

INDIA



Country *Presentation* 



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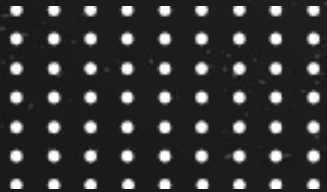


A Quote

“INDIA is the cradle of the human race, the birthplace of human speech, the mother of history, the grandmother of legend and the great grandmother of tradition. Our most valuable and most instructive materials in the history of man are treasured up in India only.”



~ Mark Twain





Presentation Points

- ✓ General Information
- ✓ Geography
- ✓ Economy
- ✓ Disaster Risk Profile and Disasters
- ✓ Evolution of DRM
- ✓ Institutional Framework
- ✓ National Disaster Response Force
- ✓ Disaster Finance
- ✓ Sendai Framework: Targets
- ✓ Research theme

General Information

Capital City:	New Delhi
Official Languages:	English and Hindi
Constitutional Languages:	22
Currency:	Indian Rupee ₹
Total area:	3,287,263 sq. km (7th largest in the World)
Population:	1363.0 million (2021 estimate)
Life expectancy:	65.8 years (M); 68.1 years (F) 2011
Latitude & Longitude:	8°4' and 37°6'N; 68°7' and 97°25'E
Time zone:	GMT+5:30



Official Name

*Republic of India;
Bharat Ganrajya*

Geography

Geologically,

India is grouped into three major groups:

1. The Himalayas and their associated group of mountains
2. The Indo-Ganga Plains
3. The Peninsular Shield

Besides these, the coastal plains of Western and Eastern ghats and the Andaman and Nicobar & Lakshadweep islands can be considered minor groups.

Climatologically

India is considered to be a tropical country with four seasons as designated by the India Meteorological Department.

1. Winter (December-February)
2. Summer (March-June)
3. South-west monsoon season (June-September)
4. Post monsoon season/ Autumn (October-November)

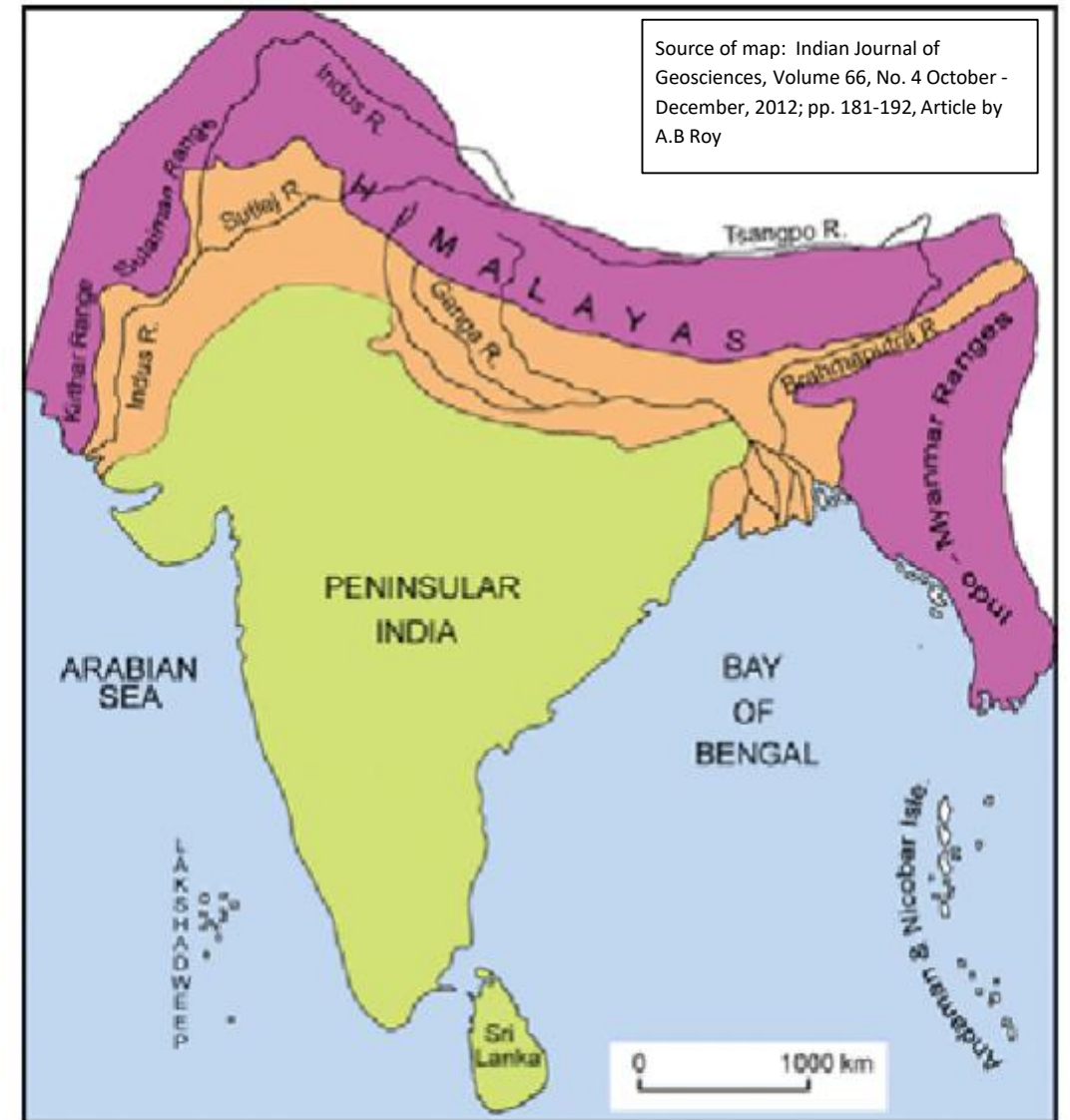
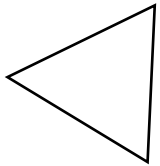
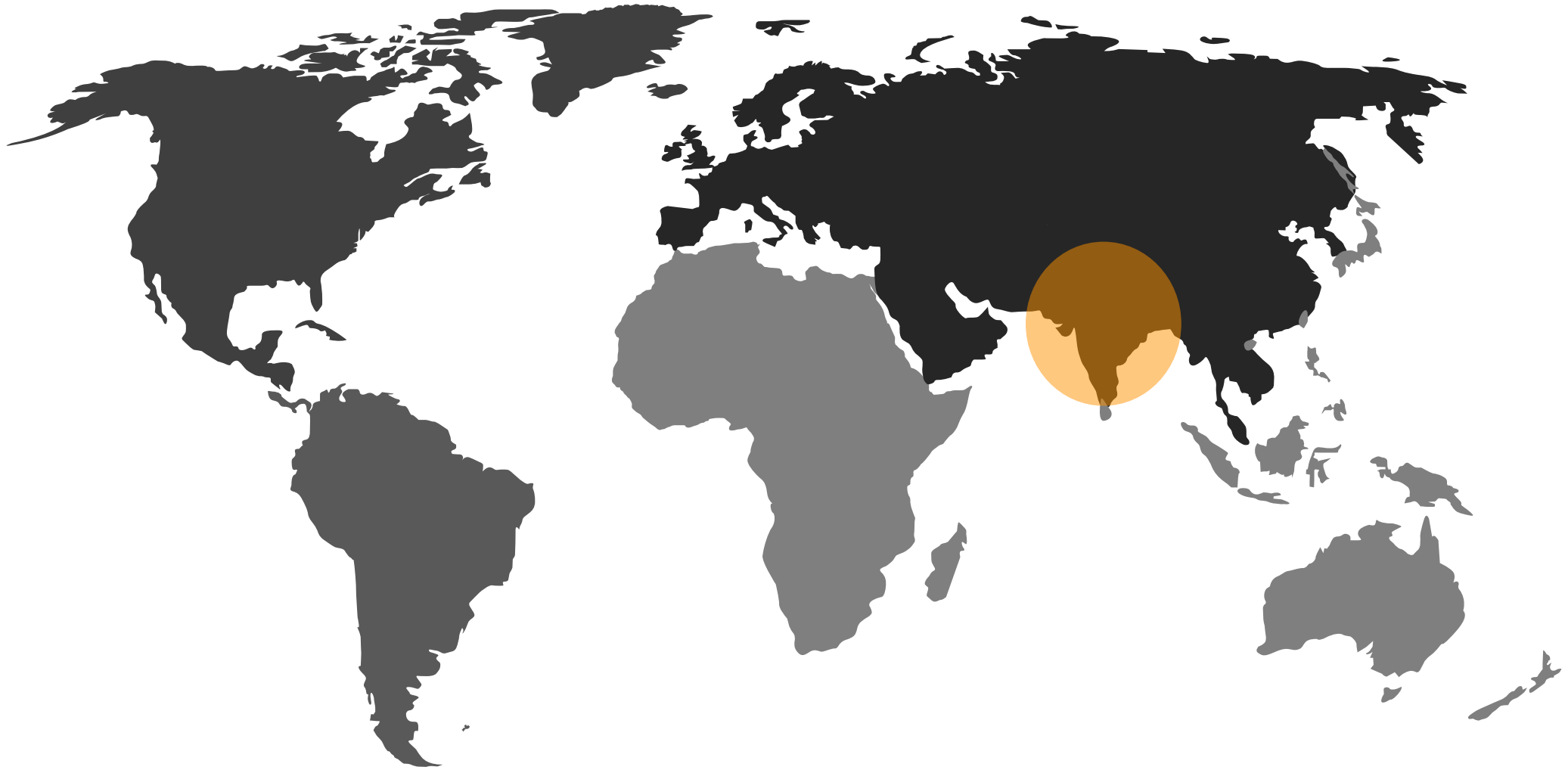
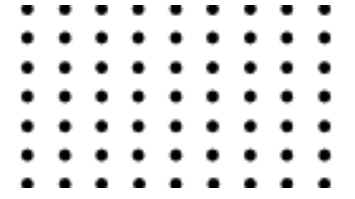


Figure: Geology of India

On the World Map



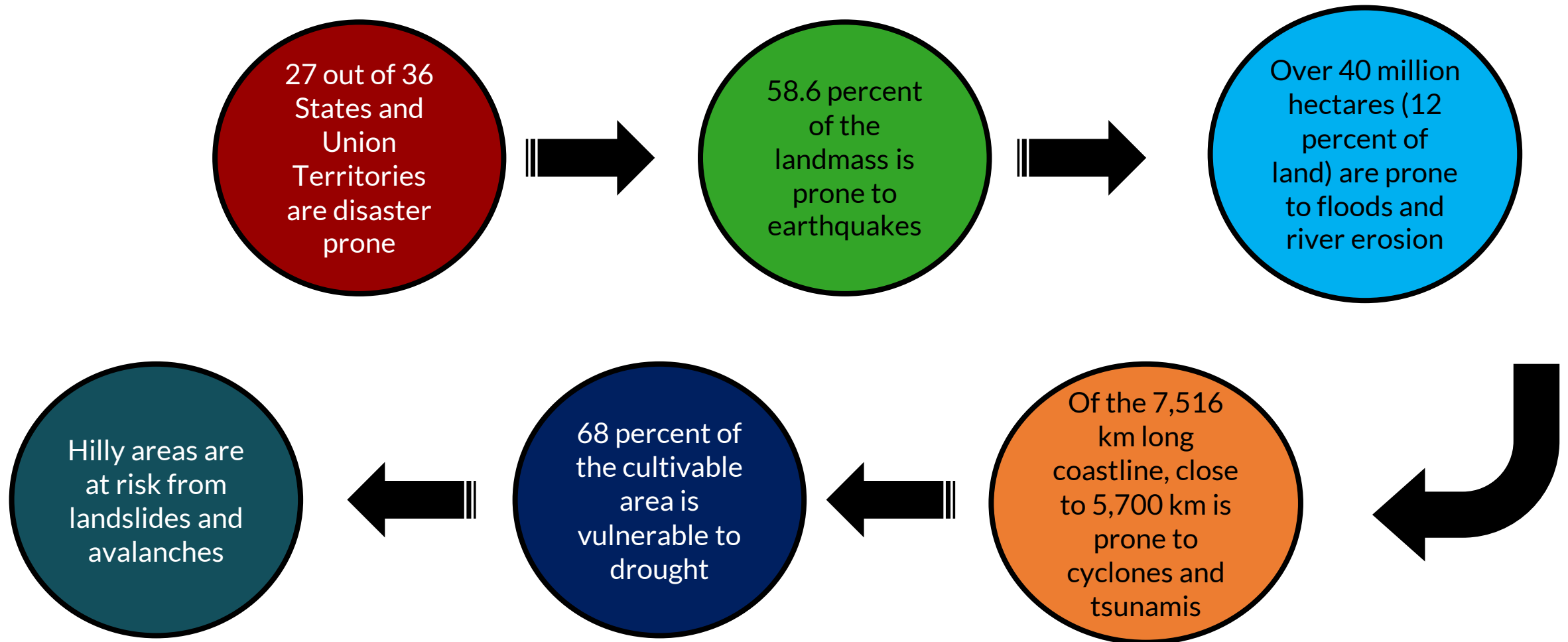
Economy

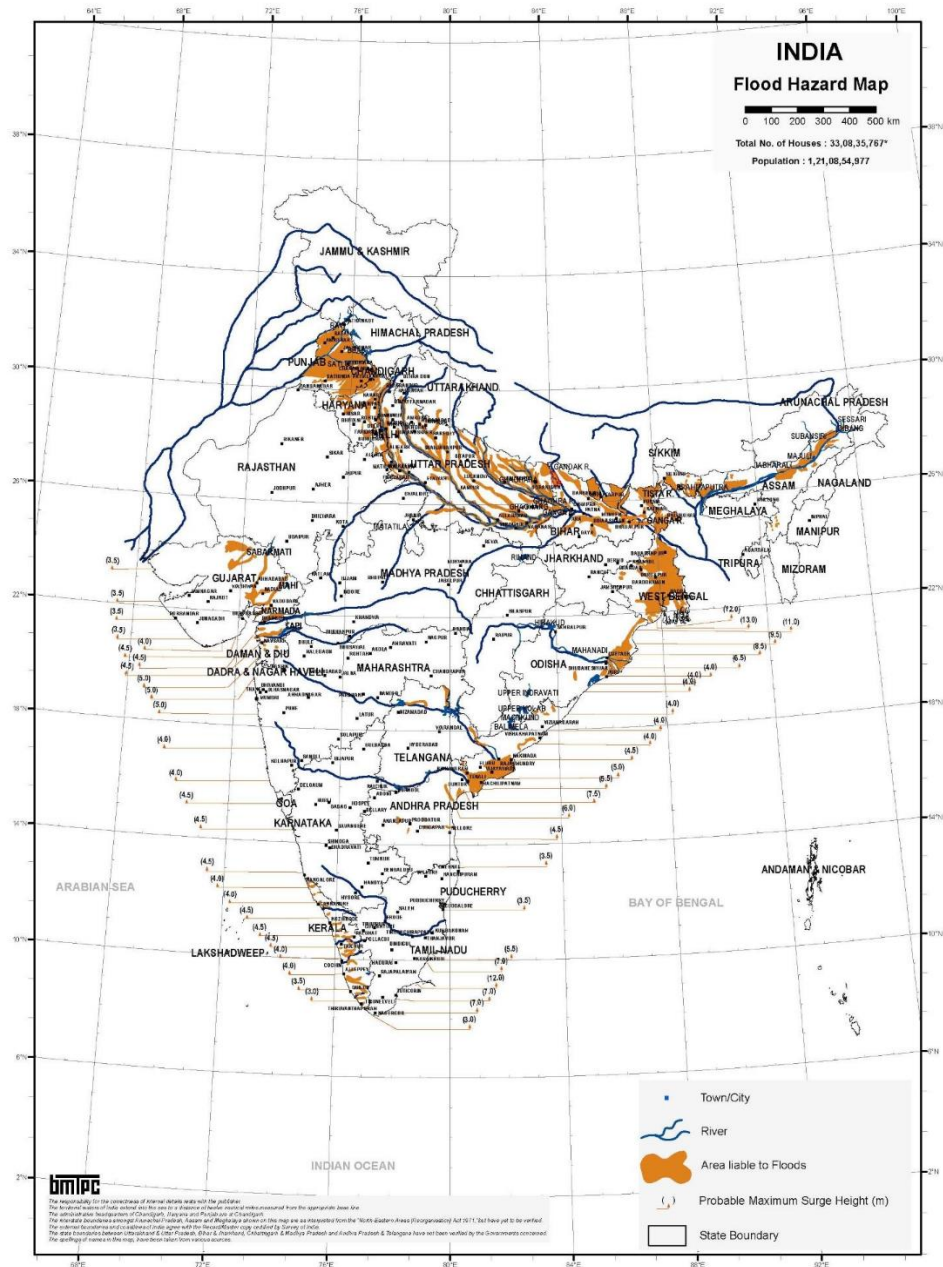
GDP (2021):	\$ 3.18 trillion
GDP Growth:	8.7 %
Forex reserves :	\$ 633.6 billion
Inflation:	5.1 %
Unemployment:	6 %
Fiscal deficit :	6.8 %



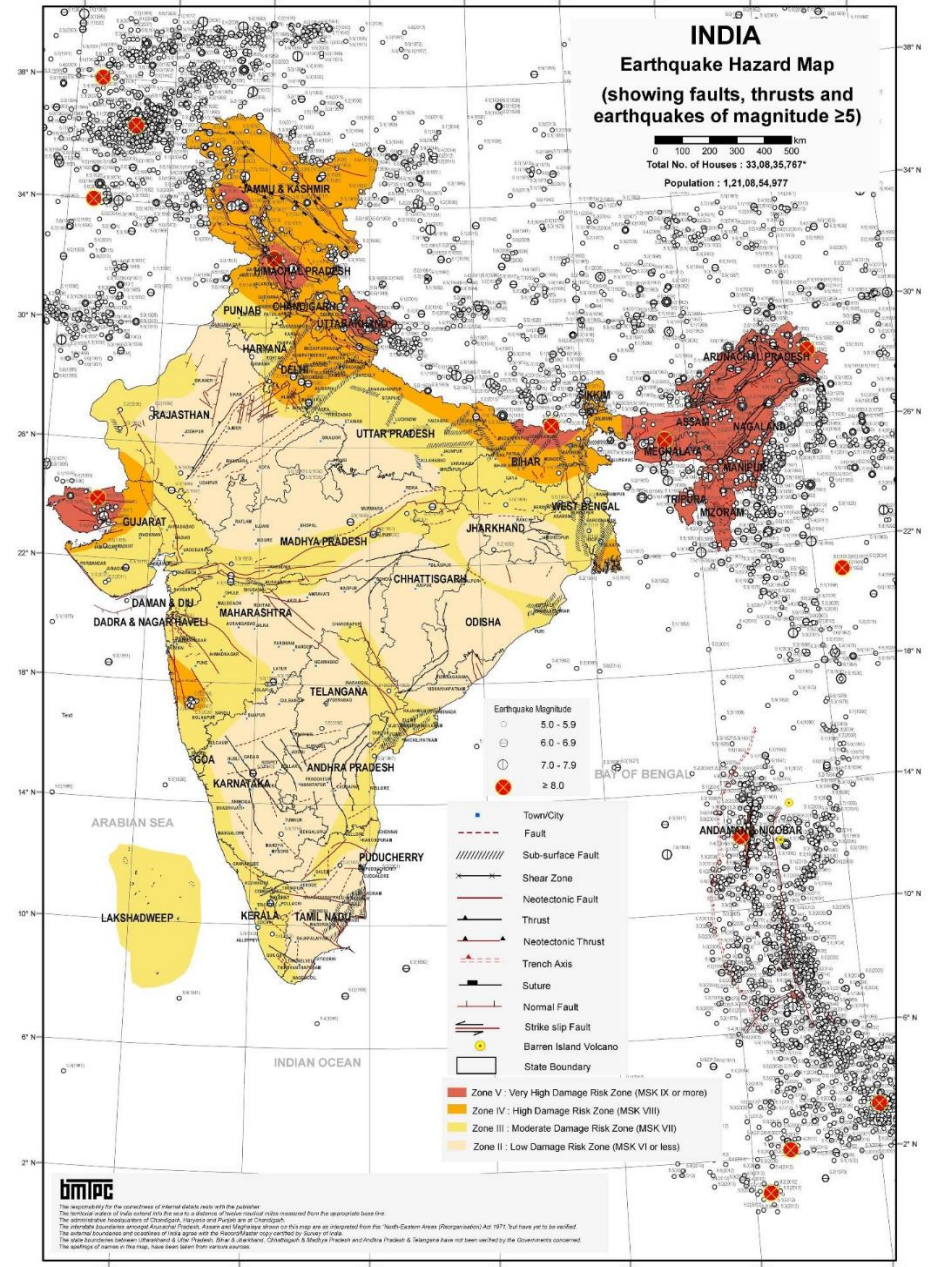
Disaster Risk Profile

India is highly vulnerable to floods, droughts, cyclones, earthquakes, landslides, avalanches and forest fires.

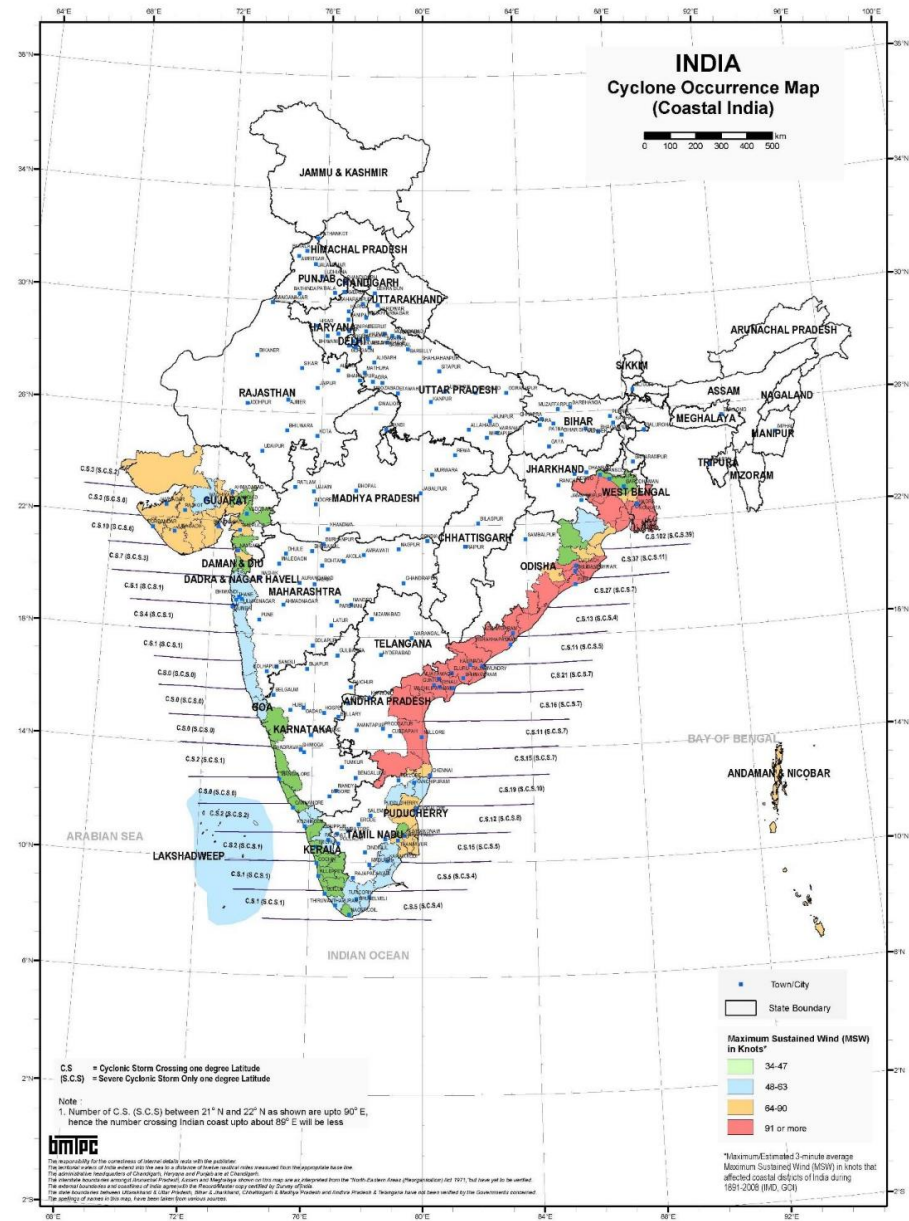




BMTPC : Vulnerability Atlas - 3rd Edition; Peer Group, MoHUA; Map is Based on digitised data of SOI, GOI; Census of India (1987); Flood Atlas (1987); Task Force Report (2004), C.W.C., G.O.I. Houses/Population as per Census 2011; *Houses including vacant & locked houses. Disclaimer: The maps are solely for thematic presentation.



BMTPC : Vulnerability Atlas - 3rd Edition; Peer Group, MoHUA, GOI; Map is Based on digitised data of SOI; Seismic Zones of India Map IS 1893 (Part I); 2002, BIS; Earthquake Epicentre from IMD; Seismotectonic Atlas of India and its Environs, GSI, Houses/Population as per Census 2011; *Houses including vacant & locked houses. Disclaimer: The maps are solely for thematic presentation.



BMPIC - Vulnerability Atlas- 3rd Edition; Peer Group, MoHUA; Map is Based on digitised data of SOI, GOI; Maximum Sustained Wind (MSW) Data from IMD, GOI. Disclaimer: The maps are solely for thematic presentation.



BMPIC - Vulnerability Atlas- 3rd Edition; Peer Group, MoHUA; Map is Based on digitised data of SOI, GOI; Basic Wind Speed Map National Building Code: 2016; Cyclone Data, 1951-2015, IMD, GOI; Houses/Population as per Census 2011; Houses including vacant & locked houses. Disclaimer: The maps are solely for thematic presentation.

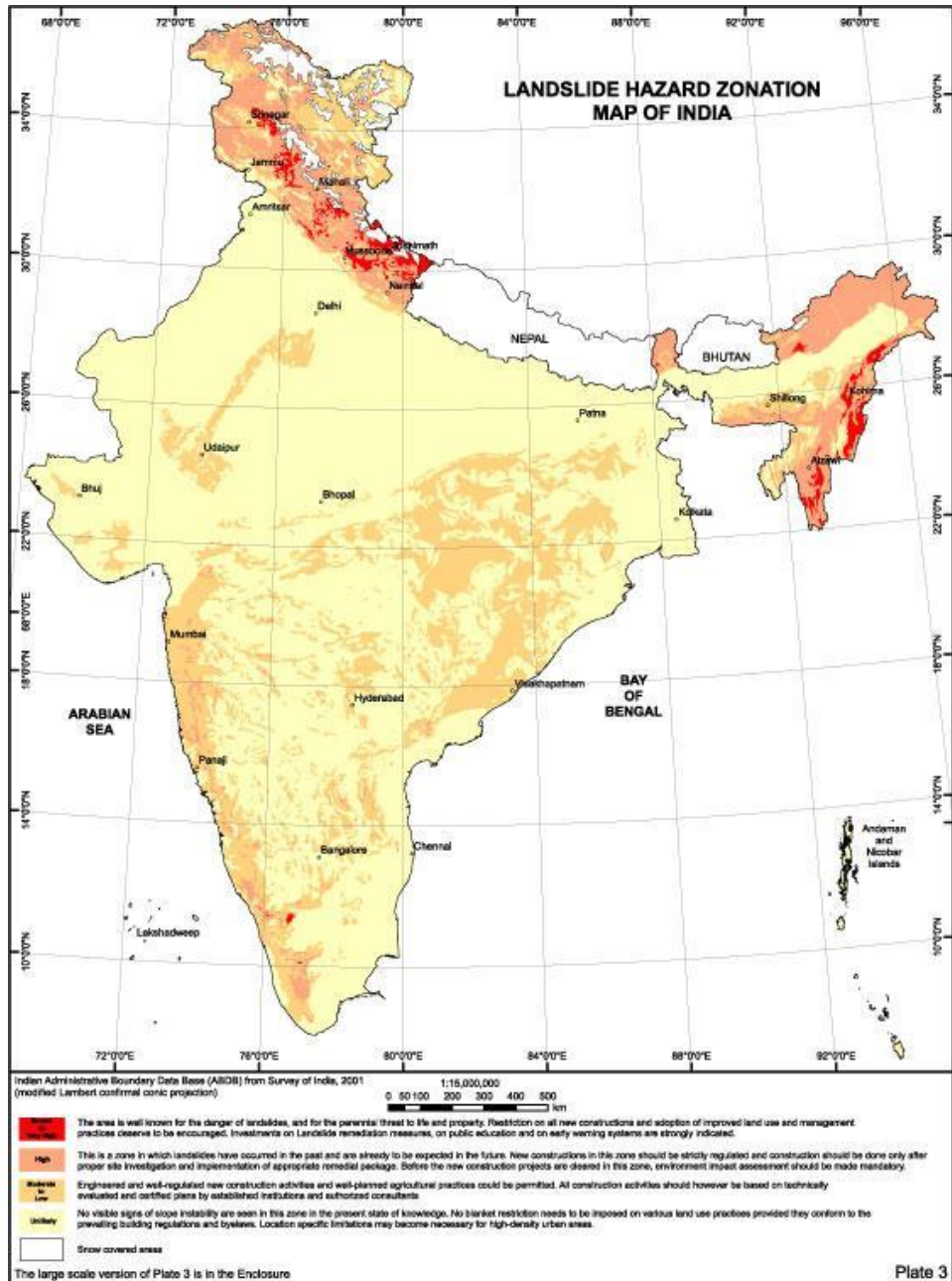
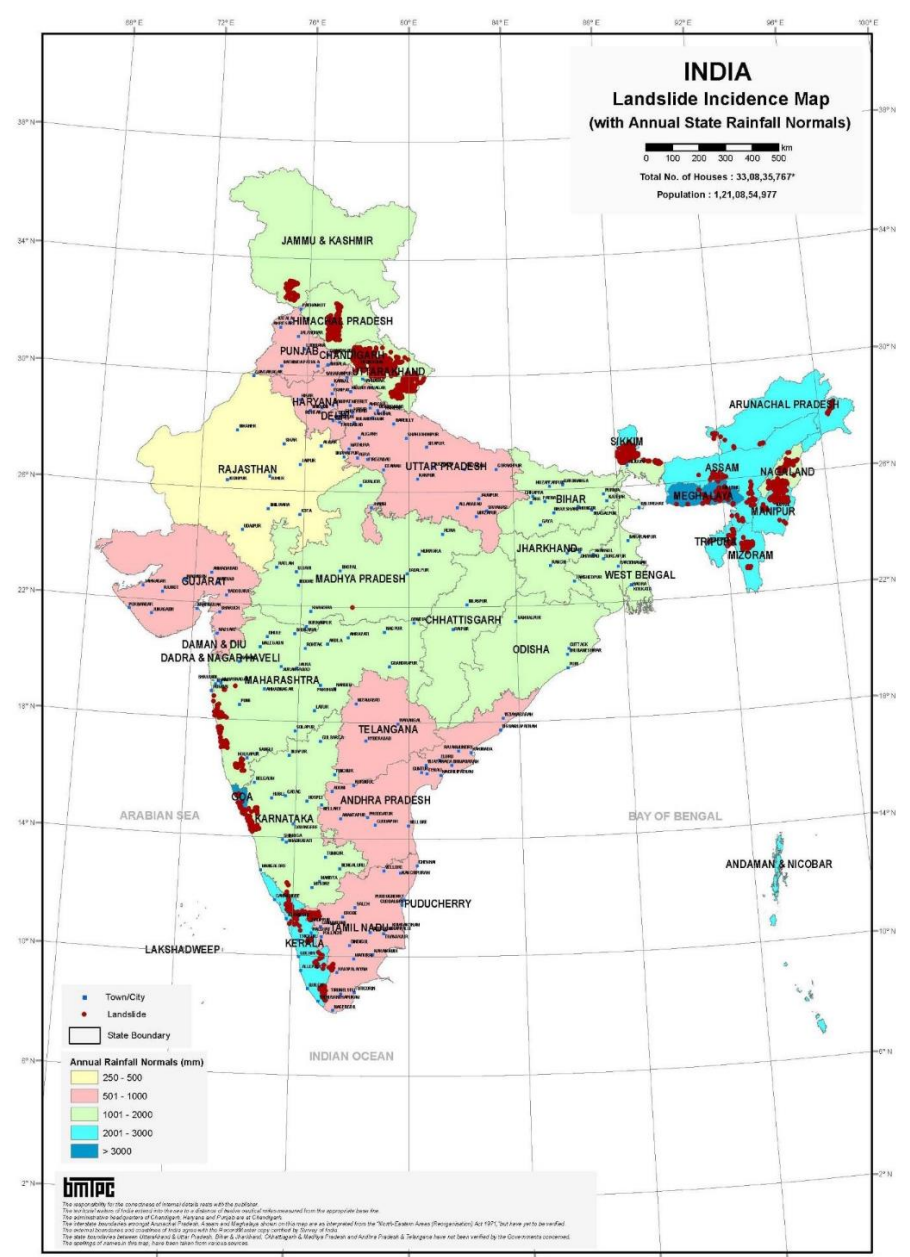


Plate 3



Disasters

India is highly vulnerable to floods, droughts, cyclones, earthquakes, landslides, avalanches and forest fires.

Geophysical:
Earthquake,
Volcano, Tsunami

Hydrological:
Flood, Landslide,
Wave action

Climatological:
Drought, Forest fire,
Glacial Lake Outburst
Flood, Extreme weather

Meteorological:
Cyclone, Cold and Heat
wave, Lightening,
Heavy rain, Hail storm

Other:
Chemical accident, Biological disease, Epidemic,
Pest attack, Nuclear accident, Building collapse,
Structural failure, Air, water and road accidents, etc

Recent Disasters

Disasters that occurred in 2019

February: Seemanchal Express derailment

February: Delhi hotel fire

February: Bandipur wildfire

March: Mumbai bridge collapse

March: Dharwad building collapse

May-June: Heat wave

May: Surat fire

June: Bihar encephalitis outbreak

June: IAF An-32 crash

June: Kullu bus accident

July: Tiware dam failure

July-August: Floods (Kerala; Gujarat)

September: Pune flood

December: Delhi factory fire

Disasters that occurred in 2020

January-present: COVID-19

June: Locust infestation

May: Visakhapatnam gas leak

May: Aurangabad railway accident

May: Cyclone Amphan

May: Uttarakhand forest fires

May: Assam gas and oil leak

May - August: Assam floods

June: Cyclone Nisarga

June: Dahej chemical plant explosion

August: Kerala floods

August: Vijayawada fire

August: Srisaïlam hydroelectric power plant fire

August: Tariq Garden building collapse in Mumbai

October: Hyderabad floods

November: Ahmedabad chemical factory blast

November: Cyclone Nivar

November: Cyclone Burevi

December: Eluru outbreak

Recent Disasters

Disasters that occurred in 2021

January–present: COVID-19

January: Shivamogga quarry explosion

February: Uttarakhand flood

February: Sidhi bus accident

March: Mumbai hospital fire

April: Virar hospital fire

May: Bharuch hospital fire

May: Cyclone Tauktae

May: Cyclone Yaas

July: Maharashtra floods

September: Saurashtra flood

September Cyclones Gulab and Shaheen

November: South India floods

December: Cyclone Jawad

Disasters that occurred in 2022

January – present: COVID-19

January: Vaishno Devi Temple stampede

January: Surat gas leak

January: Bikaner-Guwahati train accident

April : Trikut cable car accident

May: Cyclone Asani

May: Delhi fire

May: Northeast floods

June: Hapur chemical plant explosion

June: Mumbai building collapse

June: Manipur landslide

July: Amarnath floods (Cloudburst)

October: Uttarakhand avalanche

October: Kanpur road accident

October: Bhadohi fire

October: Morbi bridge collapse

Evolution of DRM

The Super cyclone in Orissa of 1999 and the Bhuj earthquake in Gujarat in 2001

Underscored the need to adopt a multi dimensional endeavour involving diverse scientific, engineering, financial and social processes; the need to adopt multi disciplinary and multi sectoral approach and incorporation of risk reduction in the developmental plans and strategies.

Disaster Management shifted from Ministry of Agriculture to Ministry of Home Affairs in 2002

Disaster Management Act, 2005

Constitution of National Disaster Management Authority in 2005 with Prime Minister of India as Chairman

National Executive Committee (NEC) in 2005 with Home Secretary as Chairperson

Setting up of SDMA and DDMA under DM Act 2005

National Disaster Response Force 2006

Institutional Framework

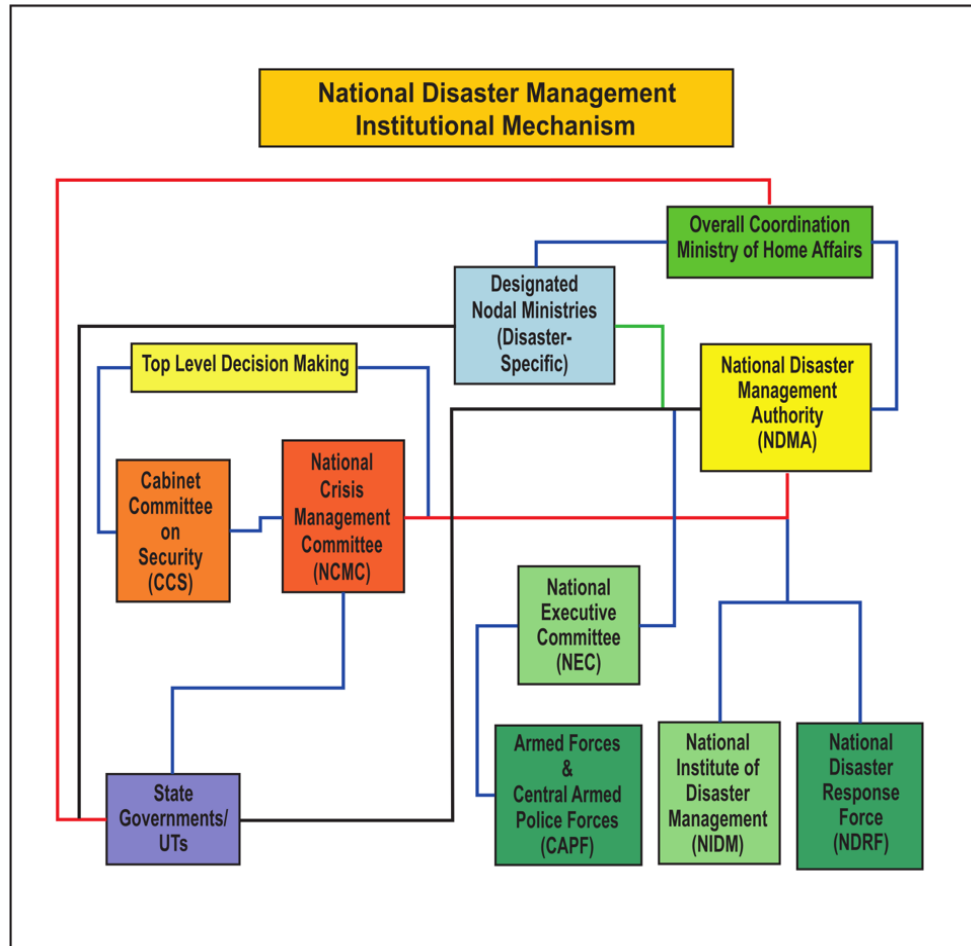


Figure-1: National-level disaster management - Basic institutional framework

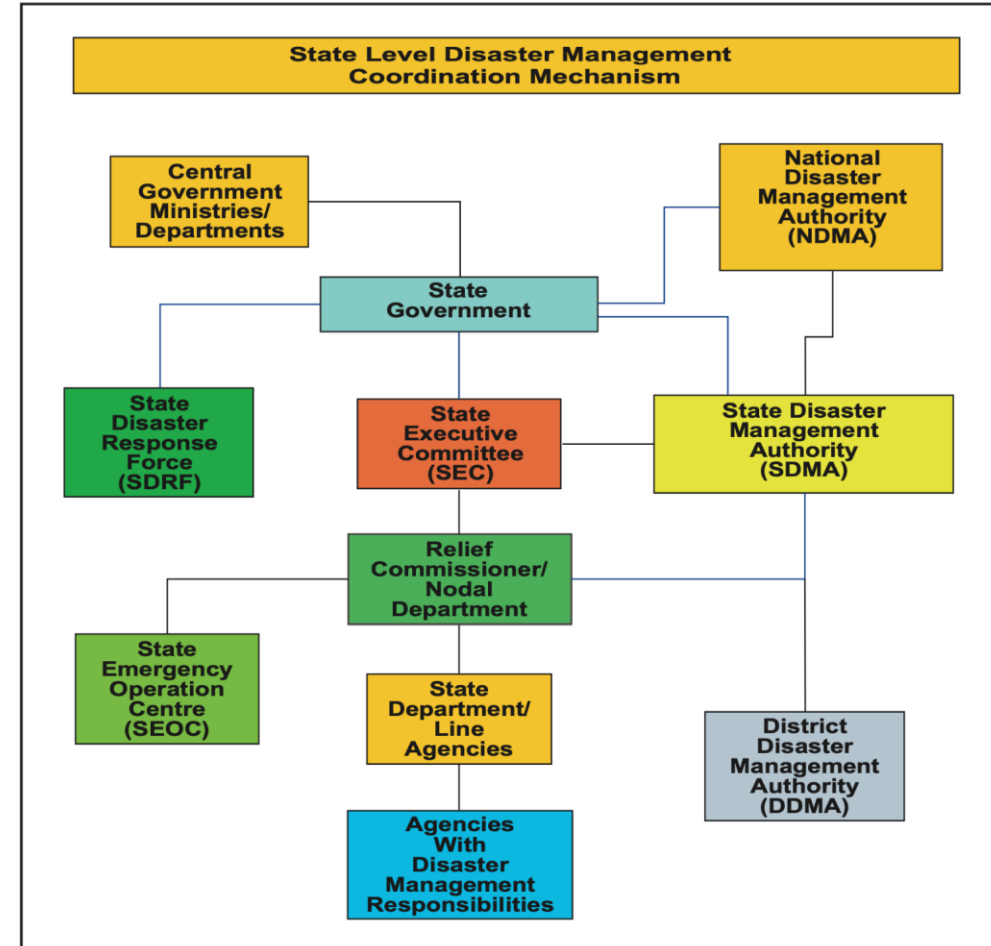
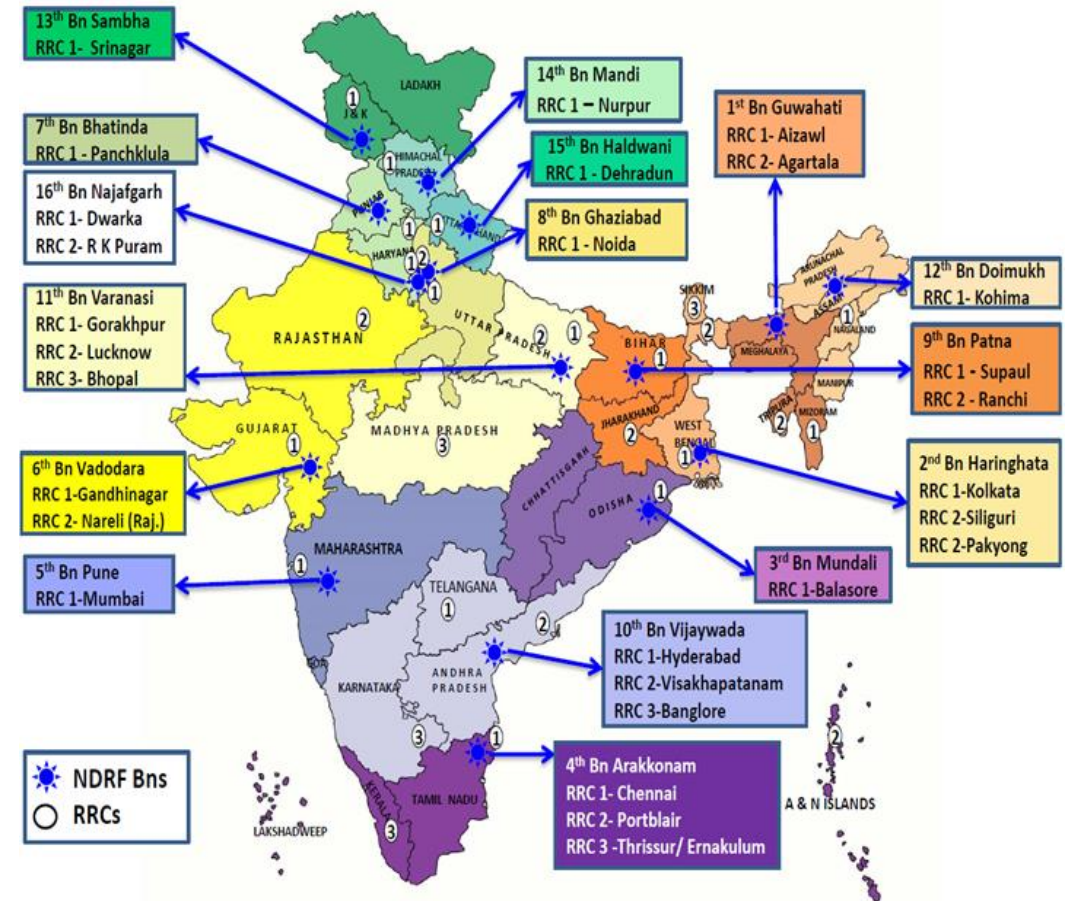


Figure-2: State-level disaster management - Basic institutional framework

National Disaster Response Force

- A force for **specialist response** to a threatening disaster situation/ disaster.
- Total **16 battalions** dedicated for DM activities.
- Each battalion has a strength of **1149 personnel**.
- **18 self contained** Search & Rescue teams in a battalion.
- **28 Regional Response Centres (RRCs)**.
- Located at **57 different locations** (Including Regional Response Centres & Temporary locations) in the country.
- **Specialist manpower** in every team viz. Engineers, Paramedics, Technician, Electrician and dog squad.
- **Training and Capacity Building** activities



State Disaster Response Forces for respective States/ Union Territories are also being raised on similar lines

Disaster Finance

15th Finance Commission FY 2021-22 to 25-25 (Five years)

- **National Disaster Risk Management Fund (NDRMF)** and **State Disaster Risk Management Fund (SDRMF)** at the National level & State level respectively
- NDRMF consist of **National Disaster Response Fund (NDRF) 80 %** & **National Disaster Mitigation Fund (NDMF) 20%** and similarly SDRMF consist of **State Disaster Response Fund (SDRF) 80%** & **National Disaster Mitigation Fund (SDMF) 20%**

NDFMF	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Allocation	12,390	13,010	13,660	14,343	15,060	68,463

SDFMF	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Union share	21,184	23,294	24,466	25,688	26,969	122,601
States' share	6,799	7,137	7,491	7,864	8,261	37,552
Total Allocation	28,983	30,431	31,957	33,552	35,230	160,153

National/ State Disaster Response Fund Distribution

Response & Relief	40%
Recovery & Reconstruction	30%
Preparedness & capacity building	10%

The figures are in INR (₹) Crores

Sendai Framework: Targets

SUBSTANTIALLY REDUCE

-  A. Global disaster mortality
-  B. Number of affected people
-  C. Economic loss in relation to GDP
-  D. Damage to critical infrastructure and services disruption

**SEVEN TARGETS
TO ACHIEVE
BY 2030**


SENDAI FRAMEWORK
FOR DISASTER RISK REDUCTION 2015-2030

-  E. Number of countries with national and local DRR strategies by 2020
-  F. International cooperation to developing countries
-  G. Availability and access to early warning systems and DRR information

SUBSTANTIALLY INCREASE

Prime Minister's 10 point agenda on DRR

All development sectors must imbibe the principles of disaster risk management

Work towards risk coverage for all: from Poor households to Small & Medium Enterprises to Multinational corporations to Nation states

Encourage greater involvement and leadership of Women leadership in Disaster Risk Management

Invest in risk mapping globally to improve global understanding of Nature and disaster risks

Leverage technology to enhance the efficiency of disaster risk management efforts

Develop a network of universities to work on disaster-related issues

Utilise the opportunities provided by social media and mobile technologies for disaster risk reduction

Build on local capacity and initiative to enhance disaster risk reduction

Make use of every opportunity to learn from disasters and, to achieve that, there must be studies on the lessons after every disaster

Bring about greater cohesion in international response to disaster

Steps to meet Sendai Targets

1

India is not only focusing on reducing mortality from major disasters but also from small or medium, and locally-specific disasters.
E.g. Heat wave related deaths have decreased from over 2000 in 2015 to 25 in 2018. This has been possible through issuance of appropriate national guidelines for almost every kind of disasters.

2

The National Disaster Management Plan updated in 2019 explicitly addresses the issues related to social inclusion and outline specific measures for bringing coherence in the implementation of SFDRR, SDGs and the Paris Agreement on climate change.

3

India hosted the First 'BIMSTEC Disaster Management Exercise' in the National Capital Region in October 2017 to enhance regional and international cooperation.

4

In February 2019, India hosted a meeting on Disaster Risk Management of the Indian Ocean Rim Association (IORA), an intergovernmental organization of 22 members and nine dialogue partners to prepare a work plan for regional cooperation on DRM among IORA members.

Steps to meet Sendai Targets

5

India has initiated a dialogue with more than 40 countries to build a Coalition for Disaster Resilient Infrastructure. Such a Coalition would benefit both developed and developing countries and serve as a knowledge and capacity development platform for promoting disaster resilient infrastructure.

In order to further develop the notion of a Coalition, India in collaboration with UNISDR, has hosted international Workshops on Disaster Resilient Infrastructure in January 2018 and March 2019.

6

Aapda Mitra scheme has been launched since May 2016 with a focus on training of 6000 community volunteers (200 volunteers per district) in disaster response in selected 30 most flood prone districts of 25 States of India.

7

In order to augment the capacity of State level disaster risk management organizations to steer the implementation, India has launched a national programme to provide appropriate technical and financial support to State governments.

To encourage innovation and recognise the exceptional contributions of organisations and individuals to Disaster Risk Management in the country, Government of India has instituted an annual national award in the name of our great freedom fighter Netaji Subhash Chandra Bose.

The first award was announced on his birth anniversary on 23 January 2019



“ The country cannot forget the services rendered by the unsung heroes who have done excellent work in the field of Disaster Management. ”
-Narendra Modi, Prime Minister

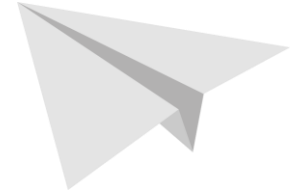
Honouring Selfless Service in Disaster Management

Inviting Nominations for

**Subhash Chandra Bose
Aapda Prabandhan Puraskar**

National Award for Excellence in Disaster Management

Research Theme



Preparedness for Disaster Response

1. Study the preparedness and response methodologies of different agencies in Japan.
2. Identify the gaps in the preparedness for disaster response in India.
3. Develop a data driven decision support system / workflow which will overcome the identified gaps in preparedness for disaster response.



Arigato Gozaimasu!

Thank You!



This Presentation is prepared by

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