**TDC, 2nd Year, 4th Sem, Paper-4016**

***Mala Moni Kalita, Asstt. Prof.***

**DISASTER - MEANING AND TYPES, NATURAL AND MANMADE**

A disaster is defined as a disruption on a massive scale, either natural or man-made, occurring in short or long periods. Disasters can lead to human, material, economic or environmental hardships, which can be beyond the bearable capacity of the affected society. As per statistics, India as a whole is vulnerable to 30 different types of disasters that will affect the economic, social, and human development potential to such an extent that it will have long-term effects on productivity and macro-economic performance.

Disasters can be classified into the following categories:

**Natural Disaster**- (i) Water and Climate Disaster: Flood, hail storms, cloudburst, cyclones, heat waves, cold waves, droughts, hurricanes.

(ii) Geological Disaster: Landslides, earthquakes, volcanic eruptions, tornadoes

Biological Disaster: Viral epidemics, pest attacks, cattle epidemic, and locust plagues

**Man-made disasters**- (iii) Industrial Disaster: Chemical and industrial accidents, mine shaft fires, oil spills,

(iv) Nuclear Disasters: Nuclear core meltdowns, radiation poisoning

(v) Urban and forest fires, oil spill, the collapse of huge building structures

Natural Disaster

A natural disaster is a disaster caused by nature, and men have no control over them. Earthquakes, tsunamis, floods, landslides, hurricanes, wildfires, droughts, volcanic eruptions are some examples of natural disasters. Such disasters cause massive loss of life, property, and many other miseries. Let’s look at some of these examples in more details to have a better idea about the damages caused by natural disasters.

Floods are one of the most common natural disasters that occur in many regions of the world every year. Flood can be defined as a rising and overflowing of a body of water onto normally dry land. Heavy rainfall in a short duration of time can result in a flood. Although the loss of lives in a flood may be not as high as a tsunami or earthquake, floods result in many long term problems. Damage to human properties (houses, roads, bridges, power lines, etc.), shortage of food and drinking water, destruction of forests and animals, the spread of diseases, soil erosion are some effects of floods.

Drought is the opposite of flood. It is a long period of time during which there is very little or no rain. Sacristy of water, extensive crop damage, lack of food and drinking water, soil degradation and erosion, death of animals and conditions like malnutrition are some effects of drought.

Although natural disasters are caused by nature, not by humans, the activities of humans can have an influence on them. For instance, actions of men like cutting down trees and destroying the sources of water in an area can lead to droughts and wildfire.

Manmade Disaster

A manmade disaster is a disaster caused by human beings. Some examples of manmade disasters include hazardous material spills, explosions, chemical or biological attacks, nuclear blasts, traffic collisions such as train accidents, plane crashes, etc. Most of these disasters are in the form accidents (except attacks) and cause deaths, injuries, and loss of property.

For example, the gas leak at an Indian pesticide plant in 1984 , which is commonly known as the Bhopal gas tragedy, was a manmade disaster. This was caused by the leak of toxic substances including methyl isocyanate (MIC) gas. This disaster affected thousands of lives.

The great Smog of London (1952) is another example of a manmade disaster. This smog resulted in a period of cold weather combined with an anticyclone and windless conditions; the main cause for this disaster was severe air-pollution. This caused about 4000 thousand deaths and other respiratory problems.

Just as natural disasters are influenced by human activities, manmade disasters too can be influenced by nature. For example, the massive earthquake and tsunami (natural disaster) in Japan in 2011 also caused nuclear accidents.

Difference between Natural and Manmade Disaster

**Cause**

Natural Disaster: Natural disasters are caused by natural forces.

Man Made Disaster: Man Made Disasters are caused by the activities of men.

**Examples**

Natural Disaster: Some examples of natural disasters include tsunamis, floods, landslides, hurricanes, wildfires, droughts, volcanic eruptions, etc.

Man Made Disaster: Some examples of manmade disasters include hazardous material spills, explosions, chemical or biological attacks, etc.

**Control**

Natural Disaster: Steps can be taken to minimize the effects of natural disasters.

Manmade Disaster: Manmade disasters can be avoided with careful planning and prevention methods.