

India's Groundwater Governance

Why in news?

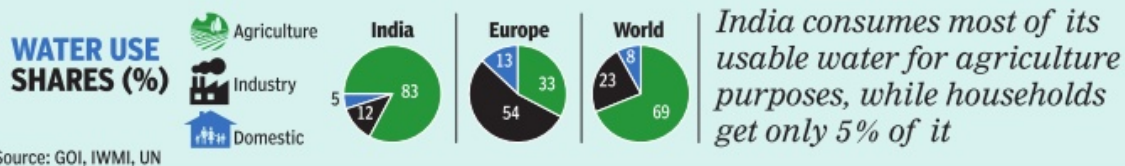
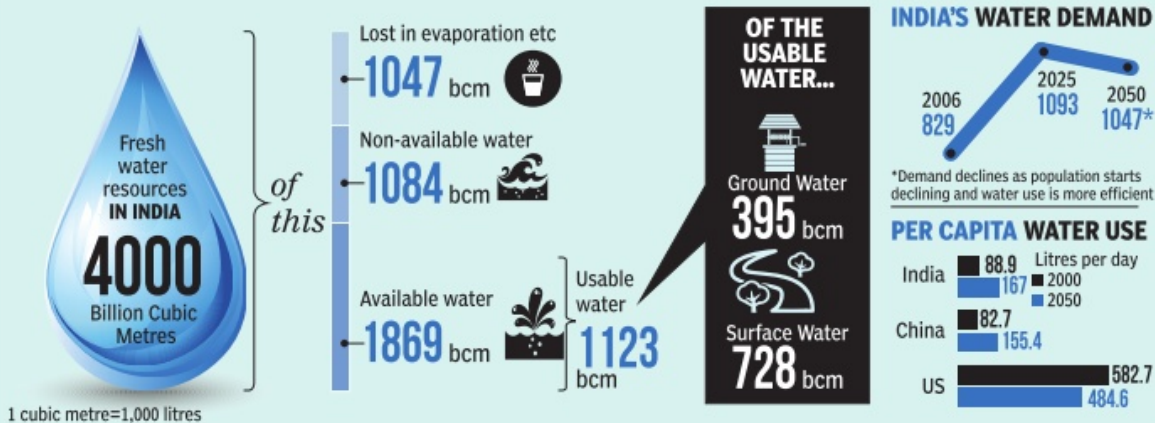
The government's interventions for better and scientific management of the groundwater situation in India reflect the spirit of cooperative federalism in managing a precious resource.

How about the picture of groundwater usage in India?

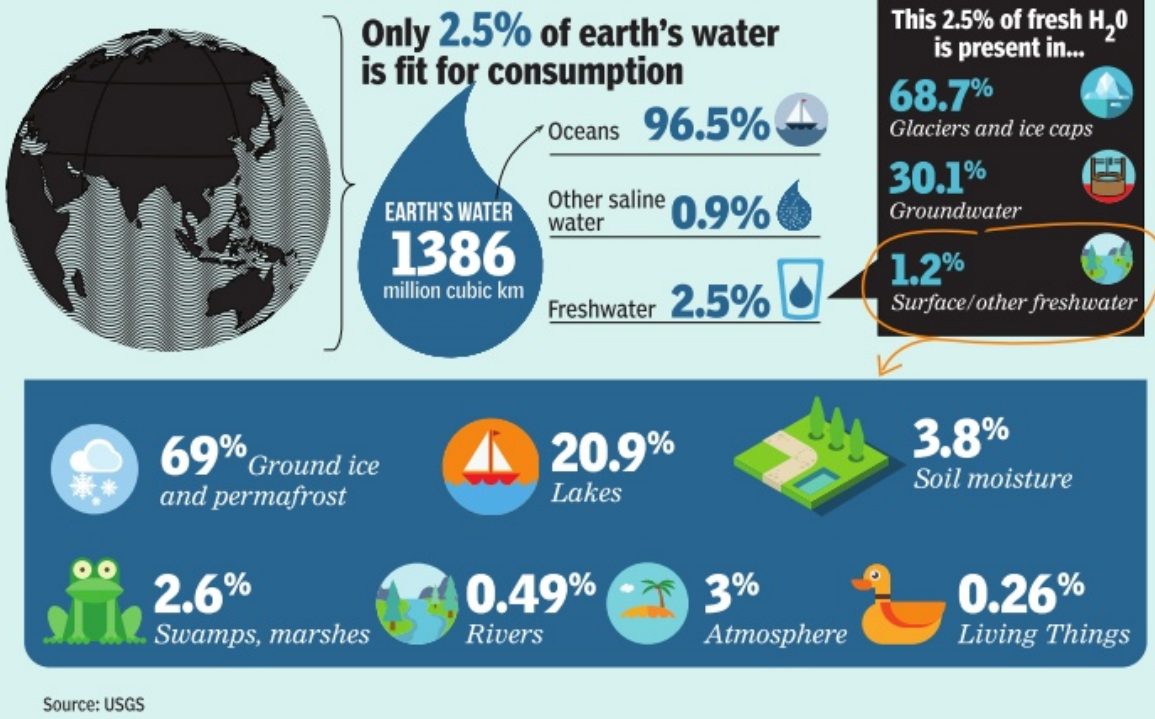
- India, with nearly 18% of the world's population, occupies about 2.4% of the total geographical area and consumes **4%** of total water resources.
- A World Bank report says that **India is the largest groundwater user**.
- Groundwater is the backbone of India's agriculture and drinking water security, 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](#)