





MULTI HAZARD DISASTER RISK REDUCTION AND RESILIENCE

HISTORICAL PERSPECTIVE

- Always occurring phenomena even formation of earth is a result of Disaster.
- During 14th century, as much as 50% population across
 Europe was reduced as a result of plague.
- DM is a dynamically evolving process, and though significant progress has been made but still we have a long mile to go.

CLASSIFICATION OF DISASTERS

NATURAL DISASTER



DISASTERS IN INDIA

















India and Natural Disasters

India is one of the most disaster prone countries in the world.

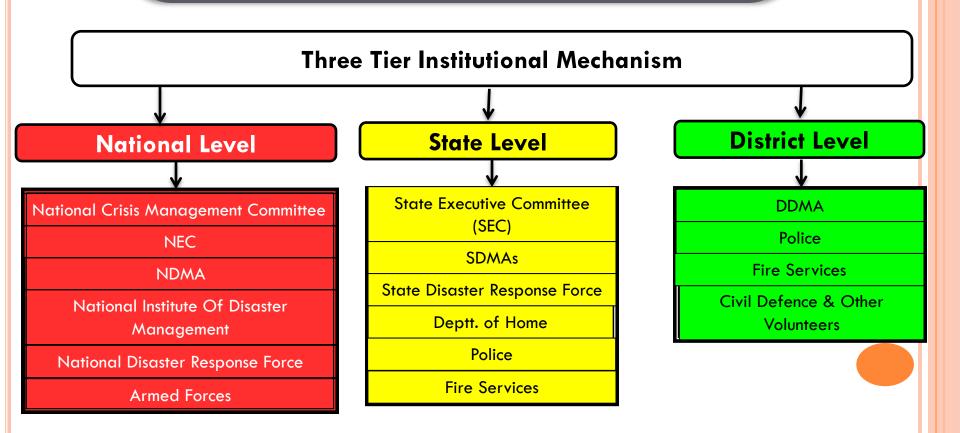
- Over 58.6% land area vulnerable to earthquake.
- 12% of land (40 million hectares) to floods.
- Out of 7516 Km of coastline, 5700 km to cyclones.
- Western and Eastern Himalayas region and western ghats to land slides.
- Vulnerability to MAH units.
- A major disaster occurs every 2-3 years.
- 50 million people affected annually.
- 1 million houses damaged annually along with human, social and other losses.



SETTING UP A DM MECHANISM

- Until 2005 : Reactive & Relief-Centric.
- 2005 : Enactment of Disaster Management Act.
 - The creation of a policy, legal and institutional framework, backed by effective statutory and financial support.
- Paradigm shift: Moving over from a reactive and relief centric approach to a holistic and integrated approach with emphasis on prevention, mitigation and preparedness.

NATIONAL DISASTER MANAGEMENT STRUCTURE



THE MAKING OF NDRF AS THE MAIN FEDERAL FIELD RESPONDER

<u>Chapter VIII, DM Act -2005 -</u> The Disaster Management Act has a statutory provision for constitution of the National Disaster Response Force (NDRF) for the purpose of specialized response to natural and man-made disasters.

Sec 44 (i) of the Act: NDRF: a 'Specialist Force' to respond to disasters/threatening disaster.

The Members of the Force have been taken on deputation from elite Central Armed Police Forces

- ✓ At present NDRF has 16 Battalions.
 - 4 Battalions each from the BSF & ITBP
 - 3 Battalions from the CRPF.
 - 2 Battalions each from CISF & SSB.
 - 1 Battalion each from Assam Rifles















NDRF: COMPOSITION

- NDRF has 16 Battalions.
- Each Bn has a strength of 1149 personnel.
- Each Bn has 18 self-contained Search & Rescue teams.
- Each team comprises of specialist manpower viz. Medical Officers, Engineers, Paramedics, Technician, Electrician and dog squads.

NDRF: STRENGTHS

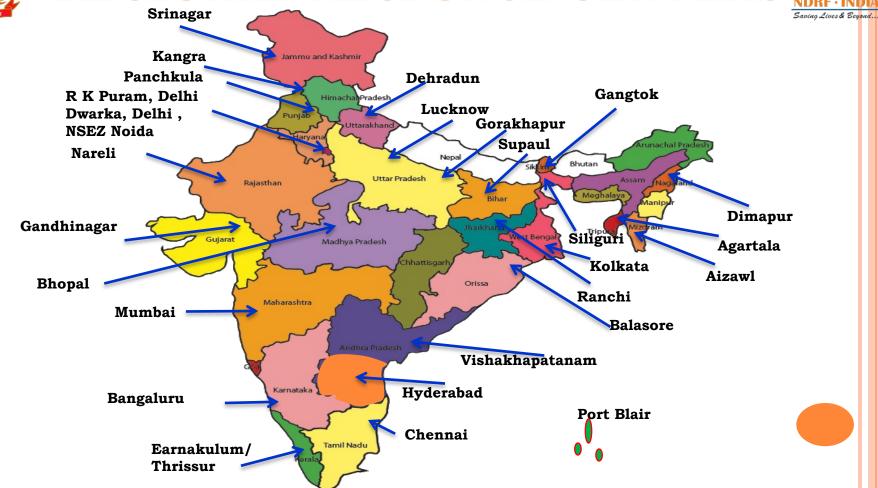
- ✓ NDRF personnel fully trained & capable in CSSR (Collapsed Structure Search & Rescue) operations.
- ✓ MFR (Medical First Response)
- ✓ CBRN emergency response
- ✓ Flood Disasters
- ✓ Mountain Search & Rescue
- ✓ Deep Diving Search & Rescue
- ✓ Canine and Technical Search
- ✓ Animal disaster response





REGIONAL RESPONSE CENTERS





RISK REDUCTION

- Guided by the Sendai Framework for Disaster Risk Reduction (DRR) 2015-2030 has 04 main priorities.
- 1. Understanding Disaster risk.
- 2. Strengthening risk governance.
- 3. Investing in disaster risk reduction for resilience.
- 4. Importance of disaster preparedness and building back better after disaster strikes.

RISK RESILIENCE

Resilience is the ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.

INITIATIVES FOR DISASTER RESILIENCE

SCHOOL SAFETY PROGRAMMES









CAPACITY BUILDING PROGRAMMES





COMMUNITY AWARENESS PROGRAMME









MOCK EXERCISE

NDRF conducts Mock Exercise with the following Stakeholders:

- NDMA
- SDMAs
- Indian Railways
- Delhi Metro
- Various MAH Units/PSUs
- Schools and Colleges
- Airport Authority of India



MOCK EXERCISE











DETAILS OF COMMUNITY DEVELOPMENT AND AWARENESS PROGRAMMES CONDUCTED BY NDRF



Particular		2023	2022	2006 till date
Community Awareness	No. of CAPs conducted	459	1232	9808
Programmes (CAPs)	No. of beneficiaries	86,585	2,13,766	59,88,280
School Safety Programmes (SSPs)	No. of SSPs conducted	431	1083	4,120
	No. of beneficiaries	1,35,040	4,06,190	15,69,698
Mock Exercise	No. of Exercise conducted	151	587	4,271
	No. of beneficiaries	42,656	1,25,670	15,28,203

FUTURE PERSPECTIVES

- Mobilising stakeholder participation of self help groups, Women's Groups, Youth Groups, Panchayati raj Institutions.
- Technology driven, people friendly.
- Knowledge management: Documentation and dissemination of good practices on preparedness, mitigation and disaster response.
- Public private partnership.
- Mobilise and train disaster volunteers (NSS, NCC, Scouts and Guides, NYK, Civil defence, Homeguards)
- Increase capacity building.

Invest in Preparedness

- Investments in Preparedness and Prevention (Mitigation) will yield sustainable results, rather than spending money on relief after a disaster.
- Most disasters are predictable, especially in their seasonality and the disaster-prone areas which are vulnerable.
- Communities must be involved in disaster preparedness.

LESSONS LEARNT FROM TURKIYE OPS



LESSON LEARNT



The Importance of preparedness of agencies, communities & individuals





The Importance of Pre-disaster planning

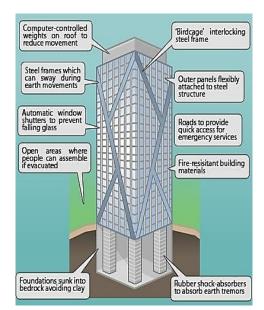






The
 Importance of
 Earthquake resistant
 design & better
 infrastructure

The value of community involvement









LESSON LEARNT

The need for Improved Communication

The need for specialized
 International Search & Rescue Teams













The needs for specialized equipment & skilled personnel





The Importance of Technology







The importance of Mental Health Support

The importance of logistics









THANK YOU