



# Training Module on LANDSLIDE RISK MANAGEMENT

Facilitator's Manual



# **TABLE OF CONTENTS**

1.	Background
2.	Scope of the Training
	2.1 Key Content
	2.2 Objectives of the Training
	2.3 Participants
3.	Detailed Training Schedule
4.	About the Session Plan
	4.1 Structure of the Training Module
5.	Session Briefs
	Session 1: Welcome and Introductions, Course Overview and Ground Rules
	Session 2: Overview of Landslide
	Session 3: Causes of Landslide
	Session 4: Types of Landslide and Identification of Landslide Prone Areas
	Session 5: Identification of Landslide Prone Areas
	Session 6: Steps to Mitigate Landslide Risk
	Session 7: Field Visit
	Session 8: Questions, Feedback and Session Closure
6.	Facilitator Guidance Note on Group Work
7.	List of Energisers
8.	Evaluation Form

## b Training Module on Landslide Risk Management

# **1. BACKGROUND**

During the South West monsoon period between June 1 and August 18 in 2018, Kerala experienced an abnormally high rainfall which was 42% in excess compared to the normal rainfall. This torrential rainfall caused the worst ever natural disaster in the recent history of the state in the form of extensive flooding and landslides. The unprecedented number of landslides along the hilly terrain of Kerala particularly in the districts of Idukki, Wayanad, Kozhikode, Malappuram, and Pathanamthitta resulted in significant number of causalities and widespread loss and damages of properties and the state's infrastructure. Nearly 341 landslides were reported from 10 districts which took over hundreds of lives and caused massive property losses. One of the lessons learnt from these landslides was to understand the various characteristics and causes associated with them and help explore local mitigation actions to be undertaken by local government officials. Compared to other states Kerala has an empowered and developed system of local self-government. This opportunity could be utilized to identify the potential risk of landslides and the necessary mitigation solutions to bring down the future risks. In this context, RedRIndia with technical support from GeoHazards Society has organized a series of training programmes on "Landslide Risk Management for the Panchayati Raj Members" in various Panchayats of Kerala. The programme was supported by National Stock Exchange Foundation and the training programs targeted local and elected representatives of Panchayati Raj Institutions in the affected districts of the state. The overall goal of the training courseswas to enhance adaptive capacity andto create awareness of local decision makers on Landslide Risk Management.

This training module is an outcome of the series of training. The document provides detailed guidance for conducting the training course on Landslide Risk Management. The contents of the document include:

- 1. Content, Training Objectives and Target Participants;
- 2. Training Schedule;
- 3. Session Plans with Key Learning Objectives, Key Learning Points, and Facilitator's Guide; and
- 4. Training Evaluation Format.

# **2. SCOPE OF THE TRAINING**

The scope of the training is to cover a wide range of concepts from basic information of landslides to understanding the measures that can be taken to reduce the risks. For it to be a comprehensive training all of the following content is needed to convey the importance of being prepared and mitigating landslides as much as possible. The training is to be used as aguideline to create more detailed preparedness and mitigation plan. The objective of the technical orientation and field exercise on landslide mapping would be to build the capacity of PRI's in landslide prone areas of different districts to mitigate landslide risk using existing local resources and programmes.

## 2.1Key Content

The training is planned at the district level to train the Panchayati Raj Institution (PRI) members and covers the following topics:

- Terms and Concepts in Landslide Risk Management
- Defining a Landslide
- Landslide risks in India and Kerala
- Landslide causes, types, parts and direct and indirect impacts
- Landslide Identification and Mapping
- Landslide susceptibility map and its relevance
- Prevention, mitigation and management of landslide
- Landslides Preparedness for pre, during and post landslide conditions

# 2.2 Objectives of the Training

The specific objectives of the training programme are given below:

- 1. Familiarize participants about the various aspects of landslide including the basic concepts, causes, effects and types of landslide accompanied with its mitigation measures and management.
- 2. Highlight the importance of basic knowledge for understanding landslide threat and the role of PRIs in landslide risk management.
- 3. Enhance the understanding about the technical and scientific aspects of landslide directly from the site.
- 4. Acquaint the participants on the role and importance of mapping for landslide risk management.
- 5. Provide guidelines to the participants about the mitigation measures to be taken in landslide risk management.

## **2.3 Participants**

The training is designed for the following target audience includingPRImembers ofvarious localbodies. Suggested groups of participants who would benefit from the training are given below:

- Panchayat Officials from various Panchayats
- Ward Member Councillors
- Officials from District Legal Service Authority (DLSA)
- Officials from office of District Collectorate
- Officials and Volunteers from UNDP
- Key community members from various Panchayats
- Students from Engineering, Disaster Management, Social Work, Development Studies, and Geography colleges.

## 2 Training Module on Landslide Risk Management

**3. DETAILED TRAINING SCHEDULE** 

Key Learning Points	<ul> <li>Participants and facilitators introduced with each other</li> <li>Awareness regarding all aspects of Landslide Risk Management Training</li> </ul>	<ul> <li>Landslides occur when a large amount of earth, rock, and other material moves down a steep slope; they can be aided by gravity, rain and other natural processes</li> <li>Western Ghats region in Kerala is identified as one of the major land slide prone areas of the country Landslides have different parts broadly - a crown, a head, main body, and a toe.</li> <li>There are several direct (loss of life, property) and indirect effects (livelihood loss, reduced water quality) of a landslide</li> </ul>
Key Learning Objectives	<ul> <li>Introduction of facilitators and participants</li> <li>Understanding the Goal and Objectives of the training.</li> <li>Briefoverview about the course</li> <li>Agenda of the day shared and discussed</li> </ul>	At the end of the session, participants will be able to: • Define landslides • Explain the landslide vulnerability profile esp. in relation to local context 1 dentify scientifically different parts of a landslide • Understand the direct/ indirect effects of landslide
Sessions Registration	Welcome, Introductions, Course Overview and Ground Rules	What is a Landslide?
Time 0845 -0900	0900-0910 (10 mins)	0910-0945 (35 mins)
No.	-	8

Training Module on Landslide Risk Management

Key Learning Points	<ul> <li>A landslide can occur due to multiple causes classified as natural and/or human induced factors</li> <li>The natural factors that contribute to landslides include rainfall, earthquake, gravity, slope, weathering, soil, geologic formation, etc.</li> <li>The human induced factors leading to landslides include deforestation, unscientific afforestation, land use changes, lack of proper drainage, building construction on slope without proper protection etc.</li> <li>Lack of information/mapping about past landslide occurrences also leads to an uninformed and vulnerable</li> </ul>		<ul> <li>Based on the type of movement landslide can be seen as falling, toppling, sliding, spreading, or flowing.</li> <li>Five major types of landslide are common in Kerala - Rotational, Translational, Rock Fall, Debris Avalanche and Soil creep.</li> <li>Each landslide occurrence has its own characteristic and scale of impact</li> </ul>
Key Learning Objectives	At the end of the session, participants will be able to: • Explain major factors responsible for landslide occurrence. • Identify the natural factors affecting landslides occurrence. • Identify human induced factors responsible for landslide.		<ul> <li>At the end of the session, participants will be able to:</li> <li>Identify different types of landslide based on movement</li> <li>Identify different types of landslides common to Kerala</li> <li>Talk about the identifying characteristics of different types of landslides</li> </ul>
Sessions	Causes of Landslide	Tea Break	Types of Landslides
Time	0945-1030 (45 mins)	1030 - 1045	1045-1145 (60 mins)
No.	m		4

Key Learning Points	<ul> <li>Mitigation measures comprise of the actions that prevent an incident or</li> </ul>	reduce the chance of it	mitigation measures for each type of	landslide	The importance of mainstreaming	landslides mitigation measures.	Some local specific landslide	mitigation measures include drainage	corrections, slope stabilisation,	mechanical construction, biological	protection etc.,	Identifying options for minimizing	landslides risks – avoidance,	prevention, mitigation (including	structural and non-structural	measures), preparedness, and	response.	It is important to remain alert, aware	and prepared during all pre-during	and post the landslide to ensure	minimal impact	
Key Learning Objectives	At the end of the session, participants will be able to:	<ul> <li>Establish need for awareness in mitication of landelides</li> </ul>	<ul> <li>Establish practical mitigation</li> </ul>	measures for different types of	landslides	<ul> <li>Describe key steps to be undertaken</li> </ul>	pre – during and post a landslide to	ensure minimum impact														
Sessions	Identification of Landslide Prone Areas																					
Time	1145-1240 (55 mins)																					
No.	Ŋ																					

Training Module on Landslide Risk Management

No.	Time	Sessions	Key Learning Objectives	Key Learning Points
9	1240-1310 (30 mins)	Steps to Mitigate Landslide Risk	At the end of the session, participants will be able to: • Evaluate major characteristics of landslide prone areas • Highlight the importance of mapping as a tool in landslide risk management • Establish the importance of a Landslide Susceptibility Map • Understand the importance of field study for landslide risk management	<ul> <li>Some areas are more susceptible to landslides than others, it is important to know the characteristics of landslide prone areas</li> <li>Mapsplay an indispensable role in identifying the landslide areas. It providesessential details about the elevation, land use, slope, road etc.</li> <li>Landslide Inventory Maps can document all past landslides in the given area with locations, dates, intensity, and additional box data on impact</li> <li>Landslide Susceptibility Mapping is an important step in landslide risk management. It can also as well as a decision toll for mitigation of landslides is crucial to understand landslides is crucial to understand landslide characteristics</li> </ul>
	1310-1400	Lunch Break		
	1400-1430	Travel to Field Site		

Key Learning Points	<ul> <li>Landslide can cause either by natural and anthropogenic activities. The reason behind most of the landslides in Kerala are of anthropogenic origin</li> <li>Unscientific afforestation, land use change activities, deforestation, insufficient drainage etc.can be considered as the triggering factors for the occurrence of landslide</li> <li>Practical application of Global Positioning System (GPS)</li> <li>Collect landslide locations directly from the field with the help of GPS</li> </ul>	<ul> <li>People living in landslide prone areas have their own experiences and stories, which is important to spread awareness and encourage dialogue</li> <li>Feedback and discussion are key to a holistic training program</li> </ul>
Key Learning Objectives	<ul> <li>At the end of the session, participants will be able to:</li> <li>Recognize landslide features and its characteristics</li> <li>Understand the practical application of GPS mapping along with a demonstration</li> <li>Scientific evaluation of the landslide through field experience</li> <li>Discuss key mitigation and planning measures for a landslide</li> </ul>	<ul> <li>Participants to share personal experiences, stories and learnings</li> <li>Evaluation of the training</li> <li>Discussions, comments, feedback and recommendations to be provided regarding the training</li> </ul>
Sessions	Field Visit	Questions, Feedback and Session Closure
Time	1430-1630 (120 mins)	1630-1700
No.		ω

Training Module on Landslide Risk Management

# 4. ABOUT THE MODULE

This module is prepared on the basis of compiling all session briefs in astandard training package. The methods proposed for the training include lectures/interactive discussions, brainstorming sessions/ experience sharing / participatory learning and guided field work. The training aids utilised to meet the objectives includes PowerPoints presentations, hand-outs, course books etc.

The main purpose of this documentsto enhance knowledge and skills related to landslides risk management of the target audience which is expected to play an important role in reducing landslide incidences and impacts through various kinds of mitigation activities. *The document should be used along with the course book and the PPT slides.* 

## 4.1 Structure of the Training Module

The entire training is designed in a manner that is directed towards enabling the trainers to conduct training on Landslide Risk Management for the landslide prone areas in Kerala. The individual sessions are designed as such to have separate session objectives, key learning points, session plan, training aids etc.

Each session brief follows the below described structure:

- Session Number and Name of the Session
- Duration
- Background of the Topic
- Facilitator's Guide

# **5. SESSION BRIEFS**

Session 1: Welcome and Introductions, Course Overview and Ground Rules



Duration of the Session: 10 minutes

#### **Key Learning Objectives**

- 1. Introduction of facilitators and participants
- 2. Understanding the Goal and Objectives of the training.
- 3. Brief overview about the course
- 4. Agenda of the day shared and discussed

#### **Key Learning Points**

- 1. Participants and facilitators introduced with each other
- 2. Awareness regarding all aspects of Landslide Risk Management Training

## **Facilitator's Guide**

Time Slot in Minutes	Session Plan
0-2	Welcome the participants to the training, introduction of the facilitators and brief about the training.
2-6	Facilitate a quick round of participants' introductions through a participatory method.
	Example – Ask participants introduce themselves by answering the following aspects – Name, Location, Designation and Organization and One unique thing about themselves or hobby or experience of landslide
6-8	Following the introductions, distribute the participants schedule and explain the goal and objectives of the training. Emphasise that this is a basic training aimed to help participants to get an overall understanding of landslides and how to undertake basic measures to prevent them.
8-10	Conclude session by explaining the day's agenda in a sequentially manner. Establish basic ground rules through participatory process for maintaining smooth and effective delivery of training.

## Session 2: What is a Landslide?



## Duration of the Session: 35 minutes

#### **Background about Topic**

This session is to help participants construct a basic understanding of landslides, its features and fundamental characteristic components in detail. It is also beneficial for the participants to understand the scientific aspects, history and scenario of landslide disasters in a global, national and state-wise context. Map illustrations regarding the landslide scenario of Kerala can be used to get a better understanding of the situation. Flip chart drawings make it easier for the participants to remember the concepts they have just learned. As the targeted participants come from different backgrounds, some of themhave been affected by or are exposed to landslide risk.

## **Key Learning Objectives**

At the end of this session, participants would be able to:

- 1. Define landslides
- 2. Explain the landslide vulnerability profile esp. in relation to local context
- 3. Identify scientifically different parts of a landslide
- 4. Understand the direct/indirect effects of landslide

#### **Key Learning Points**

- 1. The term "landslide" refers to a process that results in the downward and outward movement of slope-forming materials, including rock, soil, artificial fill, or a combination of these.
- 2. Landslides occur when a large amount of earth, rock, and other material moves down a steep slope, they can be aided by gravity, rain and other natural processes
- 3. Landslide in Kerala is locally known as 'UrulPottal'
- 4. Western Ghats region in Kerala is identified as one of the major land slide prone areas of the country.13 of the 14 districts of Kerala are prone to landslides which are mainly triggered by rainfall.
- 5. Landslides have different parts broadly a crown, a head, main body, and a toe.
- 6. There are several direct (loss of life, property) and indirect effects (livelihood loss, reduced water quality) of a landslide

#### **List of Training Material**

- LCD Projector
- Laptop
- White Board
- White Board Markers

## **Facilitator's Guide**

Time Slot in Minutes	Session Plan
00	<b>Slide No.1</b> Title Slide
00-01	<b>Slide No.2</b> Read the title of the session and explain the key learning objectives of the session in brief
01-02	<b>Slide No.3</b> Start the session by explaining scientifically various landslide terminologies, its features and basic characteristics in the context of Kerala.
	Ask participants if they can identify theoccurrences of landslide in particular areas.
	Next, describe the forces accelerating landslide activity.
03-05	<b>Slide No. 4</b> Referring to the slide, explain the landslide status of India and major landslide prone areas in India.Emphasize that all landslides exhibit common features and some common early warning signs.Emphasize on the landslide risks related to infrastructures.
	Clarify why landslides are recurrent in specific areas.
06-07	<b>Slide No. 5</b> Referring to the slide, describe the landslide profile and major landslide prone areas of Kerala. Emphasizeon the driving forces behind landslides in Kerala are population pressure and high rain fall.
08-09	<b>Slide No. 6</b> Referring to the slide, explain the impact of Kerala Floods of 2018 due to heavy rainfall, flooding and subsequent landslides. Encourage the participants to share their experiences at the time of landslide.
	Explain the key learning point 'abnormal nature of rainfall as the major cause of recent landslide combined with unsustainable land use practices.'

Time Slot in Minutes	Session Plan
10-12	<ul> <li>Slide No. 7</li> <li>Display Landslide Susceptibility Map on screen and explain its importance. (Map can be downloaded from KSDMA website)</li> <li>Start by asking the participants to identify the areas showing high landslide hazard zones from the map.Help participants to understand that susceptibility map which is considered as the combination of many physical factors causing the landslide.</li> <li>Conclude by explaining the unique physical characteristics of high</li> </ul>
	landslide zones shown in the map.
13-20	<b>Slides No. 8 and 9</b> Start the slide by explaining the various scientific parts of a landslide and describe the peculiarities of each part of a landslide.
	Key learning point isnearly all landslides have uniform major parts- a head, a body and a toe.
21-25	<b>Slide No. 10</b> Linking to the previous slide, display the various parts of the landslide on the slide and ask participants to identify them.
	Ensure that participants understand the different portions of landslide with illustration.
26-27	<b>Slide No. 11</b> Briefly explain the magnitude of damage caused by landslides. Distinguish between direct and indirect effects of landside. Emphasize the point that landslides result in both direct and indirect effects in several ways.
28-30	<b>Slide No. 12</b> Ask the participants to identify the various direct consequences of landslide in context of their local experience.
	With reference to the above and by quoting other examples, from the slide describe the direct consequences of landslide.
31-32	<b>Slide No. 13</b> Discuss the different indirect effects of landslides. Encourage the participants to identify various other indirect effects of landslides.
33-35	<b>Slide No.14</b> Consolidate the learning by emphasising the key learning points.

## Session 3:Causes of Landslide



## Duration of the Session: 50 minutes

#### **Background about Topic**

A landslide may occur due to multiple causes which can generally be classified under the forces of nature and/or human induced factors. High rainfall, snowmelt, stream erosion, earthquakes, volcanic activity or any combination of these factors refer to natural factors which may lead to landslides. Human induced factorsrefer to unsolicited land use changes along the high elevated areas such as deforestation, unsustainable agricultural practices, infrastructure development and/or mining, which can trigger landslides.

#### **Key Learning Objectives**

At the end of this session, participants will be able to:

- 1. Explain major factors responsible for landslide occurrence.
- 2. Explainhow natural and human induced factors lead to landslides.

#### **Key Learning Points**

- 1. A landslide can occur due to multiple causes classified as natural and/or human induced factors
- 2. The natural factors that contribute to landslides include rainfall, earthquake, gravity, slope, weathering, soil, geologic formation, etc.
- 3. The human induced factors leading to landslides include deforestation, unscientific afforestation, land use changes, lack of proper drainage, building construction on slope without proper protection etc.
- 4. Lack of information/mapping about past landslide occurrences also leads to an uninformed and vulnerable

#### **List of Training Material**

- LCD Projector
- Laptop
- White Board
- White Board Markers

## **Facilitator's Guide**

Time Slot in Minutes	Session Plan
00	<b>Slide No.1</b> Title Slide
00-01	<b>Slide No.2</b> Explain the key learning objectives on the session briefly
01-02	Slide No.3 Display the slide and ask participants the question – 'how do landslides happen?' Listen to the immediate responses from the participants and list them on the white board under two categories natural and human induced factors. Add more points to the responses based on your own experience. Mention that each of the natural causes of landslide is explained in detail in the following slides.
03-04	<b>Slide No. 4</b> This slide shows Rainfall as one of the important factors for causing landslide in Kerala. Refer to the slide and explain how rainfall causes landslide. Emphasize that rainfall causes more than 90% of landslides in Kerala. Emphasize that climate change is predicted to increase the intensity of rainfall events and consequent landslide incidence.
05-07	<b>Slide No. 5</b> This slide shows Gravitational Forces as another natural factor causing landslides in Kerala. Referring to the slide, explain the concept of gravitational force in the context of slope surface.Explain how the gravity causes materials to move downwards through a slope.
08-09	<b>Slide No. 6</b> This slide describes how movement and vibrations in the earth in the form of seismic waves that can trigger landslides. Explain to the participants about the relationship between earth quake and landslide and mention the seismic characteristics of Kerala in the context of landslide.
10-12	<b>Slide No. 7</b> This slide explains weathering as one of the natural causes for landslide. Referring to the slide, explainthe causes of weathering. Next, describe the characteristics of weathered rock and explain how natural weathering causes landslides.

Time Slot in Minutes	Session Plan
13-15	<ul> <li>Slide No.8</li> <li>Referring to the slide, exemplify the various attributes of high sloping area.</li> <li>Next, help participants to identify the dynamic process happening in the slope.</li> <li>Estimate the nature of slope which provides favourable condition for landslides.Distinguish stable and unstable slopes and help the participants to understand the rate of movement of falling materials.</li> </ul>
16-18	<b>Slide No.9</b> Start by explaining the composition of soil.Emphasise on soil texture which plays a vital role in landslide.Clarify the idea that high porous soil takes on water like a sponge and tend to become pressurized resulting in landslides.
19-22	<b>Slide No.10</b> Refer to the slide and explain that the occurrence of joints, cracks or fissures in the rocks can create conditions of instability thereby causing landslides. Emphasize that these features are the areas of weakness. Clarify that unstable geologic structures are prone to landslides.
23-25	<b>Slide No.11</b> Ask the participants to recall various anthropogenic (human-induced) factors leading to landslides. Referring to the slide, describe each human induced factor affecting landslides occurrence in brief with examples. Mention that each of the important causes of landslide is explained in detail in the following slides.
26-27	<b>Slide No.12</b> Describe how the trees roots help the soil from moving downslope. Explain the fact that deforestation has caused loss of fauna to hold the soil. Emphasize that heavy rain & stress on the soil particles may increase pressure leading to landslides in the long run.
28-30	<b>Slide No.12</b> Explain the idea of afforestation initiatives where it encourages the planting of exotic species such as Eucalyptus and Acacia. Ask participants if they know about the negative aspects of planting exotic plant species. Refer to the slide and describe the inability of shallow roots to anchor the soil particles in the slopes. Explain that unscientific afforestation initiatives eventually lead to landslides.

Time Slot in Minutes	Session Plan
31-35	<ul> <li>Slide No.14</li> <li>Explain the process of transformation of land from one use to another.</li> <li>Ask the participants to identify the common land use changes in their areas.</li> <li>Emphasize on the idea that the land use changes like conversion of the natural environment into unsustainable agricultural practices, mining, etc. leads to landslide.</li> <li>Discuss that these unsustainable land use changes for the last 30 years along the Western Region of Kerala are major causes of landslides occurrence.</li> </ul>
36-38	<b>Slide No.15</b> Explain how landslides are common around steep roads without any protection wall. Describe that road building with inadequate soil stabilisation and anchoring protection results landslides. Emphasize the importance to ensure the stability of road cuts and road embankments.
39-40	<b>Slide No.16</b> Explain how unsustainable building practices cause landslide. Discuss about the construction without proper engineering and geological inputs which trigger landslides. Describe the reasons of minor landslides in Kerala.
41-43	<b>Slide No.17</b> Describe the nature of rainfall-triggered landslides. Explain the role of drainage in and around a landslide area and how it acts as a key source to pore pressure. Explain the concept of pore pressure to participants in brief. Referring to the slide, emphasize that lack of proper drainage facilities and other water release mechanisms can cause landslides.
44-45	<b>Slide No.18</b> Check with the participants whether they are aware of proper maps with topographic information which would be useful in mapping past landslides. Next, explain the importance of awareness of past landslide location.Emphasize the value of scientific knowledge in identifying landslide prone areas.
46-50	<b>Slide No.19</b> Consolidate the learning by emphasising the key learning points.

## Session 4: Types of Landslides



## Duration of the Session: 60 minutes

#### **Background about Topic**

Landslides can be classified based on the type of movement. The highlands of Kerala experienced several types of landslides, called "UrulPottal" in the local vernacular. In the state, four major types of landslides are generally observed i.e. rotational slide, transitional, rock fall and soil creep. Understanding the characteristics of the specific type of landslide hazard in the area is vitally important to consider when planning or adopting appropriate mitigation measures to lessen the risk of loss and damage. The typical characteristic features of each landslide type and their reasons can be discussed with the help of multimedia (audio, video and images) to increase the audience attention and focus.

#### **Key Learning Objectives**

At the end of this session, participants will be able to:

- 1. Describe the major characteristics of various types of landslides.
- 2. Specify the major characteristics of landslide prone areas.

## **Key Learning Points**

- 1. Based on the type of movement landslide can be seen as falling, toppling, sliding, spreading, or flowing.
- 2. Five major types of landslide are common in Kerala Rotational, Translational, Rock Fall, Debris Avalanche and Soil creep.
- 3. Each landslide occurrence has its own characteristic and scale of impact

#### List of Training Material

- LCD Projector
- Laptop
- White Board
- White Board Markers
- Multimedia (Video & Audio)

## **Facilitator's Guide**

Time Slot in Minutes	Session Plan				
00	<b>Slide No.1</b> Title Slide				
00-02	<b>Slide No.2</b> Start the session by quickly explaining the key learning objectives of the session.				
03-04	<b>Slide No.3</b> Start the session by asking participants about the common types of landslides in Kerala they know. Encourage the participants to explain the common type of landslides in Kerala. Referring to the slide, describe the major landslide types in Kerala.				
05-08	<b>Slide No.4</b> Ask the participants to explain the landslides based on type of movement by reading the names on the slide.Consolidate the participants' explanation by detailing the various type of movement and its characteristics.				
09-12	<b>Slide No.5</b> This slide gives details of the common landslides seen in Kerala. To begin, list the landslide types and encourage the participants to describe the common landslide types they have seen among the list provided. Ask participants to specify its peculiar characteristic features based on their experience.				
13-18	<b>Slide No.6 to 11</b> This slide gives details of the rotational type of landslide. Referring to the slide, describe the peculiarities and causes of rotational landslides.Ask the participants whether they have experienced this type of landslide. Emphasize the fact that it is a common type of landslide in Kerala.				
19-24	<b>Slide No.12 to 13</b> Define the term translational landslide and its characteristics. Next, explain to the participants the difference between rotational and translational landslides.Ask the participants whether they have experienced this type of landslide. Help the participants to identify its nature and causes with illustrations.				

Time Slot in Minutes	Session Plan					
25-29	<b>Slide No.14 to 17</b> Explain the term debris avalanche. Ask the participants to differentiate it from rotational and translational landslides.Emphasize that it is speed based on rate of movement along with its effects. Make participants aware of its characteristics and causes with illustrations.					
30-34	<b>Slide No.18 to 20</b> Describe the term rock fall.Explain how it is different from other type of landslides. Ask the participants about the triggering factors which could lead to rock fall Help participants to identify its characteristics with illustrations.					
35-39	<b>Slide No.21 to 22</b> Define the term soil creep.Compare it with other types of landslides. Refer to the slide and explain the major characteristics and causes with illustrations.Emphasize its regional occurrence. Clarify the idea as to how this type leads to a landslide.					
40-44	<b>Slide No.23</b> Explain the concept of soil piping.Describe its occurrences in Kerala. And help participants to identify its characteristics and causes with illustrations. Ask participants whether they have experienced such a process in their locality.					
45-55	<b>Slide No.24</b> Play videos describing various types of landslides in Kerala. Ask participants to relate each landslide type shown with their surrounding landslides.					
56-60	<b>Slide No.25</b> Conclude the session by reiterating on the key learning points listed on the slide					

## Session 5: Identification of Landslide Prone Areas



## Duration of the Session: 55 minutes

#### **Background about Topic**

It is important to understand that the 'past' holds the key to the 'future', especially when landslides are concerned. In Kerala, there are some places where landslides are a common occurrence, while in some others, it is of low frequency. Landslide Inventory Maps can document all past landslides in the given area with location, slope, geology, soil aspects, land use, rainfall data etc. which contribute to landslides. All these causative factors are combined with their relative importance to form the landslide susceptibility map. It can be used as a tool to help to identify the land areas best suited for development by examining the potential risk of land sliding. Once landslide susceptibility is identified, investment projects can be developed which avoid, prevent, or substantially mitigate the landslide hazard.Illustration of the Landslide Susceptibility Map of the corresponding area helps to understand and relate the sessions clearly.

## **Key Learning Objectives**

At the end of this session, participants will be able to:

- 1. Evaluate major characteristics of landslide prone areas.
- 2. Highlight the importance of mapping as a tool in landslide management.
- 3. Establish the importance of a Landslide Susceptibility Map.

## **Key Learning Points**

- 1. The role of a map in identifying the landslide areas is an indispensable one.It provides basic details about the elevation, land use, slope, road etc.
- 2. Field survey and mapping of landslides are crucial to understand the landslide characteristics.
- 3. Landslide Inventory Maps can document all past landslides in the given area with locations, dates, intensity, and additional box data on impact.
- 4. Landslide Susceptibility Mapping is an important step in landslide investigation and landslide risk management.

## **Facilitator's Guide**

Time Slot in Minutes	Session Plan				
00	<b>Slide No.1</b> Title Slide				
00-02	<b>Slide No.2</b> Explain the key learning objectives on the session briefly				
03-06	<b>Slide No.3</b> Start the slide by asking participants to share their ideas regarding the indicators of a landslide.Next, ask the participants to identify the areas which are vulnerable to landslides. Referring to the slide, evaluate major characteristics of landslide prone areas.				
07-10	<b>Slide No.4</b> Encourage the participants to identify the areas which can be considered as safe zones with regard to landslides.Describe the areas that are considered to be safe from landslides but have a potential risk. Referring to the slide, evaluate major characteristics of those areas.				
11-13	<b>Slide No.5</b> Ask the participants to define 'map'. Assimilate the responses of the participants and spell out the definition. Next, ask participants to mentionthe different uses maps in landslide analysis. Consolidate the slide, by emphasizing the significance of maps in landslide risk management.				
14-18	<b>Slide No.6 to 8</b> Refer to the slide and discuss the various basic elements of map. Make participants aware of the importance of the individual elements in a map by illustrating a map.				
19-21	<b>Slide No.9</b> Explain to participants that it is important to understand that the 'past' holds the key to the 'future', especially where landslides are concerned. Describe the Landslide Inventory Map and its importance with illustration. Refer to the slide and explain the details needed for the creation of a Landslide Inventory Map.				
22-24	<b>Slide No.10</b> Define the term Global Positioning System (GPS).Explain briefly about the working principle of GPS. Emphasize its importance and use in landslide mapping.				

Time Slot in Minutes	Session Plan			
25-28	<b>Slide No.11</b> Provide participants with the knowledge about the importance of field study. Discuss how it is important to understand the details directly collected from the field.			
29-31	<b>Slide No.12</b> Give participants an introduction to topographic maps.Explain its importance and use in landslide risk management.			
32-34	<b>Slide No.13</b> Briefly explain about the importance and use of Google Earth Map as a reference data in landslide mapping.			
35-39	<b>Slide No.14 to 16</b> Illustrate various maps of individual factors responsible for the landslide activities. <i>Note: Include maps of Elevation, Slope, Geology, Soil, Land use etc.</i>			
40-45	<b>Slide No.17</b> Referring to the slide, that the landslide susceptibility mapping is an important step in landslide investigation and landslide risk management. Categorize the areas which are subject to landslides and measure them from low to high. Help participants to identify the land areas best suited for development by examining the potential risk of land sliding.			
46-51	<b>Slide No.18 and 19</b> Drawing from the previous slide, emphasize on the fact that the Landslide Susceptibility Map acts as a decision making tool for mitigating landslide. Talk about how crucial it is in making decisions around safety, infrastructure, and land use.			
52-55	<b>Slide No. 20 and 21</b> Referring to the slide, provide an introduction about the basic cartographic (mapping) techniques. Describe the existing sources of maps such as topographic maps, Google Earth maps etc.			
Note: The detailed field p the field visit. During the are asked to identify v participants are also ask the landslide. GPS hand location points are colle	practical including the mapping of landslide mentioned in these slides is done during e field visit the various scientific aspects of landslide is described. The participants arious parts of landslides thereby understanding the phenomenon in detail. The ked to share their local experience about the immediate rescue operations done after s on training is given to the participants during the field visit. Using GPS the landslide cted directly from the site.			
56-60	<b>Slide No.22</b> Summarize the key learning points and clarify questions or queries if any.			

## Session 6: Steps to Mitigate Landslide Risk



## Duration of the Session: 30 minutes

#### **Background about Topic**

Correction of an existing landslide or the prevention of a pending landslide is a function of a reduction in the driving forces or an increase in the available resisting forces of landslide. Corrective measures can be adopted in the existing landslide prone areas. This includes developmental activities with proper precautionary measures in hilly areas which will reduce economic and social losses due to slope failure. Restriction of developmental programmes essentially involves large-scale modifications of hill slope in high landslide hazard zones. The mitigation measures can be collectively categorized into structural measures (such as drainage correction, mechanical protection, modification of slope geometry, internal slope reinforcement) and non-structural measures (like proper land use measures, biological or permanent construction). These measures for mitigation mostly depend on the type of the landslide. Mitigation measures for various types of landslides can be highlighted with suitable illustrations.

#### **Key Learning Objectives**

At the end of this session, participants will be able to:

- 1. Describe the importance of awareness in mitigation of landslides
- 2. Establish practical mitigation measures for different types of landslides
- 3. Describe key steps to be undertaken pre during and post a landslide to ensure minimum impact

## **Key Learning Points**

- 1. Mitigation measures comprise of the actions that prevent an incident or reduce the chance of it happening. There are different mitigation measures for each type of landslide
- 2. The importance of mainstreaming landslides mitigation measures.
- 3. Some local specific landslide mitigation measures include drainage corrections, slope stabilisation, mechanical construction, biological protection etc.,
- 4. Identifying options for minimizing landslides risks avoidance, prevention, mitigation (including structural and non-structural measures), preparedness, and response.
- 5. It is important to remain alert, aware and prepared during all pre-during and post the landslide to ensure minimal impact

#### **List of Training Material**

- LCD Projector
- Laptop
- White Board
- White Board Markers

## **Facilitator's Guide**

Time Slot in Minutes	Session Plan					
00	<b>Slide No.1</b> Title Slide					
00-02	<b>Slide No.2</b> Explain the key learning objectives on the session briefly					
03-05	<ul> <li>Slide No.3</li> <li>Initiate discussion by asking question "What is landslide mitigation?"</li> <li>Listen to the participants' responses and note them on white board. Help participants to discuss about 1) landslide vulnerability 2) reduction of existing vulnerability and 3) enhancing capacity is essential for landslide mitigation.</li> <li>Share that it is impossible to eliminate landslide as a phenomenon but it impacts can be reduced drastically by adopting proper mitigation measures.</li> <li>Encourage participants to share what they understand by mitigation.</li> <li>Focus participants' attention by encouraging them to identify few local specific landslide mitigation measures.</li> <li>Conclude the slide by emphasizing the need for mainstreaming landslides mitigation measures.</li> </ul>					
06-07	<b>Slide No.4</b> Explain significance of landslide mitigation measures adopted in the existing landslide prone areas. Discuss about various corrective measures to be adopted in the landslide prone areas. Explain that corrective measures can be classified under: structural and non-structural measures.					
08-09	<b>Slide No.5</b> Referring to the slide, discuss appropriate local specific structural measures as a strategy for landslide mitigation.					
10-11	<b>Slide No.6</b> Explain the importance of drainage correction in the steep slopes. Emphasize on the key point that drainage correction helps in reducing infiltration and allows excess water to move down without hindrance.					
12-13	<b>Slide No.7</b> Referring to the slide, help the participants to understand that proper land use measures should be followed. Emphasize that adoption of effective land use regulations and building codes based on scientific research.					

Time Slot in Minutes	Session Plan
14-15	<b>Slide No.8</b> Explain the need of adoption of Mechanical Protection measures. Briefly explain about French drains, geotextile wrapping etc., and other mechanical protection measures (based on your knowledge and experience in Kerala context).
16-17	<b>Slide No.9 and 10</b> Explain the need of Implementing biological or permanent conservation measures. Explain the importance of afforestation and introduction of deep-rooted plants.
18-19	<b>Slide No.11</b> Referring to the slide, explain the important role of awareness generation in publicabout the personal safety measures taken during landslides.
20-21	<b>Slide No.12</b> Start the slide by conducting a deliberation on different mitigation measures suited for various types of landslides. Next, referring to the slide, explain that French drains, toe protection, geotextile, afforestation etc. are some of the mitigation measures for rotational type landslides.
22-23	<b>Slide No.13</b> Discuss the possible measures to mitigate debris avalanche. Emphasize the point that mitigation of debris avalanche consists of drainage corrections, French drains, biological protection etc.
24-25	<b>Slide No.14</b> Explain that retaining walls, French drains, drainage corrections, biological protection measures etc., most common measures for mitigating translational landslides by stressing on
26-27	<b>Slide No.15</b> Explain the importance of implementing rock curtains, retaining walls, cutting terraces etc. for mitigating rock fall. Discuss the feasibility of these measures in the local context.
28-29	<b>Slide No.16</b> Explain that Mitigation measures for soil creep includes introduction of proper drainage, French drains, stone walling etc. Discuss the feasibility of these measures in the local context.

Time Slot in Minutes	Session Plan
30-31	<b>Slide No.17</b> Explain the importance of emergency planning in the event of landslide. Ask participants to share few emergency planning measures adopted during the recent landslide. Compare same measures with that of standard emergency measures before the landslides. Propose few local specific emergencies planning in the context of landslide.
32-33	<b>Slide No.18</b> Emphasize the importance of being alert about your surroundings and build knowledge about the local geographical peculiarities of the region. Mention that it is important to observe unusual scenarios observed in terrain after the heavy rainfall.
34-35	<b>Slide No.19</b> Describe that it important to understand how landslides occur through examination of surrounding areas based on landslide area characteristics, history and observations during pre-landslide phase.
36-38	<b>Slide No.20</b> Explain the importance of awareness of bulging earth, cracks, fissures, foundation cracks in buildings, soil distortions etc. Discuss the feasibility of forming local level task force to monitoring the terrain during the rainy season.
39-41	<b>Slide No.21</b> Explain the importance of Quick response in an emergency. Discuss the village level task force as a measure for immediate response in the case of a landslide.
42-43	<b>Slide No.22</b> Referring to the slide, explain about the things to do after a landslide.
44-45	<b>Slide No.23</b> Summarize the key learning points and clarify questions or queries if any.

## **Session 7: Field Visit**

## Duration of the Session: 2hrs

#### **Background about Topic**

Followed by the class room lectures and discussion the participants will be taken to the nearby preidentified landslide locations. As part of this, the scientific aspects of landslide are to be described in the field in a layman's language. The participants will be asked to share their local experience as well as the knowledge regarding the landslide. Moreover, a hands-on training session of the GPS instrument may also begiven for the participants during the fieldvisit. Deliberations should be conducted on the major causes of the landslide based on the local knowledge of the participants. It is proposed that local specific mitigation and precautionary measures be adopted in the case of future landslides. In the field visit, the participants are to be asked to identify various parts of landslides thereby understanding the phenomenon in detail. At the end of field work, participants will need to discuss the road map ahead to mitigate the future landslide risks.

#### **Key Learning Objectives**

At the end of this session, participants will be able to:

- 1. Recognize landslide features and its characteristics
- 2. Understand the practical application of GPS mapping along with a demonstration
- 3. Scientific evaluation of the landslide through field experience
- 4. Discuss key mitigation and planning measures for a landslide

#### **Key Learning Points**

- 1. Landslide can be caused cause either by natural and/or anthropogenic activities.
- 2. Unscientific afforestation, land use change activities, deforestation, insufficient drainage etc. can be considered as the triggering factors for theoccurrence of landslide
- 3. Practical application of Global Positioning System (GPS)
- 4. Landslide locations mapping from the field with the help of GPS

## **Facilitator's Guide**

- Ask the participants to describe various parts of landslide from the field.
- Ask them to identify the type of landslide directly from the field.
- Explain the effects of landslide caused in that area.
- Examine the factors leading to landslide.
- Demonstration of GPS instrument

Encourage the participants to use the GPS and collect the landslide location directly from the field

• Encourage the participants to discuss about the mitigation measures to be used in that area.

Time Slot in Minutes	Session Plan					
00-15	Describe the geographical peculiarities of the region. Inspect the geological characteristics of region such nature soils, rocks, slope nature etc. and demonstrate its peculiarities					
16-30	Ask the participants to describe various parts of landslide from the field.					
31-40	Ask them to identify the type of landslide directly from the field.					
41-55	Examine and discuss the effects of landslide caused in that area.					
56-60	Examine the factors leading to landslide.					
61-76	Demonstration of GPS instrument. Participants to gain clear understanding of the tool and its usage.					
77-108	Encourage the participants to use the GPS and collect the landslide location directly from the field					
109-120	Discuss the mitigation measures that can be implemented in that area.					

## Session 8: Questions, Feedback and Session Closure



## **Duration of the Session: 30 minutes**

#### Background about Topic

Personal experience and knowledge of the participants regarding landslides are shared in this session. It also includes discussions, comments, feedback and recommendations along with evaluation of the training.

#### **Key Learning Objectives**

- 1. Participants to share personal experiences, stories and learnings
- 2. Evaluation of the training
- 3. Discussions, comments, feedback and recommendations to be provided regarding the training

#### **Key Learning Points**

- 1. People living in landslide prone areas have their own experiences and stories, which is important to spread awareness and encourage dialogue
- 2. Feedback and discussion are key to a holistic training program

## Facilitator's Guide

- Encourage the participants to share their experience and knowledge gained from this training.
- Ask them to share the feedback and recommendations regarding the training sessions.

Time Slot in Minutes	Session Plan
00-15	Encourage the participants to share their experience and knowledge gained from this training. Evaluate training programmes based on given criteria
16-30	Participants to share the feedback and recommendations regarding the training sessions.

## List of Training Material

- Pen
- Pad
- Printout of evaluation forms

# 6. FACILITATOR GUIDANCE NOTE ON GROUP WORK

## Purpose and Process

- The **purpose** is what the group has agreed to discuss or make a decision around. It needs to be clear to everyone and to be owned by the group.
- The **process** is the work the facilitator does to ensure the discussion flows well and participation is maximized.

## Purpose in Facilitation

- **Keeping the group 'on track'** gently checking out with the group if what looks like a side track to you, is off the point.
- **Identifying and linking common themes** by listening for people saying the same thing in different ways we can link themes and help prevent the discussion going around in circles
- **Clarifying confusing statements** by reflecting back what we have heard, checking out if this is what they meant we can help the individual clarify their thinking and the issues become clearer.
- **Summarizing/organizing ideas** being able to succinctly summarize the main points, as you have heard them articulated by the group, is a great skill. It can help clarify where the group is up to on an issue, identify where to focus next and save time.
- **Decision identification** in a decision making process it is important to recognize when the group seems like it is ready to make a decision, otherwise the discussion may go around in circles going over old ground.
- **Testing for agreement** when making decisions we need to seek specific agreement from the group with openness to some people still not being up to this point of agreement.

## Process in Facilitation

- **Getting group permission** It is important that people clearly understand the role of facilitator, and that the facilitator is at the 'service of the whole group'. We need to have 'permission' from the group before we step into the role of facilitator. It is this 'permission' that gives us the right to facilitate the group.
- **Ensure the expected outcome/s or objectives are clear**-Review objectives with the group at the beginning of the meeting, if these have been established in advance of the meeting.
- **Establish expectations-** Ask about the expectations the participants have of you and each other. Then ask them to list their hopes and concerns of the meeting. If necessary, help them to set their own 'ground rules' whilst working together i.e. acceptable behaviors.
- Equalizing and managing participation- Participant's communication styles may vary, along with their quantity of verbal contributions. Not everyone needs to participate to exactly the same level. However, it is important that the air space is shared and that everyone gets a chance to contribute. Draw out the quieter participants through small group work. Try asking a 'safe' question or establishing their opinion, once the topic has been initially debated. Sometimes you may need to ask one person to hold on to a point they were going to make to give another person a chance to speak or finish what they were saying. You can ask to hear from people who have not spoken yet, or occasionally go around the whole group asking for everyone's thoughts. In addition, consider allocating different roles to the high frequency or noisy contributors such as minute taker, time keeper, or writing on the flipchart. Ensure group work has a balance of participants with different communication styles.

- **Pacing the session** If the group seems to be anxious about time and is rushing through an item being discussed, you can point this out and invite them to slow down. If the group feels' flat' or the energy is low, you might ask the group if others feel this 'flatness' and if so what might be causing it. Maybe you may simply need a break or a quick energizing activity. As facilitator you don't have to try and work out what is going on, you just need to name what you notice to the group. The group is then responsible for deciding what to do.
- **Negotiating time adjustments** Attaching times to each agenda item in a meeting or each segment in a group session can help manage time. The group needs to understand and 'own' this and agree if you need to go over time. Everyone must consciously agree if a meeting is to go past the nominated time.
- Adjust facilitation style The facilitation style needs to meet the needs of the group at different development stages. For example, a directive style of facilitation works well at the beginning of a meeting. This is because participants typically prefer someone to initially take charge and take them in the right direction particularly in new group meetings. However, after time when the group has settled down working effectively together, a more suggestive or consultative facilitation style would be more appropriate.
- **Identifying and acknowledging feelings** When people express feelings, verbally or nonverbally, associated with an issue these need to be gently acknowledged. This lets the person know that we hear these feelings and that we are ok with them being expressed.
- **Interpersonal communication issues** When there seems to be some clash or unspoken tension between some people in the group which is affecting the group process, it is helpful to name these so they are brought into the open. Remember, the facilitator does not need to have an answer to the problem. The people involved or the group can work out what needs to be done.
- **Conflict** Conflict in the group is probably the number one facilitator fear! Again, we don't need to know what to do about it and it's not our responsibility to 'fix' it. We need to name it (without blame or judgment) and then facilitate the group to decide what to do with it.
- **Soliciting feedback** It is useful to seek the group's feedback from time to time during a meeting or group session, especially if things seem flat or off track. It is not a sign of failure to check out with the group how things are going. It is all part of being at the service of the group. Experienced facilitators need to do this too. Sometimes as the facilitator we can get a bit lost with the process or where things are up to.
- **Evaluation** Every group meeting should end with an evaluation. This helps everyone in the group take some ownership of the group process. It informs us as facilitators so we can learn from the feedback and take this into account next time. It also helps prevent people going away from a session with unexpressed feelings about the session.

## **Group Facilitation Techniques and Methods**

## **Ground Rules**

First, the facilitator or meeting leader should get the group establish some 'ground rules' or a 'team code' for group working. Do this at an early stage of the group coming together.

In addition, key principles for setting these ground rules are that they:

- Establish an acceptable code of behavior.
- Provide a frame of reference for group members to challenge constructively.
- Help the group gain agreement of what is important.
- Are specific enough to be practical.
- Do not stifle the groups' creativity.
- Remain within the team.

So how do you go about setting these group working rules? We suggest:

- Getting the group and recording feedback on the flipchart.
- Asking each individual in the group to summarize their own thoughts on post-it notes, then place them on the board.
- If time is short, have some visuals with key words on that represent 'ground rules' or an appropriate 'team code of behavior' for the day.

## Brainstorming

Brainstorming is an ideal tool for generating a large quantity of ideas within the group. However, for effective brainstorming sessions:

- Ideas should flow freely.
- Aim for quantity, not quality of ideas.
- Record every idea clearly.
- Do not criticize or evaluate ideas in the session.

In addition, the facilitator should also encourage the team to come up with several 'off the wall' ideas. These can often stimulate the ideal solution.

## Flipchart

Using a flipchart during a team meeting can provide a creative, yet structured, working environment and bring focus to the group. Here are a few tips for effective flipchart use:

- Place the flipchart at the front of the group.
- Ensure you have plenty of flipchart paper to hand.
- Stand to the side of the flipchart to ensure everyone can see.
- Whilst standing to one side, practice writing on flipchart. If you are right handed you may find standing to the left (facing the flipchart) of the flipchart easier.
- Write headings, where appropriate, onto the flipchart to focus the group on the issue or question.
- Use clear, bold, large font ('capitals only' helps some facilitators), to ensure the participants can read easily.
- Utilize different colors and bullet points when writing on the flipchart. However, remember that 'red' and 'green' are not helpful for group members who are color blind.

## Structured Problem Solving/Decision Making

There are many different problem-solving processes available, but essentially, most stages follow this structure:

- Define the problem.
- Present the background.
- Generate ideas.
- Group ideas.
- Choose the idea/s.
- Check commitment.

## Meta-planning

Meta-planning is a simple technique that encourages individuals to express their thoughts on the

issue under discussion. In summary, it involves writing key words onto Post-it notes and then collectively placing and arranging them into sub-groups on a flipchart or wall space.

Ask individuals to quietly write one idea per Post-It note and then place the notes onto a board, sheet of flipchart paper or similar. When all the notes are on the board, you (or one or two members of the group) can then collate similar ideas together and add a sub heading. As a result, this approach helps to incorporate everyone's ideas and contributions in the shortest amount of time. It also enables the group to come to some quick conclusions.

## Ranking

Ranking is a decision-making technique that helps the group select the most appropriate and relevant idea. Firstly, you can use brainstorming to generate the quantity of ideas you are looking for. Then the group must determine a selection criterion to use, to guide their personal decision-making process, against a numerical scale.

For example, each person might apply a one to six rating, where six is their preferred choice. Finally, the scores of each participant are then added together to determine the most appropriate and relevant idea.

#### **Round Robin**

This simple technique aims to raise participation levels or to help define a problem. Then each person in the group is asked to state their views on the issue under discussion, without being interrupted by anyone else in the group.

As a result, the facilitator is then able to get the group to summarize these ideas and views, before the group moves on.

## Energizers

Energizers are ideal to raise personal energy levels within the group. Use these, where necessary, at appropriate intervals throughout the day, to re-vitalize the group. You can build up your repertoire of energizers by reviewing training manuals, sharing ideas with colleagues and thinking up your own. The key principles of using energizers are:

- They should be fun and uplifting.
- Make them short e.g. five minutes.
- Conduct them with sufficient space.
- To be mindful of any potential health and safety hazards e.g. no chairs or equipment in the way.
- They are not physically too demanding and that everyone in the group will be able to participate.

#### **Group Review**

Getting the group to review what they have learnt and gained out of the meeting will help facilitate higher performance. This only takes five to ten minutes. Start by asking three simple questions:

- What did we do that worked well?
- Did anything not work well?
- Should we do anything differently next time?

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# 7. LIST OF ENERGISERS

## Fruit Salad

Ask the participants think of 5-6 fruits name (depend on the number participants present but it should be made sure that there are at least 2 people with the same fruits. E.g. if there are 6 people have 3 fruit names). After the fruits name has been identified, ask them to stand in a circle and say the name of the fruit in a series and ask them to remember their fruits name. The facilitator will call out different fruit names at a time and those participants whose fruits name are called out need to run and take space in the circle. Make sure that the circle does not break.

## Collective Counting 3 and 7 clap

Explain to the group that we'll be working together to count as high as we can. Group sits in a circle and one person starts by saying 'one'. The person on their right says 'two' and so it continues. However, for any number that has a 3 or a 7 in it, the person needs to clap rather than saying the number. This is not about tricky maths and thinking of numbers that are made up of 3s or 7s (like 14 or 21), just numbers that actually has a 3 or 7 as part of its name (3,7,13,17,23etc). When someone says a number that has a 3 or 7 in it, the group need to start again from the beginning. The facilitator needs to play an active role in restarting the group. The thirties are often tricky as people don't realize that they need to clap for all of them. That's great! Don't tell them ahead of time, it causes laughter and sharpens their thinking. Try to play until the group reaches 50 or higher. However, if you run out of time its fine to finish earlier. This can be repeated as an energizer later in a workshop as groups like to try and better their previous score.

#### Name Games

Two people to your left One person starts by introducing themselves "I'm ......" The person on their right then introduces the person who went first and then themselves, "this is ...... and I'm ......". Then the third person introduces person one and two (the two people to their left) and then themselves. E.g. "This is ....., this is ..... and I'm ......" Person four doesn't introduce everyone who has already been introduced, just the two people on their left (person two, three and then themselves). Person five also introduces the two people on their left and then themselves (e.g. person three, four and themselves) and so on. Let people know at the beginning that this isn't the scary game where they have to try and remember everyone, they only need to remember the two people to their left. This exercise works well as the group will hear everyone's names three times.

## Name Ball Throw

Once everyone has already introduced themselves to one another and heard each other's names, get everyone into a circle. Have one person start and throw the ball to someone else while saying their name. Continue, with each person having to throw the ball to someone who hasn't already received the ball. Once the ball has made its way to everyone in the group, start again from the beginning following the same sequence of people (saying the names as the ball is thrown), this time a little faster, encouraging people to also remember the name of the person that threw the ball to them. Once you have finished, you can then try doing this in reverse, with each person throwing the ball back to the person that threw it to them. For added complexity you can add another ball.

## **Alliteration Introductions**

An excellent game for players to get to know each other's names. Ask group members to stand in a circle, if room space permits. A player starts the game by introducing himself or herself by making a gesture, and alliterating his/her name, e.g. "I'm Wonderful Wendy" or "I'm Smart Steve". The next player points to the first player, repeats the previous player's name, attribute and gesture, and does something similar about himself or herself. And so on. The game ends with the first player having to do every other player's gesture, repeating their names and attributes.

## The Telephone/Chinese Whisperer

Participants should sit or stand in a circle. The facilitator quickly whispers a message to one participant. This participant passes the message in a whisper to the next person and so on. The last person shouts out the message. Chances are the final message will be different from the original. Here is an example of an initial message (note how two different activities are blended into the initial statement, a sure cause for confusion when whispered quickly): "I had rice for dinner and then dressed in blue to go dancing."

## Find Someone Wearing

Ask participants to walk around loosely, shaking their limbs and generally relaxing. After a short while, the facilitator shouts out "Find someone..." and names an article of clothing. The participants have to rush to stand close to the person described. Repeat this exercise several times using different types of clothing.

#### **References for more group energizers:**

- http://awea.org.nz/sites/awea.org.nz/files/Collection%20of%20energisers%2C%20name%20g ames%2C%20and%20ways%20to%20break%20into%20small%20groups.pdf
- https://sixth.ucsd.edu/ files/ home/student-life/icebreakers-teambuilding-activitiesenergizers.pdf
- http://reprolineplus.org/system/files/resources/icebreak3.pdf
- https://www.aidsalliance.org/assets/000/001/052/ene0502 Energiser guide eng original.pdf?1413808298

# 8. EVALUATION FORM

Date and Venue:

How will you rank the training course?

Please rank the following between 1 (poor) and 5 (excellent)

Course Objectives and Delivery		2	3	4	5
To what extent have the objectives of the programme been achieved?					
Did the learning aids and resources assist you in achieving the learning objectives?					
Was the delivery of course sessions effective?					
To what extent did the course strike the right balance between lecture, discussion, and exercise?					

Course Content		2	3	4	5
To what extent was the course content relevant to learning of the subject?					
How do you feel about the quantity of content at this training?					
How would you rate the content provided at the training?					

Facilitators' Evaluation		2	3	4	5
Did you think the facilitators were well prepared and professional?					
Did the facilitators answer questions clearly and accurately?					
Please rate the overall quality of facilitation					

Training Administration and Venue	1	2	3	4	5
How was the course booking procedure?					
Were the joining instructions adequate?					
Did the course represent value for money?					
Were facilities at the venue suitable for training?					
Were the accommodation and catering suitable?					

## What is your overall rating of this programme? (Please tick or circle)

Poor	1	2	3	4	5	Excellent

Please comment further on the following

What did you learn from the programme?

What did you like the most about the programme?

What did you like the least about the programme?

Do you have any suggestions on how we can further improve the programme?

It is optional to place your name on this form, however, should you wish to identify yourself and any further training you would like to undertake, please use this box.

38 Training Module on Landslide Risk Management



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