

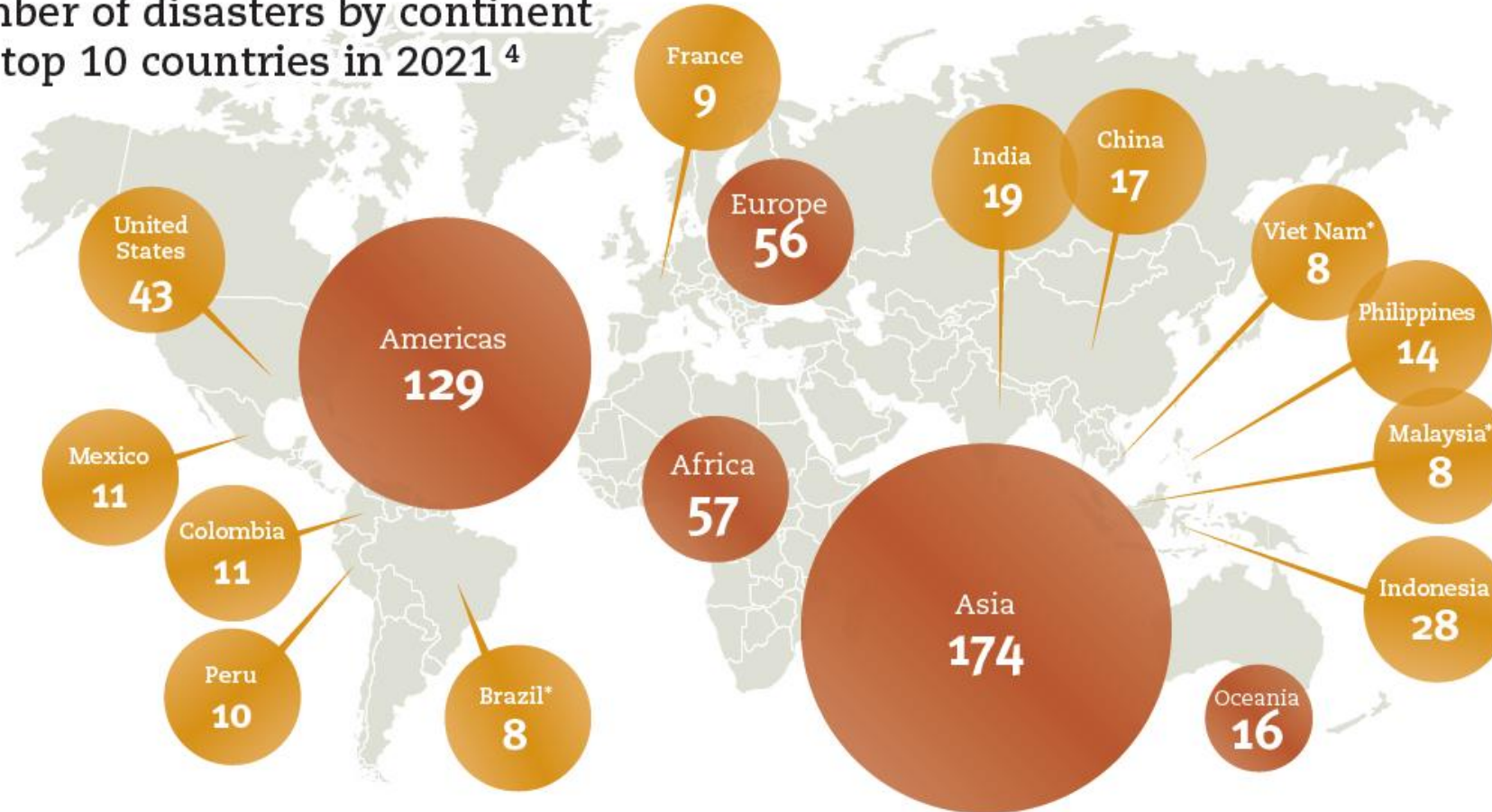
Disaster Risk Management



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Should we worry?

Number of disasters by continent and top 10 countries in 2021 ⁴



Occurrence by disaster type: 2021 compared to the 2001-2020 annual average

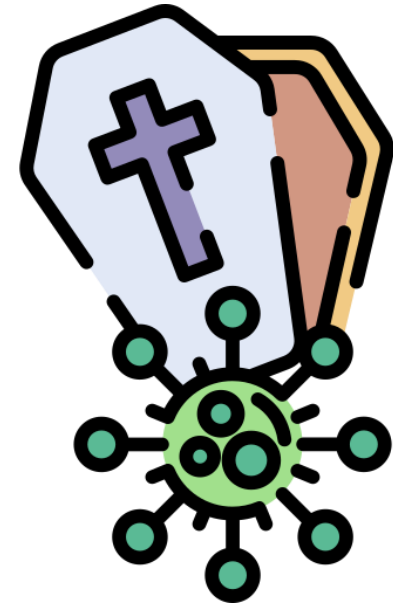
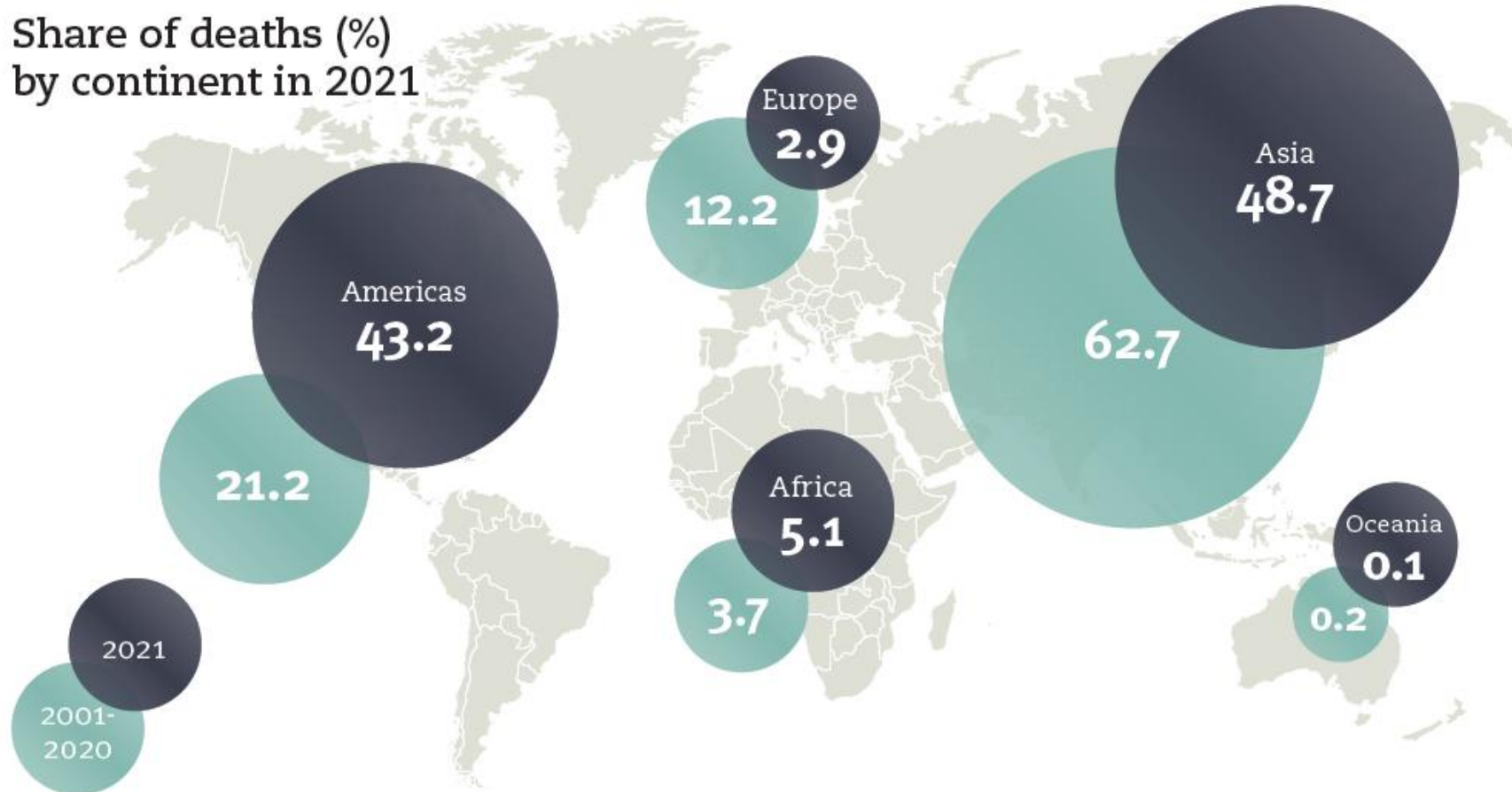
347 2001 to 2020 < 432 in 2021

Source: CRED 2021
Full report available on - <https://reliefweb.int/report/world/2021-disasters-numbers#:~:text=In%202021%2C%20a%20total%20of,across%20the%202001%2D2020%20period.>



Should we worry?

Share of deaths (%)
by continent in 2021



COVID-19

About 83,000 lives lost in India

Number of deaths by disaster type: 2021
compared to the 2001-2020 annual average

61,212 > 10,492
2001 to 2020 in 2021

Source: CRED 2021
Full report available on -
<https://reliefweb.int/report/world/2021-disasters-numbers#:~:text=In%202021%2C%20a%20total%20of,across%20the%202001%2D2020%20period.>



Should we worry?

Share of economic losses (%)
by continent in 2021



Since 2001, in **India**,
the economic losses
due to disasters are
**Rs 13 lakh crore or 6
per cent of the GDP -
SBI**

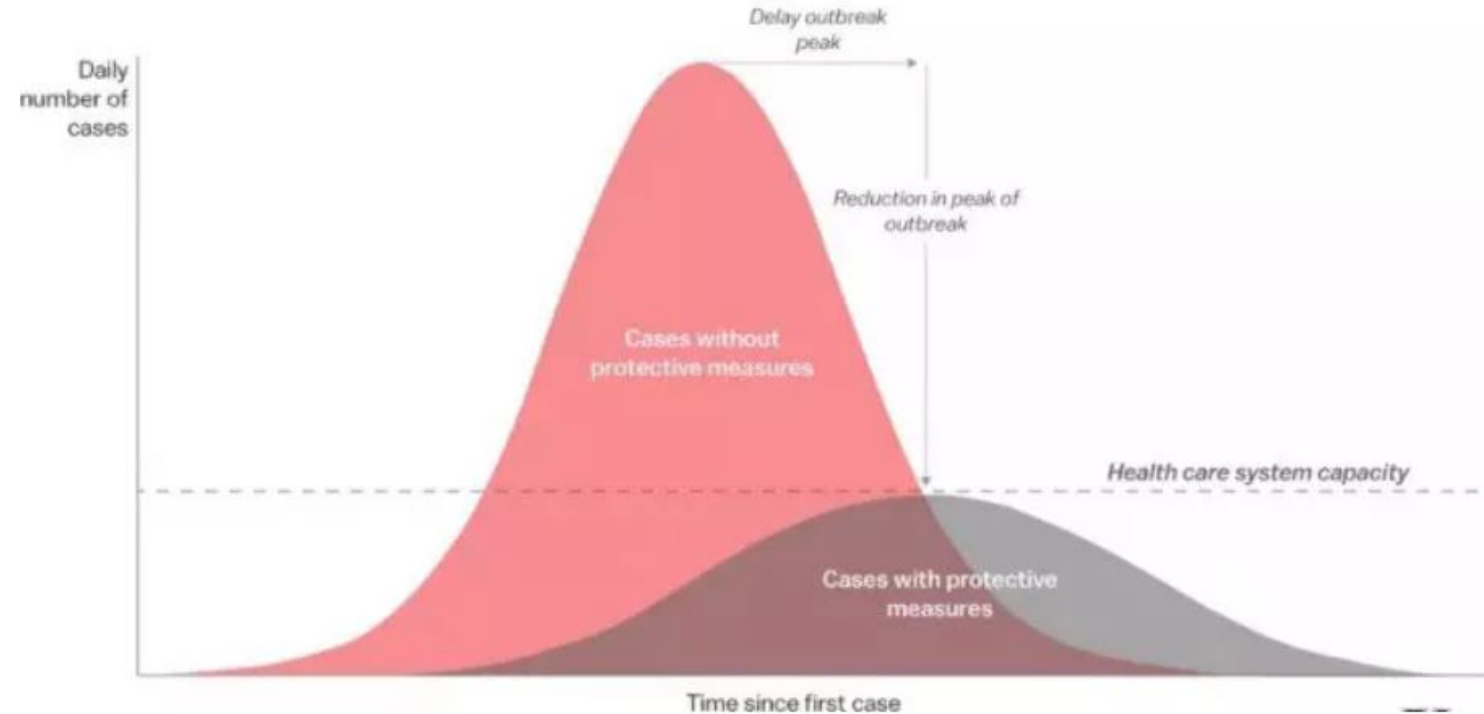
(<https://www.pressreader.com/india/the-free-press-journal/20211127/281947431121634>)

Economic losses (billion US\$) by disaster type:
2021 compared to the 2001-2020 annual average⁸

153.8 < **252.1**
2001 to 2020 in 2021

Source: CRED 2021
Full report available on -
<https://reliefweb.int/report/world/2021-disasters-numbers#:~:text=In%202021%2C%20a%20total%20of,across%20the%202001%2D2020%20period>.

- ❑ The **number of people in need of humanitarian assistance** as a result of storms, droughts and floods could climb beyond 200 million annually by 2030 – compared to an estimated 108 million today.
- ❑ The worsening impact of climate change could displace 140 million people within their countries borders by 2050.





Can we do something?

- Every \$1 invested in disaster mitigation by three federal agencies saves society \$6. (National Institute of Building Sciences 2017)
- Just 24 hours warning of a coming storm or heat wave can cut the ensuing damage by 30 percent.
- Investing in Disaster Risk Reduction (DRR) saves lives and money and future-proofs our development gains.





What is 'Disaster Risk'?

- ❑ To actually understand what a **disaster** is, we must understand what **disaster risk** is!
- ❑ **To understand disaster risk, we need to thoroughly understand few terms!**
- ❑ The words that we need to know and understand are:
 - ❑ **Hazard**
 - ❑ **Exposure**
 - ❑ **Vulnerability**
 - ❑ **Coping capacity**





Hazard

A process, phenomenon or human activity that **may cause** loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation.





Cascading & Compounding Hazards

- **Cascading:** One often finds that one hazard triggers another.

Natural Hazards Triggering Technological Disasters or NATECH.

- ▣ You may want to go through this to learn more about NATECH.
- ▣ <https://ec.europa.eu/jrc/sites/jrcsh/files/natech-leaflet.pdf>

Food for thought: Do you live in an area which is prone to NATECH?

- **Compounding:** More than one hazard interact and cause multiplicatively destructive consequences

Food for thought: Examples?



Exposure

The **situation** of people, infrastructure, housing, production capacities and other tangible human assets **located in hazard-prone areas**



The **conditions** determined by physical, social, economic and environmental factors or processes which **increase the susceptibility** of an individual, a community, assets or systems **to the impacts of hazards**

Vulnerability is a characteristic of those ‘assets’ which are exposed!

- If you build your house in an area which is prone to flood or earthquake, you are **vulnerable**.
- Let's say that you have built your house no matter what, but if you have not taken any measure to deal with it, then you are **more vulnerable**!





Coping Capacity

The **ability** of people, organizations and systems, using available skills and resources, **to manage adverse conditions, risk or disasters.**

- The capacity to cope requires continuing awareness, resources and good management, both in normal times as well as during disasters or adverse conditions.
- Coping capacities contribute to the reduction of disaster risks.

If you have the capacity to deal with the disaster risk, you are good to go, else it is a disaster!

“When the going gets tough, the tough gets going”



Disaster Risk

$$\text{Disaster Risk} \propto \frac{\text{Hazard} \times \text{Exposure} \times \text{Vulnerability}}{\text{Coping Capacity}}$$

The potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society or a community in a specific period of time, determined probabilistically as a function of hazard, exposure, vulnerability and capacity.

#NoNaturalDisasters

Flood/Drought/Cyclone are Hazard or Disaster ?



#NoNaturalDisasters



Disaster

- This has been taken from the **Disaster Management Act of India, 2005**

“**Disaster** means a catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or man made causes, or by accident or negligence which results in substantial loss of life or human suffering or damage to, or degradation of, environment, and is of such a nature or magnitude as to be beyond the coping capacity of the community of the affected area.”



Major Hazards in India & Gujarat



Earthquake

Seismic hazards are responsible for an average **direct death toll of over 20,000 people per year**

Direct economic losses of the nominal GDP

- ❑ the earthquakes of Guatemala (1976) - 98 %
- ❑ Nicaragua (1972) – 82%
- ❑ El Salvador (1986) – 40%
- ❑ Haiti (2010) - 120%



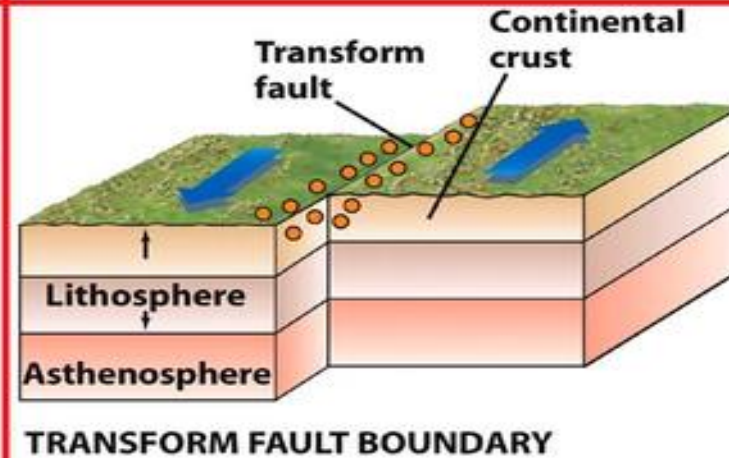
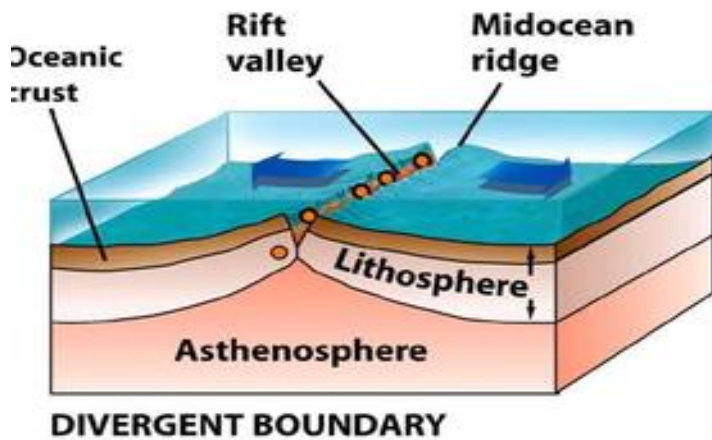
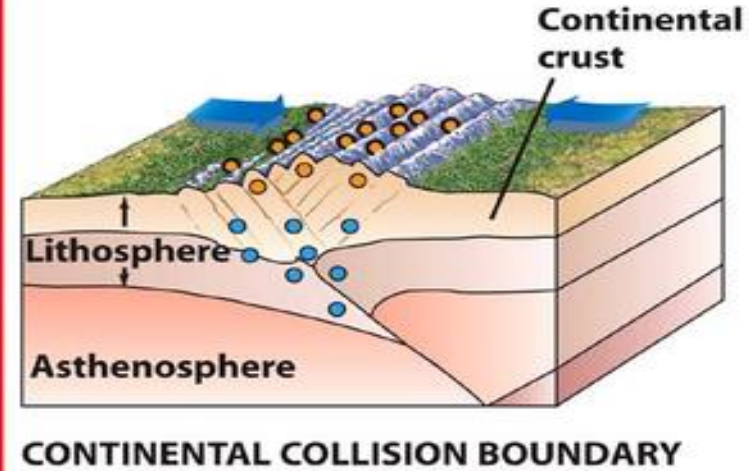
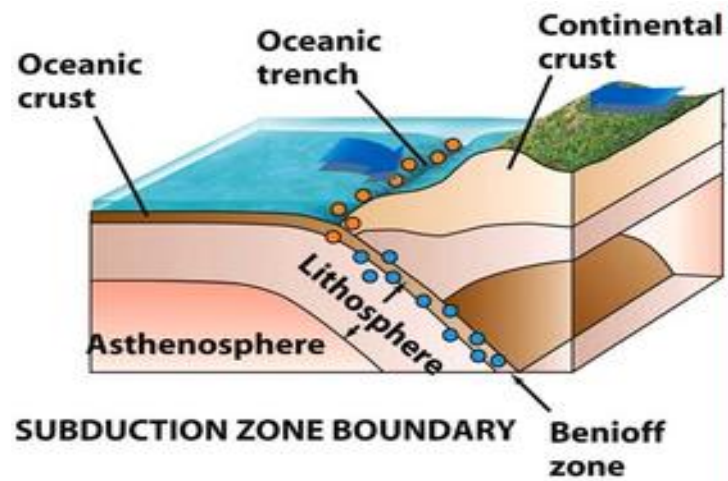


Earthquake

Terminologies to be aware of:

- ❑ Focus / Hypocenter is _____
- ❑ Epicenter is _____
- ❑ Body waves are _____
- ❑ Surface waves are _____
- ❑ Magnitude is _____
- ❑ Intensity is _____
- ❑ Seismograph is _____

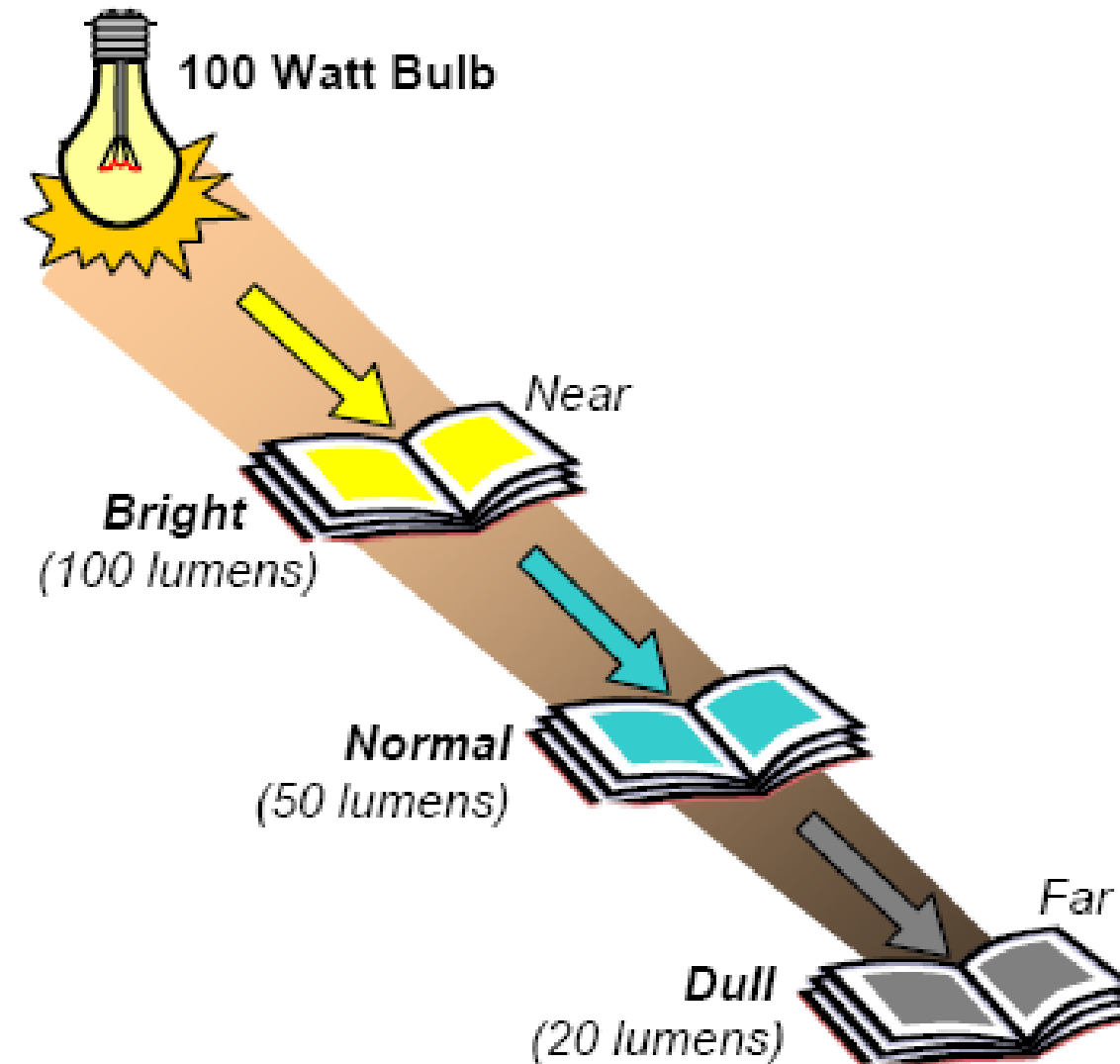
Types of Faults



- Shallow earthquakes
- Deep earthquakes

Magnitude Vs Intensity

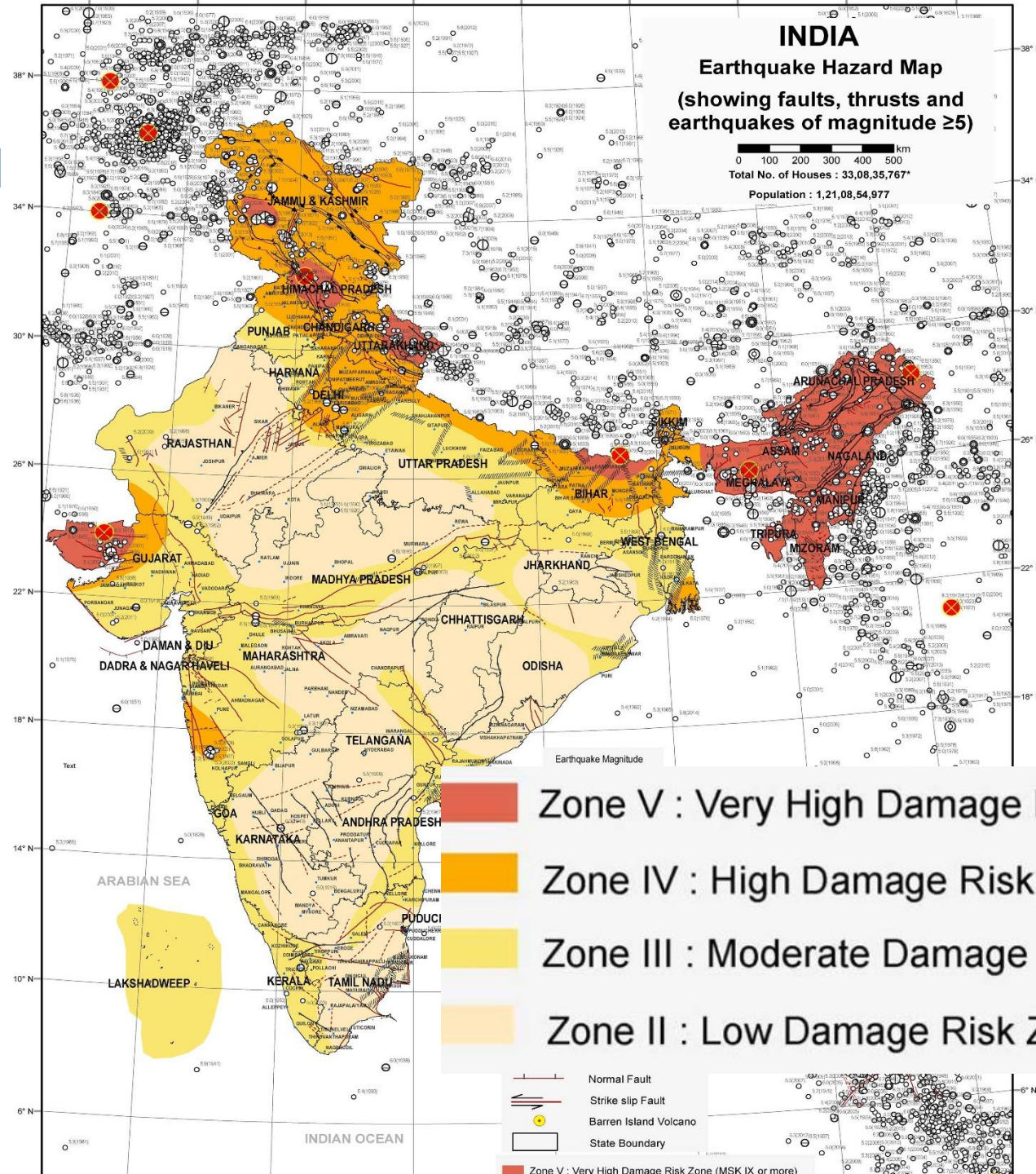
- **Magnitude** is a *quantitative* measure of the **actual size** of the earthquake
- **Intensity** is a *qualitative* measure of the actual shaking **at a location** during an earthquake





सत्यमेव जयते

Earthquake Hazard Map of India

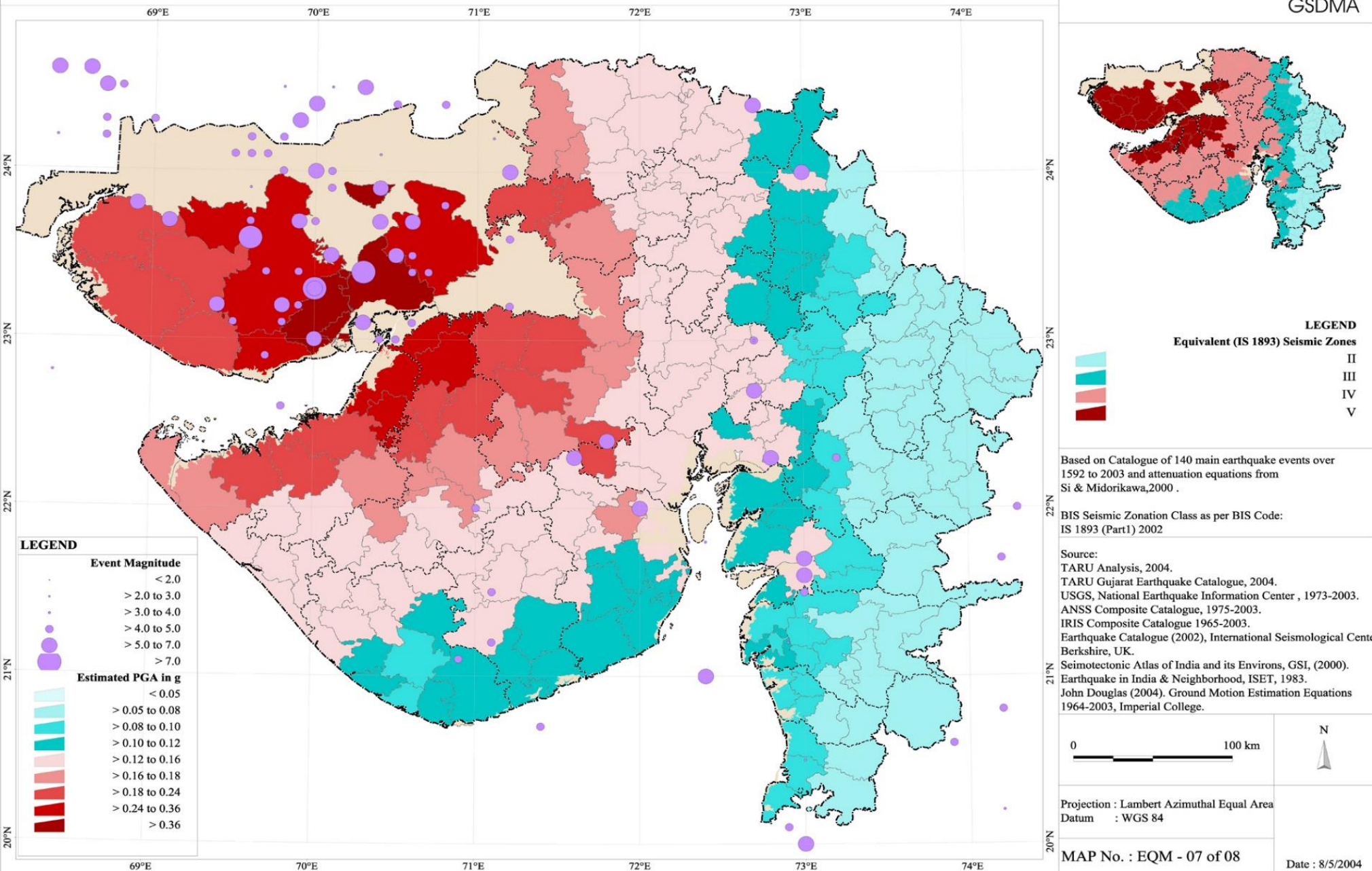


Source: (BMTPC 2019)

Gujarat Earthquake Hazard Risk Zonation: 100-year return period Estimated Mean Taluka Peak Ground Acceleration (PGA) (in g)



Earthquake Hazard Map of Gujarat





Case Study – Gujarat Earthquake

Earthquake of Magnitude 6.9 on Richter Scale

Epicenter - Chaubari Village, North of Bhachau, Kutch 21 out of 25 district affected

One of the worst earthquakes in the last 180 years

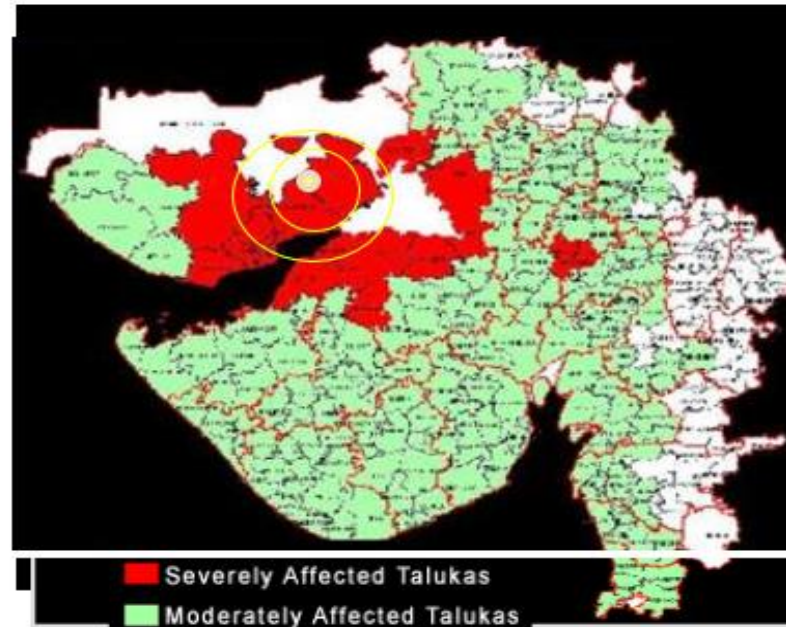
Over 10 million people affected

7,633 villages adversely affected, 450 villages flattened totally

Reported lives lost 13,805

167,000 persons suffered injury

21 out of 25 district affected



Around 5 million people needed to be given immediate relief all over the State

Over 2,22,035 houses completely destroyed and 9,17,158 houses damaged

Police Department – Admin Buildings:

10 destroyed & 122 damaged

Residential Buildings:
1257 destroyed and 4932 damaged

Over 300 hospitals destroyed

...that too in the wake of two consecutive years of drought.

Source: (GSDMA 2005)



Effects of the Gujarat Earthquake 2001

Damage & Loss Assessment

Direct

- Human lives (13805)
- Livestock, other animals
- Private property
- Municipal infrastructure
- Power/ telecommunications infrastructure
- Health/ education assets
- Estimate: Rs. 9900 crore

Indirect

- Export/ import
- Agricultural output
- Industry/services output
- Remittance income
- Fall in earning potential due to disability, trauma
- Unemployment
- Health hazard
- Estimate: Rs. 3000 crore

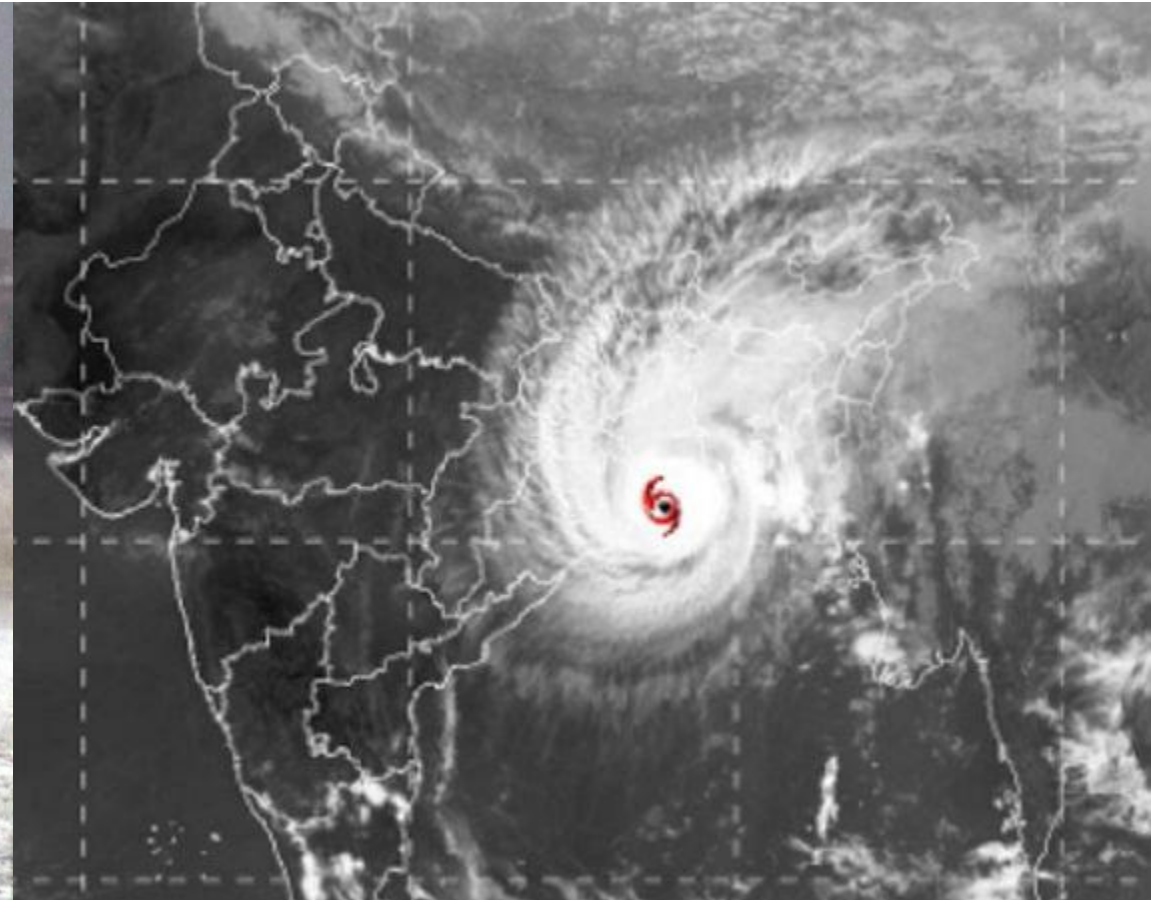
Tertiary

- Long-term development
- Overall investment climate
- Fund reallocation
- Community migration/ relocation
- Estimate: Rs. 10100 crore

Source: (GSDMA)



Cyclone



Out of about 8000 km Coastline - close to 5,700 km is prone to Cyclones

Cyclone: Category

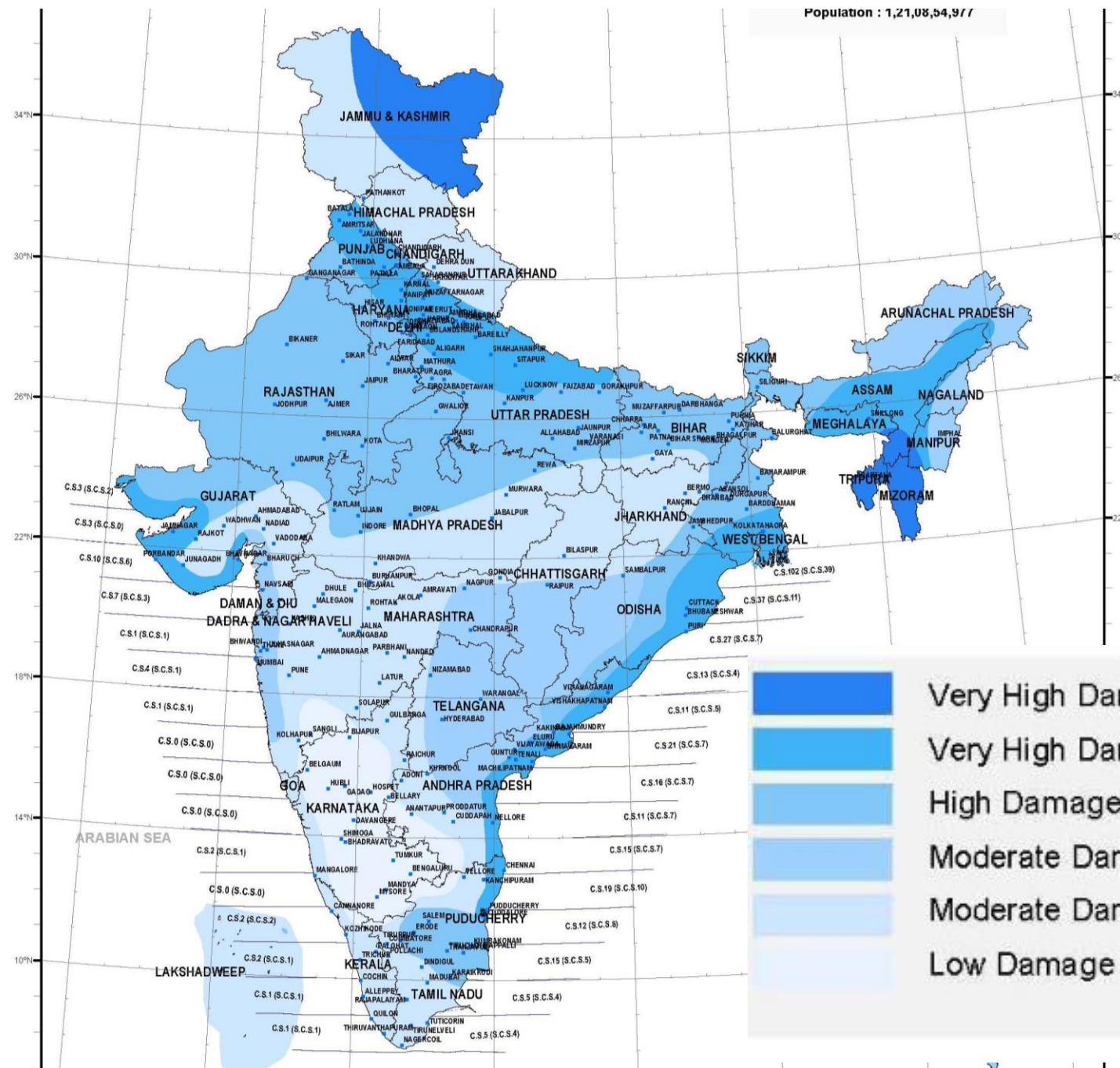
Category	Sustained Winds (3-min average)
Super Cyclonic Storm	≥120 kt ≥221 km/h
Extremely Severe Cyclonic Storm	90–119 kt 166–220 km/h
Very Severe Cyclonic Storm	64–89 kt 118–165 km/h
Severe Cyclonic Storm	48–63 kt 89–117 km/h
Cyclonic Storm	34–47 kt 63–88 km/h
Deep Depression	28–33 kt 51–62 km/h
Depression	17–27 kt 31–50 km/h



Source: (BMTPC 2019)



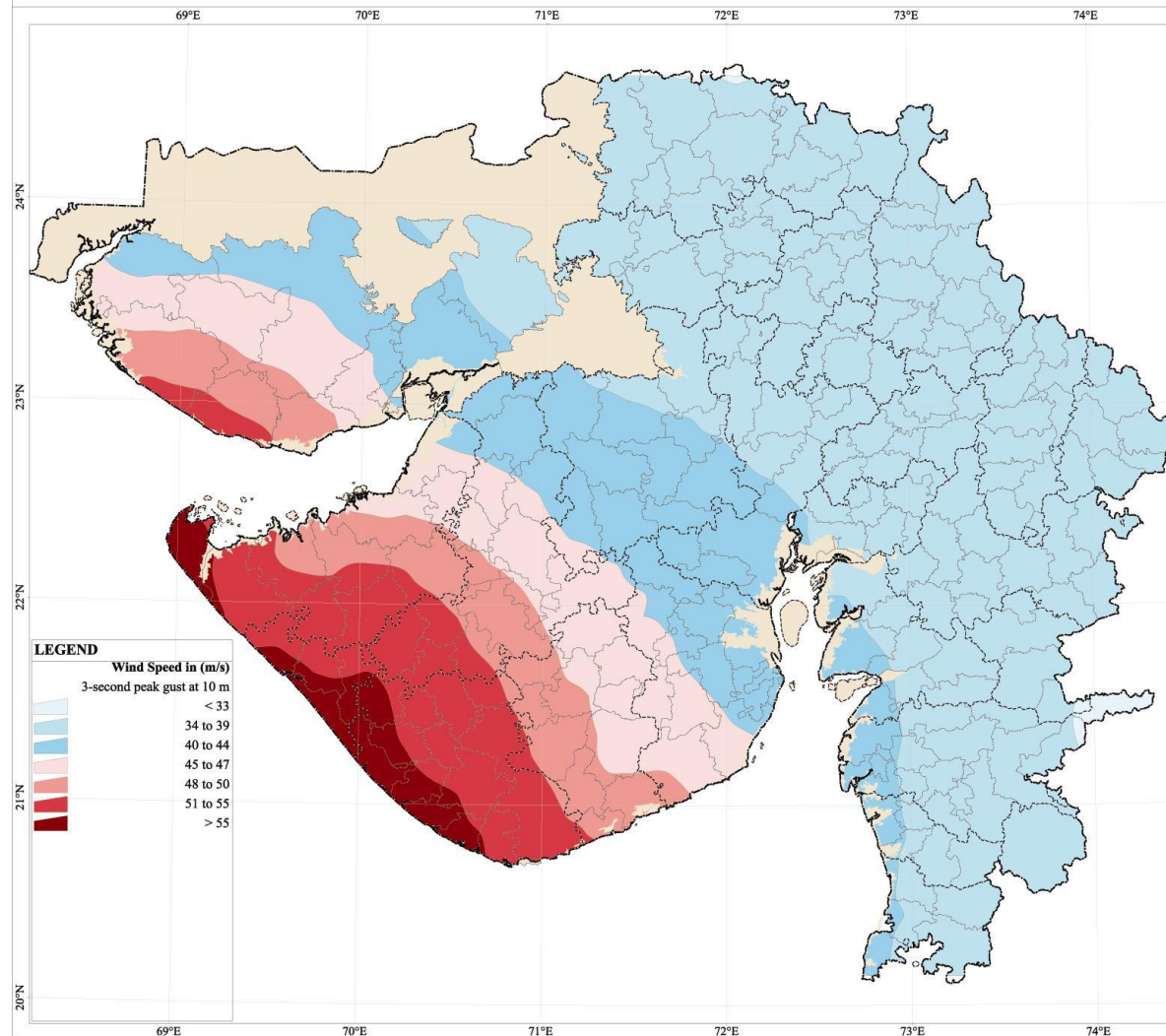
Wind Hazard Map of India



Source: (BMTPC 2019)

Cyclone: Gujarat

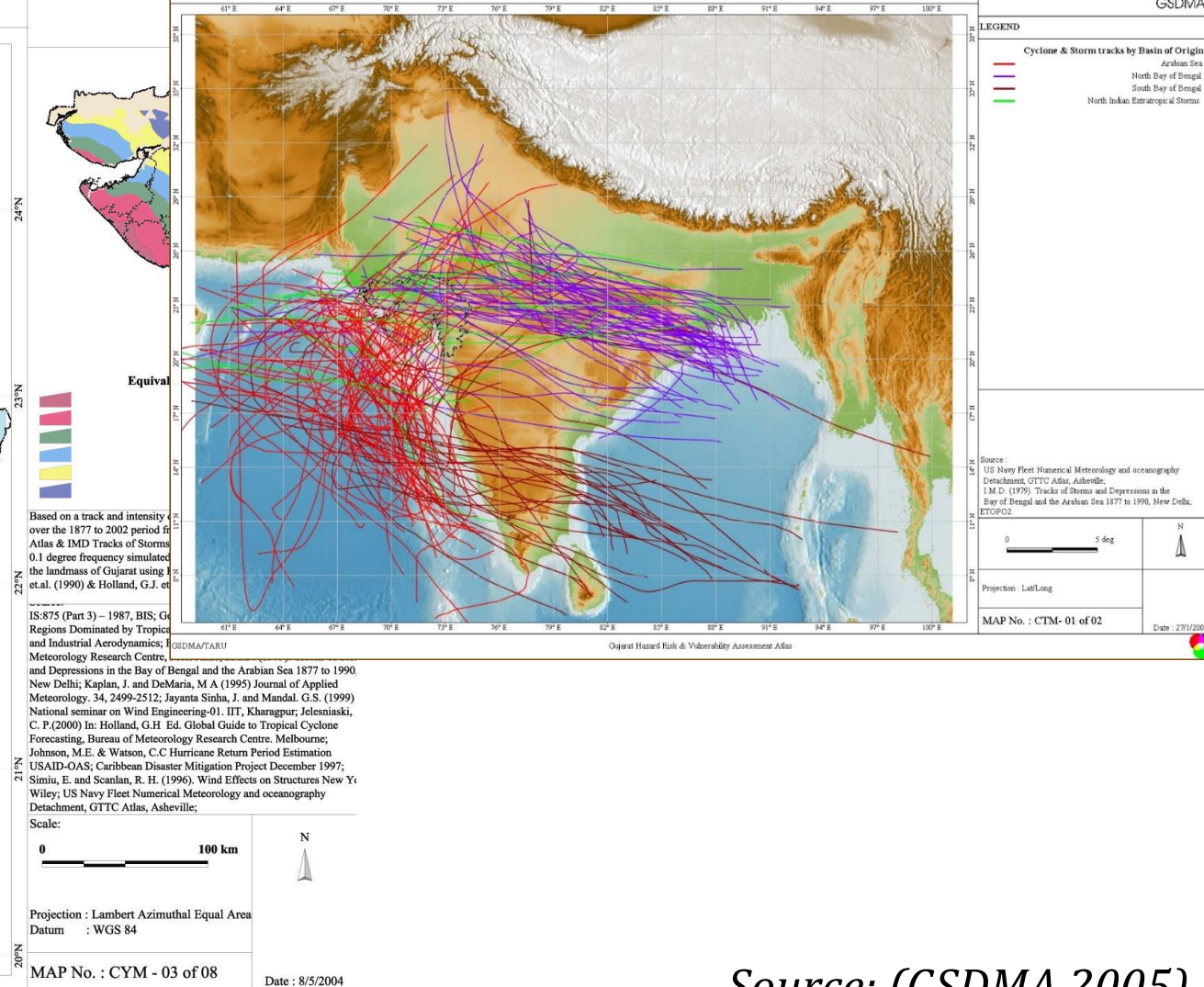
**Gujarat Cyclone Hazard Risk Zonation: 100-year return period
Estimated Basic (3-second peak gust) Wind Speed Zones in (m/sec)**



TARU/GSDMA

Gujarat Hazard Risk & Vulnerability Assessment Atlas

**Gujarat Cyclone Hazard Risk Zonation: Cyclone & Storm Tracks affecting Gujarat & its Environs
(1872-2002)**



Source: (GSDMA 2005)

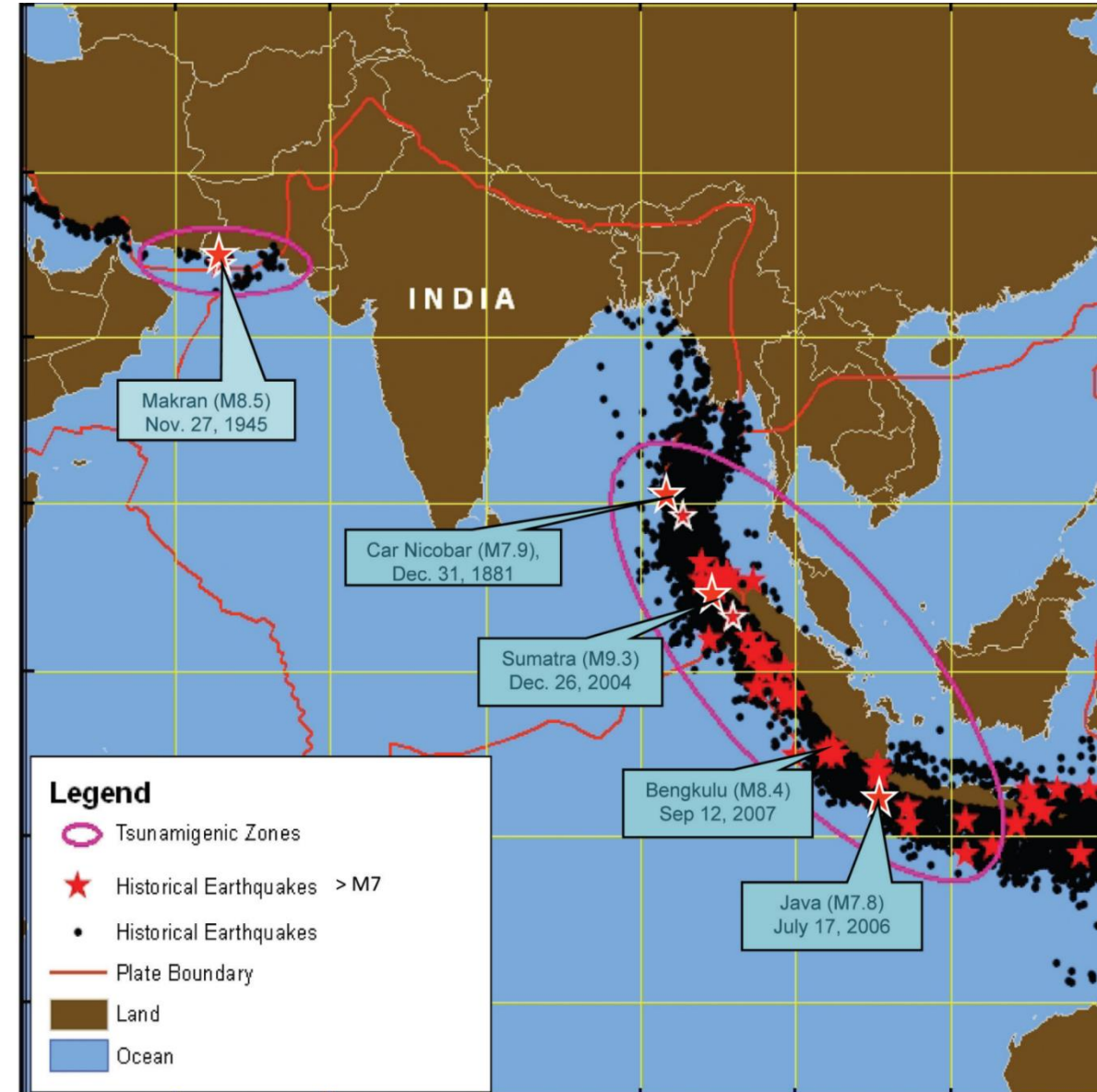
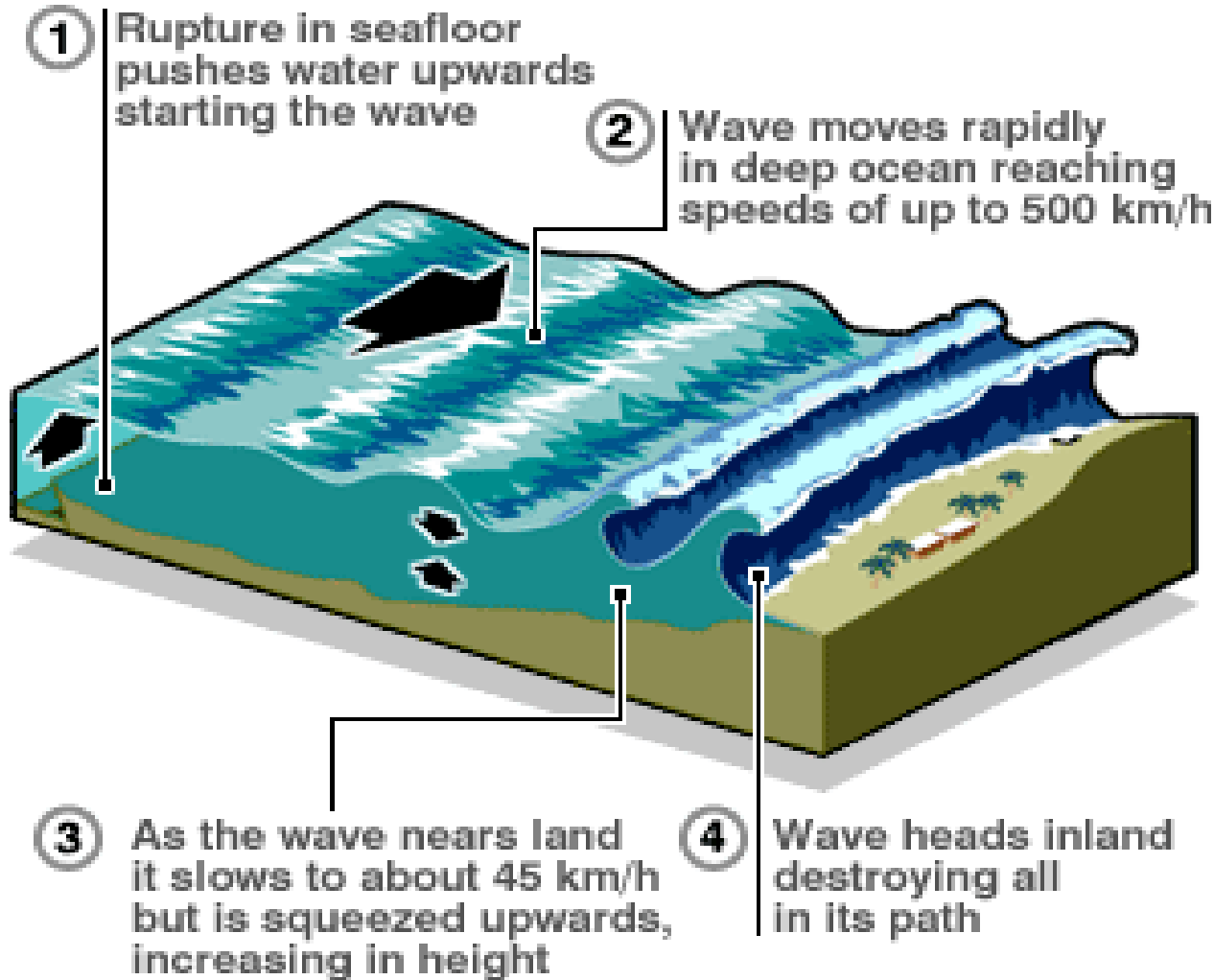


Tsunami

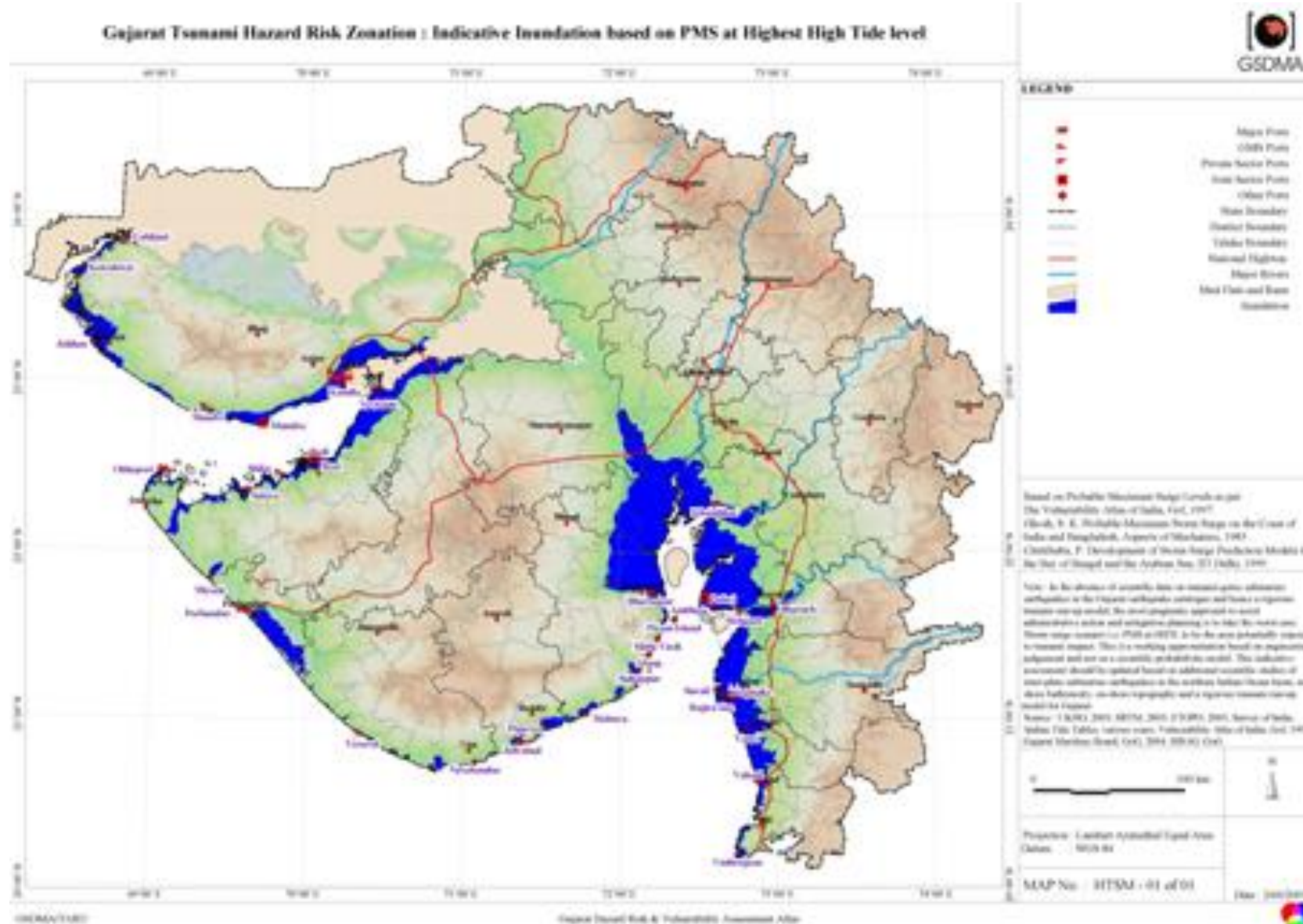
- ❑ Tsunamis must be treated as a multidisciplinary hazard.
- ❑ They can be triggered by earthquakes, landslides, volcanoes or meteorological events, with large earthquakes being the most frequent trigger.



Tsunami



Tsunami: Gujarat



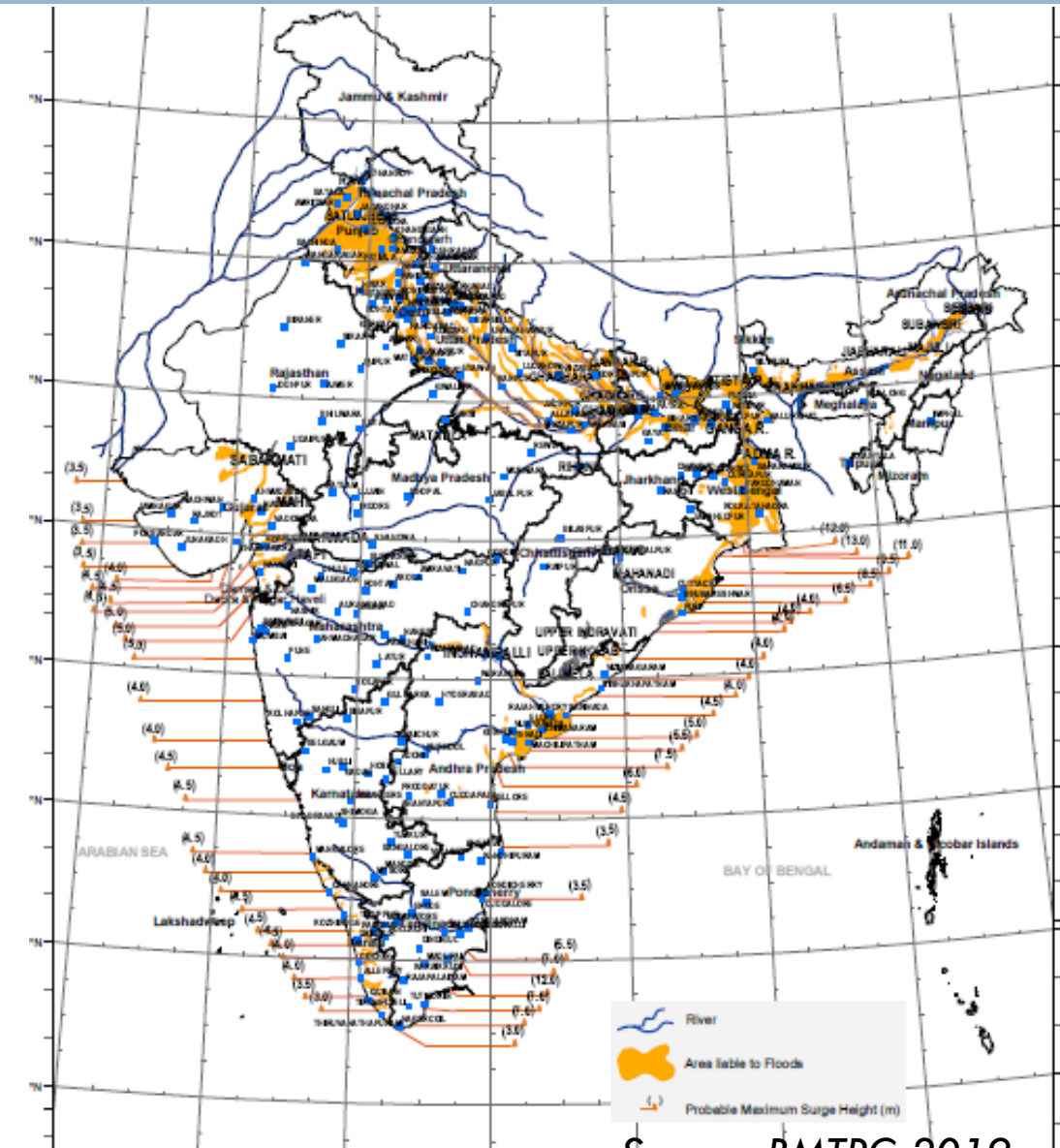


Floods

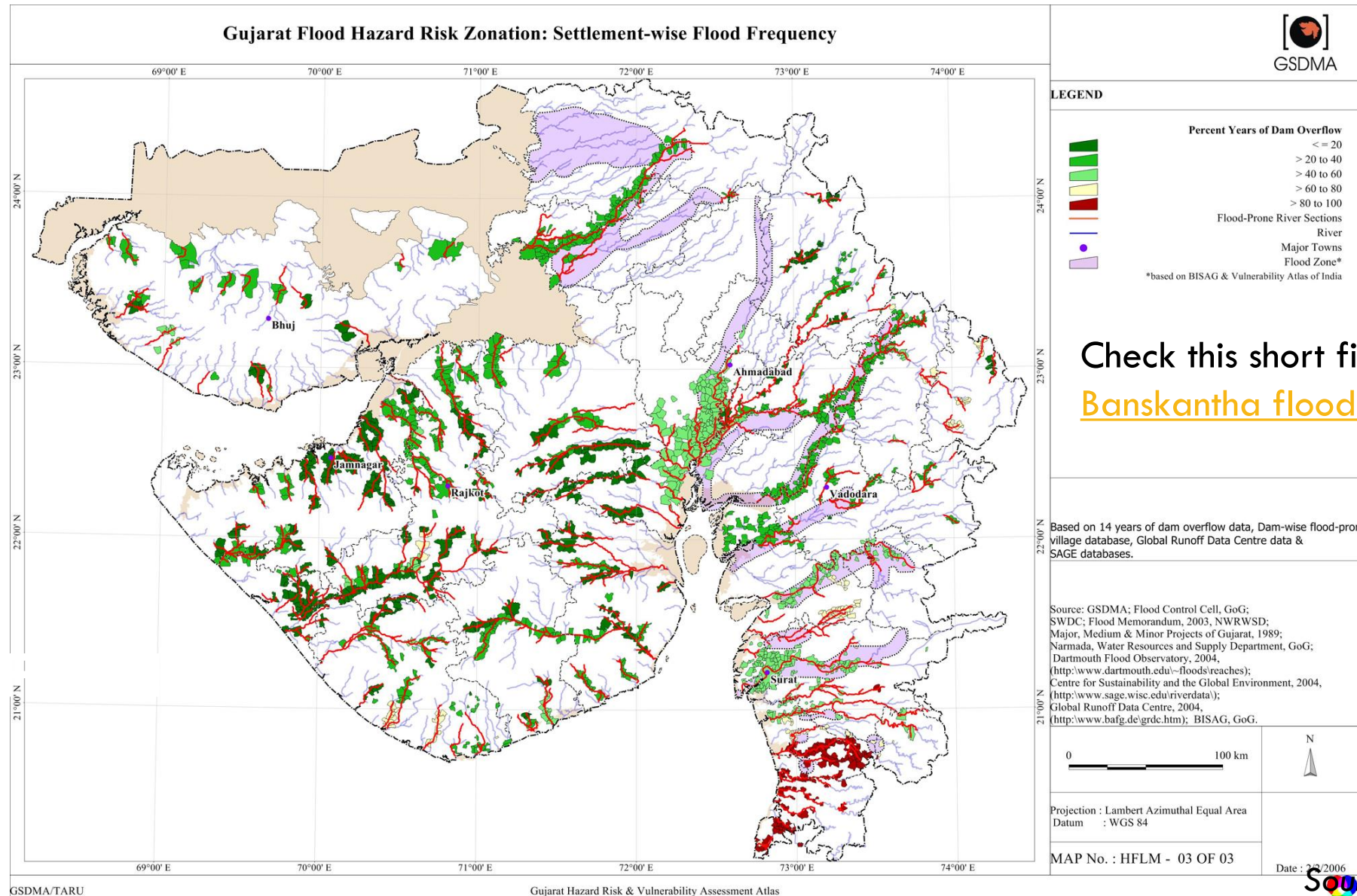


Floods: India

- Riverine Flood
- Urban Flood
- Coastal Flood
- Flash Flood



Floods: Gujarat



Check this short film on the [Banskantha floods](#) of 2017.

Source: GSDMA 2005



Food for Thought

Lets discuss challenges in Responding
Urban Floods & Rural Floods

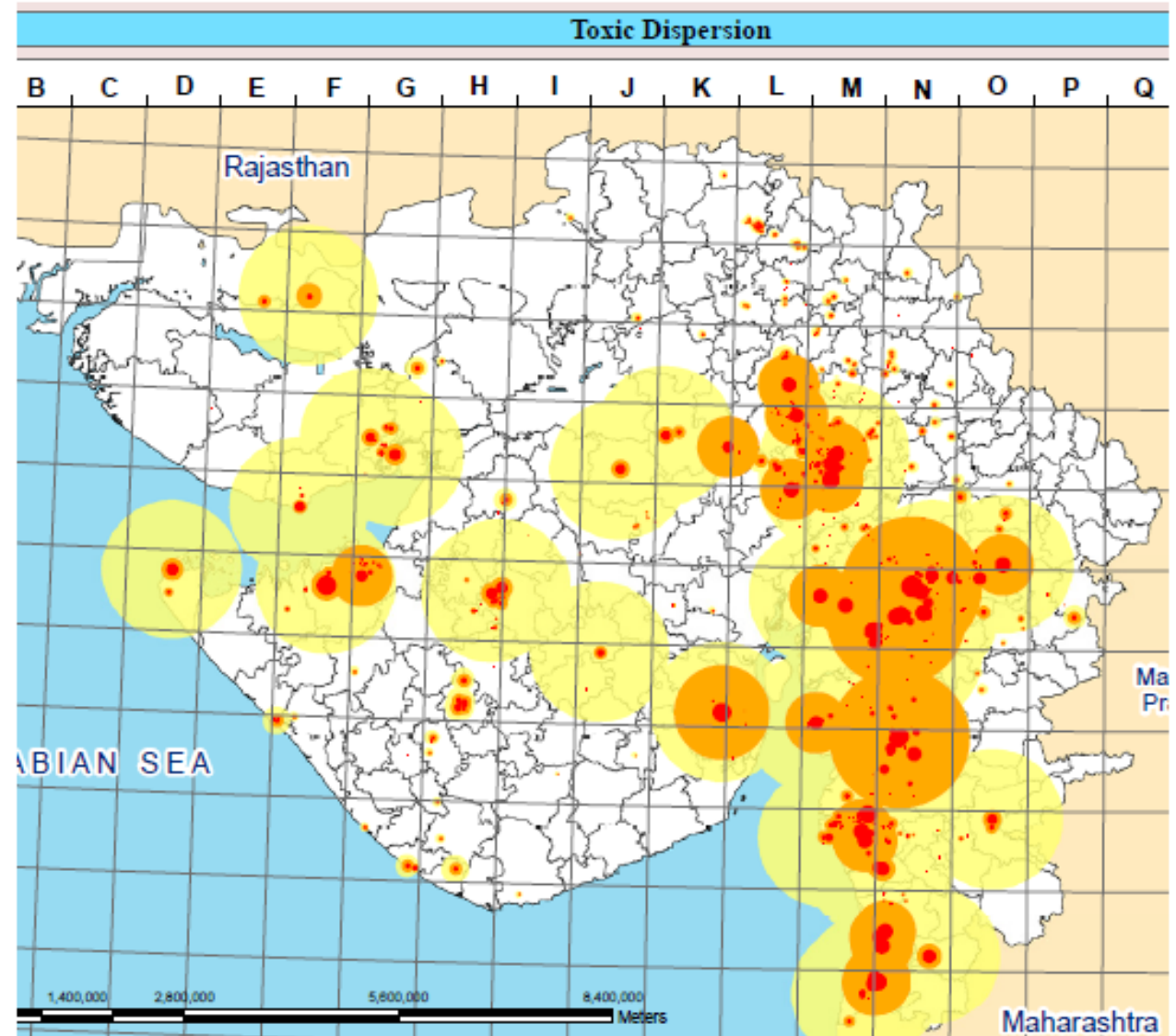
- ❑ five or more consecutive days during which the daily maximum temperature exceeds the average maximum temperature by five degrees Celsius
- ❑ if the maximum temperature of any place continues to be more than 45° C consecutively for two days



Source: WMO

Technological hazards in Gujarat

- Registered Factories: 43721
- Major Accident Hazard (MAH) Factories: 570
- To understand how bad it can be, [check this out!](#)



The Realm of Proactivity !

We are here! —————> We need to be here!





Managing disasters: Disaster Management Cycle

Prevention

Measures the object of which is to **avoid** the occurrence of a disaster

Mitigation

Measure aimed at **reducing** the impact or effect of disaster

Preparedness

State of **readiness** which enables stakeholders to mobilize, organize and provide relief to deal with an impending or actual disaster or the effect of a disaster

Response

Measures taken **during or immediate after** a declaration of disaster to diminish, or alleviate any suffering, pain, injury or distress or hardship caused on account of the disaster

Recovery

The actions taken by the community and all the government and the non-government agencies to **reset the condition** after disaster and minimise the vulnerability of the same kind of disaster in future





Sendai Framework for Disaster Risk Reduction: Latest Framework of DRM

- 3rd World Conference on Disaster Risk Reduction (March 2015, Sendai)
- Adopted the Sendai Framework for Disaster Risk Reduction (SFDRR) (2015 – 2030)

1 OUTCOME

The substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries

1 GOAL

Prevent new and reduce existing disaster risk through the implementation of integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience

4 PRIORITIES

Understanding disaster risk

Strengthening disaster risk governance to manage disaster risk

Investing in disaster risk reduction for resilience

Enhancing disaster preparedness for effective response, and to “Build Back Better” in recovery, rehabilitation and reconstruction

7 TARGETS

- ↓ DISASTER MORTALITY BY 2030
- ↓ NUMBER OF AFFECTED PEOPLE BY 2030
- ↓ ECONOMIC LOSS BY 2030
- ↓ INFRASTRUCTURE DAMAGE BY 2030
- ↑ DRR NATIONAL/LOCAL STRATEGIES BY 2020
- ↑ INTERNATIONAL COOPERATION BY 2030
- ↑ EWS AND DR INFORMATION BY 2030



Mainstreaming DRM into Development Planning

Disaster and development are the two faces of the same coin. Do you agree?

Development, uncontrolled and sporadic, exposes us to new hazards, rendering us vulnerable, leading to disasters.

On the other hand, disasters give us an opportunity to learn from our mistakes and develop in a much more better way!





Mainstreaming DRM into Development Planning

But we can not avoid development? Can we? **Perhaps no!**

So what do we do?

We need to develop in a **sustainable** manner.

Based on this simple principle the United Nations adopted the
Sustainable Development Goals!



Hon. PM's 10 Point Agenda on DRR

All development sectors must imbibe the principles of disaster risk management

Risk coverage must include all, starting from poor households to SMEs to multi-national corporations to nation states

Women's leadership and greater involvement should be central to 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

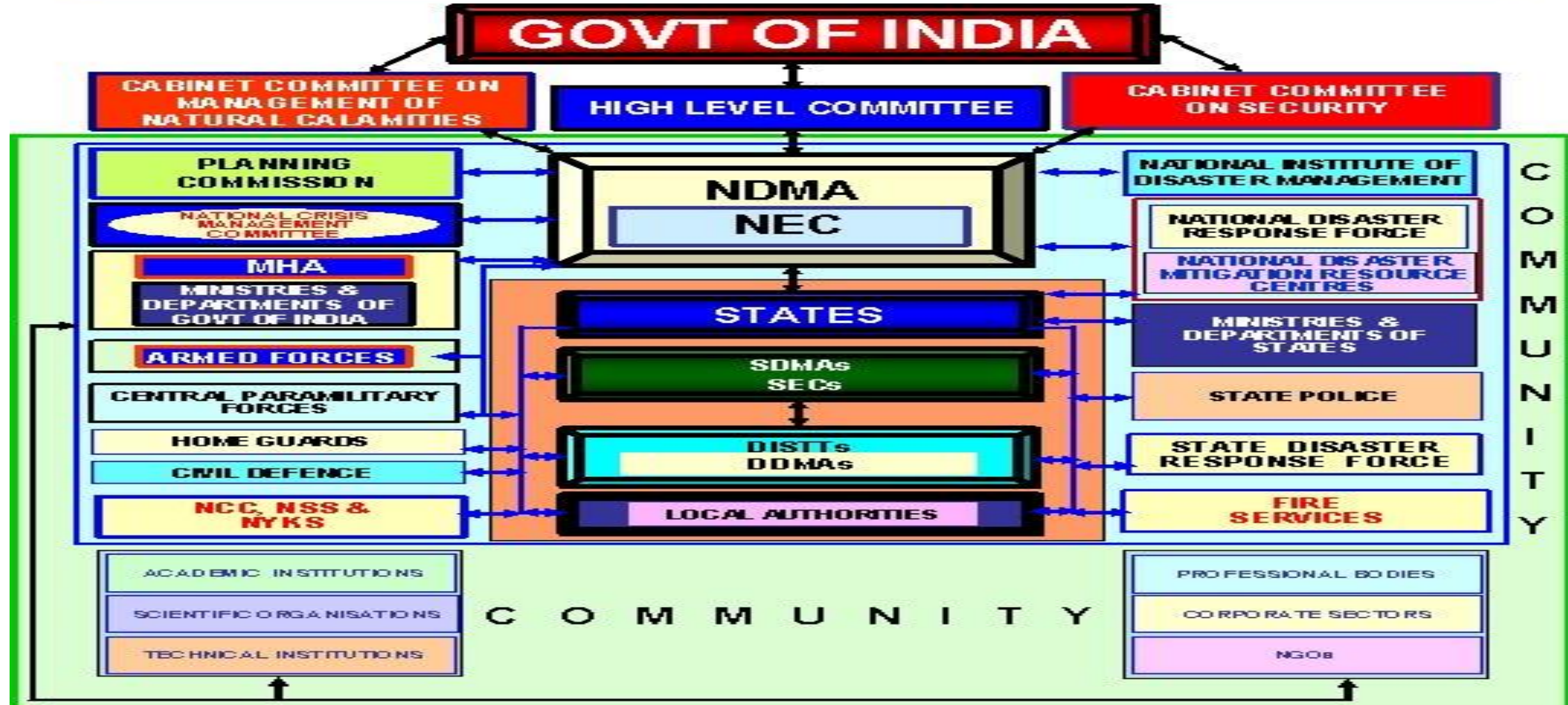
Make use of every opportunity to learn from disasters and, to achieve that, there must be studies on the lessons after every disaster

Bring about greater cohesion in international response to disasters



Organisational and operational structure of disaster management in India

NATIONAL DISASTER MANAGEMENT STRUCTURE





Reactive' to 'Proactive': DM Act 2005

- The Government enacted a Central Law on Disaster Management - **Disaster Management Act 2005.**
- The Act lays down
 - institutional,
 - legal,
 - financial and
 - coordination mechanisms
- at the national, state, district and local levels.



'Reactive' to 'Proactive': DM Act 2005

The Act provides for: -

- **Constitution of Disaster Management Authorities at National, State and District levels.**
- Role of local authorities (Panchayati Raj Institutions & Municipalities) in disaster management strengthened.
- Put in place **Disaster Management plans at national, state and district level.**
- **Constitution of Funds for Response & Mitigation**



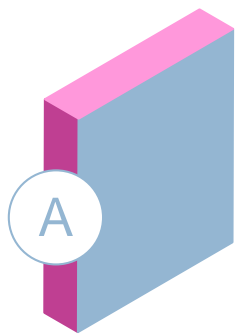
The State & District Setup

- The DM Act mandates the setting of a **State Disaster Management Authority (SDMA)** and a similar system in each Union Territory.
- At the district level, **District Disaster Management Authority (DDMA)**, the District Collector or District Magistrate or the Deputy Commissioner, as applicable, will be responsible for **overall coordination of the disaster management efforts and planning.**

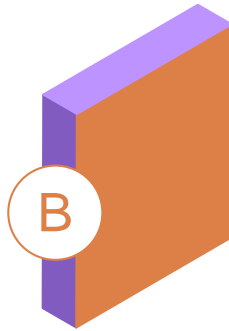


Disaster Risk Financing

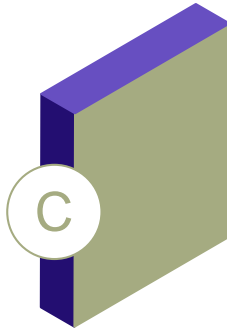
**Creating an Enabling
Environment for
Effective Insurance**



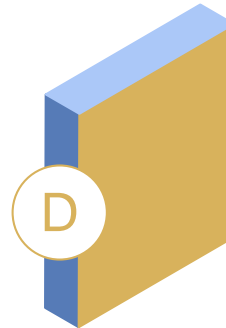
**Mainstreaming of
Disaster Risk into
Public and Private
Investment**



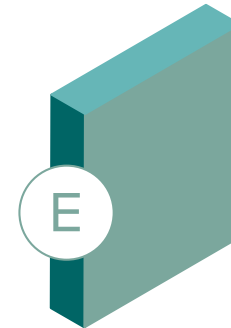
**Tracking Prevention
Financing**



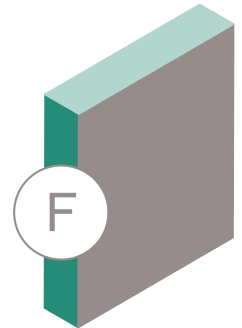
**Conducting Risk-
sensitive Budget
Reviews**



**Increasing Use and
Application of Risk and
Financial Data**



**Establish a Pipeline for
Disaster and Climate
Resilient Infrastructure
Investment**



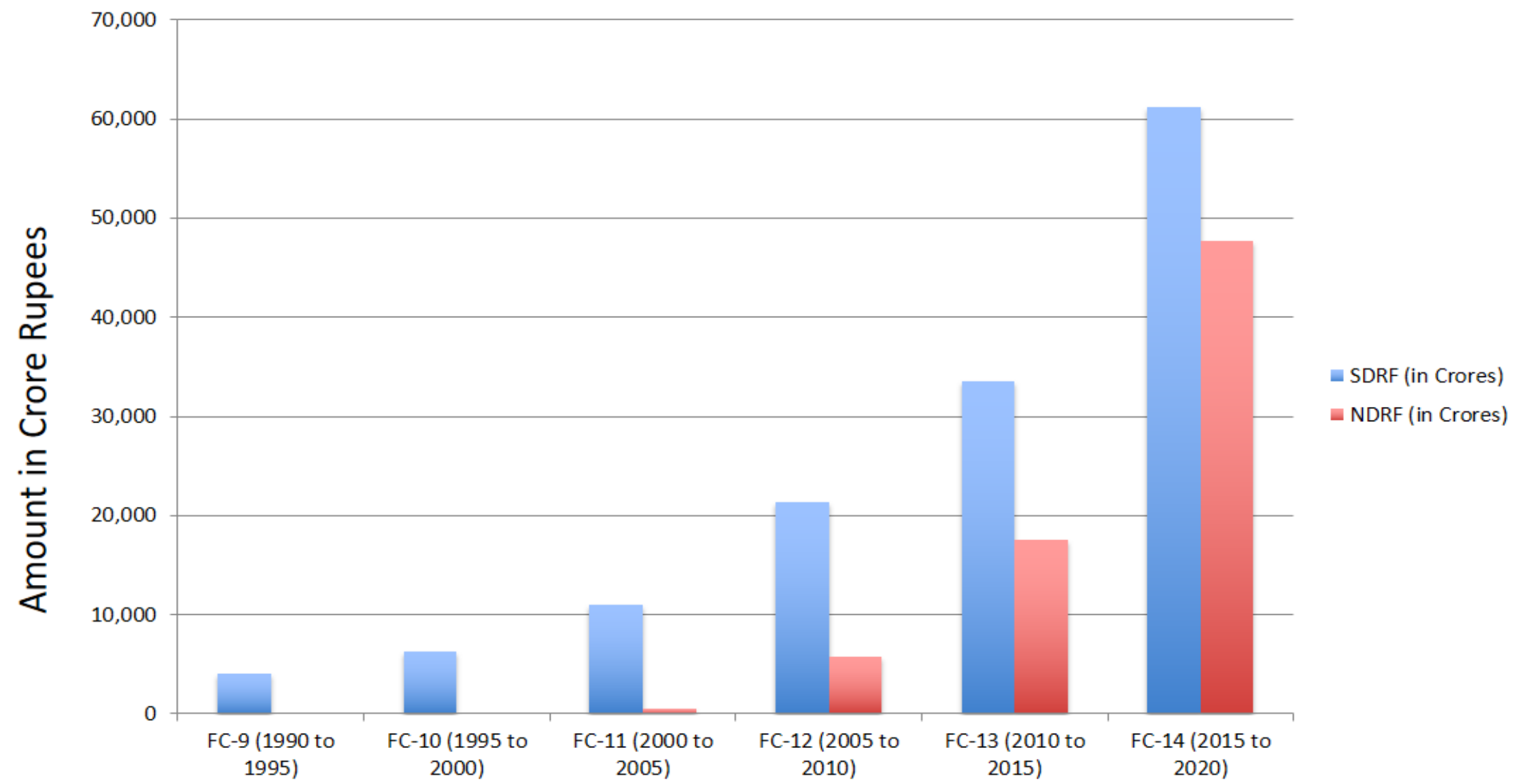


Disaster Risk Financing in India

- The responsibility of Disaster Risk Financing is shared between States and the Central Government.
- Response centric rather than Holistic
- DM Act 2005 mandates for constitution of Mitigation Funds – Further, Hon. Supreme Court gave direction to set up NDMF in 2016
- More importance required to be given to develop the capacity on institutions and Human Recourses to handle disasters.
- Funds available was-
 - **State Disaster Response Fund (SDRF)** – 75% : 25% for general States and 90% : 10% for NE States
 - **National Disaster Response Fund (NDRF)**



State & National Level Disaster Response Funds (1990 – 2020)





State Disaster Response Fund (SDRF)

□ Disasters covered under SDRF:

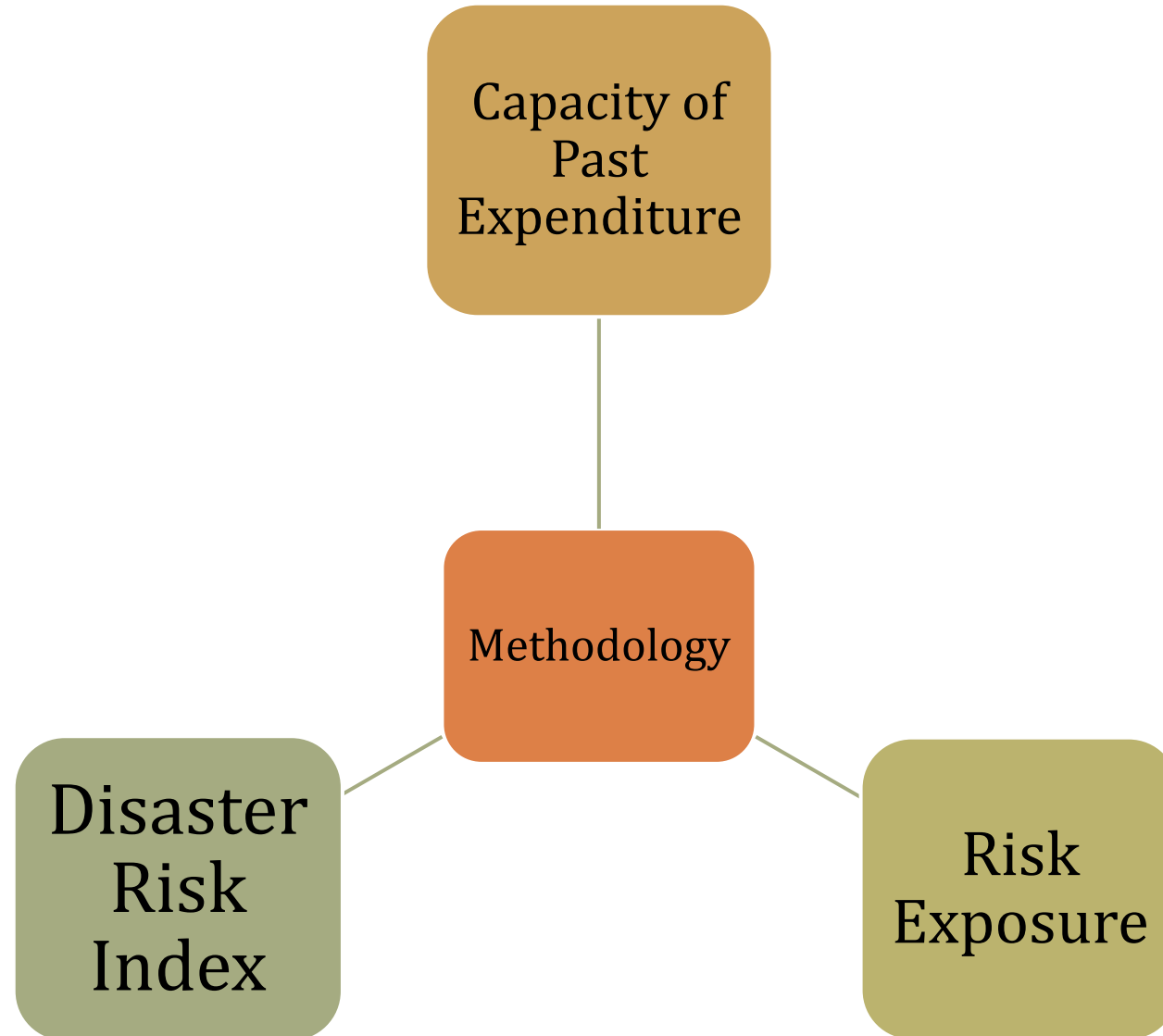
- | | | |
|---------------|--------------|--------------------------|
| 1. Cyclone | 5. Flood | 9. Avalanche |
| 2. Drought | 6. Tsunami | 10. Cloudburst |
| 3. Earthquake | 7. Hailstorm | 11. Pest Attack |
| 4. Fire | 8. Landslide | 12. Frost and Cold Waves |

Covid -19 added !!

- A State Government may use up to 10 % of the funds available under the SDRF for providing immediate relief to the victims “disasters” triggered by natural hazards - within the local context in the State
- However, the State Government has to notify clear and transparent norms and guidelines for such disasters with the approval of the State Authority.

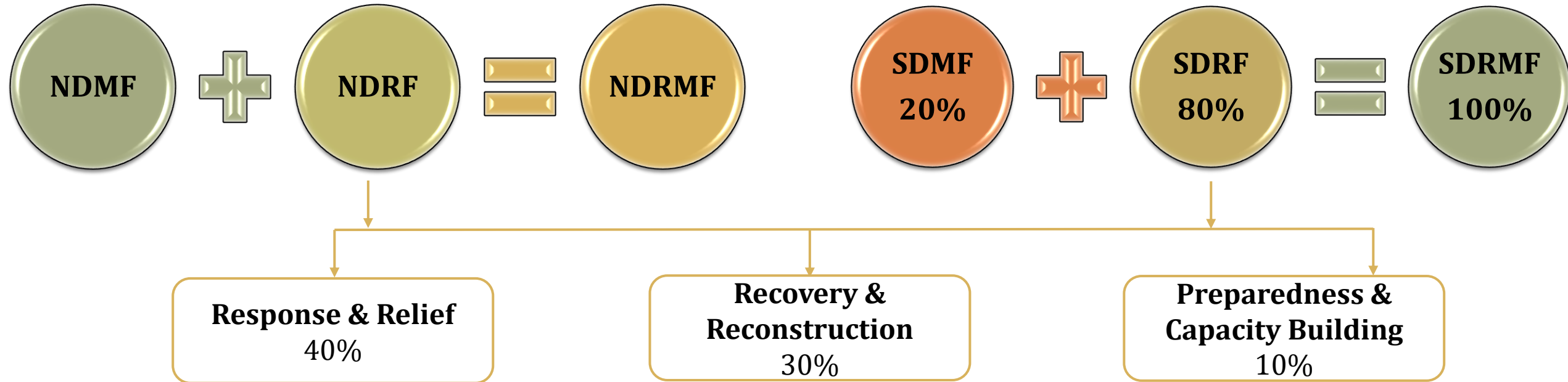


SDRMF Allocation Methodology





Disaster Risk Management Funds

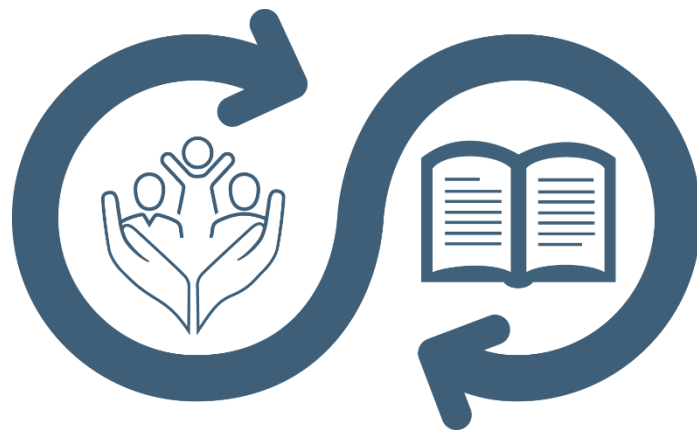


State Disaster Risk Management Funds (SDRMF)

- ❑ Share: 75% : 25% for general & 90% : 10% for NE States
- ❑ Funding windows of SDMF & SDRF in **NOT** inter-changeable but relocation (within 10% of allotted amount) amongst three sub-windows is possible



Minimum Standard of Relief





Mandate

- **National Disaster Management Act, 2005** mandates NDMA to recommend guidelines for Minimum Standard of Relief. It should include;
 - ▣ The **minimum requirements to be provided in the relief camps** in relation to shelter, food, drinking water, medical cover and sanitation;
 - ▣ The special provisions to be made for **widows** and **orphans**;
 - ▣ **Ex gratia assistance** on account of loss of life as also assistance on account of damage to houses and for restoration of means of livelihood;
 - ▣ Such **other** relief as may be necessary.
- The **State Authority** shall lay down detailed guidelines for providing standards of relief to persons affected by disaster in the State



Establishment of Relief Camp

- **Responsibility:** District Collector
- **First 3 days-** Basic norms to the possible extent may be followed.
- **4 to 10 days-** Efforts should be made to follow most of the guidelines provided here after.
- **11 days and above-** The guidelines must be followed.



Minimum requirements for Relief Camp

- District collector will take advance actions to **pre-identify locations/buildings**
- Ensure **availability of basic facilities** like sufficient number of toilets, water supply and electricity
- Arrange **Generator**, if no electricity
- Create **temporary shelter**, in case of unavailability of shelter place.
 - ▣ District Collector will send proposal to State Relief Commissioner
 - ▣ State Relief Commissioner will follow due govt. procedure for pre-fabricated shelter/ tent/ toilets



Minimum requirements for Relief Camp

- ❑ **3.5 M² of area per affected person** with basic lighting facilities
 - ❑ Relaxation for hilly areas due to geographical constraints
- ❑ Ensure **Safety and Privacy** of women, widows and children
- ❑ Special arrangement for **disabled, old** and **serious ill** persons.



Minimum Standards for Food in Relief Camp

- ❑ Provision of **100 gm. of milk** per person per day for children and lactating mothers
- ❑ Ensure **sufficient quantity of food** to affected persons specially for aged people and children.
- ❑ Ensure **Hygiene**, in case of community kitchen
- ❑ Check Date of manufacturing and date of expiry on the **packaged food** items before distribution.
- ❑ At least **2400 Calories** per day for man/ women and 1700 Calories per day for child



Minimum Standards in Relief Camp

Water

- Provision of **3 liters of drinking water** per day per person
 - ▣ Chlorination of drinking water should be done.
- In case of tapped water supply, the **distance of source of water** should not be more than 500 meter from the relief camp.

Sanitation

- **One toilet per 30 persons.** Separate arrangement for women and children.
- Toilet should **not** be more than 50 meter from the relief camp. Maintain **Hygiene**.
- **15 liter of water/person/day.** Control of spread of diseases.
- Sanitation napkin will have to be provided to needy women.



Medical Cover in Relief Camp

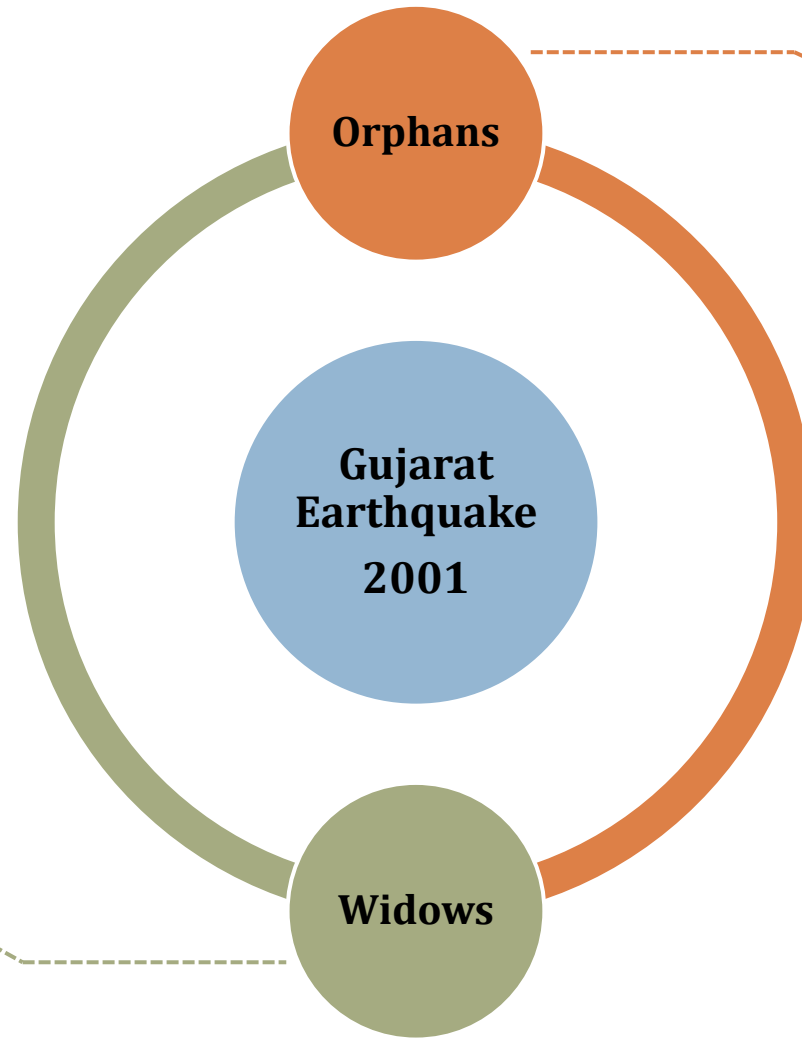
- ❑ Arrange Mobile medical teams
- ❑ Arrangements may be made for psychiatrists/psychological councilors, in case of relief camps run over a month
- ❑ Wide publicity of Helpline Numbers
- ❑ Ensure basic arrangements for safe delivery of pregnant woman.
- ❑ Suitable transport arrangements to shift ill person to the hospital.



Minimum Standards for Widows & Orphans



- **No. of Widows: 999**
 - *Monthly Pension Scheme*
 - *Capacity Building courses*
 - *Provision of toolkits*



Orphans

**Gujarat
Earthquake
2001**

Widows

- **No. of Orphan Children: 1758**
 - *Financial Compensation*
 - *Foster Parent Scheme*
 - *Scheme of Orphan Cottage (Bal Kuteer)*
 - *National Children's Fund*





Minimum Standards for Widows and Orphans

- ❑ A separate register to be maintained for entering details of women who are widowed and children who are orphaned due to disaster
 - ❑ Register has to be counter signed by Revenue officer authorized by Collector
 - ❑ register will have to be maintained in collector office as permanent Record
- ❑ Concerned Mamlatdar has to issue a certificate to a widow/orphan within 15 days
- ❑ On demand Rs.10000/- to be paid to widowed for funeral rite of her husband
 - ❑ Paid amount will have to be adjusted against the payable death assistance amount
- ❑ Ensure financial assistance to widows and orphaned children within 45 days of disaster.
- ❑ **For Orphan** - A joint account opened where concerned Mamltadar will be first account holder
- ❑ The district collector will have to ensure education up to secondary level to orphaned child.



Ex gratia Assistance

(as per SDRF)



Gratuitous Relief

a) Ex-Gratia payment to families of deceased persons.	Rs.4.00 lakh per deceased person including those involved in relief operations or associated in preparedness activities, subject to certification regarding cause of death from appropriate authority.
b) Ex-Gratia payment for loss of a limb or eye(s).	Rs. 59100/- per person, when the disability is between 40% and 60%. Rs. 2.00 lakh per person, when the disability is more than 60%. Subject to certification by a doctor from a hospital or dispensary of Government, regarding extent and cause of disability.
c) Grievous injury requiring hospitalization	Rs. 12,700/- per person requiring hospitalization for more than a week. Rs. 4,300/- per person requiring hospitalization for less than a week.
d) Clothing and utensils/ house-hold goods for families whose houses have been washed away/ fully damaged/severely inundated for more than two days due to a natural calamity.	Rs.1,800/- per family, for loss of clothing. Rs.2,000/- per family, for loss of utensils/ household goods.
e) Gratuitous relief for families whose livelihood is seriously affected.	Rs. 60/- per adult and Rs. 45/- per child, not housed in relief camps. State Govt. will certify that identified beneficiaries are not housed in relief camps. Further State Government will provide the basis and process for arriving at such beneficiaries district-wise.



Housing

	a) Fully damaged/ destroyed houses	
	i) Pucca house	Rs. 95,100/- per house, in plain areas.
	ii) Kutch House	
	b) Severely damaged houses	Rs. 1,01,900/- per house, in hilly areas including Integrated Action Plan (IAP) districts.
	i) Pucca House	
	ii) Kutch House	
	(c) Partially Damaged Houses –	
	(i) Pucca (other than huts) where the damage is at least 15 %	Rs. 5,200/- per house
	(ii) Kutch (other than huts) where the damage is at least 15 %	Rs. 3,200/- per house
	d) Damaged / destroyed huts:	Rs. 4,100/- per hut, <i>(Hut means temporary, make shift unit, inferior to Kutch house, made of thatch, mud, plastic sheets etc. traditionally recognized as hut by the State/ District authorities.)</i> <i>Note: -The damaged house should be an authorized construction duly certified by the Competent Authority of the State Government.</i>
	e) Cattle shed attached with house	Rs. 2,100/- per shed.



Livestock

1	Milch animals, draught animals or animals used for haulage.	Rs. 30,000/- Buffalo/ cow/ camel/ yak/ Mithun etc. Rs. 3,000/- Sheep/ Goat/ Pig
2	Draught animals	Rs. 25,000/- Camel/ horse/ bullock, etc. Rs. 16,000/- Calf/ Donkey/ Pony/ Mule
3	Poultry	Poultry @ 50/- per bird subject to a ceiling of assistance of Rs 5000/- per beneficiary household
4	Provision of fodder / feed concentrate including water supply and medicines in cattle camps.	Large animals- Rs. 70/- per day. Small animals- Rs. 35/- per day.



Fishery

<p>i) Assistance to Fisherman for repair / replacement of boats, nets – damaged or lost</p> <ul style="list-style-type: none">-- Boat-- Dugout-Canoe-- Catamaran-- net <p>(This assistance will not be provided if the beneficiary is eligible or has availed of any subsidy/ assistance, for the instant calamity, under any other Government Scheme.)</p>	<p>Rs. 4,100/- for repair of partially damaged boats only</p> <p>Rs. 2,100/- for repair of partially damaged net</p> <p>Rs. 9,600/- for replacement of fully damaged boats</p> <p>Rs. 2,600/- for replacement of fully damaged net</p>
<p>ii) Input subsidy for fish seed farm</p>	<p>Rs. 8,200 per hectare.</p> <p>(This assistance will not be provided if the beneficiary is eligible or has availed of any subsidy/ assistance, for the instant calamity, under any other Government Scheme, except the one time subsidy provided under the Scheme of Department of Animal; Husbandry, Dairying and Fisheries, Ministry of Agriculture.)</p>



Handicrafts/Handloom – Assistance to Artisans

i) For replacement of damaged tools/ equipment	Rs. 4,100 per artisan for equipments. - Subject to certification by the competent authority designated by the Government about damage and its replacement.
ii) For loss of raw material/ goods in process/ finished goods	Rs. 4,100 per artisan for raw material. - Subject to certification by Competent Authority designated by the State Government about loss and its



Other Provisions

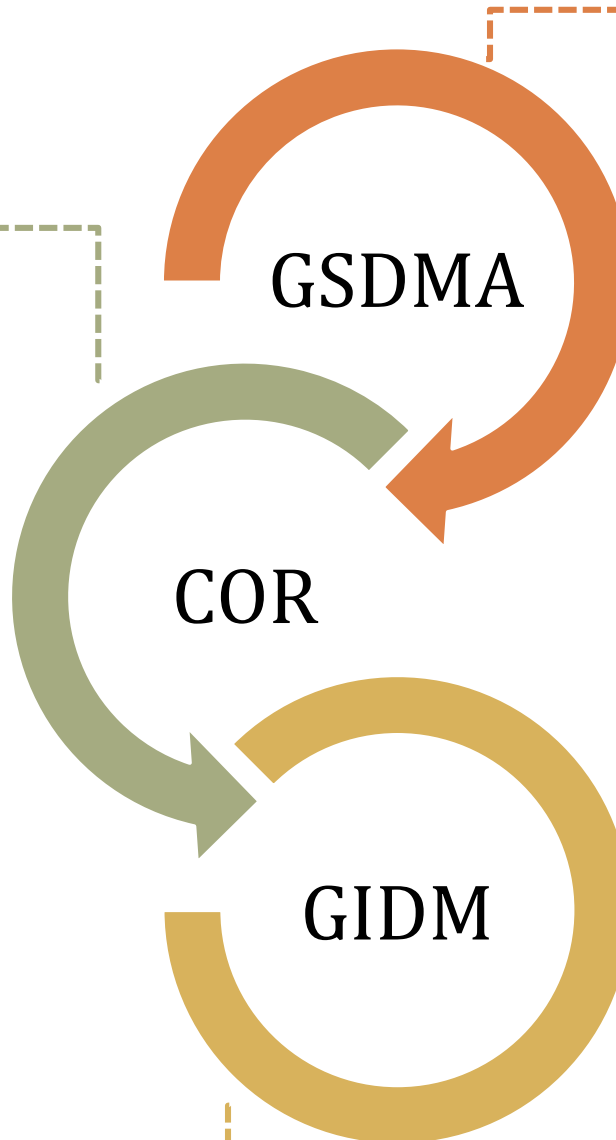
- ❑ Agriculture
- ❑ Drinking Water Supply
- ❑ Roads
- ❑ Irrigation
- ❑ Health
- ❑ Community Assets
- ❑ Power
- ❑ Education
- ❑ Procurement of essential equipments
- ❑ Capacity Building
- ❑ State specific disasters within the local context



Organisational and operational structure in Gujarat

- Coordinate and Monitor Disaster Response & Relief

- Human Resource Development, Capacity Building, Training, Academic Programs, Research and Documentation in the field of Disaster Management



- Coordinate and Monitor Disaster Prevention and Mitigation Activities
- Act as Central Planning, Coordinating and Monitoring Body for Post-Disaster Reconstruction and Rehabilitation
- Promote Awareness and Preparedness and Advice and Train the Community and Stakeholders with view to Increase Capacity

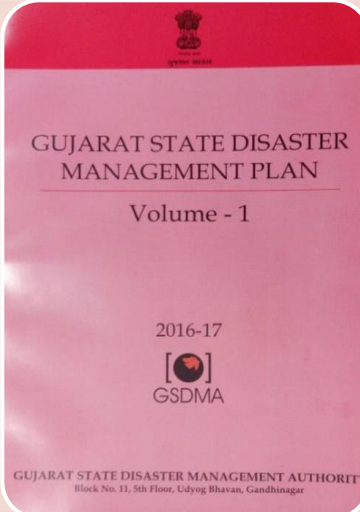
Further Reading

Gujarat State Disaster
Management Policy (GSDMP)

Gujarat State Disaster
Management Authority



ગુજરાત રાજ્ય આપત્તિ વ્યવસ્થાપન
અધિનિયમ, ૨૦૦૩



State
Disaster
Management
Policy, 2002

State
Disaster
Management
Act, 2003

State
Disaster
Management
Plan 2020



5-hours E- Course On DRM

Trailer: -

<https://www.youtube.com/watch?v=-SbVrUnSQag>

Registration: -

<https://gidm.lms.gov.in/default.aspx>

Does any one knows, what is Basics of Disaster Risk Management ??
Me* 🙋



DRM Experts be like* 🙋



Bilkul ricks nahi lene ka, aur sabse pahle GIDM web portal par jakar Online course karneka.



Thank You