Awareness Program on Early Warning System in India/Gujarat

Through Virtual Class Room of GIDM, Gandhinagar

Date: 05th July, 2023 Time: (15:00 to 17:15 Hrs.)

Concept Note:

Early warning system is a significant step in disaster risk reduction. It is the web of information and communication system based on different kind of sensors that have capabilities to detect the information about events/accidents in their pre-occurrence stage.

Human population growth and rapid urbanization coupled with climate change have aggravated the community exposure to hazards all over the world, Consequently, disasters are increasingly reported in the form of heavy loss of life and property.

Hazard intensity increasing day by day in response to climate change scenario. Mostly hazard data are spatial in nature and highly dependent on the meteorological factors, surface relief, other environmental and edaphic setup.

Spell of rain create chaos in urban and rural areas. People starts safeguarding their individual lives; properties and general public perplexed. The administration feels emergency situation and starts rescue and relief operations. At this moment Information & Communication Technology (ICT) plays an important role. It is time efficient and cost effective to fetch information to public.

Disaster management has mainly three different cycle, which are

1. Preparedness stage
2. Occurrence stage
3. Post Disaster stage

In general; risk due to any threat is a function of Hazard, Exposure and Vulnerability. The hazard defines the extent over which the threat has its effect. Exposure gives the estimate of the constructed, the built-up area, properties and lives underlying the hazard foot print. Vulnerability defines how much a manmade feature is susceptible to damage for a given threat.

Flood is relatively high flow of water that overtops the natural and artificial banks in any of the reaches of

a stream when banks are overtopped, water spread over flood plain and generally causes problem for inhabitants, crops and vegetation. It is important to determine quickly the extent of flooding and possible land use under water.

L concept has been developed to define different levels of disasters in order to facilitate the responses and assistances to States and Districts. It is from L0 to L3.

L0 = Normal Time
L1 = disaster that can be managed at the District level
L2 = require assistance and active participation of the State
L3 = large scale disaster assistance from the Central Government required

After receiving flood warning by the India Meteorological Department (IMD) information goes to the Commissioner of Relief/GSDMA by the fastest means. The Commissioner of Relief (COR) will activate all departments for emergency response including the State EOC, District EOC and ERCs. State Government may publish a notification in the official gazette declaring such areas to be disaster-affected area.

Once the situation is totally controlled and normalcy is restored, the COR declares end of emergency response and issues instructions to withdraw the staff deployed in emergency duties.

An early warning system supports in: Dissemination, communication and response capabilities, monitoring and warning, risk analysis. The biggest drawback of the early warning system is awareness and lack of effective and timely communication.

To ensure these outcomes in the Gujarat state. An awareness program on Early Warning System in India/Gujarat is scheduled on 05th July, 2023 by Gujarat Institute of Disaster Management, Gandhinagar.

Objectives:

To aware trainee officers about:

1. Basic concepts of early warning;
2. Early warning (information/communication) mechanism in India/Gujarat;
3. Role of Govt. and Non-Gov. and International Organizations in early warnings.

The main challenges in early warning mechanism and dissemination of information is:

A. Accuracy;
B. Timely and effective communication;
C. Knowledge and Reliability of Information.

These all concept, mechanism and practices will be discussed in detail in this training program.

Target Audience for Proposed Training

Sr. No.	Department Name	Designation of Participants
1.	Agriculture, Farmers Welfare & Cooperation Department	Agriculture Extension Officer, Block Technology Managers, Assistant Technology Managers & Farmers Friend
2.	Narmada Water Resources, Water Supply and Kalpsar Department	Asst. Engineer & Add. Asst. Engineer
3.	Revenue Department	Mamlatdar, mamlatdar, Disaster Management, Talati and other staff members

Resource Persons:

1. **Dr. K.J. Ramesh,** Director General, India Meteorological Department, New Delhi
2. **Shri D.S. Chaskar,** Chief Engineer, CWC, Gandhinagar.
3. **Dr. Gaurang Joshi,** M.S. University, Baroda/ Officer from SEOC,Gandhinagar

Expected outcome:

This will potentiate the employee to use early warning mechanism in their daily planning and execution.

Participants & Venue:

1. 30 participants from each district;
2. Support staff or other technical experts who are involved or responsible for DRR activities
3. Venue will be decided by District Authority where basic facilities (Projector, Audio system etc.) is available to conduct the program.