

Flood

Definition:

Flood is one of the deadliest and most costly natural disasters worldwide.

A flood is an excess of water or mud on land that is normally dry.

Types of flood

There are three types of flood

1)Coastal flood: occurs when normally, dry, low lying land is flooded by sea water

2)River flood: occurs when the water in the river rises and overflows its banks

3)Flash flood: A flash flood is a rapid flooding of low-lying areas: washes, rivers, dry lakes and depressions caused by heavy rain.

Causes of flood

Natural causes:

- 1) Heavy rainfall
- 2) Snow melting
- 3) Undersea earthquake (tsunami)
- 4) Sedimentation in rivers

Man-made causes:

dam

- 1) Bank erosion
- 2) Dam breaking or poor construction of dam
- 3) Urbanization
- 4) Deforestation

Effect of flood

A) Primary Hazards

The primary hazards are the effects of floods due to direct contact with the flood waters.

With higher velocities, streams are able to transport larger particles as suspended load. These large particles can include not only rocks and sediment, but, during a flood, could include such large objects as automobiles, houses and bridges.

Flood waters can produce massive amounts of erosion. Such erosion can weaken and undermine bridges, levees/dykes, and buildings causing their collapse.

Water entering human built structures cause water damage. Even with minor flooding of homes, furniture is ruined, floors and walls are damaged, and anything that comes in contact with the water is likely to be damaged or lost. Flooding of automobiles usually results in damage that cannot easily be repaired.

Flooding of farmland can result in crop loss. Livestock, pets, and other animals are often carried away and drown.

Humans can get caught in the high velocity flood waters and can drown in the water.

Floodwaters can concentrate garbage, debris, and toxic pollutants that can cause the secondary effects of health hazards.

B) Secondary Hazards

Secondary hazards are those that occur because of primary hazards.

1. Drinking water supplies may be polluted, especially if sewage treatment plants are within the flooded area. This contamination can result in disease and other health complications.
2. Gas and electrical services can be interrupted.
3. Transportation systems can be disrupted as a result food supplies and aid can be delayed. This has resulted in starvation in lesser developed countries.

C) Long Term Hazards

1. Location of river channel may change.
2. Sediment deposited during flooding may leave farm land in poor condition (all though silt deposits can increase productivity).
3. Destruction of wildlife habitat.

Flood benefits

1. • Floods (in particular more frequent or smaller floods) can also bring many benefits, such as– Recharging ground water,– Making soil more fertile and increasing nutrients in some soils.
2. • Flood waters provide much needed water resources in arid and semi-arid regions where precipitation can be very unevenly distributed throughout the year.
3. • Freshwater floods particularly play an important role in maintaining ecosystems in river corridors and are a key factor in maintaining floodplain biodiversity.
4. • Flooding can spread nutrients to lakes and rivers, which can lead to increased biomass and improved fisheries for a few years.
5. • For some fish species, an inundated floodplain may form a highly suitable location for spawning with few predators and enhanced levels of nutrients or food.
6. • Fish, such as the weather fish, make use of floods in order to reach new habitats. Bird populations may also profit from the boost in food production caused by flooding.

Flood management

Aims of flood management :

1. Protection of people & property
2. Reduction of flood risk
3. Monitoring, research, forecasting & warning Flood management

Measures for controlling flood

1. Construction of embankment
2. Construction of dams and reservoirs
3. Checking bank erosion
4. Afforestation
5. Channel and drainage improvement wherever necessary

Conclusion

Flood is the most deadliest disaster still, but it has some benefits . Flood cannot be controlled but can be reduce by proper management of flood.