Cyclone

Cyclones

Clouds are formed due to water vapour in the air.

As the water turns into vapour, it takes up the heat from the atmosphere.

When the water vapour turns into clouds and falls back as raindrops the same heat is released back into the atmosphere.

This heat warms up the air around the raindrops and the warm air starts rising.

This leads to decreasing their pressure in the region.

So, the air from the surroundings takes the place of the warm air. This cycle continues until the rain falls.

As a result, a very low-pressure region is created and strong winds start revolving in that low-pressure region. This is the condition of a cyclone.

The formation of a cyclone that depends upon different factors:

- The temperature of the place
- The wind speed
- The direction of the winds
- The humidity of the place

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Structure of a Cyclone

- Cyclone is a rotation of air in the atmosphere at a height of around 10 to 15 km.
- The centre of the cyclone (also called the **eye of the storm)** is a clean area where there are no clouds but only light winds.
- This area ranges from 10 to 30 km in diameter.
- The **cloud region** lies around this eye and has a diameter of around 150 km.
- The cloud region has high-speed winds blowing at 150 to 250 km per hour accompanied by heavy rainfall.
- The first indication of a cyclone can be observed when strong winds start flowing and pushing away the water from the shores.

The destruction caused by a cyclone

- Cyclone can result in extremely high waves in the sea or ocean because of the low pressure. These waves can be 3 to 12m high.
- When these high waves hit the shore it results in the destruction of life and property to a great extent.
- The soil of the area also loses its fertility after a cyclone.
- Floods can appear if rainfall continues for a longer duration.
- High-speed winds in the cyclone affect the telephonic communication lines, uproot trees, damage houses and cause loss of life.

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Precautions during cyclones

Safety services towards cyclones and other disasters by Government and other agencies:

Cyclone forecast and warning services: With the advances in technology, cyclones can be forecast about 24 to 48 hours in advance. Satellites and computers enable this to happen. A cyclone warning is predicted almost every half-hour when a cyclone is closer to the coastline.

Rapid communication to the Government and concerned people: The government and the people are swiftly informed about the cyclone so that appropriate safety precautions and rescue efforts can be taken. Building cyclone shelters in the cyclone-prone area. Shifting the crowd quickly to a safer place.

Action on the part of people:

- Occasionally, pay attention to warning broadcasts.
- Stock up on the necessary food and medications in case of a cyclone warning.
- If possible, move to a safer place.
- Fishermen should not venture into the sea during a cyclone warning.
- Cooperate with others in the community.
- Help the rescue team.