HYDROLOGICAL INVESTIGATIONS DIVISION

NATIONAL INSTITUTE OF HYDROLOGY

Ongoing and Future Research Programmes

1. **Identification of recharge sources and recharge zones in Ganga-Yamuna Doab and the study of groundwater flow conditions and age of ground water in District Hardwar and Saharanpur using ground water dating techniques.**

2. **Study of recharge to groundwater due to rain and irrigation in Tarai and Bhabhar belt in western Uttar Pradesh using neutron moisture probe and tritium tagging technique.**

3. **Study of rates and pattern of sedimentation in Dal-Nagin and Mansar lakes (Jammu and Kashmir), Sagar lake in Sagar (M.P.) and Barapani lake (Shillong) using radiometric dating techniques of sediment.**

4. **Study of soil erosion in a Himalayan catchment using Cs-137 dating of sediment.**

5. **Study of seawater intrusion in Krishna Delta, in Andhra Pradesh.**

6. **Effect of urbanisation in parts of Delhi State.**

7. **Evaluation of artificial recharge measures being taken in Maharashtra State.**

8. **Study of rates and pattern of sedimentation in selected lakes and reservoirs.**

9. **Study of soil erosion in selected hilly watersheds.**

10. **Identification of recharge sources and zones for deep aquifers in areas of ground water scarcity.**

11. **Study of artesian wells in Tarai and Bhabhar belt of Uttar Pradesh.**

12. **Study of seawater intrusion in coastal region.**

13. **Study of recharge to groundwater in areas of groundwater scarcity.**

14. **Study of artificial recharge in areas of groundwater scarcity.**

15. **Identification of sources and movement of pollutants in surface and ground waters.**

16. **Seepage/leakage from water bodies.**

17. **Surface water and groundwater interaction.**

18. **Discharge measurement of mountainous rivers.**

19. **Environmental isotopic composition in precipitation in different parts of the country including Himalayas (Tritium, Oxygen-18, Deuterium, Cesium-137, Lead-210).**

20. **Environmental and natural (geologic origin) isotopic composition in groundwater in different parts of the country.**

21. **Environmental and natural (geologic origin) isotopic composition in surface water in different parts of the country.**

22. **Environmental and natural isotopic composition of spring waters in the Himalayas including Tarai and Bhabhar region.**

23. **Ground water age in aquifers located at different depths and in different parts of the country.**