

Volume-2

WATER BODIES



जल शक्ति मंत्रालय
MINISTRY OF
JAL SHAKTI



FIRST CENSUS REPORT

Lakad Spiti, Himachal Pradesh



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

MAHARASHTRA

Maharashtra occupies the western and central part of the country and has a long coastline stretching nearly 720 kilometers along the Arabian Sea. The Sahyadri mountain ranges provide a physical backbone to the State on the west, while the Satpuda hills along the north and Bharnragad- Chiroli-Gaikhuri ranges on the east serve as its natural borders.

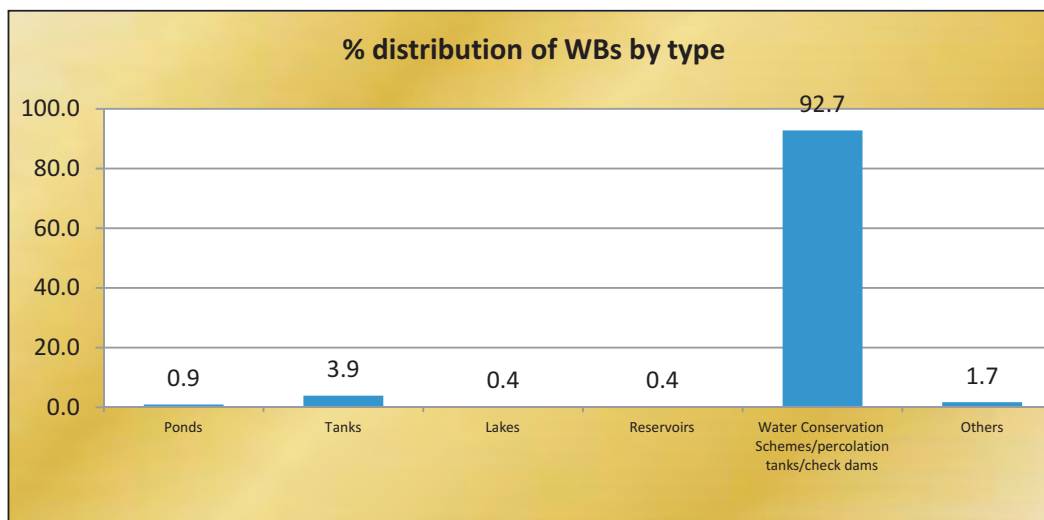
Maharashtra is the second largest State in India both in terms of population and geographical area. Total population of Maharashtra as per 2011 census is 11,23,74,333 and the State has a total geographical area of 3,07,713 km².



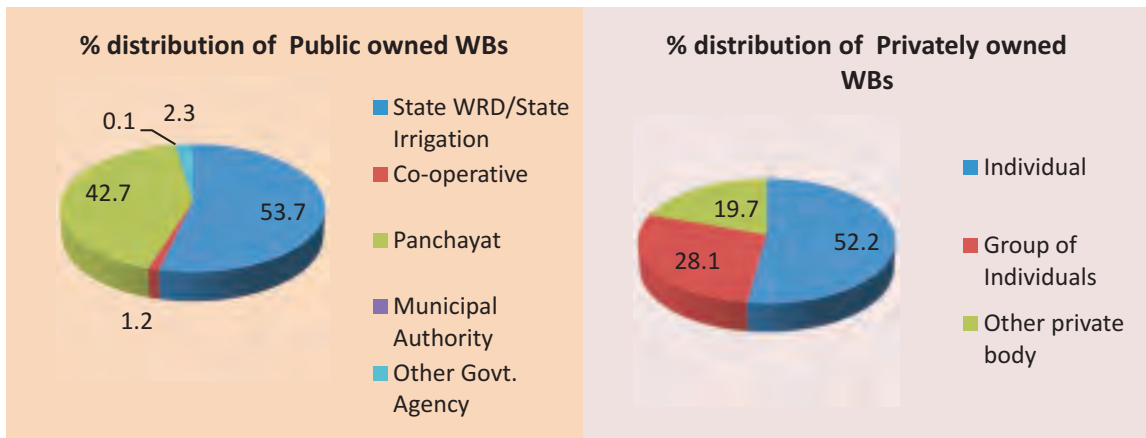
A water conservation scheme/percolation tank/check dams in Nirugudi village of Satara district

Major findings of the census

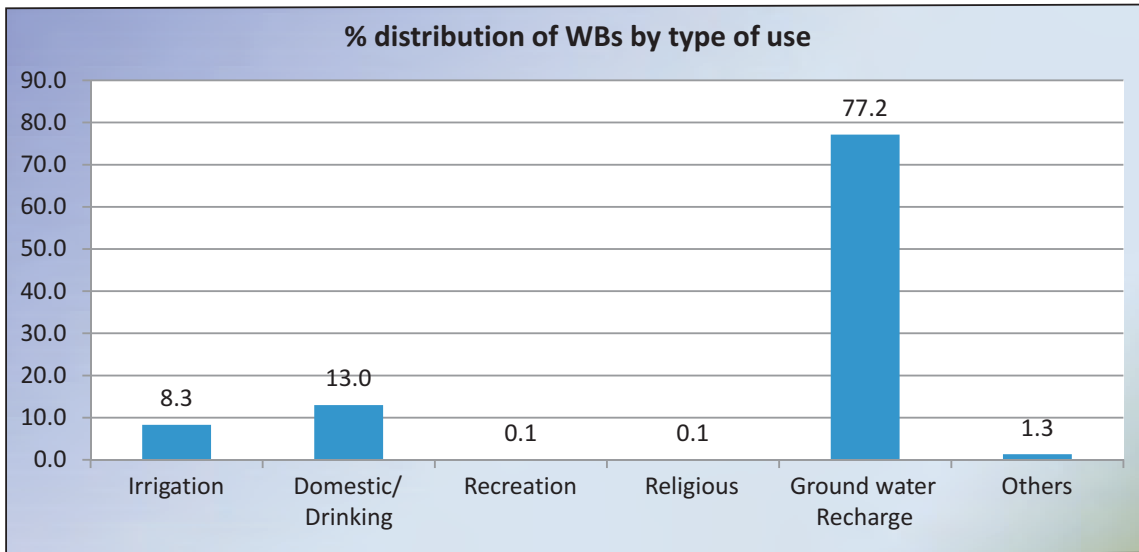
- In 1st census of water bodies, 97,062 water bodies have been enumerated in the State of Maharashtra, out of which 99.3% (96,343) are in rural areas and the remaining 0.7% (719) are in urban areas. Majority of the water bodies are water conservation schemes as depicted from chart given below.



- 99.7% (96,767) water bodies are public owned whereas the remaining 0.3% (295) are under private ownership. This reflects the dominance of public entities in ownership of water bodies. Distribution of water bodies by type of ownership is shown in the charts given below.



- Out of all water bodies, 98.9% (96,033) water bodies are "in use" whereas rest 1.1% (1,029) are "not in use" on account of drying up, siltation, destroyed beyond repair and other reasons. Out of 'in use' water bodies, a major proportion of water bodies are used in ground water recharge followed by domestic/ drinking and irrigation purpose. Percentage distribution of water bodies by type of use is shown in the diagram given below.

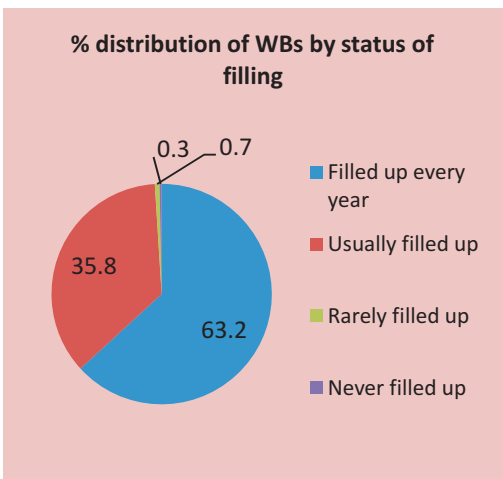
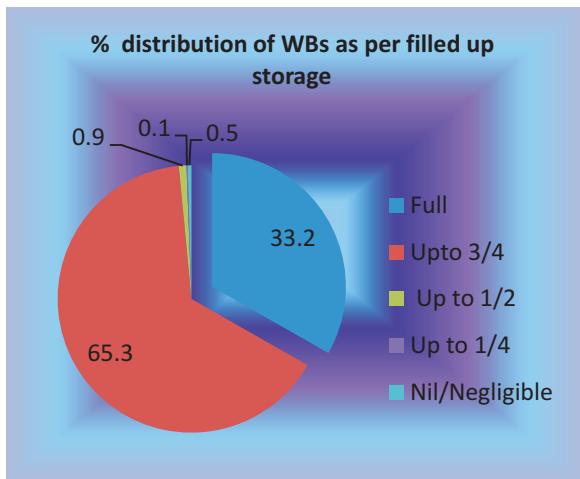


- In the State of Maharashtra, there are 574 natural and 96,488 man-made water bodies. Out of 574 water bodies, 98.4% (565) are located in rural areas whereas remaining 1.6% (9) are located in urban areas. Out of 96,488 man-made water bodies, 99.3% (95,778) water bodies are located in rural areas and the remaining 0.7% (710) are located in urban areas. Most of the man-made water bodies have original cost of construction between Rs.5 to Rs.10 Lakhs.



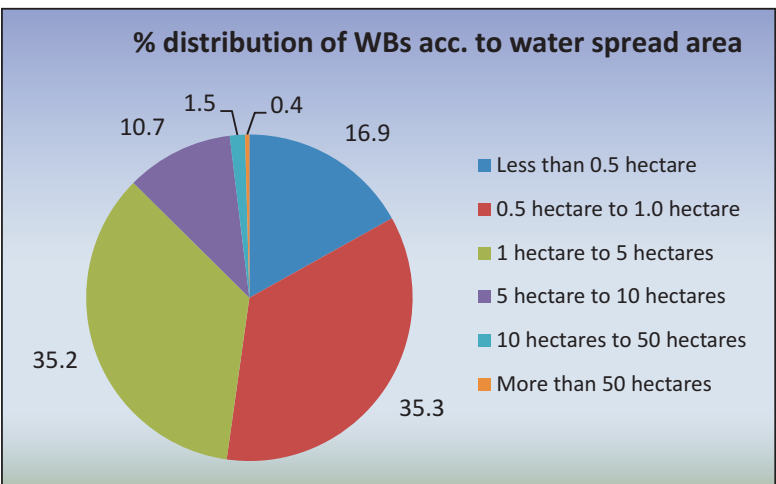
A water conservation scheme/percolation tank/check dams in Bandukpalli village of Gadchiroli district

- Out of 97,062 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 5,403 water bodies. During reference year 2017-18, out of these 5,403 water bodies, 33.2% (1,796) water bodies had fully filled up storage capacity, 65.3% (3,525) had storage capacity filled upto three fourth level, 0.9% (50) water bodies had storage capacity filled upto half level, 0.1% (7) water bodies had storage capacity filled upto one fourth level whereas 0.5% (25) water bodies had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 5,403 water bodies, 63.2% (3,414) water bodies are found to be filled up every year, 35.8% (1,935) are usually filled up, 0.7% (38) are rarely filled up and 0.3% (16) are never filled up. Percentage distribution of water bodies by 'status of filling' and 'filled up storage capacity' is shown in the diagrams given below.

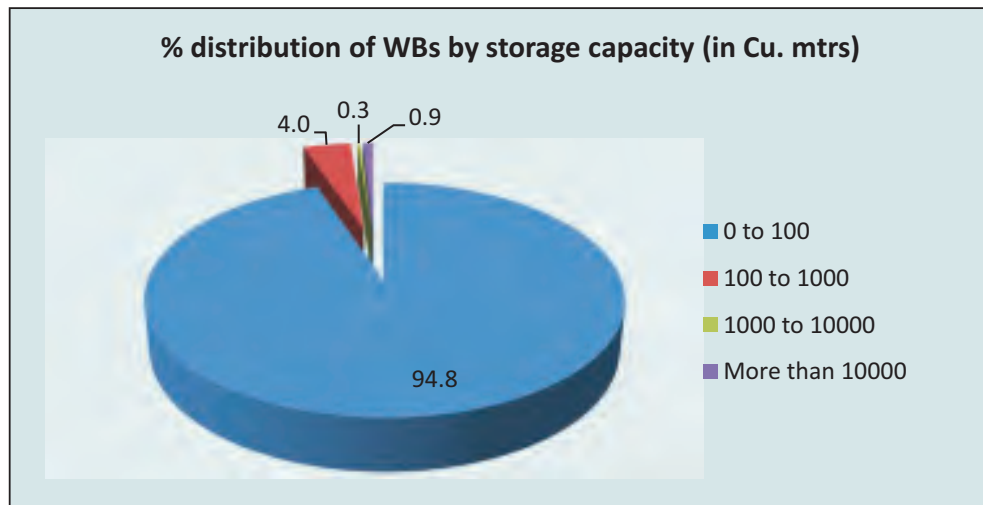


- Out of all water bodies, 60.7% (58,887) are covered in District Irrigation Plan/State Irrigation Plan. Among these 90.8% (53,449) are water conservation schemes/percolation tanks/check dams and the remaining 9.2% (5,438) are tanks, lakes, reservoirs etc. Out of 'in use' water bodies, 82.5% (79,238) are benefitting one (01) city/town, 17.1% (16,406) water bodies are fulfilling requirements of 2-5 cities/ towns and the remaining 0.4% (389) are benefitting more than five (05) cities/towns. State has reported encroachment in 251 water bodies, out of which 233 are water conservation schemes/percolation tanks/check dams.

- Out of 97,062 water bodies, the information on 'water spread area' was reported in 96,947 water bodies. Out of these 96,947 water bodies, Majority of the water bodies i.e. 70.5% (68,360) have water spread area between 0.5 hectares to 5.0 hectares followed by 35.2% (34,134) water bodies have water spread area between 1 hectare to 5 hectares. Distribution of water bodies by 'water spread area' is shown in pie chart given below:



- In terms of storage capacity, 94.8% (92,026) water bodies have storage capacity between 0-100 cubic meters whereas 4% (3,885) have storage capacity between 100 to 1,000 cubic meters. Distribution of water bodies by 'storage capacity' is shown in chart given below:



- Key parameters of First Census of Water Bodies for the State of Maharashtra are given in the Annexure.

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	Total Number of Water Bodies	no.	97,062	
	Total Number of Water Bodies in Rural Areas	no.	96,343	99.26
	Total Number of Water Bodies in Urban Areas	no.	719	0.74
a	Total Number of Water Bodies by type	no.		
	Ponds		898	0.93
	Tanks		3,797	3.91
	Lakes		350	0.36
	Reservoirs		358	0.37
	Water Conservation Schemes/ Percolation tanks/ Check dams		90,023	92.75
	Others		1,636	1.69
b	Water Bodies with Private Ownership	no.	295	0.30
	Water Bodies by area	no.		
	DPAP		4,728	4.87
	Tribal		7,110	7.33
	DDP		7	0.01
	Flood Prone		12	0.01
	Naxal affected area		285	0.29
	Others		84,920	87.49
	Total		97,062	100.00
2	Water Bodies by type of use	no.		
	Irrigation		7,976	8.31
	Industrial		37	0.04
	Pisciculture		29	0.03
	Domestic/ Drinking		12,473	12.99
	Recreation		78	0.08
	Religious		59	0.06
	Ground Water recharge		74,097	77.16
	Others		1,284	1.34
	Total		96,033	100.00
3	Natural/ Man Made Water Bodies	no.		
	Natural		574	0.59
	Man Made		96,488	99.41
4	Water Bodies Not in use due to reasons	no.		
	Dried up		194	18.82
	Construction		70	6.79
	Siltation		157	15.23
	Destroyed beyond repair		149	14.45
	Salinity		2	0.19
	Due to industrial effluents		26	2.52
	Others		433	42.00

S.No.	Parameter	Unit	Value	Percentage to Total *
5	Distribution of Water Bodies as per status of filling	no.		
	Filled up every year		3,414	63.19
	Usually filled up		1,935	35.81
	Rarely filled up		38	0.70
	Never filled up		16	0.30
	Total		5,403	100.00
6	Distribution of Water Bodies by number of city/ town benefitted	no.		
	1		79,238	82.51
	2 to 5		16,406	17.08
	6 to 10		216	0.22
	11 to 20		150	0.16
	21 to 50		15	0.02
	50 to 500		8	0.01
	Total		96,033	100.00
7	Distribution of Water Bodies by Water Spread Area	Ha.		
	Less than 0.5 hectares		16,396	16.91
	0.5 hectares to 1.0 hectares		34,226	35.30
	1 hectares to 5 hectares		34,134	35.21
	5 hectares to 10 hectares		10,329	10.65
	10 hectares to 50 hectares		1,455	1.50
	More than 50 hectares		407	0.42
	Total		96,947	100.00
8	Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)	Cu. Mtrs		
	0 to 100		92,026	94.82
	100 to 1000		3,885	4.00
	1000 to 10000		281	0.29
	More than 10000		870	0.90
	Total		97,062	100.00
9	Number of encroached water bodies	No.	251	0.26

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