



Heli-Borne Survey for Water Management

Why in News

Recently, the [Ministry of Jal Shakti](#) has launched a **Heli-Borne Survey Technology for water management** in the arid areas of Rajasthan.

Key Points

▪ About:

- Developed by [Council of Scientific and Industrial Research \(CSIR\)](#)-National Geophysical Research Institute (NGRI), it will provide information **about level, quantity, quality and information of ground water.**
 - The NGRI is a **geoscientific research organization** established in 1961 under the CSIR.
- The Heli-borne geophysical mapping technique of CSIR-NGRI provides a **high-resolution 3D image** of the subsurface up to a depth of 500 metres below the ground.
 - The main advantages of the Heliborne geophysical survey is that it is **fast, highly data dense, precise and economical.**
- This survey will be carried out in **two phases**, of which the first phase comprises an area spanning 1 lakh sq km.
 - This includes 65,000 sq km in **Rajasthan**, 32,000 sq km in **Gujarat** and 2,500 sq km in **Haryana.**
- It is to be implemented in collaboration with the **Ministry of Jal Shakti** as a part of [National Aquifer Mapping Project.](#)

▪ Significance:

- Larger areas can be covered to derive more **accurate data** to help utilize groundwater for drinking purposes.
- It will help in **water conservation, identification of new places for ground water recharging** and that too at **lesser cost** than the prevalent ones like digging tube wells using geophysics and remote sensing techniques.
- It will **help in devising new schemes** for improvement in water level in water scant areas.

▪ Other Related Initiatives:

- [Jal Jeevan Mission.](#)
- [Jal Shakti Abhiyan.](#)
- [National River Linking Project \(NRLP\)](#)
- [National Hydrology Programme.](#)
- [Pradhan Mantri Krishi Sinchayi Yojana \(PMKSY\).](#)
- [River Basin Management.](#)
- [Atal Bhujal Yojana \(ABHY\).](#)
- [National Water Mission.](#)

National Aquifer Mapping Project

- It was initiated as a part of the **Ground Water Management and Regulation Scheme** to delineate and characterize the **aquifers** (water bearing formations) to develop plans for ground water management.
- It envisages mapping of aquifers, their characterization and development of Aquifer Management Plans to **facilitate sustainable management of groundwater resources.**

Source: PIB

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