

Multi-Purpose River Projects and Rainwater Harvesting

Chapter 8: Water Resources · Topic 2

Key Concept

Multi-purpose river projects, like the Bhakra Nangal Dam, provide irrigation water for farming, generate hydroelectric power, and help control flooding during heavy monsoon rains.

While beneficial, large dam projects can also cause challenges, like displacement of local communities, loss of forest land, and disruption of natural river ecosystems.

Rainwater harvesting involves collecting and storing rainwater, often through rooftop systems or small check dams, to recharge groundwater and provide water during dry periods.

Rainwater harvesting is an increasingly important practice, especially in water-scarce regions, helping communities become more self-reliant and sustainable in managing water resources.

Quick Revision Notes

- Multi-purpose river projects serve multiple functions.
- Functions include irrigation, electricity and flood control.
- The Bhakra Nangal Dam is an example of such a project.
- Large dams can cause displacement and ecosystem disruption.
- Rainwater harvesting collects and stores rainwater.
- It uses methods like rooftop systems and check dams.
- This recharges groundwater and provides water in dry periods.
- Rainwater harvesting helps communities manage water sustainably.

Practice Questions

- 1 Research the Bhakra Nangal Dam and its functions.
- 2 Discuss a challenge caused by large dam projects.
- 3 Explain how rooftop rainwater harvesting works.
- 4 Research a region in India that uses rainwater harvesting.
- 5 Discuss why rainwater harvesting matters in water-scarce areas.
- 6 Debate the pros and cons of large dam projects.