

## CONFERENCE ON CATASTROPHIC RISKS AND INSURANCE

**22-23 November 2004**

### **DISASTER MANAGEMENT IN INDIA**

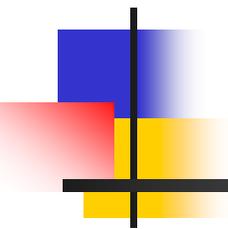
D. Madan (National Disaster Management Division,  
Ministry of Home Affairs, India)

### **Powerpoint presentation**

*This document is circulated for Session 3 of the Conference on Catastrophic Risks and Insurance, to be held on 22-23 November 2004 at the OECD Headquarters, 2 rue André Pascal, 75016 Paris, starting at 9:00 a.m.*

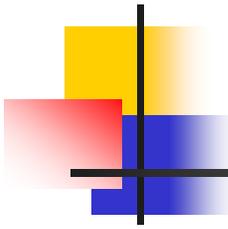
*For further information on this conference, please contact Cécile Vignial, Financial Markets Division ([Cecile.Vignial@oecd.org](mailto:Cecile.Vignial@oecd.org)), or Yosuke Kawakami or Morven Alexander, Outreach Unit for Financial Sector Reform ([Yosuke.Kawakami@oecd.org](mailto:Yosuke.Kawakami@oecd.org) or [Morven.Alexander@oecd.org](mailto:Morven.Alexander@oecd.org))*

# ***Disaster Management in India***



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***Presentation by  
D.Madan  
Under Secretary  
Govt. of India  
Ministry of Home Affairs***

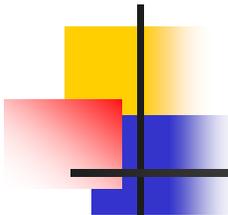


# Vulnerability

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- ❑ 54% of land mass prone to earthquakes
- ❑ 40 million hectares(8%) of landmass prone to floods
- ❑ 8000 Km long coastline with two cyclone seasons
- ❑ Drought – low and medium rainfall region which constitute 68% of the total area vulnerable to drought
- ❑ Hilly regions vulnerable to avalanches landslides/Hailstorms/ cloudbursts
- ❑ Man-made disasters including those linked to terrorism

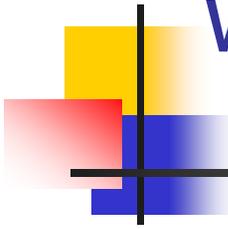
# Role of Central and State Govts.



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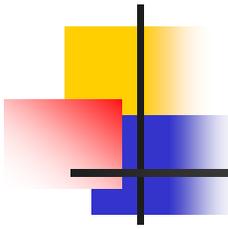
- ❑ Basic responsibility for rescue, relief and rehabilitation with the State Governments .
- ❑ Central Govt. supplements the efforts of State Govts. by providing financial and logistic support in case of major disasters.

# Central Govt. Departments/Agencies with nodal/coordinating responsibility



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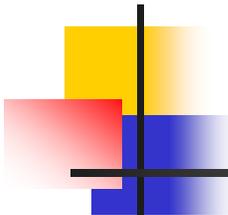
- Ministry of Home Affairs for
  - natural disasters (excluding drought and epidemics), and
  - man made disasters including those related to use of radiological, biological and chemical material by terrorists.
  
- Ministry of Agriculture for
  - drought management.



# Govt.'s approach to Disaster Management

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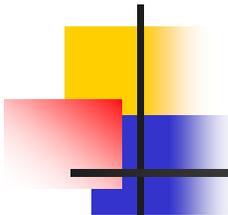
- Change in orientation from a primarily relief-centric approach to a holistic approach emphasising mitigation, prevention and preparedness besides strengthening response, relief and rehabilitation mechanisms.
- Creation of institutional mechanisms at National and State levels to provide appropriate coordinating platforms keeping in view the multi-disciplinary nature of the activities required to be undertaken to reduce and manage the risk from natural hazards.



# Govt.'s approach to Disaster Management (Contd.)

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- Tackling the problem of terrorism by adopting a multi-pronged approach which inter alia includes :
  - strengthening and modernisation of security arrangements and intelligence
  - diplomatic initiatives
  - encouraging a dialogue
  - redressal of public grievances
  - accelerating economic development to provide avenues for gainful employment
  - building up physical and social infrastructure
  - assistance for psychological and economic rehabilitation of the victims of terrorist violence

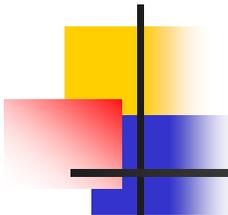


# Institutional /Policy framework

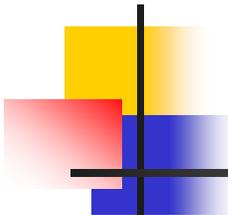
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- A National Framework for Disaster Management drawn up focusing on institutional mechanisms, coordination, monitoring, capacity building and human resource development, mitigation measures, legal and policy framework, preparedness and response, early warning systems
- States in the process of drawing up State level frameworks.
- A National policy emphasizing mainstreaming of disaster mitigation in the development process particularly in areas with a high degree of vulnerability to natural hazards
- State level policies/legislations in the process of being adopted/developed.

# Preparedness to speed up Response



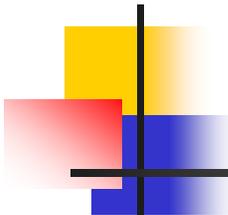
- Specialist emergency response teams of Central Para-Military Forces being trained and equipped for search & rescue in case of natural disasters and for handling of radiological, biological and chemical emergencies.
- Creation/strengthening of specialist search & rescue capability at the level of States.
- 14 Regional Response Centres being set up with caches of equipment including boats etc.
- Establishment of web enabled centralised inventory of resources for disasters managers at District/State and National level to minimise response time.
- Establishment/strengthening of Emergency Operation Centres with hazard resistant structural features and failsafe communication facilities at National, State and District levels.



# Preparedness to speed up Response (Contd.)

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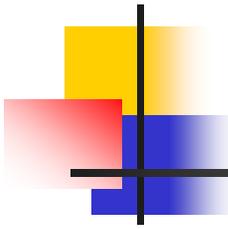
- Establishment of Emergency Communication Systems with sufficient redundancy to ensure availability of reliable communication/data transfer channels between National, State and District level nodal points and disaster/emergency sites.
- An Incident Command System being introduced to professionalise the management of response to disasters.
- Advance action by the relevant Ministries/Departments at the National and State level by way of drawing up Department specific Emergency Support Function Plans, constituting response teams and designating resources to be made available during an emergency/disaster
- Laying down Standard Operating Procedures for specific disasters



# Mitigation Measures

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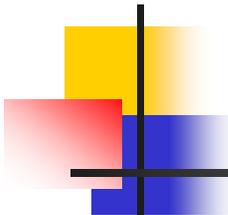
- Core Groups comprising eminent experts / administrators set up to guide and facilitate formulation of strategies and programmes for mitigation of earthquakes, cyclones and landslides.
- Emphasis on adherence to prescribed standards/codes for seismically resistant building designs and construction. Programmes for sensitization/training of Engineers, Architects and Masons in these aspects being implemented.
- Model building byelaws/regulations developed and interaction with State level authorities in progress to facilitate adoption and enforcement of appropriate techno-legal regime for hazard resistant construction



# Mitigation Measures (Contd..)

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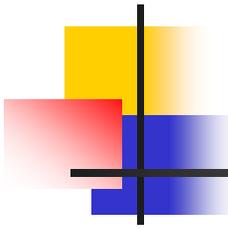
- Evaluation of existing building stock and infrastructure, particularly life-line buildings and vital installations, for seismic safety, to carry out retrofitting/reconstruction
- Sensitization and training of elected representatives, Civil servants/Police/Forest Service Officers and other public officials in disaster risk management.
- Awareness generation to inform and educate the general public on hazard risks, vulnerability, and basic do's and don'ts



# Mitigation Measures (Contd.)

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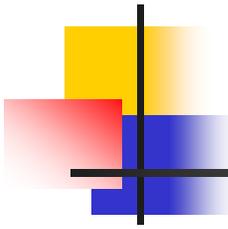
- Community level preparedness through programmes involving preparation of village/Block/District level Disaster Management Plans, constitution and training of Disaster Management Committees/teams
- Strengthening of disaster warning systems for cyclones, floods and landslides
- Drawing up project proposals for construction of multi-utility cyclone shelters, coastal shelter belt plantations



# Mitigation Measures (Contd.)

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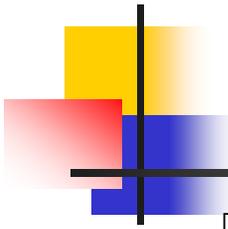
- Emphasis on drawing up and periodic rehearsing of on-site and off-site hazard management plans by industries stocking/producing hazardous materials
- Incorporating disaster management basics in school education.
- Disaster management/mitigation aspects being incorporated in Engineering/Architecture/Medical Education curricula



# Funding Mechanisms

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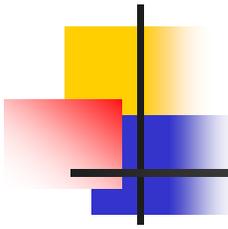
- Losses due to natural disasters/terrorism activities in the country over the years are largely unrecorded in monetary terms
- Major responsibility for funding post disaster relief and recovery has rested, directly and indirectly, with budget transfers from the Central Govt.
- The successive Finance Commissions which were constituted from time to time, have inter-alia recommended arrangements for meeting the financial requirements of relief and rehabilitation in the wake of natural calamities.



# Funding Mechanisms (Contd.)

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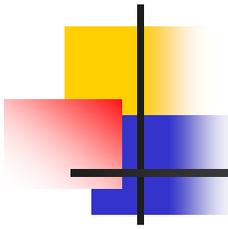
- The existing scheme, based on the recommendations of the Eleventh Finance Commission, is valid for the period 2000-05. Under this, expenditure on immediate relief to the victims of natural calamities can be met by the State Governments through the following Funds:
  - Calamity Relief Fund (CRF) constituted for each State with pre-determined annual allocations for each of the five year period. The Central Government contributes 75% and the State Govt. 25%.
  - When the calamity is of a severe nature and the CRF is not sufficient, the States may approach Central Government for additional assistance from the National Calamity Contingency Fund (NCCF) which is financed by levy of a special surcharge on Central (federal) taxes for a limited period.



# Funding Mechanisms (Contd)

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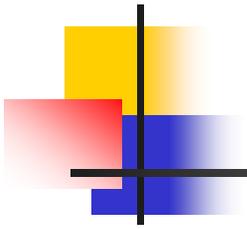
- Insurance mechanisms to compensate for natural disaster losses are relatively underdeveloped in the country and do not contribute significantly to the funding of long-term rehabilitation needs.
- With over 25% of the country's population being in the socially and economically disadvantaged categories, the Government runs a number of welfare schemes to provide employment opportunities, basic housing etc. to them. To some extent these schemes also cater to the post disaster relief requirements.
- Large scale funding requirement of post disaster relief and rehabilitation including restoration of infrastructure are met mainly by reprioritization of planned budgets, tax increases and increased borrowings



# Funding Mechanisms (Contd.)

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- The viability of an insurance mechanism/fund, in which the premium is paid fully or substantially by the Central or State Govts., appears doubtful as it may not reduce the financial burden on the Govt. as compared to a fund created at the Government level for meeting expenditure on calamity relief.
- Insurance companies may, however, design and market their disaster risk insurance products in such a way that a market is developed among the economically better off segment of the population which can afford to pay for the same.
- The role/involvement of Govt. in supporting the use of insurance as one of the funding options for post disaster funding of the rehabilitation needs in the country could be a subject for detailed analysis and consultations.



Thank You