

10. Module on ToT programme on Disaster Management

Aim of the Course:

The course aims at developing skills and capacity of the elected members/officials working as disaster management teams to effectively manage different phases of disasters in district.

Methodology

The training uses following methods in order to ensure maximum level of transfer of learning;

- Presentations, Lessons, Case Studies and Demonstrations
- Table Top Exercises and games
- Group Activities and Group Exercises
- Role Play Sessions

Objectives

Participants will be able to;

- Demonstrate the trainer skills for DM training
- Play different roles as Disaster manager at different phases of disaster
- Do HRVC analysis and disaster action planning
- Practice the Standard Operating Procedures during mock exercise
- Develop scenario and conduct TTX for a simulated disaster
- Do individual and group assignments

Target Group

Officers from the Education department

Resource Persons

Trainers are drawn from KSNDMC, ISRO/KARSAC, NIMHANS, Bomb Squad, Fires Services, Private Sector, CDM, ATI Mysore and other agencies

Expected Outcome

Participants will be able to use the skills to work as Disaster manager and as a Trainer in disaster management

Validation

Apart from daily assessment, the course will be validated by using immediate reaction questionnaires and oral feedback by the participants at the end of the course.

Training Module

Day I	Sessions I and II
Topic	Introductory Activity
Contents	<ul style="list-style-type: none"> • Introduction of Course Team and Faculty • Introductory Game • Expectations of participants • Expectations of trainers
Session Objective	Participants will be able to; <ul style="list-style-type: none"> • Share experiences in DM • List expectations from the course • Introduce themselves • Set ground rules for the course
Expected Outcome	<ul style="list-style-type: none"> • Listing of Expectations from the course • Setting Ground Rules for Trainees and Trainers • Limitations and scope of the training
Method	Introductory game <ul style="list-style-type: none"> • Eliciting responses and Eliciting reactions
Process	<p>Resource persons to introduce themselves, welcome the participants warmly.</p> <p>Introductory games: Participants to pair up and talk to each other - about their work, their families, their interests, their hobbies, etc. Participants will then introduce their partners in the plenary, so that all other participants get to know each other.</p> <p>Resource persons to define the objectives of the course and elicit the expectations of the participants from the course. Based on the above, the resource team may reset the course objectives. It is important that the resource team provide space and time for the participants to freely share their experiences and opinions, since the issues that emerge from their experiences will form the basis of the objectives of the course.</p> <p>Resource Person Course Team</p>
Performance Aids	Checklist, Flow Chart
Media	White Board/LCD Projector/PPT
Trainers	Course Co-ordinator and Faculty of CDM
Time	2 hours

Day I	Session III & IV
Topic	Basic Concepts of Disaster Management
Contents	<ul style="list-style-type: none"> • Disaster Terminology • Concept of Disaster Management • Past history of disasters • Disaster events in Karnataka and other states
Session Objective	Participants will be able to;

	<ul style="list-style-type: none"> • Explain the meaning of terminologies related to Disaster management • Draw distinction between Hazard, Risk, Vulnerability, Preparedness, Mitigation, Response etc.
Expected Outcome	Will be able to prepare CDMP and rehearse it
Method	PPT, Lesson, Micro film, case study and Discussion
Process	<p>The resource person conduct a group exercise for five minutes on Hazards and Impact vs Frequency of Hazards. One representative from each group will present the group outcome.</p> <p>This will be followed by a pictorial presentation by the resource person on hazards, risks, tools of risk assessment, steps to mitigate the impact of hazards A few case studies will be illustrated during discussion.</p>
Performance Aids	Checklist
Media	White Board/LCD Projector/PPT/ Hand outs
Trainers	Course Co-ordinator
Time	2 hours

Day I

Sessions V and VI

Topic	Urban Risks due to Bomb blasts and Bomb Disposal Safety : <i>Demonstration of equipment and materials followed by presentation</i>
Contents	<ul style="list-style-type: none"> • Types of Bombs • Impact of Bombs • Preventive measures • Safety precautions in bomb disposal • Demo of bombs • Cases of bomb explosions in different parts
Session Objective	<p>Participants will be able to;</p> <ul style="list-style-type: none"> • Identify the precautions and preventive measures to be taken during bomb threats and disposal
Expected Outcome	Identify different forms of bomb threats and disposal methods
Method	PPT, Demonstration, case study and Discussion
Process	The resource persons make a pictorial presentation of different incidents of bomb explosion, bomb threats and bomb disposal procedures adopted by Bomb squad. This will be followed by demonstration of different explosive materials being used in bombs. A few cases of bomb explosions are presented. Finally, the preventive and safety precautions for community and school children are discussed.
Performance Aids	Models of Bombs
Media	White Board/LCD Projector/PPT/ Hand outs
Trainers	Bomb Squad from Karnataka Police
Time	2 hours
Assessment	Question answer

Day II**Session I & II**

Topic	Psycho-Social Care in Disasters: Group Activity on Psycho-social care
Contents	<ul style="list-style-type: none"> • Introduction to Psycho-social care • Factors to be taken for planning • Trauma care • Child care • Care for old aged and the women
Session Objective	Participants will be able to; <ul style="list-style-type: none"> • describe the factors to be considered while providing Psycho-social care • Use tools to plan for Psycho-social care during and after disasters
Expected Outcome	Planning for Psycho-social care
Method	PPT, Group Activity, case study and Discussion
Process	The RP will make presentation on Psycho-social care focusing on the Importance and Factors with case illustrations and Group activity. The importance of different target groups will be discussed and approach to planning and facilitating such target groups will be discussed.
Performance Aids	Work book on psycho-social care
Media	White Board/LCD Projector/PPT/ Hand outs
Trainers	RPs from NIMHANS
Time	2 hours
Assessment	Group Presentation and Quiz for 5 minutes to test the ToL

Day II**Session III**

Topic	Landslide Management
Contents	
Session Objective	Participants will be able to; <ul style="list-style-type: none"> • Define Landslide • List types of Landslides • List causes of landslides • Explain the remedial measures for Landslides
Expected Outcome	Landslide Management Techniques
Method	PPT, case study and Discussion
Process	The RP will make a PPT on landslide management with case illustrations in Karnataka. The measures to prevent landslides in western ghats regions of Karnataka will be discussed. The landslides hazard map of Karnataka will be explained. This will be followed by question answer session.
Performance Aids	Landslide hazard map of Karnataka
Media	White Board/LCD Projector/PPT/ Hand outs

Trainers	CDM Faculty
Time	1 hours
Assessment	Question - answer

Day II		Session IV
Topic	Disaster Management Act	
Contents		
Session Objective	Participants will be able to;	
	<ul style="list-style-type: none"> • explain the salient features of the DM Act 	
Expected Outcome	Application of provisions of the Act related to DDMP. Penalty, Roles and responsibilities of Officers, Line departments and DDMA.	
Method	PPT and Discussion/ Question answer	
Process	<p>The RP will make a PPT on DM Act-2005. Following point will be covered in the presentation;</p> <ul style="list-style-type: none"> • Background behind DM Act-2005 • Terminologies • Organizational structure for DM at District/State/National levels • Roles of DDMA/SDMA • DDMP provisions • Roles and Responsibilities of DDMA/Departments/Officers • Penal provisions 	
Performance Aids	DM Act – 2005	
Media	White Board/LCD Projector/PPT/ Hand outs	
Trainers	Faculty of CDM	
Time	1 hour	
Assessment	Test for 5 minutes	

Day II		Session V & VI
Topic	Fire safety Measures : Fire services Rescue and First Aid : Home Guards and Fire Services	
Contents		
Session Objective	Participants will be able to;	
	<ul style="list-style-type: none"> • Explain the fire safety measures • Describe the techniques for First Aid 	
Expected Outcome	Participant will be able to demonstrate the techniques of fire safety and first aid including search and rescue.	
Method	PPT, case study ,Discussion and Demonstration	
Process	<p>The RP from Fire services will make brief presentation on fire safety measures followed by demonstration of equipment for rescue and fire safety.</p> <p>This will be followed by demonstration and mock drill for aid by the Home guards and fire services.</p>	
Performance Aids	Checklist/chart on fire safety and first aid procedures.	

Media	White Board/LCD Projector/PPT/ Equipments and machines
Trainers	RFO & Team Home guard & Team
Time	2 hours
Assessment	Question- answer

Day III

Session I

Topic	Earthquake safe Foundation Designs
Contents	
Session Objective	Participants will be able to; <ul style="list-style-type: none"> • explain the steps in earthquake safe foundation designing • Identify the earthquake safe foundations
Expected Outcome	Adopt Safe foundation methods in earthquake prone areas
Method	PPT, case study and Discussion
Process	The RP will make a PPT on different types safe foundations for earthquake prone areas. During the presentation, design parameters and earthquake safety considerations for earthquake zone II to V will be discussed. followed by Demo will be presented and question and answer session will be done during last 10 minutes
Performance Aids	Types of safe foundations and design steps List of BIS Codes
Media	White Board/LCD Projector/PPT/ Hand outs
Trainers	Professors from SJCE, Mysore
Time	1 hour
Assessment	Question answers

Day III

Session II

Topic	Drought Management in Karnataka
Contents	<ul style="list-style-type: none"> • Types of Droughts • Impacts of Droughts • Drought mitigation • Status of Karnataka and Case Studies on Drought Management
Session Objective	Participants will be able to; <ul style="list-style-type: none"> • List types of Droughts • Explain the status of drought situation in Karnataka • Discuss the case studies of drought situation in Karnataka • Discuss the case studies of drought mitigation measures in Karnataka and other states
Expected Outcome	Drought management planning
Method	PPT, Demonstration, case study and Discussion
Process	The RP will make a PPT on drought and types of Karnataka. During the presentation, the RP will specifically highlight the status of drought in different parts of Karnataka. Drought mitigation strategies and case studies will be explained. A question answer session will be conducted towards the End for 20 minutes.

Performance Aids	Checklist on drought mitigation measures
Media	White Board/LCD Projector/PPT/ Hand outs
Trainers	Director/Professor on Drought Management from KSNDMC, GKVK or ISEC
Time	1 hour
Assessment	Random questioning with 5 questions and answering

Day III

Session III

Topic	Introduction to TTX
Contents	<ul style="list-style-type: none"> • Meaning of TTX and its importance in DM action planning • Steps for TTX • Teams in TTX • Scenario development • SoPs • Application of SoPs in TTX • Micro-film followed by discussions on TTX
Session Objective	Participants will be able to; <ul style="list-style-type: none"> • Explain the meaning of TTX • Explain the steps in TTX • Describe the different roles to be played during TTX
Expected Outcome	Action planning using TTX methodology
Method	PPT, case study and Discussion
Process	The RP will explain the importance of TTX and its significance in DM. The steps in TTX and roles to be played by the participants and formation of teams namely players, observers, evaluators, media etc. will be explained. A short micro-film will be screened to understand the concept.
Performance Aids	Steps in TTX, Checklist on the process of TTX
Media	White Board/LCD Projector/PPT/ Hand outs
Trainers	ATI/CDM Faculty
Time	1 hour
Assessment	Question answer

Day III

Session IV

Topic	Activity on TTX
Contents	
Session Objective	Participants will be able to; <ul style="list-style-type: none"> • Develop a scenario • Write Message cards (Minor and Major details) • Write the steps and action plan for playing the TTX • Play the TTX
Expected Outcome	Developing and playing the TTX
Method	Group Activity
Process	Different teams as formed earlier would play the roles. Control room team and the response team would play their respective exercises one after the other. The observers will make the list of observations on the

	player team and control room team. Evaluators will evaluate each member of the group. This will be followed by the feedback of facilitators/trainers and drawing of lessons from the TTX
Performance Aids	Maps, Scenario, Steps in TTX, Checklist on the process of TTX
Media	Handout on TTX
Trainers	ATI/CDM Faculty
Time	1 hour
Assessment	Question answer

Day III

Session V&VI

Topic	HRVC Analysis and Preparation of Disaster Management Plan
Contents	<ul style="list-style-type: none"> • HRVC Analysis • Tools for risk assessment • Steps in CDMP
Session Objective	Participants will be able to; <ul style="list-style-type: none"> • Explain HRVC • Apply tools for HRVC • Steps in CDMP • Outline for CDMP
Expected Outcome	Use HRVC tools for preparing CDMP
Method	Presentations and Group Exercise
Process	The RP will discuss the HRVC analysis and present the tools for HRVC analysis. This will be followed by Group activity on preparation HRVC analysis for four cities. Each group will do for one city. This will be followed by presentation and preparation of an outline structure for Disaster Management Plan. Groups will finally make the presentation of outline DMP.
Performance Aids	Nil
Media	White Board/LCD Projector/PPT/ Hand outs
Trainers	Faculty of CDM
Time	2 hours

Day IV

Session I

Topic	Outbreak of Diseases and Health Care Management
Contents	Types of communicable diseases Preventive measures for communicable diseases Prevention of outbreak of epidemics Plan at the city level for Health and Hygiene management with focus on disasters
Session Objective	Participants will be able to; <ul style="list-style-type: none"> • describe the reasons for health hazards • identify reason for communicable diseases • mitigation measures for health hazards • Plan preparation for health care management
Expected Outcome	Will be able to prepare preparedness an mitigation plan for Health and

	Epidemic management
Method	PPT, case study and Discussion
Process	A pictorial PPT followed by discussion on outbreak of communicable diseases would be presented. The roles and responsibilities of Local authorities and ULB and district administration to control the outbreak of diseases will be discussed. A case study of an epidemic situation in a disaster affected urban area will be discussed through presentation. The RP also provides an outline for preparing a plan for health care management to contain the disaster situations.
Performance Aids	List of communicable diseases Checklist for preventive measures for communicable diseases
Media	White Board/LCD Projector/PPT/ Hand outs
Trainers	District Surveillance Officer or DHO
Time	1 hours
Assessment	Quiz for 5 minutes to test the ToL

Day IV **Session II**

Topic	Formulation of DDMP
Contents	<ul style="list-style-type: none"> • DDMP templates • Four existing DDMPs
Session Objective	Participants will be able to; <ul style="list-style-type: none"> • Review and Reformulate DDMP
Expected Outcome	Revised DDMPs
Method	Group exercise
Process	Participants will be divided into four groups. A brief introduction on DDMP templates will be given followed by discussion on the process to be followed while preparing the DDMP. Each group is given one existing DDMP for evaluation as for standard templates. Gaps are identified and revised DDMP outline will be prepared and presented by each group. Experts will give feedback on each presentation
Performance Aids	Templates
Media	White Board/LCD Projector/PPT/ Hand outs
Trainers	ATI/CDM Faculty
Time	2 hours
Assessment	Quiz for 5 minutes to test the ToL

Day IV **Session III & IV**

Topic	First Aid
Contents	
Session Objective	Participants will be able to; <ul style="list-style-type: none"> • Explain the procedures for First Aid • Draw lessons from the Case Studies on First Aid
Expected Outcome	Procedure and technique for first Aid management
Method	PPT with pictures and case Studies
Process	The RP will make a PPT with illustrations on first Aid and procedures and techniques for different types of trauma victims. The session will

	be interactive and demonstrations on first aid will be exhibited by the RP taking a few participants as mock victims.
Performance Aids	Checklist on first aid
Media	White Board/LCD Projector/PPT/ Hand outs
Trainers	Professor / Practitioner from health department
Time	2 hours
Assessment	Review of First Aid Steps

Day IV

Session V

Topic	GIS and Remote Sensing Applications in GIS
Contents	<ul style="list-style-type: none"> • Introduction to GIS and Remotes sensing • Uses of GIS and Remote sensing • Preparation maps • Steps to adopt GIS
Session Objective	Participants will be able to; <ul style="list-style-type: none"> • Explain the uses of GIS and Remote Sensing in DM • Describe the steps in preparing maps/data base using GIS • Adopt GIS in DDMP preparation
Expected Outcome	Use of GIS in DDMP
Method	PPT and Discussion/ Question answer
Process	The RP will make a pictorial presentation on GIS and Remote sensing applications. During presentation, instances of how the GIS and Remote sensing data are synchronized to prepare maps will be presented. Particular focus on the use of GIS in preparing DDMP will be illustrated with examples.
Performance Aids	Nil
Media	White Board/LCD Projector/PPT/ Hand outs
Trainers	RP, ISRO/KSRSAC
Time	1 hour

Day IV

Sessions VI

Topic	Storm Water Drainage and Flood Management in Bangalore
Contents	<ul style="list-style-type: none"> • Flood situation in Bangalore • Problems in existing storm drainage system • Preventive measures • Project undertaken to revamp the SWD
Session Objective	Participants will be able to; <ul style="list-style-type: none"> • describe the reasons for floods in cities • prepare the plan for flood mitigation and Preparedness
Expected Outcome	Steps in Flood mitigation and preparedness plan
Method	PPT, Demonstration, case study and Discussion
Process	The RP will make a PPT on Flood situation in Bangalore. He will quote pictures, drainage maps of different areas prone to flood in Bangalore. Particular focus will be given to discussion on ; <ul style="list-style-type: none"> • Problems in existing storm drainage system

	<ul style="list-style-type: none"> • Preventive measures • Project undertaken to revamp the SWD
Performance Aids	Storm Water Drainage Maps of Bangalore and Project Documents
Media	White Board/LCD Projector/PPT/ Hand outs
Trainers	CE / Senior Engineers of BBMP
Time	1 hours
Assessment	Random questioning with 5 questions and answering

Day V **Sessions I, II, III, IV & V**

Topic	Trainer Skills for Disaster Management
Contents	<p>Trainer/Instruction Skills: Basic Terminology, SAT Cycle, Feedback, LU and LE, Job, Task, Duties of Trainer</p> <p>Training Designing Skills</p> <p>TTX, Lecture, Case study, Group Exercise, Role Play</p> <p>Preparation of Training Designs on Disaster Management for different Target Groups</p> <p>Presentation of Designs</p> <p>Feedback on Designs</p>
Session Objective	<p>Participants will be able to;</p> <ul style="list-style-type: none"> • Demonstrate the trainer skills as direct trainer and designer for DM • Design the training on DM for different target groups
Expected Outcome	Trainer Skills
Method	PPT and Discussion/Question answer
Process	The RP will provide tools, techniques, methods and practice sessions/activities on instruction and designing skills. This will be followed by feedback. The participants will prepare designs for disaster management training for different levels of target group to be conducted in their institutes.
Performance Aids	Checklists Lecture, GD, Exercise etc.
Media	White Board/LCD Projector/PPT/ Hand outs
Trainers	Recognised Trainer on DTS and DoT
Time	5 hours
Assessment	Design presentation

Programme Schedule

Time	Topic/Content
Day One	Registration
09.30-10.30AM	Introductory Activities and Expectations Warming up Activity
10.30-11.30AM	INUAGURAL SESSION Disaster Management – Roles and Responsibilities of Officers
11.45-01.45 PM	Basic Concepts : Disaster Management
02.30-04.45PM	Bomb blast & Bomb Disposal Safety-Demonstration of Equipments & Presentation.
04.45-5.30PM	Screening of Film on Somyarpettai followed by Discussions
Day Two	Recap of Day-1
09.30-09.45AM	
09.45- 11.30 AM	Psycho-Social Care in Disasters Group Activity on Psycho-Social Care
11.45-12.45 PM	Landslide Management
12.45-01.45 PM	Disaster Management Act 2005
02.30-03.30PM	Fire Safety Measures – Fire Services Rescue and First Aid : Home guards
03.45-04.45PM	Demonstration by Fire Services and Home Guards
Day Three	Recap of Day 2
09.30-09.45AM	
09.45-10.45PM	Earthquake Management
10.45-012.45PM	Drought Management in Karnataka
12.45-01.45PM	TTX : Scenario Development Standard Operating Procedures and Roles Players Observers

	Evaluators Media (Control Room Team and Response Team)
02.30 – 04.30 PM	Hazard, Risk, Vulnerability Analysis Presentation followed by <i>Group Exercises I & II</i>
04.30 – 05.30 PM	Screening of Film on Nature`s Fury followed by Discussions
Day Four	Recap of Day 3
09.30-09.45AM	
09.45-10.30AM	Outbreak of Diseases and Health Care Management
10.30 --11.30 AM	Formulation of DDMP
11.45 --01.45 PM	First Aid for Disaster victims
02.30 – 03.30 PM	GIS and Remote Sensing Applications in DM
03.45-04.45 PM	Flood Management – Case study of Bangalore
04.30 – 05.00 PM	Screening of Film on Chanauti followed by Discussions
Day Five	Recap of Day-4
09.30-09.45AM	
09.45-11.30AM	Direct Trainer Skills for Disaster Management
11.45- 01.45	Training Designing Skills and preparation of Training Design on Disaster Management for different levels followed by presentations
2.30-3.30 PM	Feedback Report and Discussions
3.30 – 4.45 PM	Validation and Closing