



IAS PARLIAMENT

Information is Empowering
A Shankar IAS Academy Initiative

India's Groundwater Governance

Why in news?

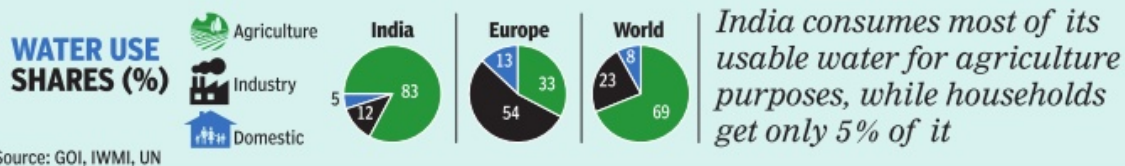
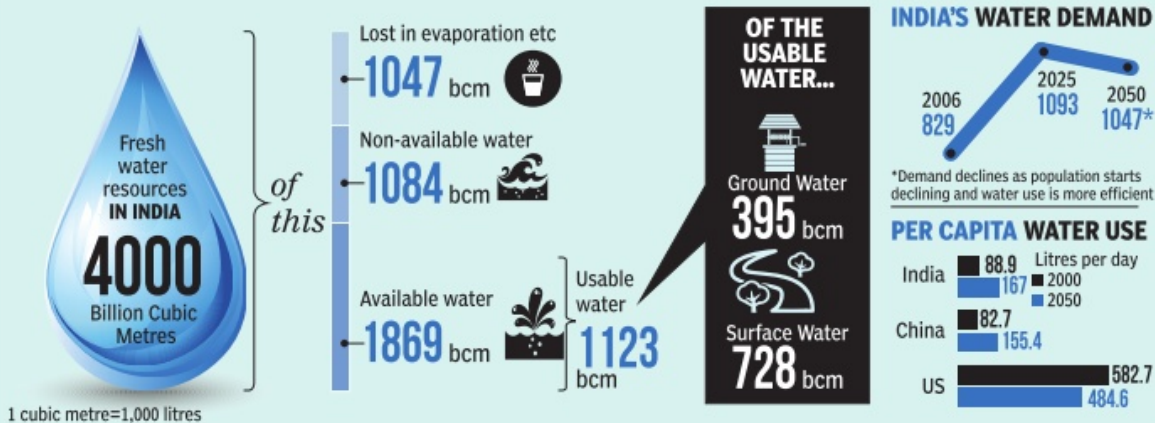
The government's interventions for better and scientific management of the groundwater situation in India reflect the spirit of cooperative federalism in managing a precious resource.

How about the picture of groundwater usage in India?

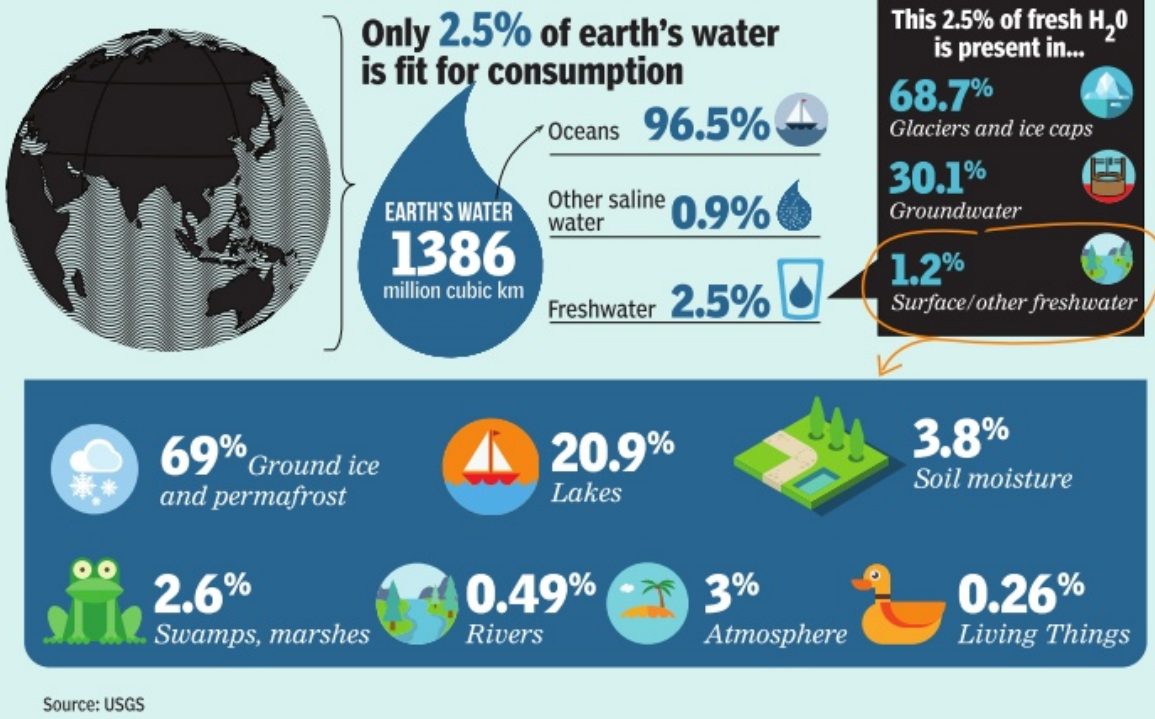
- India, with nearly 18% of the world's population, occupies about 2.4% of the total geographical area and consumes **4%** of total water resources.
- A World Bank report says that **India is the largest groundwater user**.
- Groundwater is the backbone of India's agriculture and drinking water security, meeting nearly **80%** of the country's drinking water and **two-thirds** of its irrigation needs.
- The theme of UN World Water Day 2022 - '**Groundwater, Making the Invisible Visible**' is a reflection of the importance given to the water resource.

INDIA'S WATER MATHS...

Barely 2.5% of the water on earth is fit for use. Of this, groundwater is fast depleting and other freshwater sources are also threatened. A look at where the water is



...AND THE GLOBAL PICTURE



What efforts have been taken for ground water conservation?

- **Deliverables for sustainability** - The central government has identified certain important deliverables for **sustainable groundwater management**.
- It include a reduction in groundwater extraction to below 70%, installing digital water level recorders, aquifer mapping, better regulation of groundwater extraction, participatory groundwater management and periodic groundwater resource assessment.
- **Jal Shakti Ministry** - In 2019, Jal Shakti Ministry was created (a merger of Ministries

of Water Resources, River Development and Ganga Rejuvenation with Drinking Water and Sanitation).

- This was to give impetus to the management of water resources with special focus on **demand and supply management**.
- **Jal Shakti Abhiyan** - The Jal Shakti Abhiyan was launched to transform Jan Shakti into Jal Shakti through asset creation, rainwater harvesting (Catch the Rain Campaign) and extensive awareness.
- It was created after realising the importance of **community participation**.
- **Atal Bhujal Yojana (ABY)** - It was piloted in 2018 to recharge ground water and create sufficient water storage for agricultural purposes.
- It will give emphasis to recharging ground water sources and ensure efficient use of water by involving people at local level.
- **The National Project on Aquifer Management (NAQUIM)** - It envisages mapping of sub-surface water bearing geological formations (aquifers) to gather authentic data and enable informed decision-making.
- **IN-GRES** - A software, 'India-Groundwater Resource Estimation System (IN-GRES)', has also been developed.
- **Groundwater guidelines** - The comprehensive groundwater guidelines 2020 provided for regulation in various sectors making the processes of issuing a no-objection certificate transparent and time-bound.

According to the Groundwater assessment 2022, there has been a 3% reduction in the number of 'overexploited' groundwater units and a 4% increase in the number of 'safe' category units as compared to 2017.

What is the need of the hour?

- As one of the fastest growing economies, India will need adequate groundwater resources to manage anthropogenic pressures.
- It is important to ensure source sustainability to provide safe drinking water to all rural households by 2024, under the **Jal Jeevan Mission**.
- Community's engagement is needed to realise the **UN Sustainable Development Goal 6** of ensuring availability and sustainable management of water and sanitation for all.

References

1. [The Hindu | India's groundwater governance is in better shape](#)
2. [Indpaedia | Groundwater in India](#)



IAS PARLIAMENT

Information is Empowering

A Shankar IAS Academy Initiative