

# 1 Being Prepared—A Vital Part of Disaster Management

## Lesson at a Glance

- **Natural hazards** such as cyclones, earthquakes, droughts, floods, landslides, etc occur in different parts of India frequently. In other words, India is a **hazard-prone country**. This is due to its geophysical characteristics, which make hazards possible, and its huge population which is at risk.
- There are regions where one hazard is more likely to happen than another. There are hazards which have no possibility of happening at a certain place. Coastal areas are under the threat of cyclones, plateaus and mountainous areas under the threat of landslides and earthquakes, and floods are common in plains and river valleys.
- In order to protect ourselves from the harmful effects of disasters, we need to prepare ourselves beforehand, so that we face them in a better way. **Disaster preparedness** is a process involving activities that help us to face disasters more efficiently.
- Whenever a disaster occurs, the first people to face it are the local people. They are called the **first responders**. The government or other agencies can contribute only after some time has elapsed. So it is essential for locals to be aware of how to face hazards, so as to minimise the damage to life and property.
- A region where more than one hazard is likely to occur because of its geographical characteristics is called a **multi-hazard zone**. An example is an area vulnerable to both earthquakes and floods.
- A hazard is not necessarily a disaster. It becomes a disaster when it causes a huge amount of loss to life and property. So a hazard is a **potential disaster**. We can't prevent hazards, but if we are prepared and aware, then we can let them remain a hazard and not become a disaster.
- Disasters are of two types: **Natural** and **Manmade**.
- The hazards that occur naturally and can't be prevented are called **natural disasters**. Earthquakes, volcanic eruptions, droughts, floods, cyclones, etc are examples.
- An **earthquake** is a hazard in which the earth around a certain region shakes for some seconds. It is caused by the collision of plates beneath the earth's surface, which releases energy.

- A **tsunami** is an earthquake which occurs under water.
- A **drought** is a phenomenon in which there is deficiency of surface or sub-surface water and rainfall. It happens when rainfall is below normal in a region. **Environmental degradation** is a major factor that intensifies the hazard. Some causes of droughts are deforestation, loss of biodiversity and excessive use of ground or surface water.
- **Floods** are phenomena in which water rises above its normal level in a certain region. Due to this, areas get submerged under water. They usually occur due to excessive rainfall.
- **Cyclones** are storms that occur due to pressure difference of air over the warm waters of oceans. **Cyclonic winds** come with strong winds and severe rainfall. **Tidal waves** also cause floods. These winds are powerful enough to uproot trees, destroy buildings, and wash away homes.
- **Man-made disasters** are those which are caused by major accidents or inadvertent or deliberate actions of individuals, groups or governments. Terrorist activities, use of nuclear weapons, industrial accidents, biological disasters, etc are examples.
- Man-made disasters are generally caused by misuse and spread of dangerous chemicals.
- Obviously, man-made disasters can be prevented.
- Natural disasters can also be mitigated to a certain extent. Taking care of our environment may help in preventing some natural hazards. Economic development should be done in such a way that it does not result in environmental degradation.
- To face disasters in a better way, it is necessary to understand the causes and effects of disasters. The society needs to be made **disaster-resilient** to face them.

## TEXTBOOK QUESTIONS SOLVED

**Q. 1.** *What do you understand by disaster preparedness? In India, which are the common disasters we have to be prepared for?*

**Ans.** Disaster preparedness is a process involving activities that help us to face disasters more efficiently. Different parts of India are prone to earthquakes, floods, cyclones, droughts, etc depending on the location.

**Q. 2.** *What role do you see for yourself in making your community disaster-resilient? Discuss in groups, and share your findings with the class.*

**Ans.** Students have a great role in making the community disaster-resilient. They can use their knowledge to make the community aware of the importance of being prepared for disasters. They can act as volunteers to help people get on track after disasters occur.

**Q. 3.** *Discuss methods to organise yourselves to manage disasters.*

**Ans.** Some methods to organise ourselves to manage disasters:

(i) Making the community aware of the disasters which the region is prone to.

(ii) Educating the community about how to tackle a disaster when it comes.

(iii) Trying to evade a disaster if it can be prevented.

**Q. 4.** *When does a hazard transform into a disaster?*

**Ans.** A hazard is not necessarily a disaster. It becomes a disaster when it causes a huge amount of loss to life and property.

