



Groundwater Extraction in Haryana

Why in News?

The [Stage of Groundwater Extraction \(SoE\)](#) in Haryana has reached **135.74%**, signifying that the rate of groundwater extraction exceeds the sustainable utilization limit.

Key Points

- **Current State of Groundwater Extraction:**
 - **Haryana**
 - **Annual Groundwater Recharge:** 9.55 billion cubic metres (bcm)
 - **Annual Extractable Groundwater:** 8.69 bcm
 - **Total Groundwater Extraction (2023):** 11.8 bcm
 - **SoE:** 135.74%, indicating that extraction exceeds sustainable levels.
 - **Punjab**
 - **Annual Groundwater Recharge:** 18.84 bcm
 - **Annual Extractable Groundwater:** 16.98 bcm
 - **Total Groundwater Extraction (2023):** 27.8 bcm
 - **SoE:** Exceeds sustainable levels, with extraction higher than what can be sustainably used.
 - **Rajasthan**
 - **Annual Groundwater Recharge:** 12.45 bcm
 - **Annual Extractable Groundwater:** 11.25 bcm
 - **Total Groundwater Extraction (2023):** 16.74 bcm
 - **SoE:** 148.77%, indicating a significant over-extraction compared to recharge.
- **Groundwater Depletion Concerns:**
 - **Environmental Degradation:** When groundwater levels drop, saltwater can intrude into coastal areas, contaminating freshwater resources.
 - **Groundwater Contamination:** Human activities like agriculture, sewage, and industries can introduce pollutants like [arsenic, fluoride, nitrate, and iron](#) into groundwater.
 - **Land Subsidence:** When groundwater is overused, the soil can collapse, compact, and drop, causing land subsidence.
- **Policy Recommendations:**
 - The [Ministry of Jal Shakti \(MoJS\)](#) has urged states to reassess policies on providing **free or subsidised electricity to farmers**.
 - Introduce water pricing mechanisms to encourage sustainable use.
 - Implement crop rotation, diversification, and other measures to reduce dependency on groundwater.
- **Jal Shakti Abhiyan (JSA) Efforts:**
 - Since 2019, the [Jal Shakti Abhiyan](#) has been a mission-driven program focusing on rainwater harvesting and water conservation.
 - JSA 2024 is focused on 151 water-stressed districts across India.

