style-type: none"> • Lay flat on the ground so as not to get pulled in. • Reach as far out as possible. • Shout to get the subject's attention. <p>Other rescue options:</p> <ul style="list-style-type: none"> • Flotation device tied to rope held by rescuers on both sides of the river shore or flooded street. <p>THROW and TOW – if the victim is too far away to reach with anything, you may be able to use this rescue technique to provide assistance</p> <p>Procedure:</p> <ol style="list-style-type: none"> 1. Chose a strategic spot to set up to throw bag. 2. Get and keep eye contact with the subject. 3. Aim for the subject's head or slightly up river. 4. Make a strong underhand throw when the subject is in the target zone. 5. carefully bring the subject to an eddy or the best landing spot you can find. 6. Be ready to make a second throw. 



Remember always:

REACH, THROW, but only GO with training and equipment.

- Do not enter current higher than knee deep.
- Keep the formation headed straight into the current.
- Support the person in front of you.
- Get a solid foot placement each time you move your foot.
- Do not rush.
- Abort and return to shore before getting swept away.



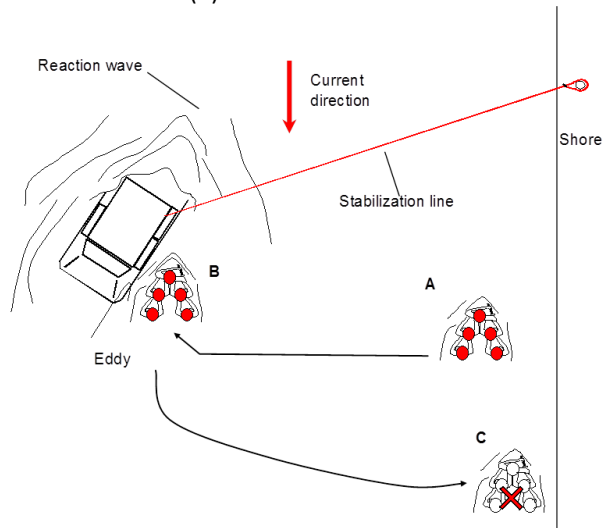
**Shallow
Water
Crossing**

**Shallow
"Flood"
Water**

1. Do not enter deeper than your knees.
2. Have upstream spotters to watch for floating debris.
3. Have downstream bag throwers as backup plan.

Crossing to a Vehicle

4. Secure vehicle with stabilization line if possible.
5. Do not follow the stabilization line, it leads to the reaction wave.
6. Take PFD and helmet for each subject.
7. Keep the formation headed straight into the current (A)
8. Abort the attempt if formation is not totally stable.
9. Move laterally to the rear of the vehicle, avoid the reaction wave.
10. Watch for instability of the vehicle.
11. If the vehicle appears stable, move up into the eddy (B).
12. Get the PFD and helmet correctly on each subject.
13. Assist one subject into the pocket of the "V" formation.
14. Move laterally to the safe bank (C).



Repeat the process for additional subjects.

Fire Emergencies

Elements of Fire (Triangle of Fire)	<p>Triangle of Fire:</p> <p>Fuel</p> <p>Heat</p> <p>Air (oxygen)</p> <div data-bbox="1062 315 1374 591"> </div> <p>For combustion to occur, all three components are necessary</p> <table border="1" data-bbox="504 698 1353 1079"> <thead> <tr> <th>Fuel/Heat source</th><th>Examples</th></tr> </thead> <tbody> <tr> <td>Ordinary combustibles</td><td>solid organic material such as wood, cloth, rubber, some plastics, etc.</td></tr> <tr> <td>Flammable liquids</td><td>Petrol, diesel, kerosene, alcohol, etc...</td></tr> <tr> <td>Flammable gases</td><td>Natural gas, methane</td></tr> <tr> <td>Electrical equipment</td><td>short-circuiting machinery or overloaded electrical cables</td></tr> <tr> <td>Combustible metals</td><td>sodium, magnesium, potassium, etc ...</td></tr> <tr> <td>Cooking oil or fat</td><td></td></tr> </tbody> </table>	Fuel/Heat source	Examples	Ordinary combustibles	solid organic material such as wood, cloth, rubber, some plastics, etc.	Flammable liquids	Petrol, diesel, kerosene, alcohol, etc...	Flammable gases	Natural gas, methane	Electrical equipment	short-circuiting machinery or overloaded electrical cables	Combustible metals	sodium, magnesium, potassium, etc ...	Cooking oil or fat	
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Products of Combustion	<ol style="list-style-type: none"> 1. Heat 2. Light 3. Smoke 4. Toxic gases 5. Carbon / Ash 														
Theory for putting out fires	<p>Fire is put out by limiting or interrupting one or more of the essential elements in the combustion process (fuel, heat, oxygen):</p> <ol style="list-style-type: none"> a.) Reducing its <i>Temperature</i> (cooling) b.) Removal of available <i>Fuel</i> (starving) c.) Exclusion of <i>Oxygen</i> (smothering) 														
Extinguishing Agents	<ul style="list-style-type: none"> • Water • Sand • Wet Rags • CO₂ • Foam • Dry Chemical 														
Fire Extinguisher	<p>How to use a fire extinguisher</p> <ol style="list-style-type: none"> 1. Pull the pin 2. Aim the nozzle 3. Squeeze the lever 4. Sweep <div data-bbox="922 1559 1015 1731"> </div> <div data-bbox="1118 1559 1370 1731"> </div>														
The Bucket Brigade	<p>People form a line from the water source to the fire scene and pass buckets to each other to put out the fire.</p> <div data-bbox="1086 1756 1366 1928"> </div>														
	<p>During a fire, you should do the following:</p> <ul style="list-style-type: none"> • Use a fire extinguisher to put out small fires. You can also use water if the fire is not electrical or chemical. Do NOT try to put out a fire that you can't 														

	<p>control.</p> <ul style="list-style-type: none"> • If there's a fire that is too big to put out, leave the building immediately. You might not have much time before the fire spreads, so don't even stop to call "Emergency number". Once you're outside and safe, you can use a cell phone or a neighbor's phone to call. • If your clothes catch fire, do NOT run. This could make the fire spread more quickly. Instead, <i>Stop, Drop, and Roll!</i> In other words, stop, drop to the ground, cover your face with your hands, and roll back and forth until the fire is put out. • If there is smoke in your house, cover your nose and mouth with a small cloth and stay low to the ground as you're leaving. Smoke is very dangerous to breathe and difficult to see through. Since smoke naturally rises, you should crawl on your hands and knees to exit the building.
Keyword for Fire Safety	<p>C – Conscious prevention A – Awareness D – Detection of Fire R – Response or Reaction E – Evacuation</p>

Basic Infectious Disease Safety	
Personal protective equipment	<ul style="list-style-type: none"> • Helmet - protect the head from cuts and abrasions • Goggles - stop body fluids from coming in contact with the eyes • Dust masks - stop body fluids from coming in contact with the face and respiratory tract • Latex gloves - may have to put under leather work gloves to prevent body fluids coming in contact with the hands during work activities
<ul style="list-style-type: none"> • Wash with soap or disinfectant as soon as possible if contact with body fluids • Remove or wash clothing with soap soon as possible if contact with body fluids • Immunization against various diseases should be kept up-to-date (especially tetanus, typhoid & hepatitis B) • Water contamination and broken or flooded latrines will cause most of the illnesses following a structural collapse disaster unless proper purification and sanitation procedures are used. 	

Content**Community Level Disaster Response****Disaster Response (during & after disaster event)****Session 08: First Aid****Objectives:**

- 1.

To be completed by Lao Red Cross



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