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TOPIC OF THE DAY (DATE: 06.09.2023)

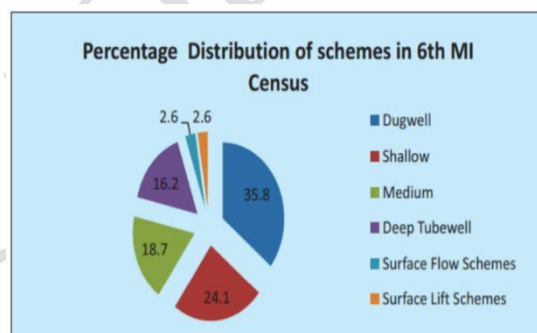
6th CENSUS OF MINOR IRRIGATION SCHEMES

WHY IN NEWS?

Recently, Ministry of Jal Shakti has released the 6th census of minor irrigation schemes (with reference year 2017-18). So far, five censuses were conducted in 1986-87, 1993-94, 2000-01, 2006-07, and 2013-14.

BACKGROUND

- **A minor irrigation scheme** is a type of irrigation project that uses surface water or groundwater to irrigate a culturable command area (CCA) of up to 2,000 hectares. CCA is an area which can be irrigated from a scheme and is fit for cultivation.
- **Minor irrigation schemes are classified into two major categories and six sub-categories.**
 1. **Ground Water (GW) schemes** encompass dugwells, shallow tube wells, medium tube wells, and deep tube wells.
 2. **Surface Water (SW) schemes** consist of surface flow and surface lift schemes.
- **Implementation:** Minor Irrigation schemes, in general, are formulated, planned, investigated and implemented by the **farmers, NGOs, Panchayats, State Governments and Union Territories.**



Key Findings of the Census

1. Total Minor Irrigation Schemes:

- A total of **23.14 million minor irrigation (MI) schemes** have been reported in the country.
- Among these, 21.93 million (94.8%) are groundwater (GW) schemes, and 1.21 million (5.2%) are Surface Water (SW) schemes.

2. Dominant Types of Schemes:

- *Dug-wells have the highest share in Minor Irrigation schemes followed by shallow tube-wells, medium tube-wells and deep tube-wells.*
- *The 6th Minor Irrigation census recorded an increase of about 1.42 million MI schemes compared to the previous census.*
- *Nationally, GW schemes saw a 6.9% increase, while Surface Water schemes increased by 1.2%.*

3. Leading States in Minor Irrigation Schemes:

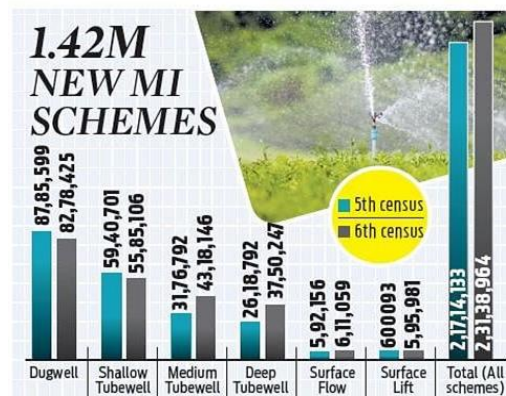
- **Uttar Pradesh** leads in MI schemes in India, followed by Maharashtra, Madhya Pradesh, and Tamil Nadu.
- *Maharashtra is the leading State in dug-wells, surface flow and surface lift schemes.*

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- Uttar Pradesh, Karnataka and Punjab are the leading States in shallow tube-wells, medium tube-wells and deep tube-wells.
- In **Surface Water schemes**, Maharashtra, Karnataka, Telangana, Odisha and Jharkhand have the highest share.

4. Ownership Breakdown:

- Approximately 96.6% of Minor Irrigation schemes are under private ownership.
- Among GW schemes, 98.3% are owned by private entities, and in SW schemes, this share is 64.2%.
- For the first time, data on the **gender of Minor Irrigation scheme owners was collected. 18.1% of individually owned schemes are owned by women.**



Features of Minor Irrigation

- **Small-Scale Infrastructure** - Minor irrigation systems are characterized by their small-scale nature. They consist of relatively modest structures and equipment, such as wells, borewells, tube wells, check dams, and tanks.
- **Localized Application** - Minor irrigation systems are tailored to cater to the specific water requirements of individual farmers or small groups of farmers. This localized approach is well-suited for fragmented agricultural plots where the water needs of different fields may vary.
- **Diverse Water Sources** - Minor irrigation systems draw water from various sources, depending on local hydrological conditions. This diversity includes groundwater, which is often accessed through tube wells and borewells, as well as surface water from sources like check dams and tanks.
- **Affordability** - One of the key advantages of minor irrigation systems is their relative affordability, especially for small and marginal farmers. Farmers may not have the financial resources to invest in large-scale irrigation infrastructure.

Initiatives Taken to Develop Minor Irrigation In India

- **Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)**: PMKSY is a flagship scheme of the Indian government aimed at providing financial support and incentives to farmers for various water-related activities, including minor irrigation. It promotes the development of sustainable water use practices, improved infrastructure, and efficient water management.
- **Mission Kakatiya**: Mission Kakatiya is a flagship programme launched by the Government of Telangana which aims at rejuvenation of water tanks and other water storage structures to provide assistance and help to the small and marginal farmers.
- **National Mission on Sustainable Agriculture (NMSA)**: NMSA includes components focused on enhancing water use efficiency and promoting minor irrigation. It provides financial support to farmers for adopting modern irrigation technologies and practices that reduce water wastage and improve crop yields.