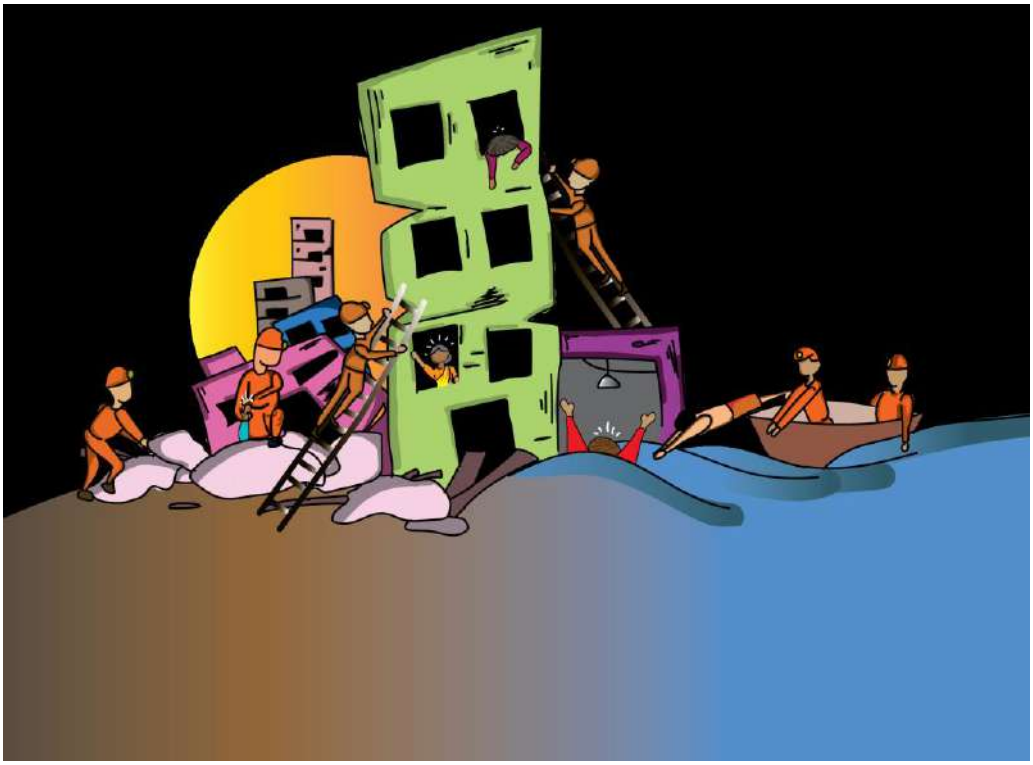
Disaster Risk Reduction and Preparedness

Interdisciplinary Area (IDA) subject for

Grade - 9



Towards a Disaster Resilient Goa

State Council of Educational Research and Training, Porvorim

Government of Goa

Interdisciplinary Area Semester-II: Credit-III		
Total mks: 50	**Theory: 20 mks (Disaster Risk Reduction & Preparedness)** **Practical: 30 mks (Existing Subject Syllabus)**	**Total Hours: 30 (Each Topic)**

NCC				Scout & Guide				Junior Red Cross				Social Service			
Hours: 30	Theory	Practical		Hours: 30	Theory	Practical		Hours: 30	Theory	Practical		Hours: 30	Theory	Practical	
	20 mks	30 mks			20 mks	30 mks			20 mks	30 mks			20 mks	30 mks	

Note: For Credit- III, theory content shall remain common across all topics.

Contents

Learning Outcomes:

1. Student explains key terms such as hazard, vulnerability, capacity, and disaster risk, with examples relevant to real-life scenarios.
2. Student analyses the factors that increase vulnerability in a community and explains the factors which contribute to disaster risks, using case studies or local examples.
3. Student illustrates the four stages of the disaster management cycle—preparedness, response, recovery, and mitigation—and give examples of actions taken at each stage.
4. Student develops basic disaster preparedness plans or strategies, considering the resources, early warning systems, and mitigation measures available in their community.
5. Students demonstrates an understanding of various environmental and biological emergencies, including their causes, risks, and preventive measures.
6. Student applies appropriate safety protocols before, during, and after disasters, ensuring personal safety, protecting the community, and minimizing the impact of such emergencies.
7. Student develops practical skills to mitigate the risks of these disasters through preparedness, awareness, and responsive actions in various emergency situations like biological, chemical, natural (cyclones, earthquakes, floods, etc.), and man-made hazards.

Learning outcomes for the topics:

Biological Emergencies:

1. Student demonstrates preventive actions, such as practicing good hygiene, using mosquito nets, etc to reduce the risk of biological disasters like epidemics.
2. Student applies safety protocols during biological emergencies, including avoiding contact with affected individuals, using respiratory protection, and following official instructions for disposal of contaminated materials and ensuring immunization.

Chemical Emergencies:

1. Student identifies key safety practices, such as proper storage of chemicals, avoiding hazardous areas, and preparing an emergency kit, and apply these measures to reduce the risk of chemical disasters in their surroundings.
2. Student demonstrates appropriate actions, including evacuating safely, using protection like a wet cloth during exposure, and properly disposing of contaminated

materials, to ensure personal safety and community well-being during and after chemical emergencies.

Cyclones:

1. Student identifies preparedness measures, such as securing their homes, preparing an emergency kit, staying informed through media updates, and knowing safe evacuation routes, to reduce the impact of cyclones.
2. Student demonstrates appropriate safety actions during a cyclone, including evacuating to safe shelters, using protective measures indoors, and following official instructions post-cyclone for health and safety, such as avoiding damaged buildings and drinking safe water.

Droughts:

1. Student identifies effective water conservation practices, such as repairing leaks, using water-efficient appliances, and implementing rainwater harvesting systems, and applies them to reduce water wastage during drought conditions.
2. Student develops a contingency plan for drought situations, including selecting drought-tolerant plants, using efficient irrigation systems, and practicing mindful water usage to mitigate the impacts of drought on communities.

Earthquakes:

1. Students identifies key earthquake preparedness actions, such as structural strengthening, creating an emergency kit, and developing an evacuation plan, and applies these practices to minimize risks and ensure safety during an earthquake.
2. Student demonstrates the correct actions to take during an earthquake, such as "Drop-Cover-Hold," avoiding hazards, and implements post-earthquake safety measures, including navigating damaged areas and conserving energy when trapped.

Fire:

1. Student demonstrates fire safety protocols, including the use of fire extinguishers, evacuation drills, and emergency communication.
2. Student evaluates fire risks in their homes and schools, recommends preventive measures such as safe storage of flammable materials, and create an emergency fire response plan that includes the use of fire safety equipment and evacuation procedures.

Floods:

1. Student recognises potential flood risks in their local areas, assess their vulnerability to floods, and applies preventive measures such as creating emergency kits, securing important documents, and identifying safe evacuation routes.

2. Student demonstrates safety protocols after a flood, including avoiding contaminated water, checking electrical equipment, and using disinfectants.

Forest Fire:

1. Student identifies the common causes of forest fires, including natural and human-induced factors, and applies preventive measures to reduce the risk of forest fires, such as avoiding careless behavior and promoting community awareness.
2. Student demonstrates appropriate responses during a forest fire, including the safe evacuation of animals and movable goods, using fire suppression techniques like water and digging when possible, and following emergency instructions from authorities.

Heat Waves:

1. Student explains the causes of heat waves and recognize the signs of heat-related illnesses, including how different regions (plains, coastal, hilly) are affected by varying temperature thresholds.
2. Students applies strategies to stay safe during a heat wave, such as staying hydrated, limiting sun exposure, and using proper heat-protection methods, while also identifying vulnerable groups that may require additional care.

Landslides:

1. Student recognises the natural causes of landslides, such as excessive rainfall, earthquakes, and volcanic eruptions, and identifies early warning signs that may precede a landslide, including cracks in rocks or changes in river water color.
2. Student applies safety protocols during a landslide, such as moving to higher ground and avoiding low-lying areas, and demonstrates the correct response after a landslide, including checking for injuries and staying clear of unstable areas.

Lightning:

1. Student explains the process of lightning formation and recognises the associated dangers, such as the risks of lightning strikes to people and property.
2. Student demonstrates appropriate safety measures both indoors and outdoors during a lightning storm, including the 30-30 rule, avoiding water bodies, and staying clear of metal structures and trees.

Tsunamis:

1. Student explains how tsunamis are caused by underwater earthquakes or volcanic eruptions and identifies the potential risks to coastal areas.
2. Student applies safety measures during a tsunami, such as evacuating to higher ground, staying informed via radio, and waiting for official instructions before returning home.

1. Introduction:

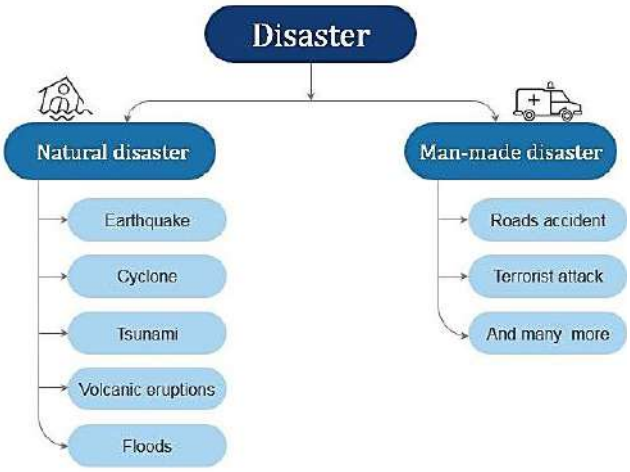
Disasters threaten sustainable economic development worldwide. In the past, earthquakes, floods, tropical storms, droughts and other calamities have caused colossal loss of life, inflicted injuries, disease, homelessness, misery and have caused damage to properties and critical infrastructure. Disasters destroy decades of human effort and investments, thereby placing new demands on society for reconstruction and rehabilitation.

[1]Disaster is an unexpected tragic event which occurs due to natural or man-made reasons, affecting the everyday life of people in a particular area, is called a disaster. For example, earthquake, flood, road, or rail accident etc.

Disasters indeed are tragic in nature however they provide an opportunity for a vulnerable community or society to **enhance disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction**.[2]

1.1 Types of Disasters:

As understood above, an unexpected tragic event which occurs due to **natural or man-made reasons**, affecting the everyday life of people in a particular area, is called a disaster. For example, earthquake, flood, road, or rail accident etc. However, based upon the cause of occurrence, disasters are of two types: 1) Natural Disasters 2) Human Induced disasters.



[1] National Council of Educational Research & Training
[2] Sendai Framework for Disaster Risk Reduction 2015 - 2030

Various Types of Hazards

Types	Hazards	
Geological Hazards	1. Earthquake 2. Tsunami 3. Volcanic Eruption	4. Landslide 5. Dam Burst 6. Mine Fire
Water and Climate Hazards	1. Tropical Cyclone 2. Tornado and Hurricane 3. Flood 4. Drought 5. Hailstorm	6. Cloud Burst 7. Landslide 8. Snow Avalanche 9. Heat and Cold Wave 10. Sea Erosion
Environmental Hazards	1. Environmental Pollution 2. Deforestation	3. Desertification 4. Pest Infection
Biological Hazards	1. Human/Animal Epidemics 2. Pest Attacks	3. Food Poisoning 4. Weapons of Mass Destruction
Chemical , Industrial and Nuclear Hazards	1. Chemical Disasters 2. Industrial Disasters	3. Oil Spills / Fires 4. Nuclear
Accident Related	1. Boat/Road/Train accidents/Air Crash/ Fires/Bomb Blasts 2. Forest Fires 3. Building Collapse	4. Electric Accidents 5. Festival related Disasters 6. Mine Flooding

1.1.1 Natural Disasters:

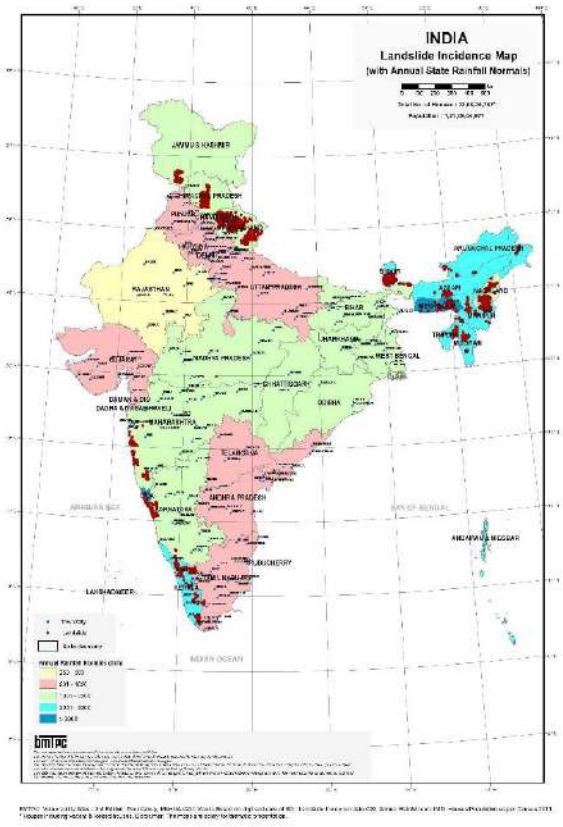
A natural tragic event occurring due to environmental imbalance or unnatural movement inside the earth, that causes loss to life and property, is called a natural disaster. Examples: Earthquake, Floods, Drought, Storm, Natural Landslides, Cloud Burst, Cyclone, Tsunami, Cold wave, Heat wave, Forest Fires, Volcanic Eruption, etc.

1.1.2 Human Induced Disasters:

A disaster that occurs due to human negligence, mistake, carelessness, or failure of the system is called a man-made disaster. Chemical, Biological, Radiological, Nuclear (CBRN) Emergencies, Fires, drowning incidents, Landslides (Mining Areas), Industrial hazards, Boat Capsize, Road/Railway/Aircraft Accidents, Terrorism/Stampede/Riots, etc.

1.2 Vulnerability Profile of India[3]:

India, due to its unique geo-climatic and socio-economic conditions, is vulnerable, in varying degrees, to floods, droughts, cyclones, tsunamis, earthquakes, urban flooding, landslides, avalanches and forest fire.



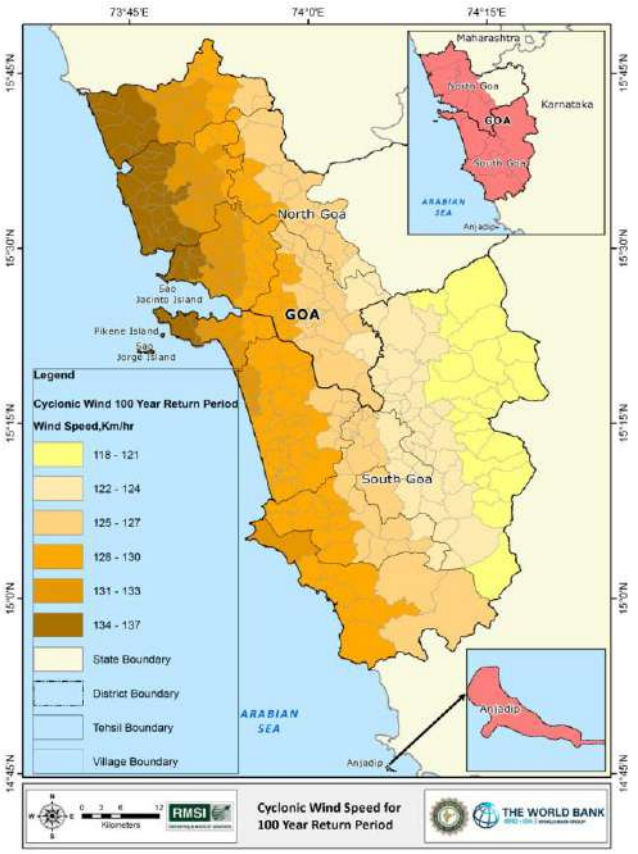
Out of **36** States and Union Territories (UTs) in the country, **27** are **disaster prone**. **58.6%** landmass is prone to **earthquakes** of moderate to very high intensity; **12%** land is prone to **flood and river erosion**; out of 7,516 km coastline, **5,700 km** is prone to **cyclones and tsunamis**; **68%** of the cultivable land is vulnerable to **drought**, hilly areas are at risk from landslides and avalanches, and **15%** of landmass is prone to **landslides**.

A total of **5,161** Urban Local Bodies (ULBs) are prone to **urban flooding**. Fire incidents, industrial accidents and other manmade disasters involving chemical, biological and radioactive materials are additional hazards, which have underscored the need for strengthening mitigation, preparedness and response measures.

[3] Annual Report 2022-2023; National Disaster Management Authority

1.3 Vulnerability Profile of Goa:

Goa is a multi-Hazard Prone Coastal State and is vulnerable to the multiple disasters including Cyclones, Floods, Landslides, etc. This is primarily attributed to heavy rainfall in the State during the Monsoon Season. Every year large number of domestic as well as foreign tourists visit the State; so tourist safety also becomes necessary for the State in both normal and disaster situations.



Cyclone Hazard Map (100 Year Return Period)

The State of Goa experienced the catastrophic events -**Taukte Cyclone and Floods** in the months of May and July 2021 respectively, causing colossal damage to the properties, livelihood, infrastructure, environment, social disruption and unfortunate loss of **04 lives.** In the year 2023, the State experienced high waves in the coastal areas caused by **Cyclone Biparjoy** and in the year 2024, the State witnessed a record heavy rainfall from last 03 years. [4]

The State of Goa falls under **Seismic Zone III** (Moderate Damage Risk Zone as per MSK VII) under the Seismic Zonation Map of India. The Low-lying areas of the State are prone to floods. Approximate 15% of the land area of India is susceptible to landslides out of which **0.09 million sq. km** come under Western Ghats and Konkan hills including Goa. The Gusty Winds in the pre-monsoon season result into tree fall incidents, destroying roof-tops and crops. As per Directorate of Fire & Emergency Services Goa[5], the trend of the fire incident has increased to **285%** since 2003. In the year 2023, **4,108** No. of fire incidents were reported in the State. In addition, rate of forest fires has also increased in the State especially during the dry spells in Summer season. The areas in the vicinity of the Konkan and Western Rail lines are vulnerable to railway accidents across North and South Goa. Besides, the State is experiencing the increasing trend to road accidents. As per the monthly report issued by the Directorate of

[4] Goa State Disaster Management Plan 2024
[5] Directorate of Fire and Emergency Services Goa

Transport[6] for the month of September 2023, 227 road accidents were reported, out of which 14 were Fatal Accidents (North Goa – 06 and South Goa –08). Goa's proneness to multiple disasters caused by natural and human induced factors aggravated by climate change impacts pose many threats and challenges for communities and agencies involved in management of Disasters in the State.

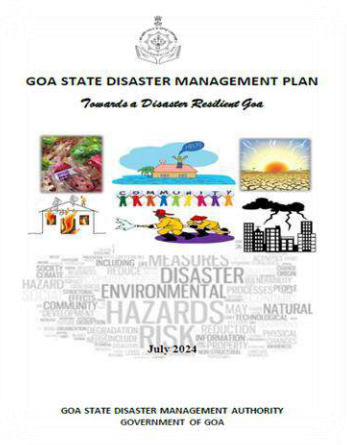
1.4 Disaster Management Setup in Goa:

Disaster management is the assistance or arrangements made by government and non-government organizations in an area affected by disaster, to deal with its antecedence and aftermath.

As per the **Disaster Management Act 2005**, Government of Goa has constituted Goa State Disaster Management Authority-**SDMA** headed by **Hon'ble Chief Minister as Chairperson**; State Executive Committee-**SEC** headed by **Chief Secretary** of the State and District Disaster Management Authorities-**DDMAs** for North and South Goa headed by respective District Collectors as **Chairpersons.**

The Disaster Risk Reduction Initiatives undertaken by the Government include:

1. Preparation of Disaster Management Plans:



Government has prepared the State Disaster Management Plan-2024 in accordance with National Disaster Management Plan-2019. Also the Departmental Disaster Management Plans including Airport and Seaport Authorities have also been prepared.

2. Emergency Operation Centres (EOCs):

Government has established 01 State Emergency Operation Centre (EOC), 02 District Emergency Operation Centres (DEOC) and 12 Taluka Emergency Operation Centre (TEOCs) which are functional 24x7 to assist public in disaster related emergencies.

[6] Road Accident Statistics -2023 by the Directorate of Transport Goa

3. Technological Interventions:

Government utilises the services of **Common Alerting Protocol-Integrated Alert System** to send the Disaster Alerts to the general public and has also kept the facility of **Emergency Response Support System (Dial 112)** for seeking emergency assistance Police Assistance, Fire Incidents, Ambulance Service, Women Protection, Child Safety, Location lost and has extended the same for **disaster emergencies** as well.

3. Disaster Management Schemes/Project:

3.1 National Cyclone Risk Mitigation Project NCRMP – II:

Government has done following achievements the NCRMP-II:

Government has constructed **11 Multipurpose Cyclone Shelters** (MPCS) **04** in North Goa and **07** in South Goa with all basic facilities for providing temporary accommodation to the disaster affected victims;

Additionally, Government has identified **259** schools and **132** community halls as emergency centers in both North and South districts with all basic facilities.

- Government has installed **37 Early Warning Dissemination System-EWDS Towers** along the coastal line of Goa including **14 Concrete Spun Towers** (15 and 20 Meters), **12 BSNL Tower**s on Beach Locations and **11 Monopoles** on MPCS (5 Meters);

3.2 Upscaling of Aapda Mitra Scheme:

Government has trained **400 Aapda Mitra** volunteers including **70 Aapda Sakhi (Female Volunteers)** through Directorate of Fire and Emergency Services on Disaster Management, Disaster Preparedness, Cyclone, Flood, Earthquake, Landslides, Tsunami, Nuclear and Chemical Emergencies, Basic Search & Rescue techniques, Community based First Aid response, CPR, Control Bleeding, Basic Fire Safety, Lifting & Moving of Patients, Rope Rescue Techniques & Improvised Techniques to assist the responding agencies during the disaster situations.

4. DISASTER MANAGEMENT APPS:

In order to stay updated with the location based live weather forecast, necessary do's and don'ts on all disasters and an emergency button **(Dial 112)** to seek any emergency support, Government has popularized the usage of SACHET Application launched by National Disaster Management Authority, Government of India among general masses.

Other Important Applications recommended by Ministry of Home Affairs, Government of India that the public can make use of include: **Mausam** (Weather Forecast), **Meghdoot** (Agricultural Forecast) and **Damini** (Lightening Alert).

5 DISASTER MANAGEMENT MOCK DRILLS:

Government conducts a Mock Exercises at State, District and Departmental Level in collaboration with the concerned National and State Level Agencies to promote a culture of prevention, preparedness and resilience at all levels. Besides, Familiarisation

Exercises including school safety are also conducted with the support National disaster Response Force (NDRF).

6. DISASTER MANAGEMENT TRAINING PROGRAMMES:

Government regularly conducts Capacity Building Trainings for Government Officials/Staff from Line Departments, SHGs, NCC Cadets at College Level, Members of Cyclone Shelter Management and Maintenance Committee, etc.

7. DISASTER MANAGEMENT WORKSHOPS:

Government conducts the workshops on disaster management in order to educate participants from various line departments on disaster management and provide them with the skills and knowledge needed to prepare for, respond to, and recover from disasters.

7. DISASTER MANAGEMENT PORTALS:

Government makes use of the disaster management portals including **India Disaster Resource Network (IDRN)** for managing the inventory of resources including equipment, skilled human resources and critical supplies for emergency response and **National Disaster Management Information System (NDMIS)** to report and record the data regarding disaster incidents in the State.

Process of Disaster Management includes:

- Preparation to deal with the disaster before it occurs;
- Immediate assistance provided during a disaster;
- Prevention of possible dangers during a disaster;
- Rehabilitation of people, villages and settlements affected by a disaster;
- Reconstruction of the property destroyed or damaged in a disaster;

Need for Disaster Management:

People need help when, at the time of a disaster, they are unable to deal with the crisis on their own.

- Safe evacuation of people trapped in areas affected by disaster.
- Making proper arrangements for the treatment of the injured people.

- Arranging food and other essential items for the people affected by the disaster.
- Assisting in rehabilitating people, villages and settlements rendered homeless by disaster.

2. Basics of Disaster Management[7]

(a) Hazard:

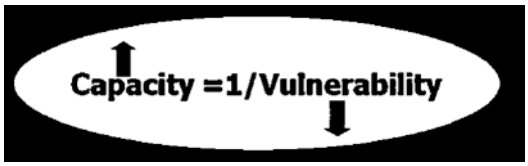
A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

(b) Vulnerability:

The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard.

(c) Capacity:

The combination of all the strengths, attributes and resources available within a community, society or organization that can be used to achieve agreed goals.



(d) Disaster risk:

The potential disaster losses, in lives, health status, livelihoods, assets and services, which could occur to a particular community or a society over some specified future time period.

[7] National Institute of Disaster Management

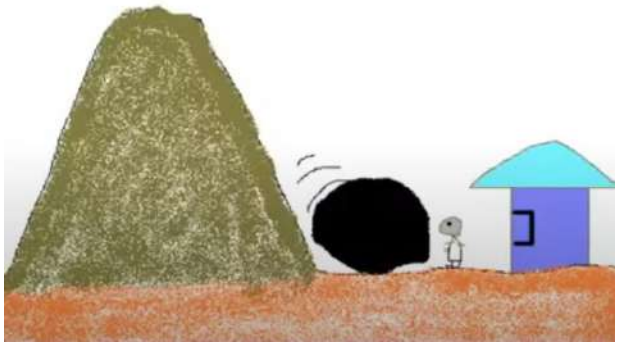
$$\text{Risk is proportional} = \frac{\text{Hazard} \times \text{Vulnerability}}{\text{Capacity}}$$

(e) Disaster risk management:

The systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster.

(f) Disaster:

A catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or manmade causes, or by accident or negligence which results in substantial loss of life or human suffering or damage to, and destruction of property, 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***. *(Disaster Management Act, 2005)*



HAZARD x VULNERABILITY = DISASTER

(g) Mitigation:

The lessening or limitation of the adverse impacts of hazards and related disasters. Natural hazard: Natural process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

(h) Disaster risk reduction:

The concept and practice of reducing disaster risks through systematic efforts, to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.

(i) Early warning system:

The set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss.

(j) Emergency management:

The organization and management of resources and responsibilities for addressing all aspects of emergencies, in particular preparedness, response and initial recovery steps.

(k) Preparedness:

The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions.

(l) Prevention:

The outright avoidance of adverse impacts of hazards and related disasters.

(m) Public awareness:

The extent of common knowledge about disaster risks, the factors that lead to disasters and the actions that can be taken individually and collectively to reduce exposure and vulnerability to hazards.

(n) Recovery:

The restoration, and improvement where appropriate, of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors.

(o) Response:

The provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected.

3. Disaster Management Cycle:

i. Preparedness: Activities prior to a disaster

Examples: Preparedness Plans; Emergency Exercises/Training; Warning Systems

ii. Response: Activities during a disaster

Examples: Public Warning Systems; Emergency Operations; Search and Rescue.

iii. Recovery: Activities following a disaster.

Examples: Temporary housing; claims processing and grants; long-term medical care and counselling

iv. Mitigation: Activities that reduce the effects of a disaster.

Examples: Building codes and zoning; vulnerability analysis; public education.

4. Disaster Risk Reduction Measures:

As understood above, Disaster risk reduction is the concept and practice of reducing disaster risks through systematic efforts to analyse and reduce the causal factors of disasters.[8] Disaster risk reduction[9] is aimed at preventing new and reducing existing disaster risk and managing residual risk, all of which contribute to strengthening resilience and therefore to the achievement of sustainable development.

The Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR)[10] being the first major agreement of the post-2015 development agenda, advocates for: The substantial reduction of

[8] UNESCO
[9] United Nations Office for Disaster Risk Reduction
[10] Sendai Framework (2015-2030)-National Disaster Management Authority

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. It recognizes that the State has the primary role to reduce disaster risk but that responsibility should be shared with other stakeholders including local government, the private sector and other stakeholders.

In order to prevent the new and reduce the existing disaster risks posed by natural and human induced disasters, necessary disaster risk reduction measures must be undertaken.

4.1 Biological emergencies

Epidemics occurring due to biological processes, infectious animal diseases or infections spread by insects or other animals are called biological disasters/emergencies. Examples: Malaria, COVID-19 pandemic, Anthrax, Smallpox, etc.

Safety Tips:

BEFORE

- Watch television, listen to radio, or surf the Internet for official news of any outbreak.
- Practice good hygiene and keep your premises clean.
- Use mosquito nets / repellents night.
- Boil water before drinking. Chlorinate it, if possible.
- Thoroughly wash all vegetables/fruits before cooking/eating.
- Use insecticides to contain the vectors.
- Don't consume stale or contaminated food products.
- Immediately report any sickness with unusual and/or suspicious symptoms in the family / neighbourhood to health authorities.
- Seek medical attention if you are sick; keep a stock of your regular prescribed medicines.

DURING

- Keep distance from and avoid direct contact with the affected person.
- Avoid going to crowded areas.
- Use a respiration mask for protection.

AFTER

- Follow official instructions and help authorities dispose of contaminated items such as food, poultry, crops, vectors and other materials, if advised.
- Ensure that all the required immunizations are done and necessary precautions taken.

4.2 Chemical emergencies

Chemicals in the factories can often catch fire due to human negligence, leading to an increased risk of explosion, leakage of poisonous gases and their mixing in the atmosphere and the sea. Due to this, people can become vulnerable to serious diseases. Such a situation is called chemical disaster. On December 2, 1984, a highly poisonous gas leaked in the chemical factories of the American company Union Carbide in Bhopal, due to which thousands of people died within three days. Millions of people suffered from severe respiratory diseases, eye diseases and many other problems.

Safety Tips:

FOR INDIVIDUALS

BEFORE

- Don't mix chemicals, even common household products. Some combinations, such as ammonia and bleach, can create toxic gases.
- Store chemical products properly.
- Store non-food products tightly closed in their original containers for easy identification.
- Dispose of unused chemicals properly. Improper disposal is harmful as it may contaminate the local water supply.
- Do not smoke or light fire in the identified hazardous areas.
- Avoid staying near industries which process hazardous chemicals, if possible.
- Keep emergency contact numbers handy, including that of nearby hazardous industries.
- Participate in capacity building programmes organized by the government/ voluntary organizations / industrial units.
- Identify safe shelters along with safe and easy access routes.
- Prepare a family disaster management plan.
- Prepare an emergency kit with essential items for safety and survival.

DURING

- Do not panic. Evacuate quickly through the designated escape route.
- Keep a wet piece of cloth on your face while evacuating.
- If you are unable to evacuate, close all the doors and windows tightly.
- Once you are at a safe location, inform Emergency Services (Police, Hospital, etc.).
- Do not spread and/ or believe in rumours.

AFTER

- Do not consume uncovered food/ water, etc.
- Change into fresh clothes after reaching a safe place/ shelter, and wash hands properly.

COMMUNITY

- Make the entire neighbourhood aware of chemical hazards and the first aid required to treat them.
- Listen to radio, watch TV and surf the Internet for official news and announcements.
- Provide accurate information to government officials.
- Sensitise authorities about the exact requirement of protective equipment for dealing with the hazard present

4.3 Cyclones

The increase in temperature on the surface of the sea and a decrease in air pressure results in a cyclone. Tropical cyclones are characterised by large pressure gradients. The centre of the cyclone is mostly a warm and low-pressure, cloudless core known as eye of the storm.

Safety Tips:

FOR INDIVIDUALS

BEFORE CYCLONE

- Ignore rumours, stay calm, don't panic.
- Keep your mobile phones charged for emergency communication; use SMS.
- Listen to radio, watch TV, read newspapers for weather updates.
- Keep your documents and valuables in water-proof containers.
- Try staying in an empty room; keep movable items securely tied.

- Prepare an emergency kit with essential items for safety and survival.
- Secure your house, especially the roof; carry out repairs; don't leave sharp objects loose.
- Keep cattle/animals untied to ensure their safety.
- In case of a storm surge/tide warning, or flooding, know your nearest safe high ground/ safe shelter and the safest access route to it.
- Store adequate ready-to-eat food and water to last at least a week.

- Conduct mock drills for your family and community.
- Trim treetops and branches near your house with permission from the local authority.
- Close doors and windows securely.
- Evacuate immediately to safe places when directed by government officials.

DURING

A) IF INDOORS

- Switch off electrical mains, unplug all electrical appliances and gas connection.
- Keep doors and windows shut.
- If your house is unsafe, leave early before the onset of a cyclone. Reach a safe shelter.
- Listen to radio; rely only on official warnings.
- Drink boiled/chlorinated water.
- If the building starts to crumble, protect yourself with mattresses, rugs or blankets, or by getting under a strong table or bench or by holding onto a solid fixture, such as a water pipe.

B) IF OUTDOORS

- Do not enter damaged buildings.
- Seek a safe shelter as soon as possible.
- Never stand under a tree/ electric pole.
- Beware the calm 'eye'. If the wind drops, don't assume the cyclone is over; violent winds may soon resume from another direction. Wait for the official 'all clear'.

AFTER

- Drink boiled/chlorinated water.
- Do not go out until officially advised. If evacuated, wait until advised to go back.
- Watch out for broken electric poles and loose wires, and other sharp objects.

- Do not enter damaged buildings.
- Do not use damaged electrical equipment. Get them checked by an electrician first.

FISHERMEN SHOULD:

- Ignore rumours, stay calm, not panic.
- Keep mobile phones charged for emergency communication; use SMS.
- Write down important numbers on a paper and keep it safely.
- Keep a radio set with extra batteries handy.
- Listen to radio, watch TV, read newspapers for weather updates.
- Keep boats/rafts tied up in a safe place.
- Don't venture out in the sea.

4.4 Droughts:

The critical situation of having received 25% less rainfall than average with not enough rainwater stored for irrigation because of the lack of proper arrangements, is called drought. It may continue for a period of several months or years. A situation of starvation may arise due to an extreme shortage of food and water during a 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 cop 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.

4.5 Earthquakes

The sudden and violent shaking of the ground caused by the collision between the tectonic plates present below the earth's surface is called an earthquake. Earthquakes often come without any warnings which is why there is an immense loss of life and property.

Safety Tips:

BEFORE

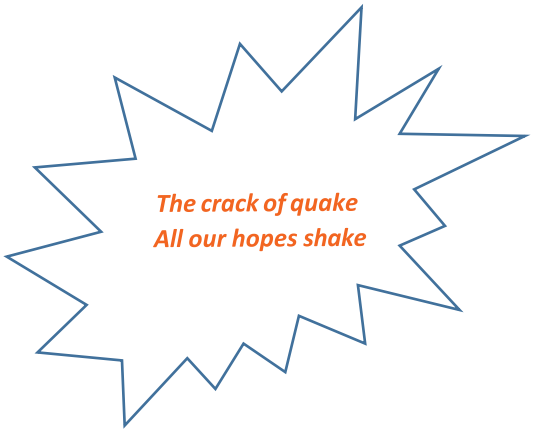
- Consult a structural engineer to make your house earthquake resilient.
- Know your seismic zone and carry out necessary structural changes in your house.
- Preserve the design and layout drawings of your house for future reference.
- Repair deep plaster cracks on walls and ceilings.
- Fasten shelves securely to walls; place heavy / large objects on lower shelves. Provide strong support to power and gas appliances.
- Prepare an emergency kit with essential items for safety and survival.
- Develop an emergency communication and evacuation plan for your family.
- Learn the technique of 'Drop-Cover-Hold'.
- Avoid flood plains and filled-up areas for construction as far as possible.
- Educate yourself and family members about earthquake risk.

DURING

- Stay calm. Do Not Panic. If you're indoors, stay inside. If you're outside, stay outside.
- Don't use matches, candles, or any flame. Broken gas lines and fire don't mix.
- If you're in a car, stop the car and stay inside until the earthquake stops.
- Drop under a table; Cover your head with one hand and Hold the table till the tremors last.
- Stay away from mirrors and windows. Do not exit the building while the earth is still shaking.
- Move outside as soon as the tremors stop. Do not use a lift.
- When outside, move away from buildings, trees, walls and poles/electric lines.
- When inside a vehicle, pull over in an open place and remain inside; avoid bridges.
- When in a structurally safe building, stay inside until shaking stops.
- Protect yourself by staying in the corner/ under a strong table or bed/ an inside wall away from mirrors and windows.
- If near an exit, leave the building as soon as possible.
- If inside an old and weak structure, take the fastest and safest way out.

AFTER

- Do not enter damaged buildings.
- If trapped in rubble:
  - Do not light a matchstick.
  - Cover your mouth with a cloth.
  - Tap on a pipe or a wall.
  - Sound a whistle.
  - Shout only as a last resort. This will help you conserve energy.
- Use stairs and not lifts or elevators.



- Move cautiously, and check for unstable objects and other hazards above and around you. Check yourself for injuries.
- Anticipate aftershocks, especially after a major earthquake.
- Stay away from beaches. Tsunamis and seiches sometimes hit after the ground has stopped shaking.
- Do not spread and/ or believe in rumours.
- Leave a message stating where you are going if you must evacuate your house.
- Do not drive around the damaged areas as rescue and relief operations need roads for mobility.

- Do not attempt to cross bridges/flyovers, which may have been damaged.

4.6 Fire:

Factories and human settlements can catch fire due to human carelessness or a short circuit of electric wires. This can lead to a severe loss of life and property if not controlled in time.

Safety Tips:

PREPAREDNESS

- Prepare and practice a response plan for your school.
- Regularly carry out and practice fire rescue drills such as stop, drop, and roll.
- Ensure that all residents/visitors are periodically trained to face different emergency situations and provide first aid.
- Ensure that smoke alarms are fitted in buildings and are functional.
- Try to make your residential building 'No Smoking' zone
- Be familiar with the exit routes.
- Keep the exit routes /staircases free of any obstructions. Periodically check evacuation routes for obstruction, if any.
- Ensure that there is enough open area and wide roads available in and around your home and school to ensure easy access and movement of emergency vehicles.
- Ensure that exit routes are marked and fire-fighting equipment is working properly in your school premises and residential area.
- Ensure that your house and school have a first aid kit placed at every segment.

- Do not leave any open fire unattended.
- Do not accumulate old newspapers or combustible materials in your house.
- Do not store flammable liquids in the house.
- Always keep matches and lighters locked away from children.
- Do not keep papers, clothes and flammable liquids near heaters/stoves/open chulhas.

- Keep LPG gas stoves on a raised platform; do not keep them on the floor.
- Turn off the gas cylinder valve and knob of the gas stove after cooking.
- Don't throw matches, cigarette butts, etc. in waste baskets.
- Don't place oil lamps, agarbattis or candles on wooden floor or near combustible material.
- Don't wear loose, flowing and synthetic clothes while cooking.
- Never reach for any article over a fire.
- Always evaluate the electric load requirement for your premises and ensure that the power company supplies electricity accordingly. This will help avoid heating due to overload.
- Use standard electrical appliances, switches and fuses, etc. to prevent fire from electrical short circuit. Also, ensure that there are enough Earth-leakage Circuit Breakers (ELCBs) to prevent short circuit.
- Regularly check for loose electrical connections. Do not run electric wires / cords under carpets or in congested areas.
- Switch off electrical appliances after use and remove plugs from the socket.
- Switch off the 'Mains' when leaving home for a long duration.
- Don't plug too many electrical appliances in one socket.
- Ensure that there are no major electric installations near day-to-day usage area.

IN CASE OF A FIRE:

- Raise an alarm and inform the Fire Brigade call on 101 or 112 immediately.
- Do not panic; Stay calm.
- Unplug all electrical appliances.
- Try to extinguish the fire with available equipment.
- Close the doors and other openings. Place a wet cloth under the doors to stop the smoke from spreading. Use a wet cloth to cover your mouth to filter inhalation.

- Exit immediately if the fire is out of control.
- Do not go back for your possessions.
- In case of burn injuries due to fire, pour water over burn until pain subsides.

IF YOU ARE TRAPPED BY A FIRE:

- Stay close to the floor if smoke permeates your location.
- Before opening a door, check it for heat. Use the back of your hand to test the temperature at the top of the door, the knob and the frame before opening. If it is hot, do not open.
- If you are unable to escape through a door, use a window. However, if it is too high to jump from a window, try to attract attention by waving something.
- If you can leave the room, close the door behind you - this will slow down the progress of the fire. Crawl low.
- If your clothes catch fire, drop to the ground and roll to extinguish flames.

IN CASE YOU HEAR THE FIRE ALARM:

- Leave the premises by the nearest available exit.
- Close all doors and windows behind you.
- Do not use lifts. Use staircases.
- On arrival of the fire service, help them to help you.
  - Give way to fire engines to enable them to reach the spot quickly.
- Don't park your vehicles close to fire hydrants/underground static water tanks.
- Guide firemen to water sources i.e. tube wells, ponds, static tanks, etc.

4.7 Floods

The temporary overflow of a large amount of water in an area, massively affecting human life, is called a flood. There can be many reasons for the occurrence of floods, such as excessive rainfall, breaking of a dam or increased flow of water in an area.

Safety Tips:

BEFORE

- Ignore rumours, Stay calm, Don't panic.
- Keep your mobile phones charged for emergency communication; use SMS.
- Listen to radio, watch TV, read newspapers for weather updates.
- Keep cattle/animals untied to ensure their safety.
- Prepare an emergency kit with essential items for safety and survival.
- Keep your documents and valuables in water-proof bags.
- Know the safe routes to nearest shelter/ raised pucca house.
- Evacuate immediately to safe places when directed by government officials.
- Store enough ready-to-eat food and water for at least a week.
- Be aware of flash flood areas such as canals, streams, drainage channels.

DURING

- Don't enter floodwaters. In case you need to, wear suitable footwear.
- Stay away from sewerage lines, gutters, drains, culverts, etc.
- Stay away from electric poles and fallen power lines to avoid electrocution.
- Mark any open drains or manholes with visible signs (red flags or barricades).
- Do not walk or drive in the flood waters. Remember, two feet of moving flood water can wash away big cars as well.
- Eat freshly cooked or dry food. Keep your food covered.
- Drink boiled/chlorinated water.
- Use disinfectants to keep your surroundings clean.

AFTER

- Do not allow children to play in or near flood waters.
- Don't use any damaged electrical goods, get them checked.

- If instructed, turn off utilities at main switches and unplug appliances - do not touch electrical equipment if wet.
- Watch out for broken electric poles and wires, sharp objects and debris.
- Do not eat food that has been in flood waters.
- Use mosquito nets to prevent malaria.
- Be careful of snakes as snake bites are common during floods.

Become friendly with nature, Disaster will not occur in future

- Don't use the toilet or tap water if the water lines/sewage pipes are damaged.
- Do not drink tap water until advised by the Health Department that the water is safe to drink.

IF YOU NEED TO EVACUATE:

- Raise furniture, appliances on beds and tables.
- Put sandbags in the toilet bowl and cover all drain holes to prevent sewage backflow.
- Turn off power and gas connection.
- Move to a higher ground/ safe shelter.
- Take the emergency kit, first aid box, valuables and important documents with you.
- Do not enter deep, unknown waters; use a stick to check water depth.
- Come back home only when officials ask you to do so.
- Make a family communications plan.
- Clean and disinfect everything that got wet.

4.8 Forest fire

A critical situation when a part or whole of the forest catches fire, is called a forest fire. In such a situation, the plants and trees start burning and the animals start dying because of the fire and its smoke. Lightning, friction caused by excessive heat and human carelessness are some of the main reasons of forest fires.

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 occurs 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 smouldering 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.

4.9 Heat waves

When the temperature of an area increases unnaturally during the summers, it is referred to as heat wave. Hot winds usually blow between the months of March and June or July. In India, heat wave conditions are considered of maximum temperature of a station reaches at least **40°C** or more for plains, **37°C** or more for coastal areas and at least **30°C** or more for hilly regions.[11]

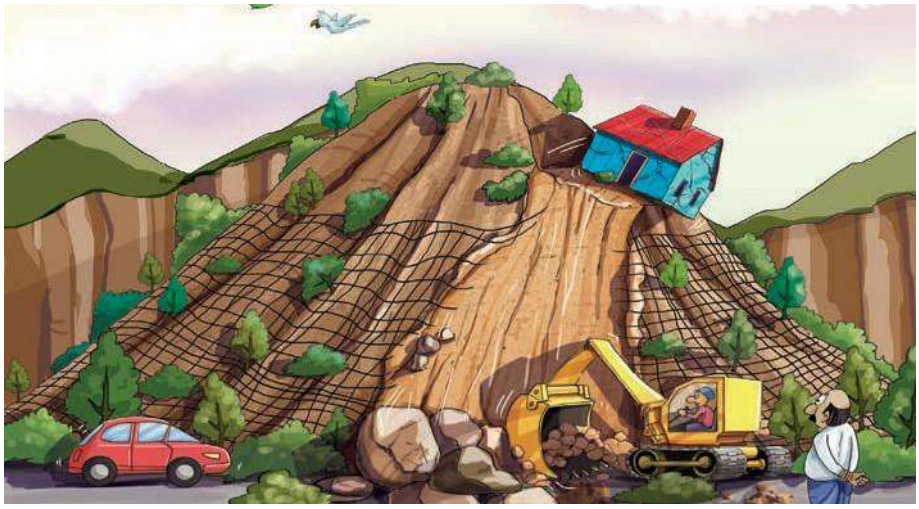
Safety Tips:

- Install temporary window reflectors such as aluminium foil-covered cardboard, to reflect heat back outside.
- Cover windows that receive morning or afternoon sun with drapes, shades.

[11] Heatwave Action Plan 2024 Goa SDMA

- Listen to local weather forecasts and make yourself aware of upcoming temperature changes.
- Know those in your neighbourhood 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.

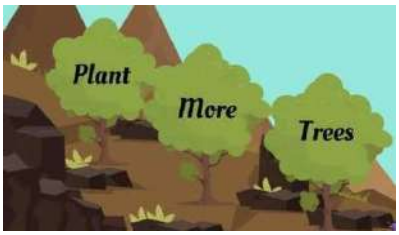
4.10 Landslides



The sliding, rolling or falling off of the pieces of dry rocks or wet soil from the slope of a hill is called a landslide. Excessive rainfall, tremors and explosions caused by earthquakes or volcanoes, abundance of minerals in rocks, etc. are some of the primary causes of natural landslides.

Safety Tips:

BEFORE



- Grow more trees/vegetation as it can hold the soil together.
- Listen to radio/Watch TV/Read newspaper for any alerts.
- Keep drains clean, weep holes open. Do not change the natural drainage system.
- Do not place debris, waste or fill material on a steep slope.
- Watch out for any warning signs such as subsidence of building, cracks on rocks, muddy river water.
- Do not construct near steep slopes and drainage path.
- Store emergency supplies of food and water, flashlights, batteries and medicine ready.
- Keep a 'disaster kit' with essential identity documents ready.

DURING

- Ignore rumours. Stay calm. Don't panic.
- Stay together with your companions.
- Landslide debris moves from uphill to downhill. You should, therefore, avoid low- lying areas or valleys.
- If you notice any warning signs such as unusual sounds like trees cracking or boulders knocking together,
- Move away from landslip path or downstream valley quickly;
- Inform nearest Tehsil/ District HQ/ Disaster Management Helpline.

AFTER

- Do not touch/walk over loose material and electrical wires or poles.

- Move away from landslip path and downstream valley quickly.
- Check for injured and trapped persons.
- Do not move an injured person without rendering first aid unless he/she is in immediate danger.
- Do not drink contaminated water directly from rivers springs, wells, etc.
- Locate the nearest public shelter.
- Stay away from the slide area. There may be a danger of additional slides.
- Re-plant damaged ground as soon as possible. Erosion caused by loss of ground cover can lead to flash flooding.
- Stay away from the location until the emergency workers and the experts confirm that it is safe.

4.11 Lightning

When clouds collide with each other in the sky, electrostatic charge (electricity) is released which quickly moves towards the earth. It is during this time that we hear thunder and see flashes of light in the sky. This is referred to as lightning. There is an immense loss of life and property in and around the area where lightning strikes the ground.

Darkening skies, thunder, hair standing up on the back of your neck or tingling skin mean lightning is imminent.

Safety Tips:

BEFORE

- Cut down or trim trees that may be in danger of falling on your home.
- An important lightning safety guide is the 30-30 rule. After you see lightning, start counting to 30. If you hear thunder before you reach 30, go indoors. Suspend activities for at least 30 minutes after the last clap of thunder.

- Always keep the earthing working to avoid damage to electrical equipment.
- Consider buying surge protectors, lightning rods, or a lightning protection system to protect your home, appliances, and electronic devices.

DURING

(A) IF INDOORS

- Unplug all electrical equipment before the storm arrives. Don't use corded telephones, electrical devices, chargers, etc.
- Stay away from windows and doors; stay off verandas.
- Don't touch plumbing and metal pipes. Do not use running water.

(B) IF OUTDOORS

- Get inside a house/building. Stay away from structures with tin roofs/metal sheets.
- If caught under the open sky, crouch. Don't lie down or place your hands on the ground.
- Don't take shelter near/under trees. Spread out; don't stand in a crowd. Stay clear of water bodies.
- If you are outside, seek refuge in a car or grounded building when lightning or thunder begins.
- Stay put if you are inside a car/bus/covered vehicle.
- Don't use metallic objects; stay away from power/telephone lines.
- Get out of water - pools, lakes, small boats on water bodies.
- Avoid hilltops, open fields and beaches.

AFTER

- Watch out for fallen power lines and trees. Report them immediately.

TREATING THE AFFECTED

- Administer CPR (Cardio Pulmonary Resuscitation), if needed.
- Seek medical attention immediately.

4.12 Tsunamis

A storm that occurs due to an earthquake or volcanic eruption under the surface of the sea is called tsunami. After reaching the coast, the tsunami waves release enormous energy stored in them and water flows turbulently onto the land destroying port-cities and towns, structures, buildings and other settlements. Since the coastal areas are densely populated the world over, and these are also centres of intense human activity, the loss of life and property is likely to be much higher by a tsunami as compared to other natural hazards in the coastal areas.

Safety Tips:

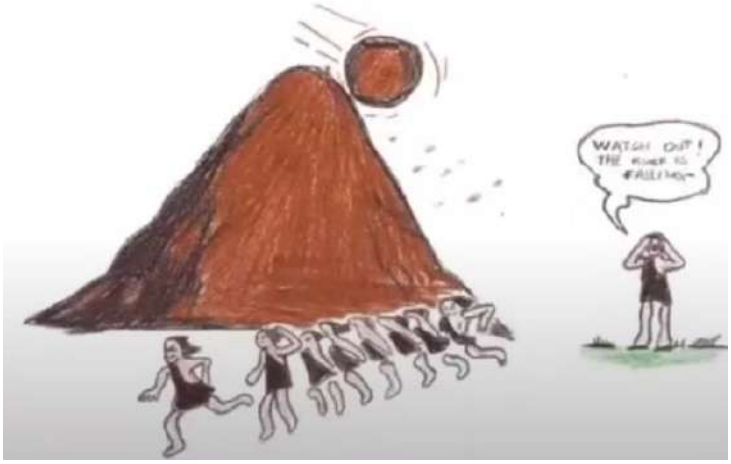
- Find out if your home is in the danger zone.
- Know the height of your street/house above sea level and the distance from the coast.
- People living along the coast should consider earthquake or strong ground rumbling as a warning signal.
- Try and climb a raised platform or climb the highest floor 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.

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

- 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.

5. Mock Drills[12]:

Mock drills are the ways of rehearsing the preparedness plan. It is one of the last steps in preparedness. The mock drill on earthquake, fire etc. may be conducted at periodic interval preferably once in every six months and the deficiencies may be assessed for updating of the plan.



This section of the plan should clearly indicate the steps to be followed to conduct the mock drills and the responsibilities of the teachers, non-teaching staff and students. If required school should invite the Fire Service Officers and trained Civil Defence volunteers for support. The steps to be followed for earthquake drill are mentioned below.

Earthquake drill:

i. Practice drop, cover and hold.

ii. Evacuate classroom in less than 1 minute without pushing and falling.

iii. Evacuate school in less than 4 minutes.

iv. Lookout for friends.

v. Stay away from weak areas/ structures.

vi. Help those who need assistance (identification of task force in advance for rescue of special children).

Conducting a Fire Drill: Step-by-Step Process[13]

Below is a detailed step-by-step guide on conducting a fire drill in a school setting:

Step 1: Prepare Staff and Students

[12] National Disaster Management Guidelines- School Safety Policy
[13] Directorate of Fire and Emergency Services Goa

Before the first drill, explain the fire drill procedure to all students and staff. Teachers should review evacuation routes, assembly points, and the importance of calm, orderly behaviour with their students. Practice walking through the routes with younger students to ensure they feel comfortable.

Step 2: Sound the Alarm

At a designated time, sound the alarm to signal the start of the drill. Make sure everyone understands that they need to respond to the sound of the alarm, regardless of the time or location within the school.

Step 3: Guide Students to Exits

Teachers should calmly direct students to the nearest exit. Students should follow designated routes without running, pushing, or shouting. In cases where exits are crowded, teachers should manage students to ensure a smooth, orderly flow.

Step 4: Use Evacuation Equipment (If Needed)

For multi-story schools, evacuation equipment like stairwells and ramps may be necessary. Teachers should ensure students with disabilities or mobility challenges receive assistance if needed, either through designated helpers or by using accessible routes.

Step 5: Proceed to the Assembly Point

Once outside, students and staff should head directly to the designated assembly point. Teachers should instruct students to line up by class or grade, making it easier to account for everyone.

Step 6: Conduct a Roll Call

Once at the assembly point, teachers and staff should conduct a roll call or headcount to ensure all students are accounted for. If anyone is missing, they should inform emergency personnel immediately.

Step 7: Conclude the Drill and Return to Class

After confirming that everyone has evacuated and accounted for, administrators can conclude the drill, signalling that it's safe to return to the building. Teachers can use this opportunity to discuss the drill with students, answer questions, and reinforce key lessons.

6. School Safety:

School Safety is a concept that encompasses "the creation of safe environments for children starting from their homes to their schools and back[14]."

The National School Safety Policy Guidelines emphasize on the need for active mainstreaming of disaster risk reduction in all the school education initiatives in the country. This would require a collaborative approach between the state education departments and the state disaster management machinery. Collaboration, would be necessary especially for capacity development activities such as sensitization of officials, public awareness on disasters, training of students and teachers; pre-positioning equipment for emergency response, creation of educational material on disasters and, monitoring of risk.

It is pertinent to understand that children are among the population groups that are more vulnerable to disasters due to characteristics such as age, gender and sexual identities, race, culture, religion, disability, socio-economic status, geographical location, or migration status. Therefore, it is important to identify vulnerable populations and risk management capacity in a community, and to develop and implement appropriate vulnerability reduction strategies.[15]

All hazard approach

School Safety efforts need to take cognizance of all kinds of hazards that may affect the wellbeing of children. These may include natural hazards such as floods and earthquakes as well as manmade hazards. **Hazards include structural and non- structural factors. Structural factors include dilapidated buildings, poorly designed structures, faulty construction, poorly maintained infrastructure, loose building elements, etc. while non-structural factors include loosely placed heavy objects such as almirahs, infestation of the campus**

[14] National Disaster Management Guidelines- School Safety Policy
[15] Vulnerable Population-World Health Organisation

by snakes and any other pests, broken or no boundary walls, uneven flooring, blocked evacuation routes, poorly designed and placed furniture that may cause accidents and injury, inadequate sanitation facilities etc. Safety of children, their teachers and parents needs to be approached holistically to include visible as well as invisible risks that may be sudden on-set or have built-up slowly over a period of time.

New schools should be located, on a site that has adequate mitigation measures already in place against any imminent natural hazards. Existing schools located in a vulnerable location should either be relocated at a safer site or they should be provided adequate support to mitigate the effect of any natural hazards that may affect the area.

How to Prepare for a Disaster?

Some disasters can be predicted well in time, such as floods, storms etc. It is wise, in such situations, to prepare in advance. If necessary, people of the area affected by the disaster can be evacuated to a safer place.

- Keep your important documents, jewellery, and an emergency kit ready.
- Do not panic, stay calm and do not pay attention to rumours.
- Keep your mobile phone charged to stay in contact.
- Have the necessary phone numbers and information ready to get official help.
- Decide in advance the meeting place in case of separation from family during an emergency.
- Stay updated on the information and heed the warnings issued by the
- government and voluntary organizations from time-to-time through radio, TV, or official announcements.

Challenges after a Disaster

The time after the disaster is equally challenging. Many people lose their lives in such a situation. Consequently, rehabilitating the displaced people, villages, and settlements, and reconstructing destroyed property is not an easy task.

- Injury or death people affected by natural of human induced disaster

- Hunger and Starvation due to crisis situation especially the economically weaker sections of the society

- Migration of Families to the safer areas for safety and survival.

Remember-

1. Stay calm and help each other.
2. Stay updated with the disaster management policies.
3. Actively participate in government's disaster management projects.
4. Prepare beforehand to deal with disasters effectively.
5. Inspire your friends and yourself to start a new life.

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