

CBSE Class 10 Social Science Geography Notes Chapter 3: In Class 10 Geography, Chapter 3, you will study water resources. The chapter opens with a discussion of how fresh water is available on Earth and how a shortage of it arises. The chapter goes over the benefits and drawbacks of building dams on rivers. The chapter concludes with a discussion of rainwater harvesting as a way to save water.

The CBSE Notes for Class 10 Geography Chapter 3 on Water Resources are provided here. All of the significant subjects covered in the chapter are covered in these notes. These notes are also available for download in PDF format for offline reading.

CBSE Class 10 Social Science Geography Notes Chapter 3

Below we have provided CBSE Class 10 Social Science Geography Notes Chapter 3 for students to help them understand the chapter better and to score good marks in their examination.

Water

Although water covers three-fourths of the earth's surface, just a small amount of that water is usable freshwater. One renewable resource is water.

Water Scarcity and the Need for Water Conservation and Management

The availability of water resources varies over space and time.

- Overuse, over-exploitation, and unequal access to water among various social classes are the main causes of water scarcity.
- In an effort to increase the area under irrigation for dry-season crops, water resources are being overused.
- In certain places, there is enough water to suit everyone's needs. However, the poor quality of the water in those places continues to cause a shortage of water.

The need of the hour is to conserve and manage our water resources. How do we do it?

- Protect ourselves from risks to our health.
- Assure the continuation of our creative efforts, food security, and our means of subsistence.
- Stop the deterioration of our natural environments.

Multi-Purpose River Projects and Integrated Water Resources Management

Water conservation in the past involved the construction of complex hydraulic structures such as stone-rubble dams, lakes or reservoirs, embankments, and irrigation canals. In modern-day India, we have carried on this custom by constructing dams in the majority of our river basins.

Dams

A dam is a structure that blocks, redirects, or slows the flow of water across it, frequently resulting in the creation of a lake, impoundment, or reservoir. The reservoir, not the building, is referred to as the "dam."

Uses of Dams

Dams are built,

- To store rainwater and rivers so they can be utilised later to irrigate fields for farming. for the production of power.
- Water supply for business and residential purposes.
- Flood prevention.
- Recreation, fishing, and inland navigation.

Side Effects of Creating Dams

- The natural flow of rivers is impacted by damming and regulation.
- The aquatic life in the rivers has worse habitats.
- It is difficult for aquatic animals to travel over fragmented rivers.
- The vegetation and soil that are already there are submerged by dams built on floodplains, which eventually causes them to decompose.
- Many new environmental movements, such as the "Narmada Bachao Andolan" and the "Tehri Dam Andolan," have been sparked by the construction of huge dams.
- The locals frequently had to give up their land, means of subsistence, and authority over resources in order to build the dam.

The failure of the projects to fulfil the goals for which they were constructed was the main source of criticism. Although the majority of the dams were built to regulate floods, some of the dams have caused floods. Soil erosion has also been extensively caused by dams. Pollution, pests, water-borne illnesses, and earthquakes have all been linked to excessive water use.

Rainwater Harvesting

Rainwater harvesting is a straightforward technique for storing rainfall for later use. Rainwater collected can be stored, used to multiple uses, or used straight for recharging.

Various techniques have been used for rainwater harvesting in various locations -

1. For agricultural purposes, people in hilly and mountainous areas have constructed diversion channels similar to the Western Himalayan "guls" or "kuls."

2. Rainwater harvesting on rooftops is a popular method of storing drinking water, especially in Rajasthan.
To irrigate their fields, inhabitants in Bengal's flood plains created inundation channels.
3. Agricultural fields in semi-arid and arid regions were transformed into rain-fed storage structures called "khadins" in Jaisalmer and "Johads" in other parts of Rajasthan, which allowed the water to stand and saturate the soil.
4. The tanks are constructed inside the main house or the courtyard and are a part of the sophisticated rooftop rainwater gathering system.
5. This is mostly used to save rainwater in Rajasthan, especially in the regions of Bikaner, Phalodi, and Barmer. Since the "tanka" would keep the chamber cool, several houses have built underground rooms next to it to escape the summer heat.

The state of Tamil Nadu is the first in India to require rooftop rainwater collecting systems for every home in the region. Defaulters are subject to legal penalties.