



Pre-NPDRR Workshop

Risk and Resource Mapping - Role of GIS and Databases

11 May 2017 (One Day) NIDM New Delhi

Organized by: National Institute of Disaster Management, Ministry of Home Affairs, Govt of India, In collaboration with Central Statistics Office and National Informatics Centre

CONCEPT NOTE

Context:

“Understanding disaster risk” is a key priority set by the Sendai Framework for Disaster Risk Reduction. Disaster risk is expressed as the likelihood of loss of life, injury or destruction and damage of property, environment and resources due to impact of a disaster in a given period of time, as per the UNISDR Global Assessment Report 2015. Proactive approach of disaster risk management calls for characterization and expression of hazard, vulnerability and disaster damage potentials on geographical extent enabling risk sensitive land use planning, hotspots identification, site risk assessment and prioritization of mitigation actions. Besides this, capacity planning – in terms of response resources, access routes, communication network, and deployment of relevant human resources also requires understanding spatial dimensions of such resources for effective coordination. Therefore, role of GIS enabled disaster management planning systems, including the practices like India Disaster Resource Network (IDRN) besides the exercises of hazard-risk and vulnerability mapping with specific value additions in recent times across many states of India, is an important aspect of knowledge and experience sharing to delineate the strategies for better utilizing the potentials of GIS enabled system and disaster management related databases – its collection, organization, reporting and availability for various functions of disaster management in India. Initiatives of Central Statistics Organization, Ministry of Home Affairs, NIDM, NDMA, NIC and various other Central Ministries and agencies have been significant. The pre-event of NPDRR on the theme of risk and resource mapping would present an opportunity to analyse the needs, scope, present techno-strategic strengths, gaps and opportunities, and the mechanisms to improve the GIS and database management systems for risk and resource mapping at different levels in the country.

Objectives:

Key objectives of the workshop are following –

- (a) To enumerate on underlying causes of hazard-risk and vulnerability, and associated tools and indicators for their assessment in understanding disaster risk,
- (b) To review the current state and opportunities for mapping climatic and disaster risks, and resources for resilience against such risks with respect to developmental planning and goods & services supply-chain management,
- (c) To review the current and futuristic scope of database systems – data needs, sources, database coordination, reporting mechanism for planning safety and resilience in development

- (d) To examine and recommend the efficient mechanism of database management in India, with emphasis on state and district level, for mapping risk-vulnerability and relevant resources to deal with different aspects of disaster resilience and business continuity.

Expected Outcome:

The proposed side event (workshop) would be helpful in following ways:

- (a) It will help assess the current state of affair – challenges, needs, scope and opportunities of climate resilience and business continuity, by way efficient planning based on risk and resource mapping. This will be useful in optimizing resources and finances by prioritizing activities and investments accordingly in sectors/activities/items and locations.
- (b) It will help in delineating effective approach – mechanism, institutional framework and capacity networks, for advancing databases application for planning and assessments relating to risk sensitive developmental planning and making supply chains disaster proof.
- (c) Workshop will result in understanding and envisaging roles and responsibilities of different agencies and stakeholders in promoting proper database coordination at different levels for necessary application in different aspects of disaster risk management including preparedness, post-disaster damage and needs assessment, planning and monitoring mainstreaming, and effective response and relief with ensuring availability of goods and services and help bring back normalcy at quickest.

Target Participants:

National and State DM Authorities and institutes, CSO, ISRO, NIC, Nodal agencies for forecast and vulnerability assessments – IMD, GSI, CWC, INCOIS, NIT Aayog, Relevant ministries – MoEFCC, MoAg, MoHFW, Railways, Aviation, Road Transport, Dept of Telecom, Food Processing & Civil Supplies, Defence, DST, CSIR institutes, ICAR, other relevant research institutes, State Statistics Departments, relevant iNGOs and UN agencies, etc.