



Do's and Don'ts For Common Disasters

VULNERABILITY PROFILE OF INDIA

India has been vulnerable, in varying degrees, to a large number of natural, as well as, human - made disasters on account of its unique geo-climatic and socio-economic conditions. Out of 35 states and union territories in the country, 27 are disaster prone. Almost 58.6 percent of the landmass is prone to earthquakes of moderate to very high intensity; over 40 million hectares (12 per cent of land) are prone to floods and river erosion; of the 7,516 km long coastline, close to 5,700 km is prone to cyclones and tsunamis; 68 per cent of the cultivable area is vulnerable to drought and hilly areas are at risk from landslides and avalanches.

HAZARD PROFILE OF INDIA

India is one of the ten worst disaster prone countries of the world. The country is prone to disasters due to number of factors; both natural and human induced, including adverse geo-climatic conditions, topographic features, environmental degradation, population growth, urbanization, unscientific development practices etc. The four distinct regions of the country i.e. Himalayan region, the alluvial plains, the hilly part of peninsula, and the coastal zone have their own specific problems.

- The Himalayan region is prone to frequent seismic activities. As a result of various major river systems flowing from Himalaya and huge quantity of sediment brought down by them, the region is exposed to river channel siltation, resulting into frequent floods.
- The western parts of the country is very frequently hit by drought situation. The unusual change in the temperature and pressure gradient over ocean, results in cyclones in coastal regions. The geo-tectonic movements inside the ocean floor makes the coastal region prone to tsunami disaster too. India with its extended coast line is exposed to five to six tropical cyclones on an average, both from the Arabian Sea and the Bay of Bengal annually.
- Various human induced activities like increasing demographic pressure, deteriorating environmental conditions, deforestation, unscientific development, faulty agricultural practices over grazing, unplanned urbanisation, etc. are also responsible for accelerated impact and increase in frequencies of disasters in the country.

During the last three decades of the 20th century, (1980-2010) natural disasters in India have claimed a total death of 1, 43, 039 people (on an average more than 4,768 death toll every year).

DISASTER MANAGEMENT FRAMEWORK IN INDIA

The institutional structure of disaster management in India is currently in state of transition. The new setup, following the implementation of the Disaster Management Act, 2005 is evolving; while the previous structure also continues to be functional. The National Disaster Management Authority has been established at the centre and the State Disaster Management Authority at state and district authority at district level are gradually being formalized.

DISASTER MANAGEMENT ACT, 2005

The Act provides institutional mechanisms for drawing up and monitoring the implementation of disaster management in India. It also ensures implementation of the policies by various wings of the Government for prevention and mitigation of disasters and prompt response to any disaster situation.

NATIONAL POLICY ON DISASTER MANAGEMENT (2009)

The salient features of National Policy on Disaster Management are:

- A holistic and pro-active approach for Prevention, Mitigation and Preparedness will be adopted for Disaster Management.
- Each Ministry/Department of the Central/State Government will set apart an appropriate quantum of funds under the Plan for specific schemes/projects addressing vulnerability reduction and preparedness.
- Where there is a shelf of projects, projects addressing mitigation will be given priority. Mitigation measures shall be built into the on-going schemes/programs.
- Each project in a hazard prone area will have mitigation as an essential term of reference. The project report will include a statement as to how the project addresses vulnerability reduction.
- There will be close interaction with the corporate sector, non-government organization and the media in the national efforts for disaster prevention/vulnerable reduction.
- Institutional structures/appropriate chain of command will be built up and appropriate training imparted to disaster managers at various levels to ensure coordinated and quick response.
- A culture of planning and preparedness is to be inculcated at all levels for capacity building measures.
- Standard Operating Procedures and Disaster Management Plan at state and district levels as well as by relevant central government departments for handling specific disasters will be laid down.
- Construction designs must correspond to the requirements as laid down in relevant Indian Standards.
- All lifeline buildings in seismic zones III, IV & V viz - hospitals, railway stations, airports/airport control towers, fire station buildings, bus stands, major administrative centre will need to be evaluated and, if necessary, retro-fitted.
- The existing relief codes in all the States will be revised to develop them into disaster management codes/manuals for institutionalizing the planning process with particular attention to mitigation and preparedness.
- Community involvement and awareness generation, particularly that of the vulnerable segments of population and woman has been emphasized as necessary for sustainable disaster risk reduction.



Earthquake

Safety Tips :

- Make your house earthquake resistant and secure heavy furniture and objects.
- Choose a couple of family meeting place; pick easy to identify, open and accessible places that you can easily reach. Prepare to be self-sufficient for a minimum of three days.
- If inside, stay inside. "DUCK, COVER and HOLD! Duck under firm furniture. Cover as much of your head and upper body as you can. Hold onto the furniture. Move to an inside wall and sit with your back to the wall, bring your knees to your chest and cover your head. Stay away from mirror and window. Do not exit the building during the shaking.
- If outdoors, move to an open area away from all structures, especially buildings, bridges, and overhead power lines.
- Move cautiously, and check for unstable objects and other hazards above and around you. Check yourself for injuries.
- Anticipate aftershocks, especially if the shaking lasted longer than two minutes.
- Stay out of damaged buildings. Listen to the radio or watch local TV for emergency information and additional safety instructions.

*The crack of quake,
All our hopes shake.*



Flood

Safety Tips :

- All your family members should know the safe routes to nearest shelter/raised pucca house.
- If your area is flood-prone, consider suitable flood resistant building materials.
- Tune to your local radio/TV for warnings and advice. Have an emergency kit ready.
- Keep dry food, drinking water and clothes ready. Drink preferably boiled water. Keep your food covered, don't take heavy meals.
- Do not let children and pregnant woman remain empty stomach.
- Be careful of snakes, as snake bites are common during floods.
- Pack warm clothing, essential medication, valuables, personal papers, etc. in waterproof bags, to be taken with your emergency kit.
- Raise furniture, clothing and valuable onto beds, tables and in attic.
- Turn off the main electricity power supply. Do not use electrical appliances, which have been in flood water.
- DO not get into water of unknown depth and current.
- Do not allow children to play in, or near flood water.

***Become friendly with nature,
Disaster will not occur in future.***



Cyclone

Safety Tips :

- Listen to radio or TV weather reports and alert everyone through a loud speaker or by going home to home.
- Identify safe shelter in your area. These should be cyclone resistant and also find the closest route to reach them.
- Keep your emergency kit and basic food supply, medicines, torch and batteries etc. ready.
- Doors, windows, roof and walls should be strengthened before the cyclone season through retrofitting and repairing. Store adequate food grains and water in safe places.
- Conduct Mock Drills for your family and the community.
- Do not venture into the sea. Stay Indoors under the strongest part of the house if not moved to the cyclone shelter.
- Remain indoors until advised that the cyclone has passed away.
- Do not go out till officially advised that it is safe. If evacuated, wait till advised to go back.
- Use the recommended route to return to your home. Do not rush.
- Be careful of broken powers lines, damaged roads and house, fallen trees etc.

*Ignoring a warning,
Can cause much mourning.*



Fire

Safety Tips :

- In case of fire, dial 101 (or the special number for FIRE SERVICE in your area/town).
- Learn at least two escape routes and ensure they are free from obstacles.
- Remain calm, unplug all electrical appliances.
- Keep bucket of water and blankets ready.
- If clothes catch fire, Stop, Drop and Roll.
- In case of uncontrolled fire, wrap the victim in a blanket, till the fire ceases/stops.
- Don't burn crackers in crowded, congested places, narrow lanes or inside the house.
- Don't cover crackers with tin containers or glass bottles for extra sound effect.
- Avoid wearing long loose clothes, as they are fast in catching fire.
- Don't remove burnt clothing (unless it comes off easily).
- Don't apply adhesive dressing on the burnt area.
- Don't throw lighted cigarette butts.

*Nature is full of bounty and beauty,
Protect it and fulfill your duty.*



Landslide

Safety Tips :

- Avoid building houses near steep slopes, close to mountain edges, near drainage ways or along natural erosion valleys.
- Avoid going to places affected by debris flow. In mud flow areas, build channels to direct the flow around buildings.
- Stay alert and awake. Many deaths from landslides occur while people are sleeping.
- Listen for unusual sounds that might indicate moving debris, such as trees cracking or boulders knocking together.
- Move away from the landslide path or debris flow as quickly as possible.
- Avoid river valleys and low-lying areas. If you are near a stream or channel, be alert for any sudden increase or decrease in water flow and notice whether the water changes from clear to muddy.
- Go to designated public shelter if you have been told to evacuate.
- Stay away from the slide area as there may be danger of additional slides.
- Check for injured and trapped persons near the slide, without entering the direct slide area.

*Keep environment intact,
Mitigate disaster impact.*



Drought

Safety Tips :

- Never pour water down the drain, use it to water your indoor plants or garden.
- Repair dripping taps by replacing washers.
- Check all plumbing for leaks and get them repaired.
- Choose appliances that are more energy and water efficient.
- Develop and use a contingency plan to meet drought situation.
- Plant drought-tolerant grasses, shrubs and trees.
- Install irrigation devices which are most water efficient for each use, such as micro and drip irrigation.
- Consider implementing rainwater harvesting wherever it is suitable.
- Avoid flushing the toilet unnecessarily.
- Avoid letting the water run while brushing your teeth, washing your face or shaving.

*Value the ecological service of nature,
For a safe and disaster free future.*



Tsunami

Safety Tips :

- Find out if your home is in the danger zone.
- Know the height of your street/house above sea level and the distance from the coast.
- People living along the coast should consider earthquake or strong ground rumbling as a warning signal.
- Try and climb a raised platform or climb the highest floor of any house or building which you might see.
- Make evacuation plans and a safe route for evacuation. Stay away from the beach.
- Never go down near the beach to watch the Tsunami.
- Listen to a radio or television to get the latest information and be ready to evacuate if asked to do so.
- If you hear an official warning, evacuate at once. Return home only after authorities advice it is safe to do so.
- Stay tuned to battery-operated radio for the latest emergency information. Help injured and trapped persons.
- Stay away from flooded and damaged areas until officials say it is safe to return.
- Enter your home with caution.
- Use flashlight when entering damaged houses. Check for electrical short circuit and live wires.
- Check food supplies and test drinking water.

*We are the signatory of our own disasters,
And opportunity, so choice is yours.*



Heat Wave

Safety Tips :

- Install temporary window reflectors such as aluminum foil-covered cardboard, to reflect heat back outside.
- Cover windows that receive morning or afternoon sun with drapes, shades.
- Listen to local weather forecasts and make yourself aware of upcoming temperature changes.
- Know those in your neighborhood who are elderly, young, sick or overweight. They are more likely to become victims of excessive heat and may need help.
- Get trained in first aid to learn how to treat heat-related emergencies.
- Never leave children or pets alone in closed vehicles. Stay indoors as much as possible and limit exposure to the sun.
- Stay on the lowest floor out of the sunshine.
- Eat well-balanced, light and regular meals.
- Drink plenty of water; even if you do not feel thirsty.
- Persons with epilepsy or heart, kidney, or liver disease; are on fluid-restricted diets; or have a problem with fluid retention should consult a doctor before increasing liquid intake.
- Protect face and head by wearing a hat or cloth.

*Due to our misdeed there is global warming,
Grow more trees and make the Earth charming.*



Cold Wave

Safety Tips :

- Keep ready the Emergency Kit along with snow shovels, wood for your fireplace and adequate clothing.
- Listen to local Radio Station for weather updates.
- Stay indoors; minimize travel.
- Keep dry. Change wet clothing frequently to prevent loss of body heat.
- Watch for symptoms of frostbite like numbness, white or pale appearance on fingers, toes, ear lobes, and the tip of the nose.
- Maintain proper ventilation when using kerosene heaters or coal oven to avoid toxic fumes.
- Go to a designated public shelter, if your home loses power or heat during extreme cold.
- Protect yourself, from frostbite and hypothermia by wearing warm, loose fitting, lightweight clothing in layers.

*Disaster destructs,
Preparedness protects.*



Epidemics

Safety Tips :

- Store atleast two week supply of water and food.
- Periodically check availability of your regular prescription medicines
- Have non-prescription medicines and other health supplies in hand, including pain relievers, stomach remedies, cough and cold medicines, fluids with electrolytes and vitamins.
- Volunteer with local groups to prepare and assist during emergency response.
- Keep your surroundings clean and do not let the water be stagnant.
- Avoid close contact with people who are sick. When sick, keep distance from others to protect them from getting sick.
- If possible, stay at home; keep away from work, school etc. when you are sick. This will help prevent others from getting infected.
- Cover your mouth and nose with a tissue while coughing or sneezing. Washing your hands often will help protect you from harmful germs.
- Avoid touching your eyes, nose or mouth. Germs are often spread when a person touches something that is contaminated with germs and then touches his or her eyes, nose or mouth.

*When you choose to safeguard the nature,
You choose to secure your own future.*

Thunder and Lightning



Thunder and Lightning

Safety Tips :

- Keep ready an Emergency Kit with important medication. Postpone outdoor activities.
- Remember, rubber-soled shoes and rubber tires provide NO protection from lightning.
- Unplug any all electrical/ electronic equipment/appliances such as fridges, computers, fans etc. and turn off air conditioners well before the storm arrives.
- Use your battery-operated Radio for news updates.
- Avoid contact with electrical equipments or cords.
- Do not lie on concrete/ marble floors and do not lean against concrete walls.
- Continue to listen to local radio and television stations for updated information or instructions, as access to roads or some parts of the locality may be blocked.
- Help people who may require special assistance, such as infants, children, women and elderly.
- Stay away from broken power lines and report them immediately.

*Alert today,
Alive tomorrow*



Forest Fire

Safety Tips :

- Try to maintain FOREST BLOCKS to prevent day litter from forests during summer season.
- Try to put the fire out by digging or circle around it by water, if not possible to call a Fire bridge.
- Move farm animals & movable goods to safer places.
- During fire listen regularly to radio for advance information & obey the instructions cum advice.
- Teach the causes and harm of fire to your family and others. Make people aware about forest fire safety.
- Do not be scared when a sudden fire occur in the forest, be calm & encourage others & community to overcome the problem patiently.
- Do apply seasonal mitigation measures i.e., fuel reduction etc.
- Don't throw smoldering cigarette butts or bidi in the forests.
- Don't leave the burning wood sticks in or near the forest.
- Don't enter the forest during the fire.
- Discourage community to use Slash & Burn method.

*Because of us there is global warming,
Grow more tree and make Earth charming.*

NATIONAL INSTITUTE OF DISASTER MANAGEMENT



NATIONAL INSTITUTE OF
DISASTER MANAGEMENT
(NIDM)

Ministry of Home Affairs,
Government of India

The National Institute of Disaster Management is one of the youngest national institute in the country. NIDM acts with nodal national responsibilities for human resource development, capacity building, training research, documentation and policy advocacy in the field of disaster management. The institute has strategic partnerships with number of academic, research and technical organizations in India and around the world. It promotes networking among knowledge institutes and encourages interdisciplinary research on different aspects of disaster management.

VISION

- To be a premier Institute of Excellence for training and research on disaster risk mitigation and management in India and to be recognized as one of the leading Institutions at the International level in the field.
- To strive relentlessly towards making a disaster free India by developing and promoting a culture of prevention and preparedness at all levels.

THRUST AREAS

TRAINING AND AWARENESS

Face-to-Face Training: NIDM conducts both in campus and off-campus training programmes on various themes covering a wide range of subjects and sectors for senior and middle level government officials and others.

Web Based Training: The Institute in collaboration with GFDRR, Washington conducts on-line training programmes on various specialized subjects related to disaster management.

Satellite Based Training: The Institute collaborates with some of the Administrative Training Institute to conduct satellite based training programmes through the ISRO community centers.

Self study Courses: The Institute has introduced web based self study courses which anyone can participate from anywhere at any time.

Awareness: Developing and disseminating awareness tools / material for disaster management.

PUBLICATIONS

- Journal 'Disaster and Development'
- Quarterly Newsletter "Tidings"
- India Disaster Report
- Training modules
- Case studies
- Archives of disasters
- Directory of DM resource persons / institutions
- IEC material

RESEARCH & DOCUMENTATION

NIDM documents major disasters taking place in the country to learn the lessons on its management and use the case studies as resource materials for the training classes and simulation exercises. Action oriented Research Projects are also undertaken by Institute.

POLICY STUDIES

NIDM provides assistance in national level policy formulation and state level policies, strategies and frameworks.

For details please visit the institute website : www.nidm.gov.in