

## Training Module

<b>Training Title</b>	: Virtual Training Course on “Disaster Risk Reduction and Management”
<b>Participants</b>	: Civil Service Officers from friendly foreign countries responsible for Disaster Risk Reduction policy and planning, national development planning, land-use planning, local development and related agencies.
<b>Organizer</b>	: Haryana Institute of Public Administration, Gurugram, Haryana, India
<b>Duration</b>	: 3 days (12.45 hrs approximately)
<b>Tentative Dates</b>	: 16-18 March, 2021.
<b>Training Language</b>	: English

### Introduction:

1. Disaster Management encompasses two major domains viz. Risk Reduction & Management and Emergency Response. Millennium Development Goals (MDGs), Hyogo-Framework for Action (2005-2015), United Nation-International Decade for National Disaster Reduction [UN-IDNDR (1990-2000)], World Summit of Sustainable Development (WSSD, Rio+10), as a sequel of Agenda-21 adapted at UNCTAD, 1992, have made the global community realize and recognize that no development is sustainable if human, life, resources and capital are vulnerable to Disaster risk.
2. Disaster risk within a country generally has its roots in development decisions that do not adequately address disaster concerns. By not considering Disaster risk in development planning
  - a) New risks could be unintentionally created or
  - b) Existing ones exacerbated through investments in infrastructure and public services, and through improper planning and regulation. Thus, Disaster Risk Reduction and Management is a core component of sustainable development. Developing resilience in the Resource Support System (natural and anthropogenic) and socio-economic functions are therefore prime concerns for reducing vulnerability and for prevention or mitigation of hazards from producing a Disaster situation.
3. As mentioned in the UN-Sendai Framework for Disaster Risk Reduction cooperation, collaboration, and partnerships with organizations and States (Countries) across different sectors, are vital in Disaster risk management and risk governance. In order to deal effectively with disaster & mitigate its impact (Social, Economic and Environment) cooperation provides a valuable platform for sharing of best practices and lessons learnt. The virtual training course on “Disaster

Risk Reduction and Management” for Civil Service Officers from friendly foreign countries would therefore be a valuable initiative to create a platform not only for value addition & knowledge on this important subject but also experience sharing-among friendly foreign countries. A compendium prepared after the module on sharing of best practices would be a very useful reference tool for the policy makers that would add value to their decision making process.

#### **4. Aim and Objectives:**

The three days on-line training aim to explain the concept of DRR and methodologies for evaluating DRR strategies with respect to hydro-meteorological hazards, including those likely to emerge as a consequence of Climate Change, and to mainstream these in the policy processes. Insights from initiatives taken to reduce other hazards related to hydro-meteorological hazards such as will also be part of the course where they have specific relevance to the main focus of the training.

The key objectives of the training are :

- i) To identify the challenges and opportunities of Disaster risk and need for Disaster Resilience.
- ii) To emphasize the use of Science & Technology in Disaster Risk Reduction (DRR) and its management.
- iii) To explain methods on how to mainstream Disaster Risk Reduction (DRR) in development plans and decision making for effective management of environmental impact on a country’s development.

#### **5. COURSE CONTENT**

##### **Learning Unit 1: Introduction to Disaster Risk Reduction**

The first module will provide participants with the basic knowledge on Disaster Risk Reduction (HRRR) required to support a detailed understanding of mainstreaming. The module will cover terminologies related to HRRR, discuss the comprehensive link between hydro-meteorological Disaster and development, and provide a basic outline on risk assessment and how to use information to guide development decisions.

## **Learning Unit 2: Strengthening Risk Governance through Science & Technology**

This module will cover the risk assessment and management techniques of hydro meteorological disasters. The role of science and technology in the risk assessment and forecasting in India with reference to drought, flood, cyclone & tsunami would be dealt in detail. It will also provide an opportunity for the Civil Service Officers of friendly foreign countries to share their experiences & expertise in the module.

## **Learning Unit 3: Mainstreaming Hydro-meteorological Disaster Risk Reduction into the development planning process**

This module will form the core of the training and will start by providing a detailed explanation of what is mainstreaming and provide a broad framework for mainstreaming Hydro-meteorological Disaster Risk Reduction. The session will aim to break down the national development planning processes of India and other friendly countries (all best practices) into key components and suggest approaches for mainstreaming Hydro-meteorological Disaster Risk Reduction into these respective components.

### **6. Topics to be covered:**

1. Disaster Risk Reduction: Issues and Challenges.
2. Hydro-meteorological Disaster Risk Reduction and its linkage with sustainable development.
3. Flood Risk Assessment and Management.
4. Drought Risk Assessment and Management.
5. Flood & Cyclone Forecasting and Warning System in India : A Case Study.
6. Tsunami Modeling, Forecasting and Warning System in India.
7. Application of Risk Reduction Information for Urban Planning
8. Preserving River Ecosystems through Environmental Flows for Sustainable Development.
9. Impact of Climate Change on Water Resources and Adaptation Strategies.

### **7. Distinguish Speakers**

1. Dr. Mrutyunjay Mohapatra, Director General, Indian Meteorological Department

2. Dr. R P Pandey, Scientist, Environmental Hydrology Division, National Institute of Hydrology, Roorkee
3. Dr. Srinivasa Kumar, Director, INCOIS, Hyderabad.
4. Dr. Pradeep Kumar, Scientist, Environmental Hydrology Division, National Institute of Hydrology, Roorkee
5. Dr. J P Patra, Scientist, Environmental Hydrology Division, National Institute of Hydrology, Roorkee
6. Dr. Manohar Arora, Scientist 'D' National Institute of Hydrology, Roorkee.

**8. Methodology** : Each session consists of an hour and 15 minutes in which 50 minutes for lecture and 25 minutes for questions answers.

**9. Assessment** : Through online multiple-choice Questionnaire.

**10. Event website** : [www.hipaco.in](http://www.hipaco.in)

**11. Google meet Link** : It will share separately to participants and distinguished speakers/Guests.

- 12. Reference Material** :
- a. **UNDRR**  
Prevention Web  
The knowledge platform for Disaster Risk Reduction
    - i) [preventionweb.net/disaster-risk/drr-advocacy](http://preventionweb.net/disaster-risk/drr-advocacy)
    - ii) [preventionweb.net/disaster-risk/invest-in-drr](http://preventionweb.net/disaster-risk/invest-in-drr)
    - iii) [preventionweb.net/disaster-risk/disaster-losses](http://preventionweb.net/disaster-risk/disaster-losses)
    - iv) [preventionweb.net/terminology/](http://preventionweb.net/terminology/)
    - v) [gar.undrr.org](http://gar.undrr.org)
    - vi) [preventionweb.net/disaster-risk/graf](http://preventionweb.net/disaster-risk/graf)
    - vii) [preventionweb.net/risk/dataviewers](http://preventionweb.net/risk/dataviewers)
    - viii) [preventionweb.net/risk/models](http://preventionweb.net/risk/models)
  - b. **NDMA Guidelines**  
[ndma.gov.in/governance/guidelines](http://ndma.gov.in/governance/guidelines)
  - c. [www.nihroorkee.gov.in](http://www.nihroorkee.gov.in)
  - d. [Incois.gov.in/portal/osf/ofs.jsp](http://Incois.gov.in/portal/osf/ofs.jsp)
  - e. [mausam.imd.gov.in](http://mausam.imd.gov.in)

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