

India Conducts First-Ever Census Of All Water Bodies

Water Census Highlights Insights Into The Country's Water Resources

The Ministry of Jal Shakti has carried out the first-ever census of all water bodies in the country, which is a first in the nation's history. In order to contain water for irrigation or other purposes (such as industrial, pisciculture, domestic/drinking, recreational, religious, groundwater recharge, etc.), all "natural or man-made units bordered on all sides with some or no masonry construction, must be, according to the First Census Report, considered to be water bodies. The census showed distinctions between rural and urban areas as well as different levels of encroachment, and it gave crucial information regarding the nation's water supply. More than 2.4 million water bodies were counted during the 2018–19 census, which covered all states and union territories.

What are the Key Features of the Water Body Census Report?

In the country, there are 24,24,540 water bodies, 97.1% of which only 2.9% (69,485) in urban areas and (23,55,055) are found in rural ones.

According to the amount of water bodies in each state, West Bengal, Uttar Pradesh, Andhra Pradesh, Odisha, and Assam are the top five states making up almost 63% of all the water bodies in the nation that complete the "sujalam" portion of the national anthem.

West Bengal, Tamil Nadu, Kerala, Uttar Pradesh, and Tripura are the top five States in terms of the number of water bodies in urban regions, whereas West Bengal, Uttar Pradesh, Andhra Pradesh, Odisha, and Assam are the top five States in rural areas.

Ponds account for 59.5% of all water bodies, followed by reservoirs (12.1%), lakes (0.9%), tanks (15.7%), percolation tanks (9.3%), and others (2.5%).

44.8% of water bodies are under public ownership, compared to private ownership of 55.2% of water bodies.

Panchayats are the primary owners of publicly accessible water resources, followed by state irrigation and water resource departments.

In order of ownership, a collection of persons and other private entities hold the bulk of privately owned water bodies, followed by a single owner or farmer.

When it comes to privately held water bodies, West Bengal, Assam, Andhra Pradesh, Odisha, and Jharkhand are the top five States.

Major water bodies are claimed to be used in pisciculture, followed by irrigation, out of all the "in use" water bodies.

West Bengal, Assam, Odisha, Uttar Pradesh, and Andhra Pradesh are the top five states where water bodies are mostly used for pisciculture; Jharkhand, Andhra Pradesh, Telangana, West Bengal, and Gujarat are the top five states where water bodies are primarily used for irrigation.

22% of water bodies are natural, compared to 78% that are artificial. Out of the total number of water bodies counted, it is reported that 1.6% (38,496) have been encroached upon, with 95.4% of those being in rural areas and the remaining 4.6% in urban areas.

Regarding 23,37,638 water bodies, the data on the water spread area was reported. These water bodies had water spread areas that range from less than 0.5 hectares in 72.4% of the cases, to between 0.5 and 1 hectares in 13.4%, between 1 and 5 hectares in 11.1%, and larger than 5 hectares in 3.1% of the cases.

How is a 'Water Body' Defined?

Based on the First Census Report, water bodies refer to any natural or man-made units that are enclosed on all sides, with or without masonry work, which serve the purpose of storing water for irrigation or other uses (e.g., industrial, pisciculture, domestic/drinking, recreation, religious, groundwater recharge, etc.)". According to the statement, the water features are often of various sorts and recognised by different names like tank, reservoirs, ponds, etc. In the study, it is stated that "a structure where water is stored by diversion from a stream, nala, or river or is accumulated from ice-melt, streams, springs, rain, or drainage of water from residential or other areas will also be treated as a water body."

Why is the Need for a Water Bodies Census?

Previously, the Centre kept a database of the water bodies that were receiving federal funding through the Repair, Renovation, and Restoration (RRR) of Water Bodies programme. A Standing Committee of Parliament raised the issue of conducting a separate water body census in 2016. The first water body census and the sixth Minor Irrigation (MI) census were both ordered by the government in 2018–19. The purpose of the census, according to the census report, was to gather data "on all important aspects of the subject including their size, condition, status of encroachments, status of filling up of storage, use, storage capacity, etc."

A Comprehensive Database on Minor Irrigation Structures in India

Since 1986, the Centre has counted all small irrigation systems every five years. Minor irrigation projects have also received a lot of attention in the data that government organisations have indirectly generated from the population Census. The tendency of succeeding governments to

see tanks, ponds, and canals as economic utilities rather than essential resources for human and ecological well-being resulted in part in the irrigation-centred strategy. There have been various attempts at course correction over the past 20 years. For instance, the MGNREGA projects have focused on revitalising traditional water bodies, and the UPA administration introduced the Repair, Renovation and Restoration of Water Bodies scheme in 2005. These programmes, however, have not lived up to their goals enough due to the absence of a thorough database.

Importance of Water Census

The fact that the current study counted approximately five times as many repositories as the most recent minor irrigation survey in 2013–14 highlights the importance of the study. There was little information on urban centres in previous investigations. Civil society organisations and academic institutions were generally in charge of counting the number of tanks, lakes, and other water sources in cities and towns. These efforts did offer insightful information regarding the disappearance of lakes in cities like Hyderabad, Ahmedabad, Chennai, Srinagar, and Bengaluru. The data will undoubtedly become richer as a result of the government getting involved.