

Volume-2

WATER BODIES



जल शक्ति मंत्रालय
MINISTRY OF
JAL SHAKTI



FIRST CENSUS REPORT

Lakaal Spit, Himachal Pradesh



GOVERNMENT OF INDIA
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT AND
GANGA REJUVENATION
MINOR IRRIGATION (STATISTICS) WING

Tamil Nadu

Tamil Nadu is one of the southern States in India bounded on north by Andhra Pradesh and Karnataka, on the west by Kerala, on the east by the Bay of Bengal, and on the south by the Indian Ocean. The State is famous for its wonderful temples and monuments.

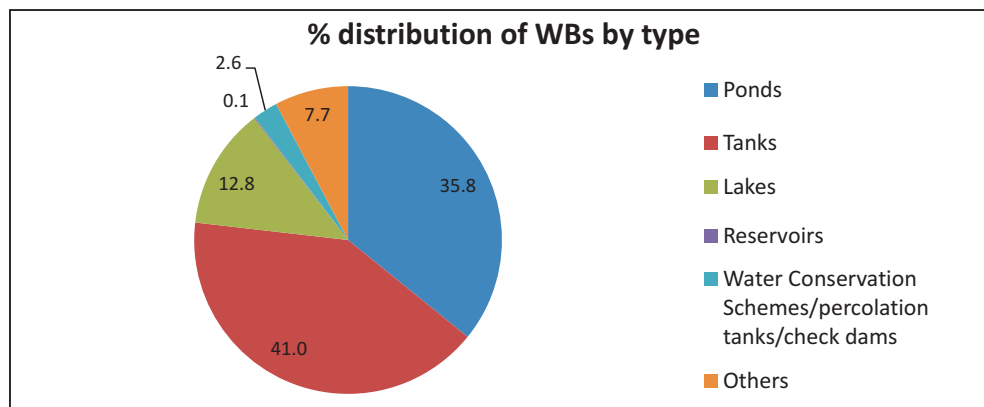
Tamil Nadu has a total Geographic area of 1,30,058 km². According to the 2011 census, Tamil Nadu had a population of 7,21,47,030.

Major findings of the census

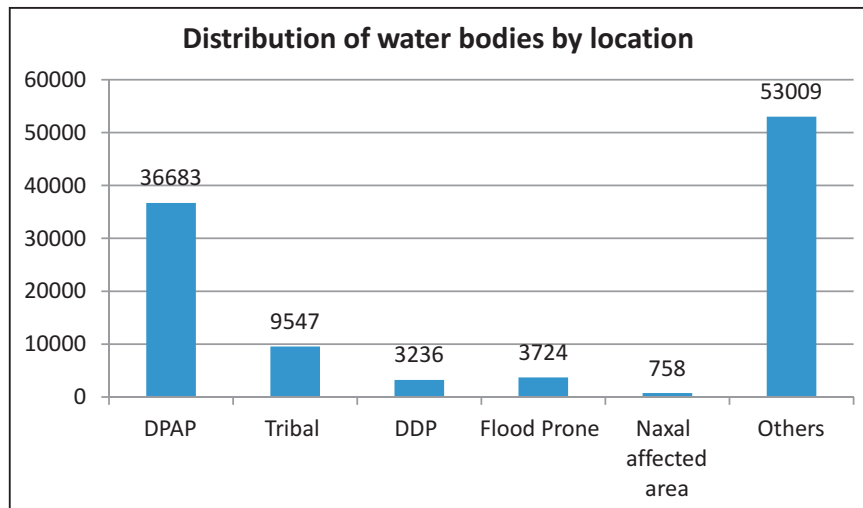
- In 1st census of water bodies, 1,06,957 water bodies have been enumerated, out of which 92.9% (99,414) are in rural areas and the remaining 7.1% (7,543) are in urban areas. Majority of the water bodies are tanks followed by ponds as depicted from chart given below.



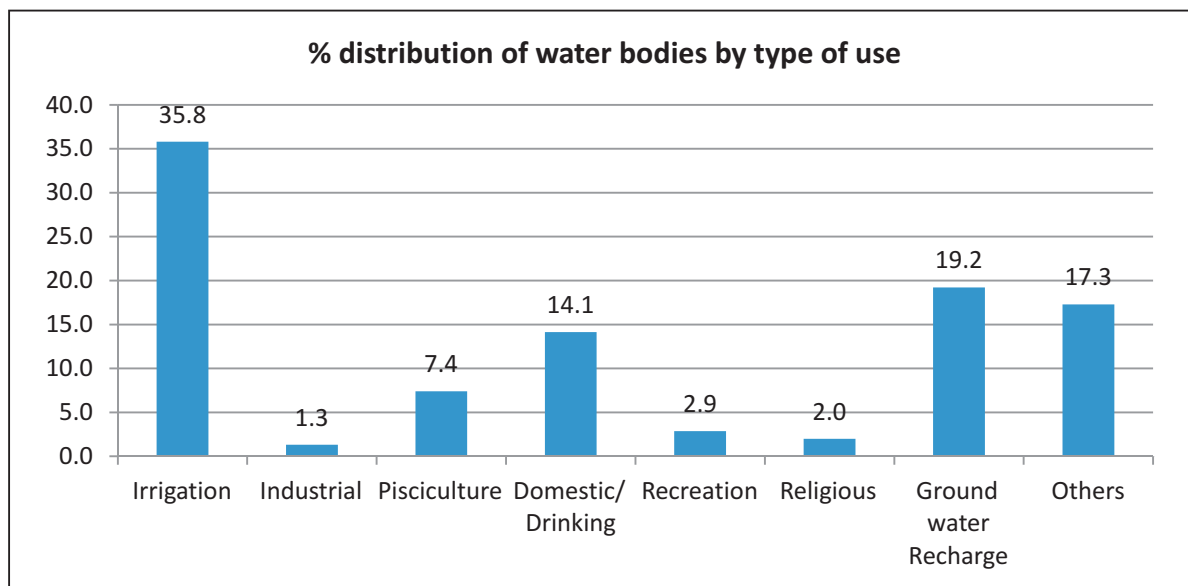
Lake in Kodiyalam Village of Krishnagiri District of Tamil Nadu



- 91.8% (98,139) are public owned whereas the remaining 8.2% (8,818) are under private ownership. By location, 34.3% (36,683) water bodies are located in the areas under 'Drought Prone Areas Programme', 8.9% (9,547) in tribal areas and the remaining 56.8% (60,727) are located in flood prone area, naxal affected and other areas. Distribution of water bodies by location is shown in the charts given below.



- Out of 1,06,957 water bodies, 53.1% (56,760) water bodies are in use whereas 46.9% (50,197) water bodies are not in use on account of drying up, siltation, destroyed beyond repair, salinity and other reasons. Out of 'in use' water bodies, 35.8% (20,324) water bodies are used for irrigation purpose in the State. Percentage distribution of water bodies by type of use is shown in the diagram given below.

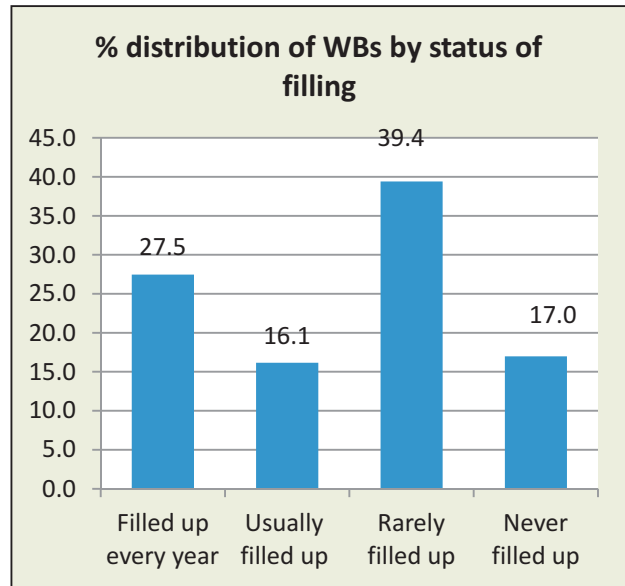
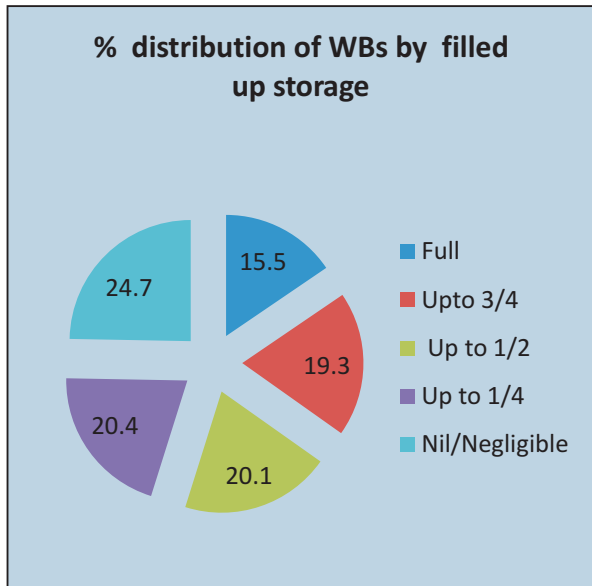


- There are 77,244 natural and 29,713 man-made water bodies in Tamil Nadu. Out of 77,244 natural water bodies, 91.9% (70,974) water bodies are located in rural areas whereas 8.1% (6,270) are located in urban areas. Out of 29,713 man-made water bodies, 95.7% (28,440) water bodies are located in rural areas whereas 4.3% (1,273) are located in urban areas. Most of the man-made water bodies have original cost of construction Up to Rs.50,000.

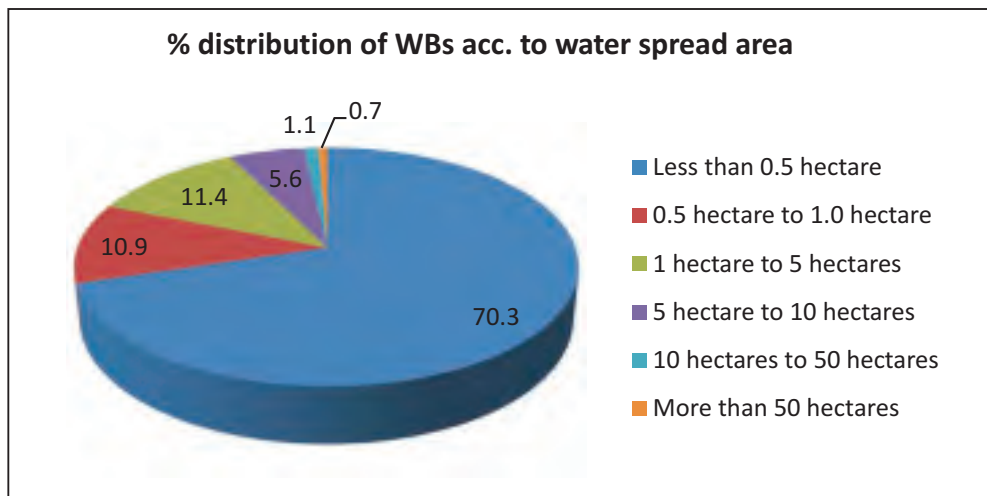


A Lake in Vetriyur village of Ariyalur district of Tamil Nadu

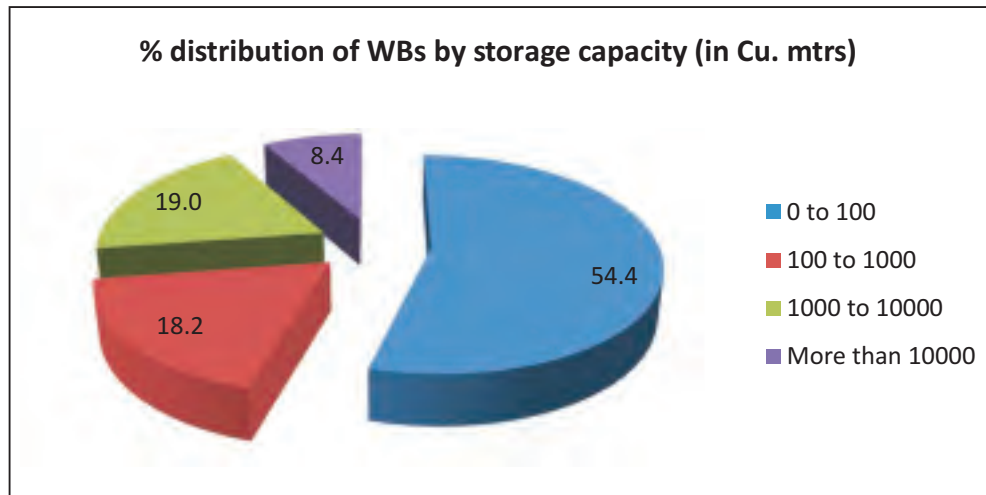
- Out of 1,06,957 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 95,898 water bodies. During reference year 2017-18, out of these 95,898 water bodies, 15.5% (14,857) water bodies had fully filled up storage capacity, 19.3% (18,517) water bodies had storage capacity filled upto three fourth level, 20.1% (19,235) water bodies had storage capacity filled upto half level, 20.4% (19,600) water bodies had storage capacity filled upto one fourth level whereas 24.7% (23,689) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 95,898 water bodies, 27.5% (26,343) water bodies are found to be filled up every year, 16.1% (15,487) are usually filled up, 39.4% (37,783) are rarely filled up and 17% (16,285) are never filled up. Percentage distribution of water bodies by status of filling and filled up storage is given in the diagram given below.



- Out of 10,6957 water bodies, 13,651 (12.8%) are covered in District Irrigation Plan/State Irrigation Plan. Among these 13,651 water bodies, 43.2% (5,896) are tanks. Out of 'in use' water bodies, 57.5% (32,671) are benefitting one (01) city/town, 39.1% (22,168) water bodies are fulfilling requirements of 2- 5 cities/ towns and the remaining 3.4% (1,921) water bodies are benefitting more than five (05) cities/towns.
- Out of 1,06,957 water bodies, the information on 'water spread area' was reported in 1,06,292 water bodies. Out of these 1,06,292 water bodies, 70.3% (74,673) of the water bodies have water spread area less than 0.5 hectares. Distribution of water bodies by 'water spread area' is shown in chart given below.



- In terms of storage capacity, out of 1,06,957 water bodies, 54.4% (58,155) water bodies have storage capacity between 0 to 100 cubic meters and majority of these water bodies are in rural areas. Distribution of storage capacity of water bodies is given in the pie chart given below:



- Out of 1,06,957 water bodies in Tamil Nadu, 8,366 water bodies are reported to be encroached. These are 2,805 ponds, 3,565 tanks, 1,458 lakes, 5 reservoirs, 69 water conservation schemes/ percolation dams/ check dams and 464 others. Out of all these 8,366 water bodies, the encroachment area can be assessed in 4,933 water bodies. Among the water bodies whose encroachment area can be assessed, 2,596 are assessed to have less than 25% area under encroachment, 1,328 having encroachment area ranging between 25% to 75% and 1,009 have more than 75% encroachment area.
- Key parameters of First Census of Water Bodies for the State of Tamil Nadu are given in the Annexure.

S.No.	Parameter	Unit	Value	Percentage to Total*
1	Total Number of Water Bodies	no.	1,06,957	
	Total Number of Water Bodies in Rural Areas	no.	99,414	92.95
	Total Number of Water Bodies in Urban Areas	no.	7,543	7.05
a	Total Number of Water Bodies by type	no.		
	Ponds		38,321	35.83
	Tanks		43,837	40.99
	Lakes		13,629	12.74
	Reservoirs		111	0.10
	Water Conservation Schemes/ Percolation tanks/ Check dams		2,782	2.60
	Others		8,277	7.74
b	Water Bodies with Private Ownership	no.	8,818	
	Water Bodies by area	no.		
	DPAP		36,683	34.30
	Tribal		9,547	8.93
	DDP		3,236	3.03
	Flood Prone		3,724	3.48
	Naxal affected area		758	0.71
	Others		53,009	49.56
	Total		1,06,957	100.00
2	Water Bodies by type of use	no.		
	Irrigation		20,324	35.81
	Industrial		751	1.32
	Pisciculture		4,196	7.39
	Domestic/ Drinking		8,022	14.13
	Recreation		1,623	2.86
	Religious		1,129	1.99
	Ground Water recharge		10,903	19.21
	Others		9,812	17.29
	Total		56,760	100.00
3	Natural/ Man Made Water Bodies	no.		
	Natural		77,244	72.22
	Man Made		29,713	27.78
4	Water Bodies Not in use due to reasons	no.		
	Dried up		21,449	42.73
	Construction		5,621	11.20

S.No.	Parameter	Unit	Value	Percentage to Total*
	Siltation		2,808	5.59
	Destroyed beyond repair		1,095	2.18
	Salinity		326	0.65
5	Distribution of Water Bodies as per status of filling	no.		
	Filled up every year		26,343	27.47
	Usually filled up		15,487	16.15
	Rarely filled up		37,783	39.40
	Never filled up		16,285	16.98
	Total		95,898	100.00
6	Distribution of Water Bodies by number of city/ town benefitted	no.		
	1		32,671	57.56
	2 to 5		22,168	39.06
	6 to 10		1,004	1.77
	11 to 20		552	0.97
	21 to 50		142	0.25
	50 to 500		223	0.39
	Total		56,760	100.00
7	Distribution of Water Bodies by Water Spread Area	no.		
	Less than 0.5 hectares		74,673	70.25
	0.5 hectares to 1.0 hectares		11,577	10.89
	1 hectares to 5 hectares		12,211	11.49
	5 hectares to 10 hectares		5,971	5.62
	10 hectares to 50 hectares		1,152	1.08
	More than 50 hectares		708	0.67
	Total		1,06,292	100.00
8	Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)	Cu. Mtrs		
	0 to 100		58,155	54.37
	100 to 1000		19,544	18.27
	1000 to 10000		20,299	18.98
	More than 10000		8,959	8.38
	Total		1,06,957	100.00
9	Number of encroached water bodies	no.	8,366	

*: Due to rounding off of the decimal places, the percentages may not add upto 100 at certain places.