

AWARENESS AND CONSCIOUSNESS OF NATURAL DISASTERS

प्रो. अचिन्त्य

PROF. ACHINTYA

Ph.D.(Engg.), FIE (India)

PRINCIPAL, DCE, DARBHANGA & BCE, BHAGALPUR

FORMER PRINCIPAL, M I T, MUZAFFARPUR

FORMER PRINCIPAL, S I T, SITAMARHI

FORMER DEAN OF ENGG., A K U, PATNA

drachintya@rediffmail.com

[\(www.drachintya.com\)](http://www.drachintya.com)

PROLOGUE

There are two types of Natural disasters

- *Recurrent Disasters such as floods, droughts, landslides, etc.*
- *Non-recurrent Disasters such as earthquakes, cyclones, etc.*

- Since the creation of this universe, no place on our planet is free from disasters due to natural events such as floods, landslides, cyclones, volcanic eruptions, earthquakes, tsunamis, etc.
- The nature and extent of preparedness for disasters involve a complete spectrum of variety from avalanches to floods, earthquakes, landslides and so on.

drachintya@rediffmail.com





Mitigating the effects of natural disasters requires an integrated and scientific approach calling for collective and coordinated efforts of all agencies – international, governmental and voluntary.

Preparedness for the mitigation of disasters includes the development, adoption and implementation of multipronged approaches comprising various disciplines such as estimation and evaluation of risk and technological assessment with respect to design and construction, financing, education and above all, people's participation.

ELEMENTS OF RISK



DISASTERS AND DAMAGES

Disasters may be classified into  Direct, **Indirect** and **Intangible** ones.

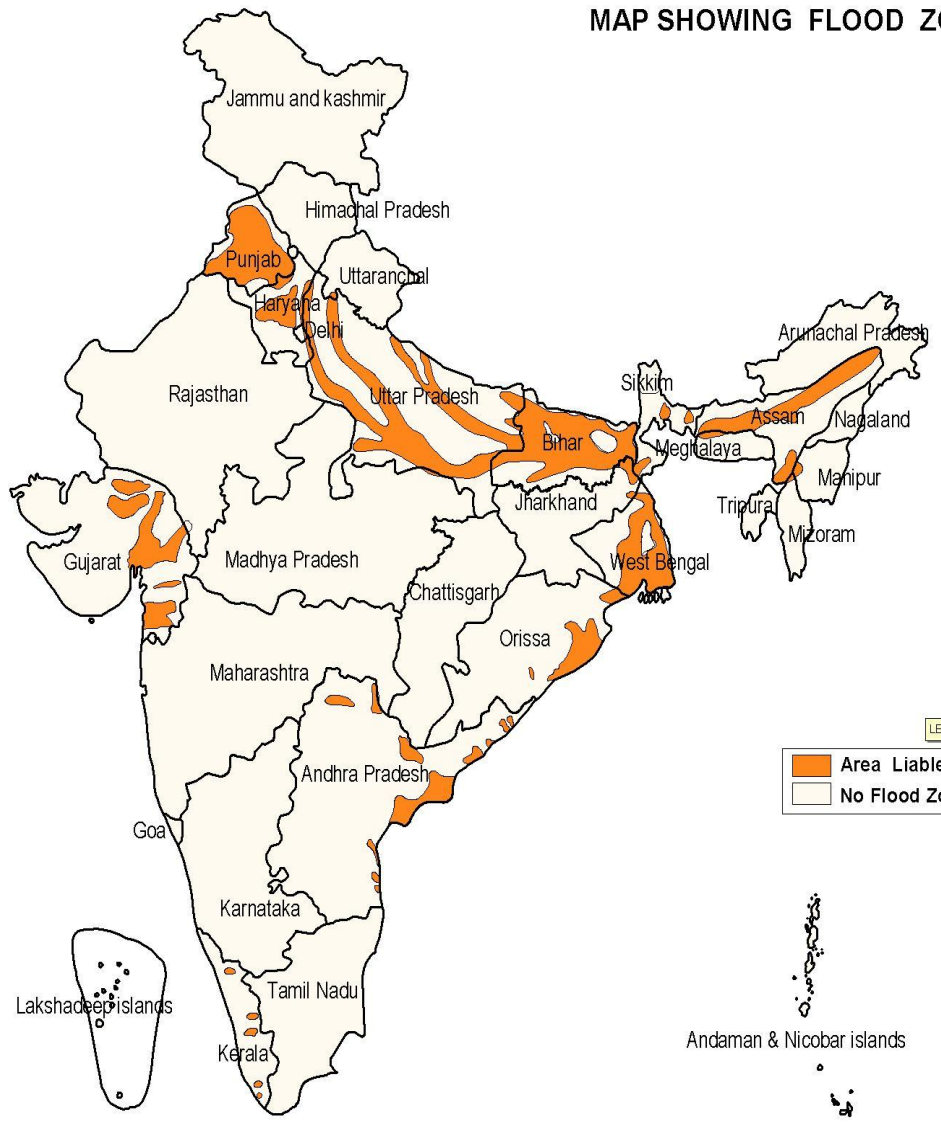
- **Direct Disasters** include damage to residence, human lives, stores, industries, etc. Losses due to direct disasters are apparent ones, which can be assessed by the cost of repair or replacement of all physical damages caused by the disasters.

- **Indirect disasters** include the damage to business, service and economic activity. This becomes sometimes so complex as to make even a rough estimate difficult and it is often expressed as proportion, i.e. 0.5 to 1.0 times or more of direct disaster.
- **Intangible disasters** are not subject to direct money-evaluation. They include effects upon health, social and economic security.

- There are however valid and cogent reasons for believing that **recent disasters are of greater magnitude than those which have occurred in the past, precisely on account of rapid industrialization, urbanization, increased land-use and on top of all, growing population world over.**

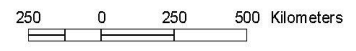
- Disasters of **recurrent** and **non-recurrent** nature **are liable to continue** to occur for all time to come and **MAN CANNOT PREVENT THEM.**
- All he can do is to take steps for safety and thus prevent the increasingly appalling losses of life and property, making use of available advanced technologies at his disposal.

MAP SHOWING FLOOD ZONES IN INDIA



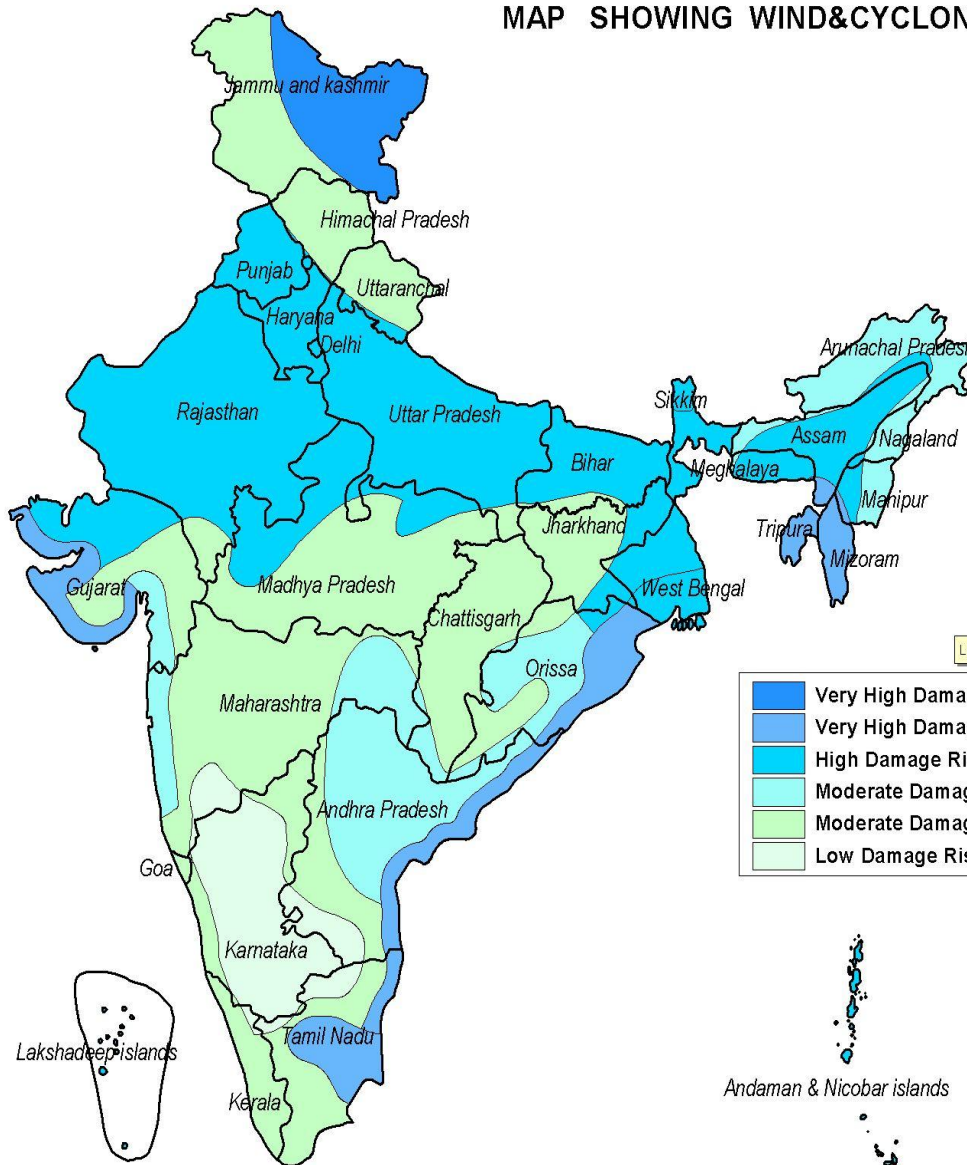
LEGEND

- Area Liable to Flood
- No Flood Zone or Area Protected



Disclaimer : All efforts have been made to make this image accurate. However UNDP do not own any responsibility for the correctness or authenticity of the same. Source: BMTPC, India

MAP SHOWING WIND & CYCLONE ZONES IN INDIA



LEGEND

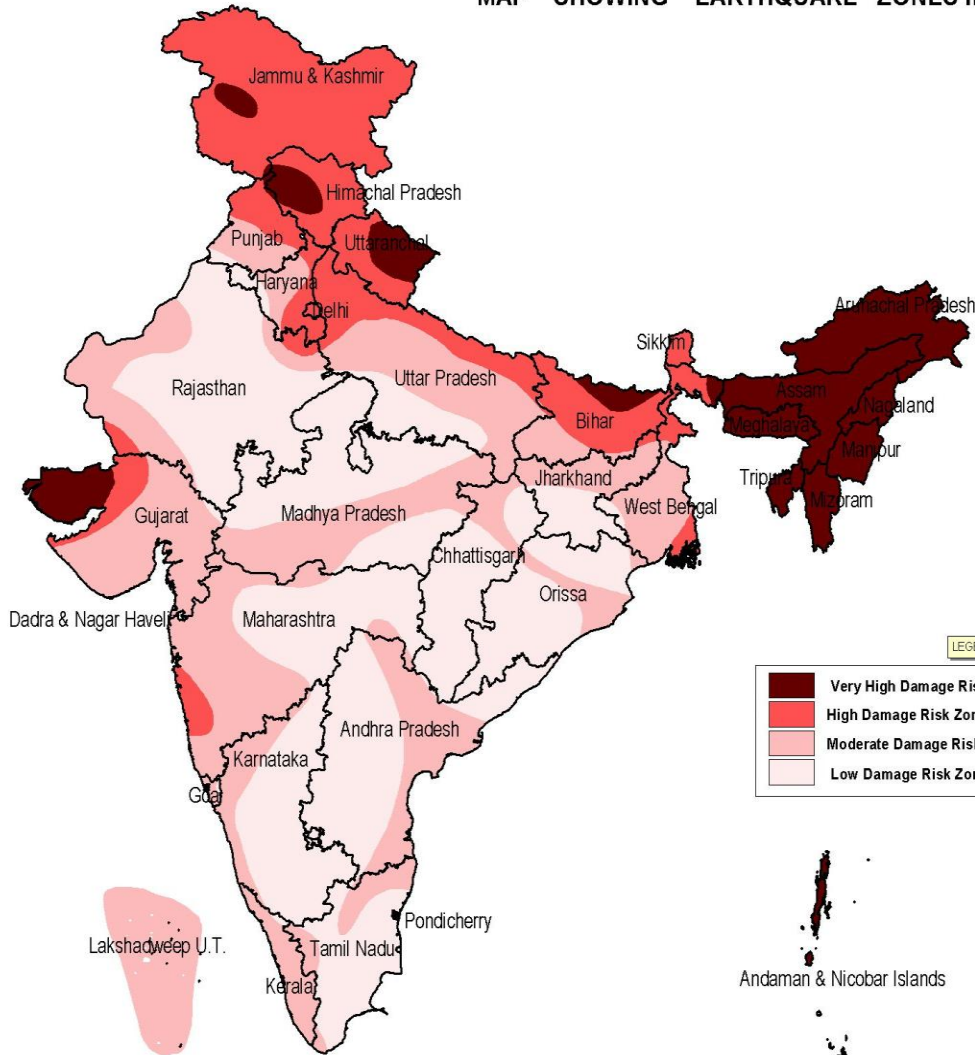
- Very High Damage Risk Zone-A ($V_b = 55\text{m/s}$)
- Very High Damage Risk Zone-B ($V_b = 50\text{m/s}$)
- High Damage Risk Zone ($V_b = 47\text{m/s}$)
- Moderate Damage Risk Zone-A ($V_b = 44\text{m/s}$)
- Moderate Damage Risk Zone-B ($V_b = 39\text{m/s}$)
- Low Damage Risk Zone ($V_b = 33\text{m/s}$)

250 0 250 500 Kilometers

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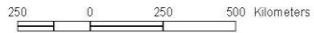
drachintya@rediffmail.com

MAP SHOWING EARTHQUAKE ZONES IN INDIA



LEGEND

	Very High Damage Risk Zone-V(MSK IX or More)
	High Damage Risk Zone-IV(MSK VIII)
	Moderate Damage Risk Zone -III (MSK VII)
	Low Damage Risk Zone-II (MSK VI)



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Flood



Earth Quake
Zone IV,V



Hot Wave



Drought



BIHAR
Prone to Multi Hazards



Cold Wave



Fire



High Wind



Thunderstorm
& Hailstorm

OBJECTIVE OF THE STUDY

प्राकृतिक आपदा अध्ययन का उद्देश्य

- A single disastrous event can destroy crops and buildings, roads and railways, water supply and power supply – even reduce a whole town or many villages into barren land.
- Once a disaster strikes, **the aftermath** is faced with variety of problems, mainly human and civic

- Right from arranging food, drinking water, clothes, etc. to fighting insanitation, diseases, etc. the task of the tackling-authorities becomes formidable.
- All this results from the congestion of large number of people in limited space called rehabilitation centre or camps and that too with inadequate civic facilities.
- This poses teething problems for the attending physicians and workers.

- **Pitiably, most countries, particularly the developing and under-developed ones, face the devastation first by the natural disasters and then start relief measures after the calamities.**
- **Can't they predict or monitor natural disasters, develop emergency preparedness and take measures to control their effects**

- ▶ We had to, in the past, put up with all such adversities and then activated relief measures. But we can, at present, predict, control, monitor and manage most disasters through science and technology.
- ▶ By inculcating a sense of cleanliness among the affected people and by administering proper medicines and drugs, post-disaster epidemics and diseases can well be contained to a satisfactory limit

- **The level of education scenario of our society is dull and dreary. Hence the work of consciousness and awareness development among masses is very difficult, if not impossible.**
- **The presentation of the information regarding disasters and its post effects in conjunction with mitigation measures should be made simple to such an extent that even a common person may follow it**

- An extensive awareness programme consisting of cartoon films, slogans and posters containing scenes from actual earthquake disasters or flood disasters should be disseminated to the people through television channels, radio, cinema and newspapers.
- **Demonstrations may be held in villages as well as the skilled persons may be invited to the institutions for crash demonstration – cum – training programme**

■ Even the course of the curriculum must provide the lessons about personal safety in the event of the occurrence of the natural disaster.

■ **Objective** of the present study is to **generate awareness and consciousness** among the masses such that the persons of each and every stratum could observe and feel the nightmare of natural disasters whatsoever and its mitigation as well.

EPILOGUE

- **Disasters cannot always be prevented but their effects can certainly be mitigated.**
- **For some disasters such as earthquakes, floods, etc., the prone areas can be earmarked and suitable mitigation provisions be made accordingly.**



- **Such areas need investigation, planning, provisions and manning of special facilities for timely mitigation of such disasters, their nature, degree of severity and exact location.**



- **Actions can be identified in case of a disaster by government, local and voluntary agencies and the inhabitants of the affected areas.**



- Experience of the mitigation of natural disasters has proved that a great deal of destruction takes place due to inappropriate planning and decision-making.
- If the structures are built adequately to withstand the fatal forces created by the disasters, the damages could be minimized.

- **AN INTERVENTION BY THE Professionals, Planners, NGOs, Policy - makers, Parliamentarians, Peoples' representatives, etc. has hereby been strongly suggested so as to fill the vacuum between THEORY AND PRACTICE of MITIGATION AND MANAGEMENT which evidently exists and which may be applicable in many developing and underdeveloped countries.**

THANK YOU

drachintya@rediffmail.com