Volume-2

WATER BODIES

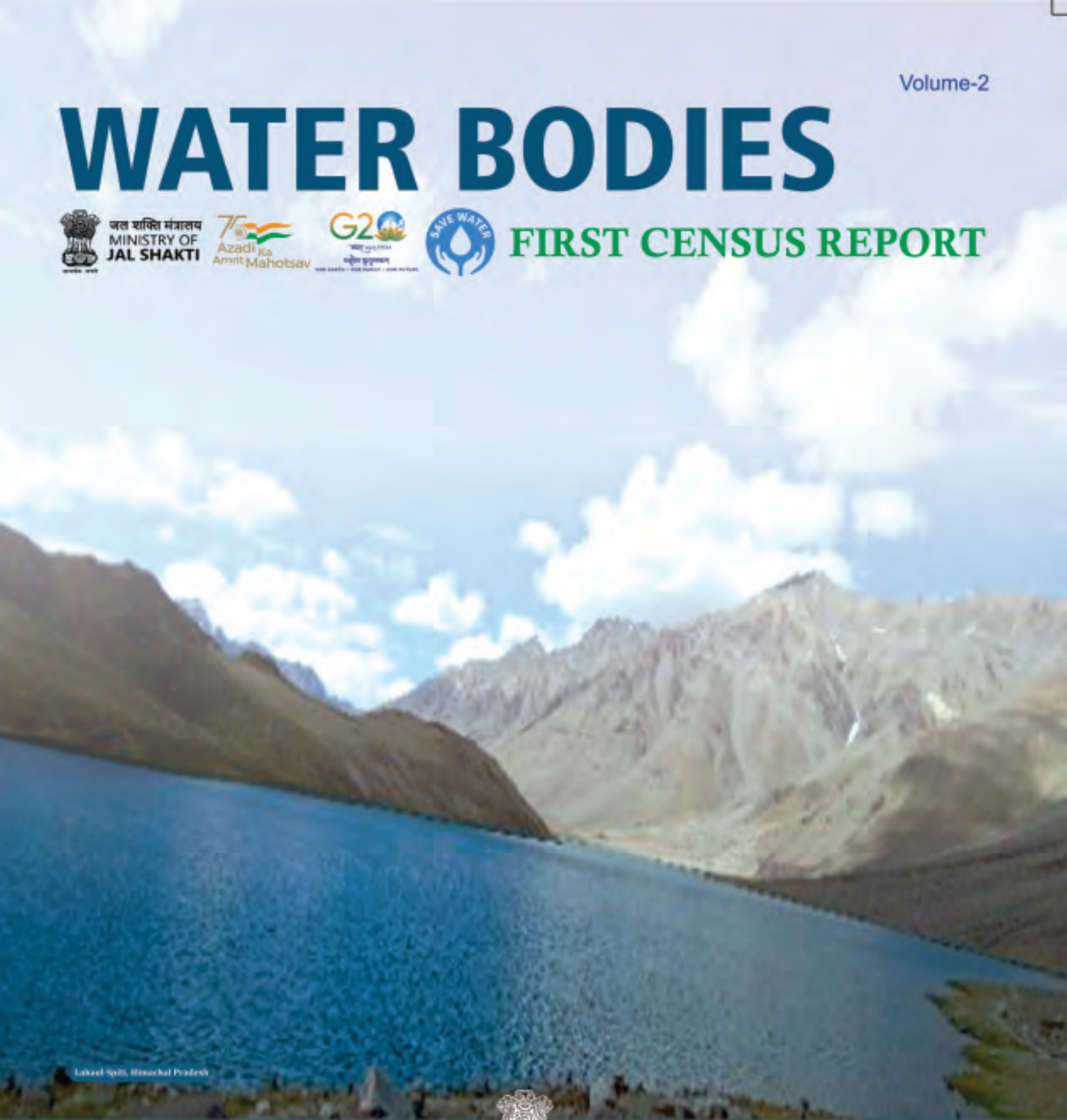
जल शक्ति मंत्रालय
MINISTRY OF
JAL SHAKTI

Azadi Ka Amrit Mahotsav

G20

SAVE WATER

FIRST CENSUS REPORT



Lahaul-Spiti, Himachal Pradesh

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

State - wise reports

of

First Census of Water bodies

VOLUME - 2

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

Contents

ANDHRA PRADESH

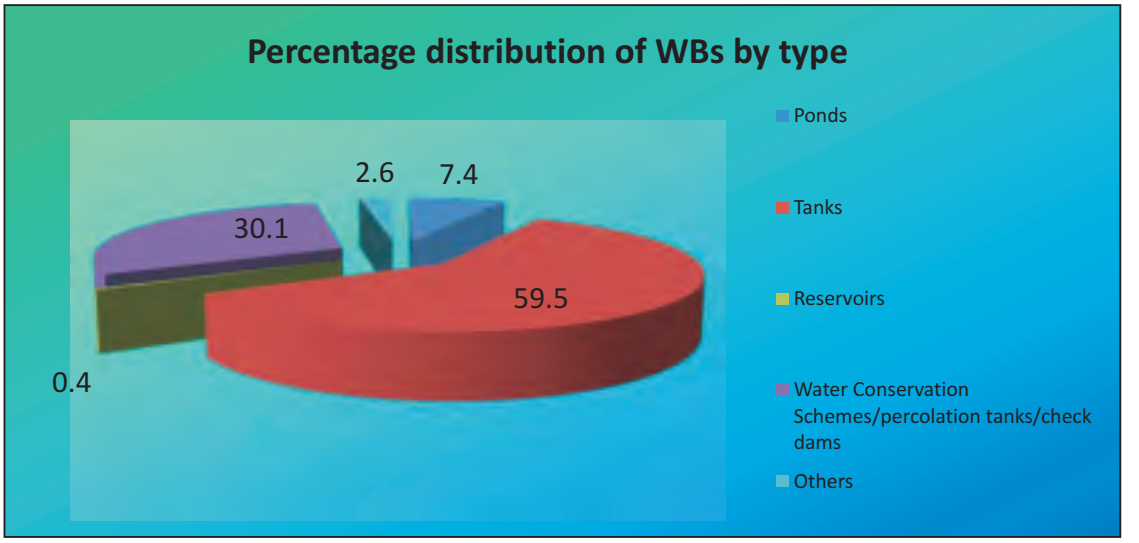
A State situated in the lap of nature with numerous waterfalls, clean air, rich biodiversity and beautiful view of surrounding hillocks. The bright green shrubbery on the banks and serenity of the river adds on to the beauty of this place.

The State has an area of 1,60,205 km^2. It has 13 districts with a population of 49.67 million

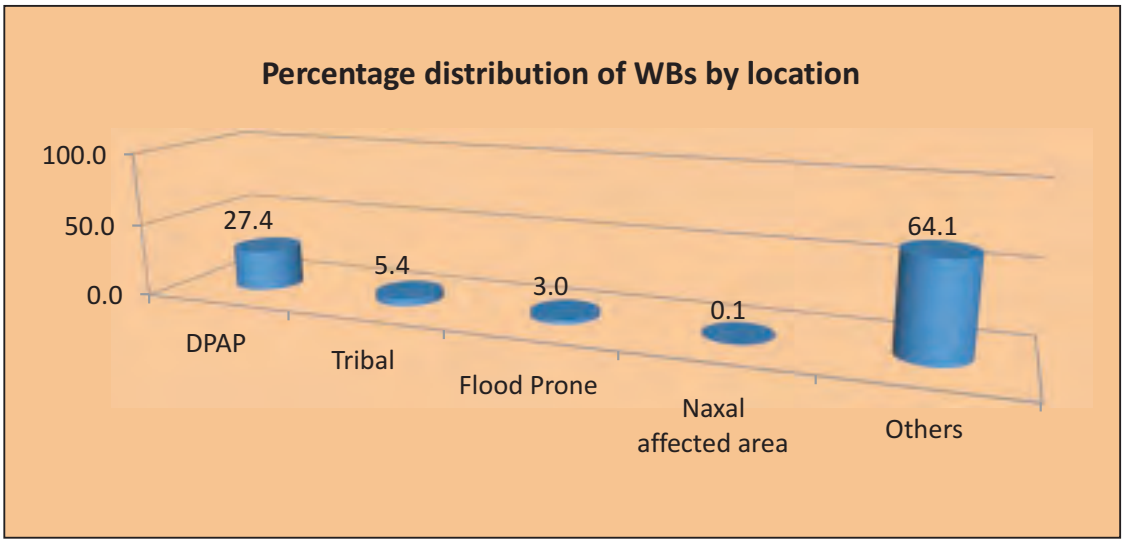
Pond in Andhra Pradesh,
Chittoor district Chandramakulapalli village

Major findings of the census

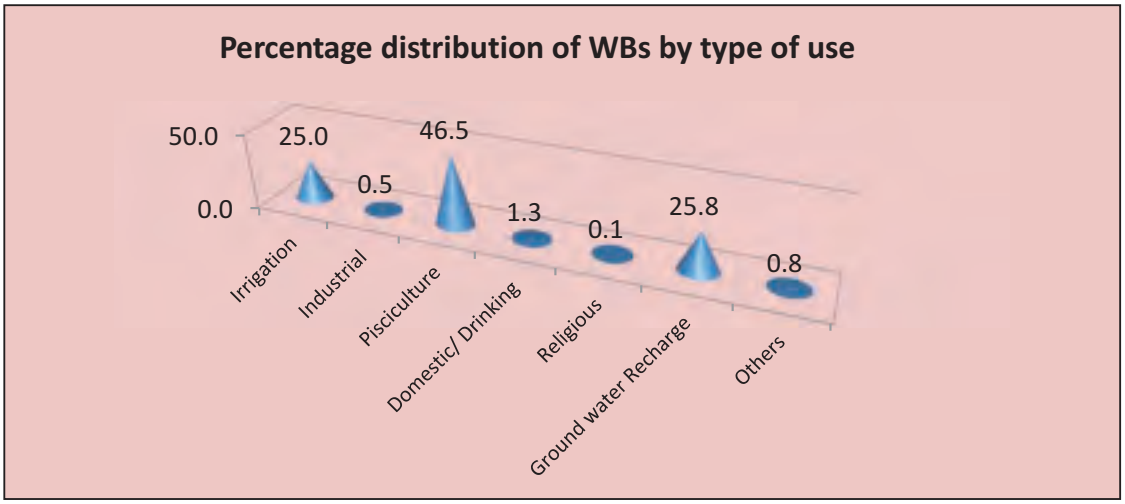
- In 1st census of water bodies, total 1,90,777 water bodies are enumerated in the State of Andhra Pradesh, out of which majority, i.e. 99.7% (1,90,263) are in rural areas and the remaining 0.3% (514) are in urban areas. Majority of the water bodies are Tanks followed by Water Conservation Schemes/percolation tanks/check dams as depicted from chart given below.



- Out of water bodies, 57.2% (1,09,074) are under private ownership whereas the remaining 42.8% (81,703) are under public ownership. Out of all the private owned water bodies 90.3% (98518) are in the hands of individual farmers whereas out of the public owned water bodies, 84.3% (68,881) are with State Water Resource Department/ State Irrigation. By location, 27.4% (52376) water bodies are located in the areas under 'Drought Prone Areas Programme', 5.4% (10,326) in tribal areas and the remaining 67.1% (1,28,075) are located in flood prone area, naxal affected and other areas. Distribution of water bodies by location is shown in the chart given below.



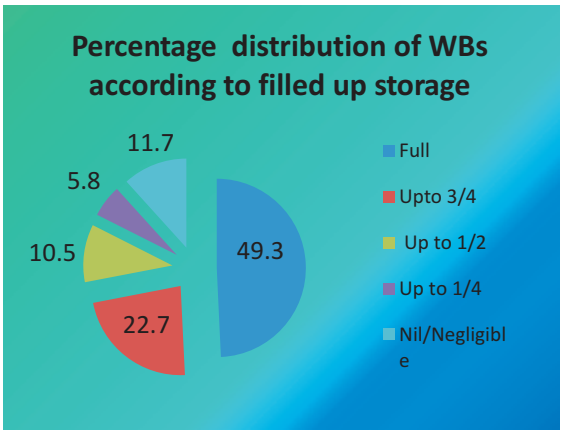
- Out of 1,90,777 water bodies, 78.2% (1,49,279) water bodies are in use whereas rest 21.8% (41,498) are not in use on account of being dried up, siltation, destroyed beyond repair, salinity and other reasons. Out of in use water bodies, majority of them are used for Pisciculture followed by Ground Water Recharge and Irrigation. Percentage distribution of water bodies by type of use is shown in the diagram given below.

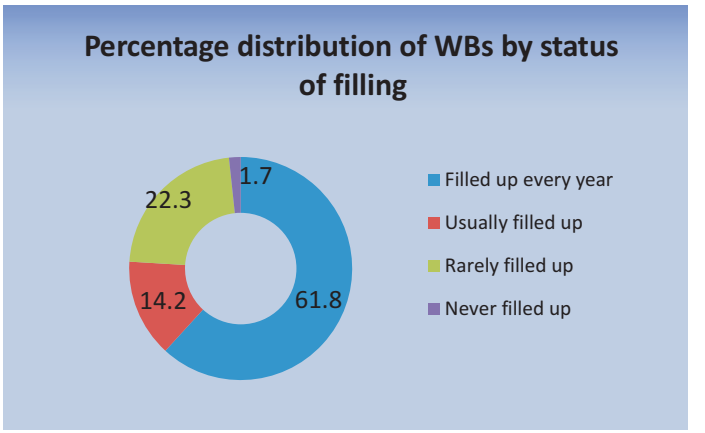


- There are 26,016 natural and 1,64,761 man-made water bodies in the State of Andhra Pradesh. Out of 26016 natural water bodies, 99.3% (25,830) water bodies are located in rural areas and the remaining 0.7% (186) are located in urban areas. Out of 1,64,761 man-made water bodies, 99.8% (1,64,433) water bodies are located in rural areas and the remaining 0.2% (328) are located in urban areas. Most of the man-made water bodies have original cost of construction upto Rs.50,000.

Kolleru lake in Eluru district Andhra Pradesh

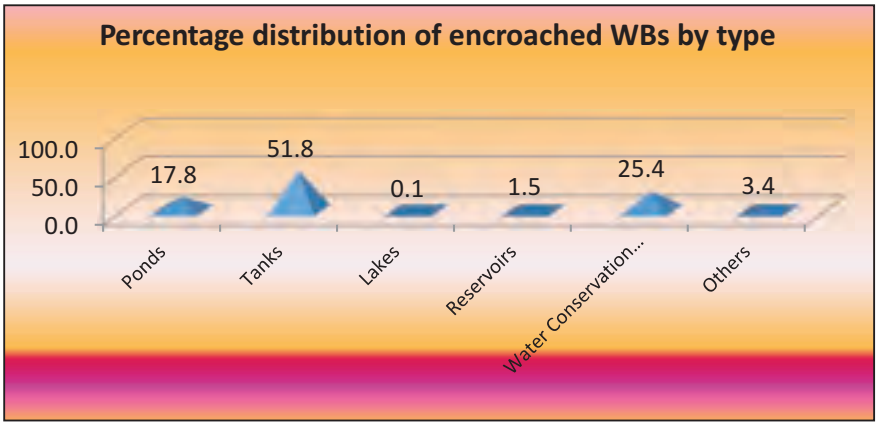
- Out of 1,90,777 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 1,28,322 water bodies. During reference year 2017-18, out of these 1,28,322 water bodies, 49.3% (63,201) water bodies had fully filled up storage capacity, 22.7% (29,143) water bodies had storage capacity filled upto three fourth level, 10.5% (13,449) water bodies had storage capacity filled upto half level, 5.8% (7,491) water bodies had storage capacity filled upto one fourth level whereas 11.7% (15,038) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of these 1,28,322 water bodies, 61.8% (79,320) water bodies are found to be filled up every year, 14.2% (18,198) are usually filled up, 22.3% (28,633) are rarely filled up and 1.7% (2,171) are never filled up. Percentage distribution of water bodies by 'status of filling' and 'filled up storage capacity' is shown in the diagram given below.



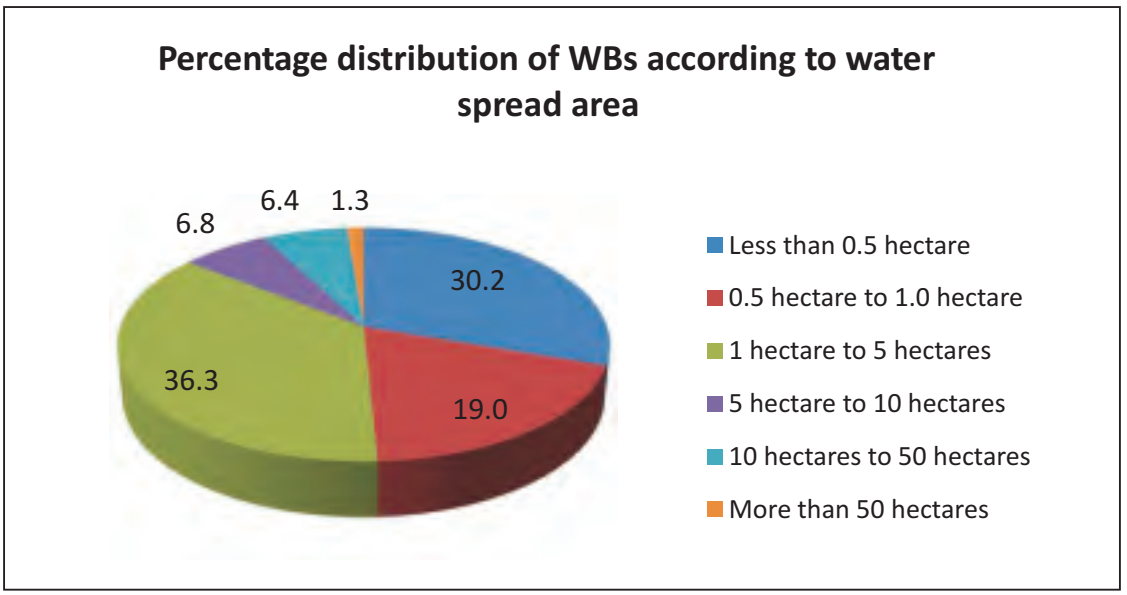


- 46,374 water bodies are covered in District Irrigation Plan/State Irrigation Plan. Among these water bodies, 56.8% (26,344) are tanks whereas the remaining 43.2% (20,030) are ponds, lakes, reservoirs etc. Out of 'in use' water bodies, 90.5% (1,35,048) are benefitting one (01) city/town, 8.3% (12,333) water bodies are fulfilling requirements of 2- 5 cities/ towns and the remaining 1.3% (1,898) water bodies are benefitting more than five (05) cities/towns.

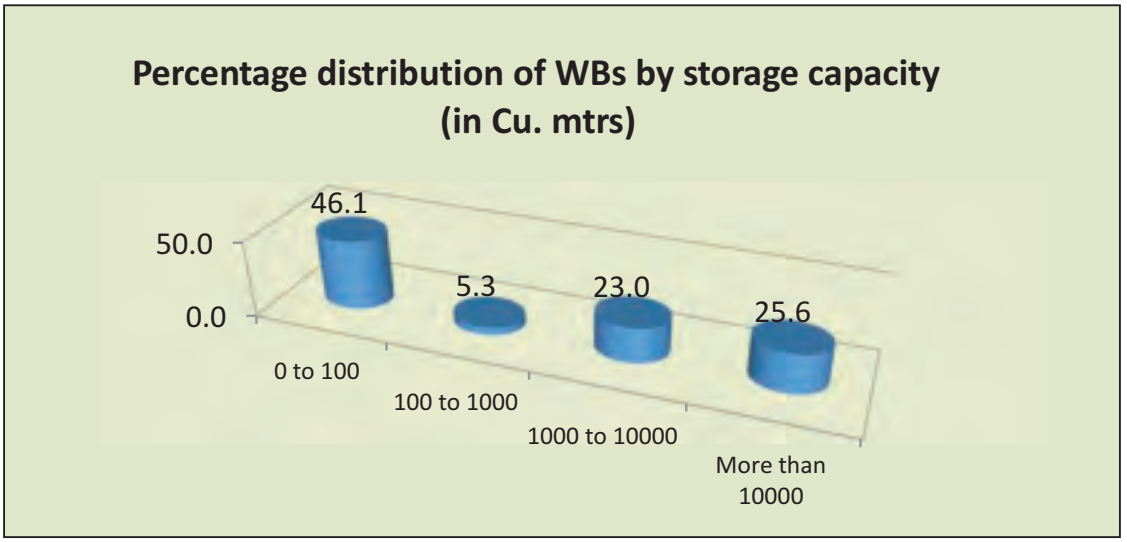
- State has reported encroachment in 3,920 water bodies, out of which 51.8% (2,032) are tanks and the remaining 48.2% (1,888) are ponds, lakes, reservoirs etc. Out of 3,920 water bodies, the encroachment area can be assessed in 2,492 water bodies. Among these 2,492 water bodies, 74.6% (1,858) are assessed to have less than 25% area under encroachment, 17.5%(435) having encroachment area ranging between 25% to 75% and remaining 8.0% (199) have more than 75% encroachment area.



- Out of 1,90,777 water bodies, the information on 'water spread area' was reported in 1,37,221 water bodies. Out of these 1,37,221 water bodies, 30.2% (41,510) of the water bodies have water spread area less than 0.5 hectares, 19.0% (26,026) have water spread area between 0.5 to 1.0 hectares, whereas 1.3% (1,751) water bodies have water spread area more than 50 hectares. Distribution of water bodies by 'water spread area' is shown in charts given below.



- In terms of storage capacity, 23.0% (43,977) water bodies have storage capacity between 1,000 to 10,000 Cubic Meters whereas 25.6% (48,813) water bodies have storage capacity more than 10,000 cubic meters. Distribution of water bodies by 'storage capacity of water bodies' is shown in charts given below.



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

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	**Total Number of Water Bodies**	**no.**	1,90,777	
	Total Number of Water Bodies in Rural Areas	**no.**	1,90,263	99.73
	Total Number of Water Bodies in Urban Areas	**no.**	514	0.27
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		14,132	7.41
	Tanks		1,13,425	59.45
	Lakes		62	0.03
	Reservoirs		703	0.37
	Water Conservation Schemes/ Percolation tanks/ Check dams		57,492	30.14
	Others		4,963	2.60
b	**Water Bodies with Private Ownership**	**no.**	1,09,074	57.17
	Water Bodies by area	**no.**		
	DPAP		52,376	27.45
	Tribal		10,326	5.41
	DDP		0	0.00
	Flood Prone		5,770	3.02
	Naxal affected area		110	0.06
	Others		1,22,195	64.05
	Total		1,90,777	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		37,257	24.96
	Industrial		680	0.46
	Pisciculture		69,510	46.56
	Domestic/ Drinking		1,945	1.30
	Recreation		35	0.02
	Religious		106	0.07
	Ground Water recharge		38,460	25.76
	Others		1,286	0.86
	Total		1,49,279	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		26,016	13.64
	Man Made		16,4761	86.36
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		1,889	4.55
	Construction		74	0.18
	Siltation		7	0.02
	Destroyed beyond repair		243	0.59

S.No.	Parameter	Unit	Value	Percentage to Total *
	Salinity		65	0.16
	Due to industrial effluents		10	0.02
	Others		39,210	94.49
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		79,320	61.81
	Usually filled up		18,198	14.18
	Rarely filled up		28,633	22.31
	Never filled up		2,171	1.69
	Total		1,28,322	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		1,35,048	90.47
	2 to 5		12,333	8.26
	6 to 10		562	0.38
	11 to 20		723	0.48
	21 to 50		452	0.30
	50 to 500		161	0.11
	Total		1,49,279	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		41,510	30.25
	0.5 hectares to 1.0 hectares		26,026	18.97
	1 hectares to 5 hectares		49,876	36.35
	5 hectares to 10 hectares		9,270	6.76
	10 hectares to 50 hectares		8,788	6.40
	More than 50 hectares		1751	1.28
	Total		1,37,221	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		87,879	46.06
	100 to 1000		10,108	5.30
	1000 to 10000		43,977	23.05
	More than 10000		48,813	25.59
	Total		1,90,777	100.00
9	**Number of encroached water bodies**	No.	3,920	2.05

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

ARUNACHAL PRADESH

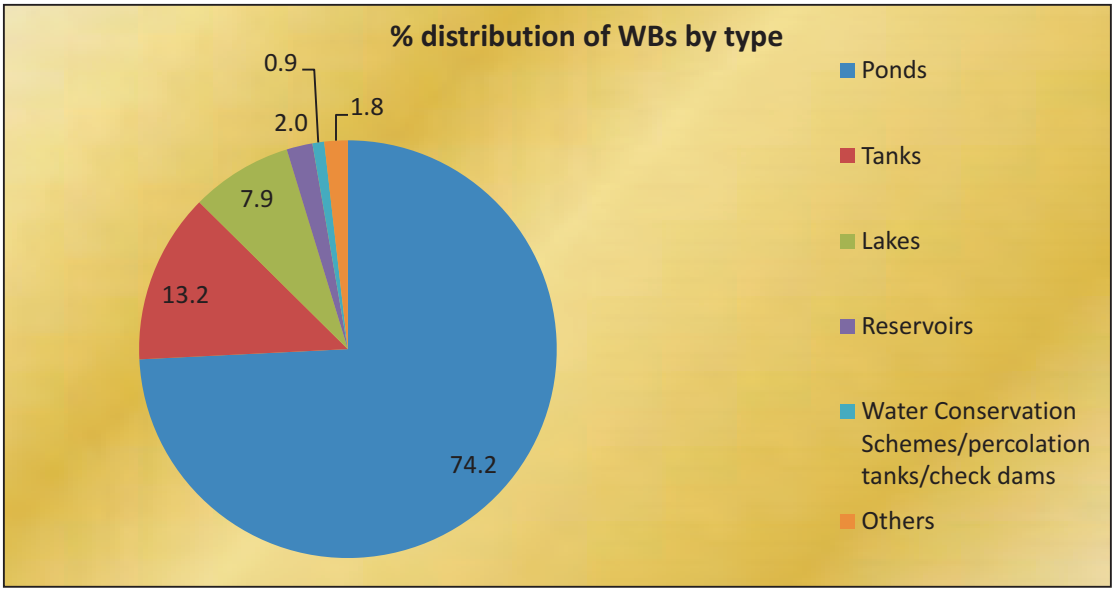
Arunachal is the largest state area wise in the north-eastern region and it has a long international border with Bhutan to the west, China to the north and north-east and Myanmar to the east.

The population of Arunachal is 13,82,611 according to 2011 census and it has an area of 83,743 square kilometres. It stretches from snow-capped mountains in the north to the plains of Brahmaputra valley in the south.

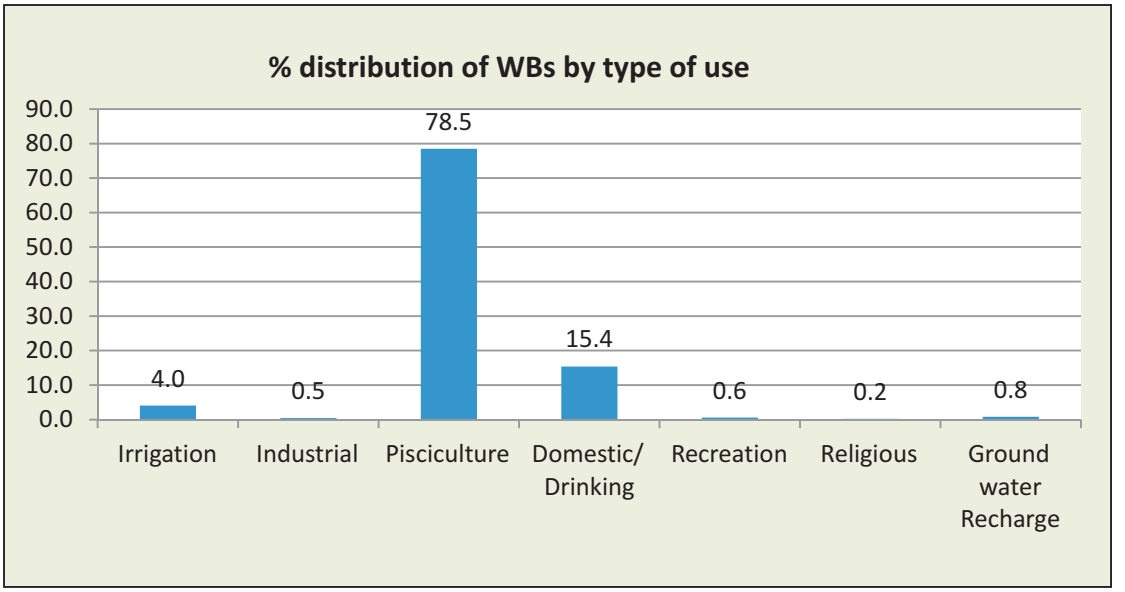
A pond in new riddi village in arunachal pradesh

Major findings of the census

- In 1st census of water bodies, 993 water bodies have been enumerated, out of which 89.9% (893) are in rural areas and the remaining 10.1% (100) are in urban areas. Out of all water bodies, 74.4% (739) are privately owned whereas the remaining 25.6% (254) are under public ownership. By location, 988 out of 993 water bodies are in tribal areas.
- Majority of the water bodies are ponds followed by tanks and lakes as depicted from chart given below.



- Out of 993 water bodies, 87.1% (865) water bodies are in use and the remaining 12.9% (128) water bodies are reported not in use on account of drying up, siltation and other reasons. Out of 865 'in use' water bodies, 78.5% (679) water bodies are used for pisciculture purpose in the State.

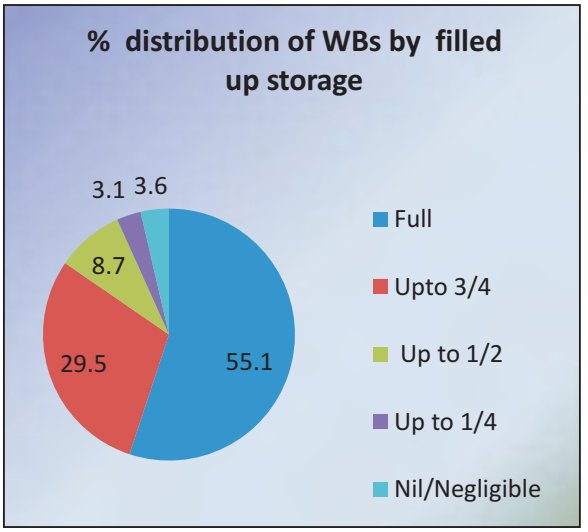


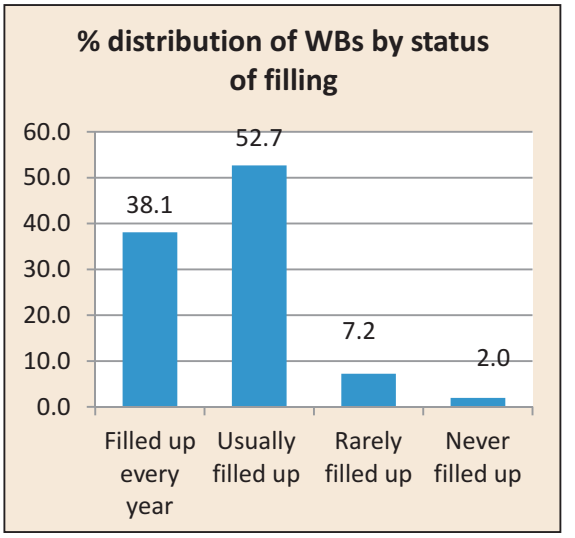
- There are 177 natural and 816 man-made water bodies in Arunachal Pradesh. Out of 177 natural water bodies, 98.3% (174) water bodies are located in rural areas whereas 1.7% (3) in urban areas. Out of 816 man-made water bodies, 88.1% (719) water bodies are located in rural areas whereas rest 11.9% (97) in urban areas. Most of the man-made water bodies have original cost of construction up to Rs. 5 lakh.

A pond in Kakoi Village in Arunachal Pradesh

- Out of 993 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for in 966 water bodies. During reference year 2017-18, out of these 966 water bodies, 55.1% (532) water bodies had fully filled up storage capacity, 29.5% (285) water bodies had storage capacity filled up to three fourth level, 8.7% (84) water bodies had storage capacity filled upto half level, 3.1% (30) water bodies had storage capacity filled upto one fourth level whereas 3.6% (35) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 966 water bodies, 38.1% (368) water bodies are found to be filled up every year,

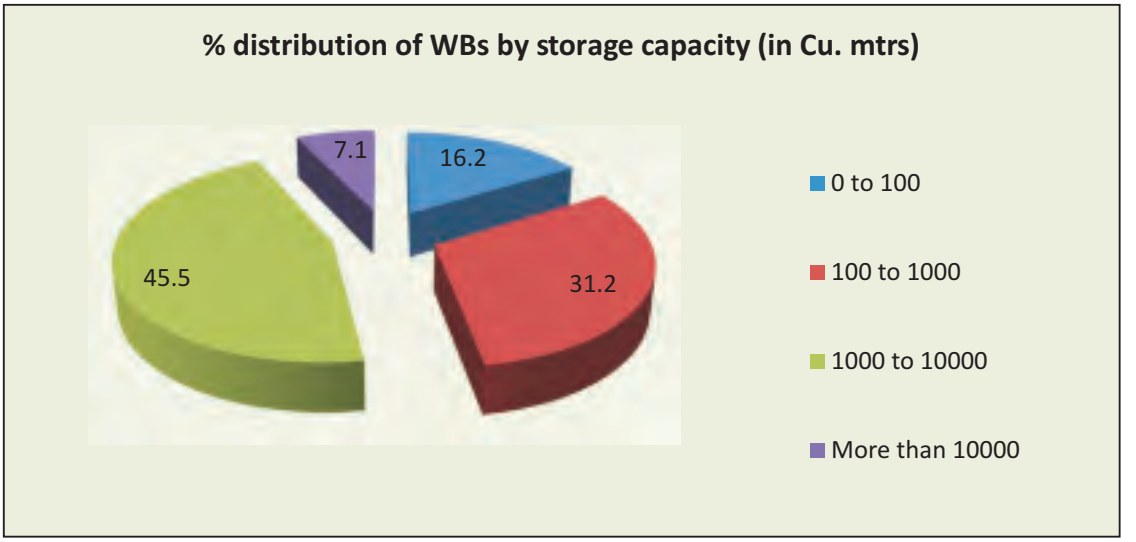
52.7% (509) are usually filled up, 7.2% (70) are rarely filled up and 2% (19) are never filled up. Percentage distribution of water bodies by status of filling and filled up storage is given in the diagrams given below.





- Out of 993 water bodies, 25 (2.5%) are covered in District Irrigation Plan/State Irrigation Plan. Among these 25 water bodies, 22 are tanks. Out of 'in use' water bodies, 88.1% (762) are benefitting one (01) city/town and 10.5% (91) water bodies are fulfilling requirements of 2- 5 cities/ towns.

- Out of 993 water bodies in Arunachal Pradesh, 86.3% (857) of the water bodies have water spread area less than 0.5 hectares and 12.6% (125) water bodies have water spread area between 0.5 to 5 hectares. In terms of storage capacity, out of 993 water bodies, 45.5% (452) water bodies have storage capacity between 1,000 to 10,000 Cubic Meters. Distribution of storage capacity of water bodies is given in chart given below:



- Out of 993 water bodies, none of the water bodies are reported to be encroached in Arunachal Pradesh.
- Key parameters of First Census of Water Bodies for the State of Arunachal Pradesh are given in the Annexure.

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total*
1	**Total Number of Water Bodies**	**no.**	993	
	Total Number of Water Bodies in Rural Areas	**no.**	893	89.93
	Total Number of Water Bodies in Urban Areas	**no.**	100	10.07
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		737	74.22
	Tanks		131	13.19
	Lakes		78	7.85
	Reservoirs		20	2.01
	Water Conservation Schemes/ Percolation tanks/ Check dams		9	0.91
	Others		18	1.81
b	**Water Bodies with Private Ownership**	**no.**	739	74.42
	Water Bodies by area	**no.**		
	DPAP		2	0.20
	Tribal		988	99.50
	DDP		0	0.00
	Flood Prone		2	0.20
	Naxal affected area		0	0.00
	Others		1	0.10
	Total		993	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		35	4.05
	Industrial		4	0.46
	Pisciculture		679	78.50
	Domestic/ Drinking		133	15.38
	Recreation		5	0.58
	Religious		2	0.23
	Ground Water recharge		7	0.81
	Others		0	0.00
	Total		865	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		177	17.82
	Man Made		816	82.18
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		12	9.38
	Construction		2	1.56
	Siltation		26	20.31

S.No.	Parameter	Unit	Value	Percentage to Total*
	Destroyed beyond repair		0	0.00
	Salinity		0	0.00
	Due to industrial effluents		0	0.00
	Others		88	68.75
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		368	38.10
	Usually filled up		509	52.69
	Rarely filled up		70	7.25
	Never filled up		19	1.97
	Total		966	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		762	88.09
	2 to 5		91	10.52
	6 to 10		9	1.04
	11 to 20		3	0.35
	21 to 50		0	0.00
	50 to 500		0	0.00
	Total		865	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		857	86.30
	0.5 hectares to 1.0 hectares		76	7.65
	1 hectares to 5 hectares		49	4.93
	5 hectares to 10 hectares		7	0.70
	10 hectares to 50 hectares		3	0.30
	More than 50 hectares		1	0.10
	Total		993	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		161	16.21
	100 to 1000		310	31.22
	1000 to 10000		452	45.52
	More than 10000		70	7.05
	Total		993	100.00
9	**Number of encroached water bodies**	No.	0	

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

ASSAM

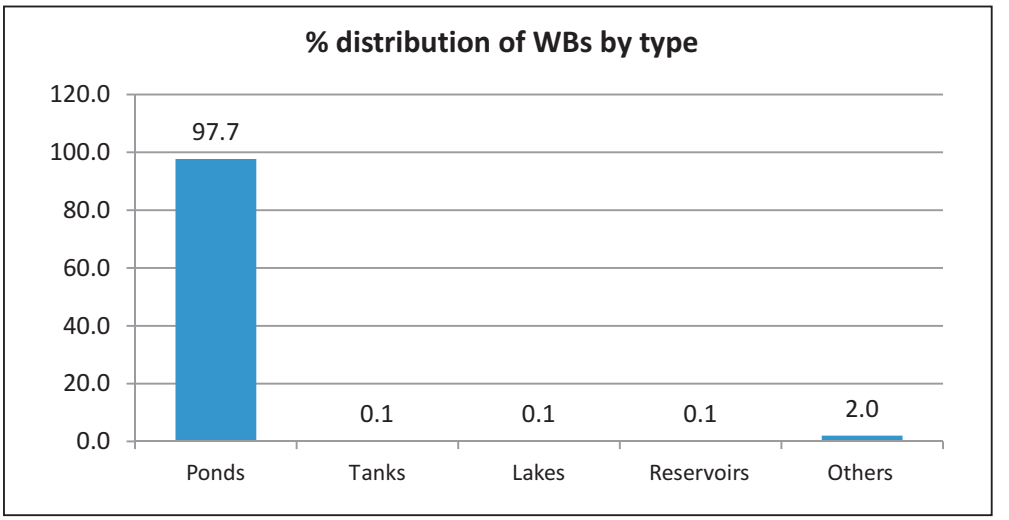
The State is adorned with beautiful lush covers of greenery, a chain of hills and rivers, mainly the Brahmaputra and the Barak. State has been the living place of various races, tribes and ethnic groups. Bihu is the essence of Assam and is celebrated across the State with a tremendous zeal and enthusiasm.


A Pond in Lakhimpur District

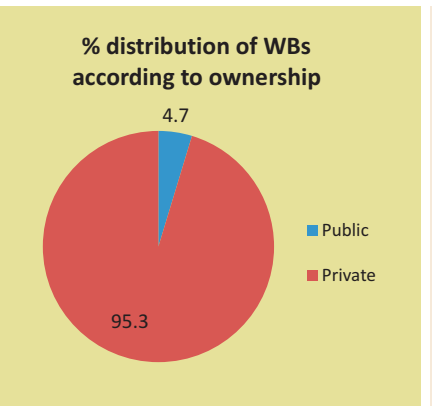
Assam has 33 districts with a total geographical area of 78,438 km^2 and a population of 3,12,05,576.

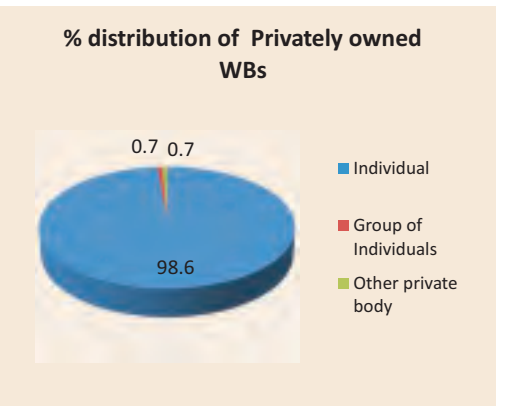
Major findings of the census

- In 1st census of water bodies, 1,72,492 water bodies have been enumerated in the State of Assam, out of which 98.6% (1,70,112) are in rural areas and the remaining 1.4% (2,380) are in urban areas. Majority of the water bodies are ponds as depicted from chart given below.



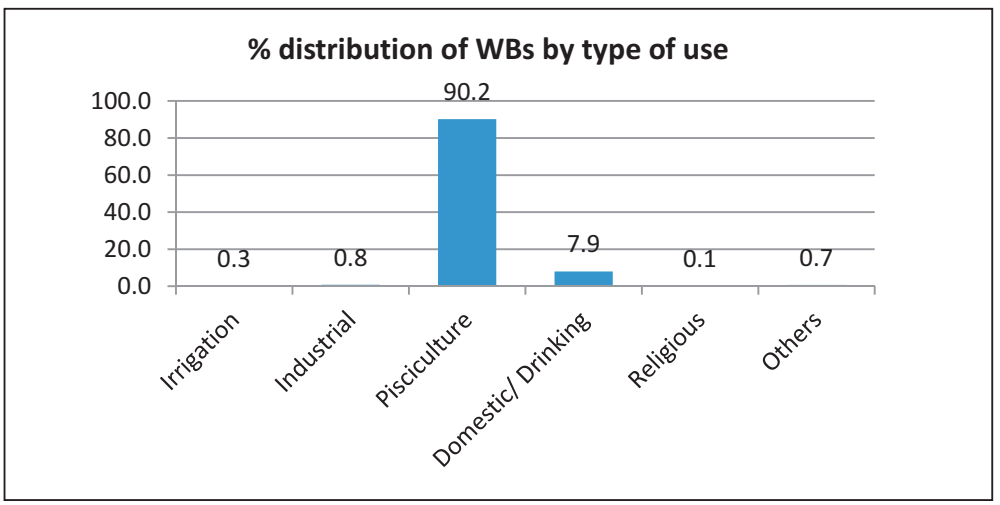
- 95.3% (1,64,411) are privately owned whereas the remaining 4.7% (8,081) are under public ownership. This reflects the dominance of private entities in ownership of water bodies. Distribution of water bodies by ownership status is shown in the charts given below. By location, 97.4% (1,67,955) water





bodies are located in flood prone areas and the remaining 2.6% (4,537) are located in tribal areas, naxal affected areas and other areas.

- Out of all water bodies, 98.2% (1,69,352) water bodies are in use whereas rest 1.8% (3,140) are not in use on account of drying up, siltation, salinity, destroyed beyond repair and other reasons. Out of 'in use' water bodies, a major proportion of water bodies are used in pisciculture followed by domestic/ drinking purpose. Percentage distribution of water bodies by type of use is shown in the diagram given below.

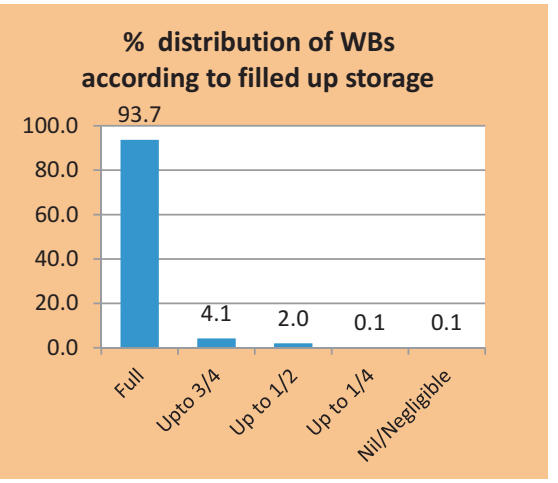


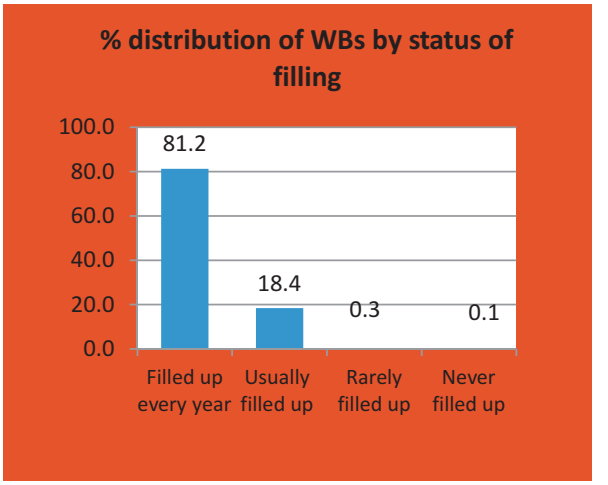
- In the State of Assam, there are 3,989 natural and 1,68,503 man-made water bodies. Out of 3,989 water bodies, 97.7% (3,899) are located in rural areas whereas remaining 2.3% (90) are located in urban areas. Out of 1,68,503 man-made water bodies, 98.6% (1,66,213) water bodies are located in rural areas and the remaining 1.4% (2,290) are located in urban areas. Most of the man-made water bodies have original cost of construction upto Rs.50,000.

A Pond in Assam, Kamrup Metro district Panikhaiti village

- Out of 1,72,492 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 1,69,041 water bodies. During reference year 2017-18, out of these 1,69,041

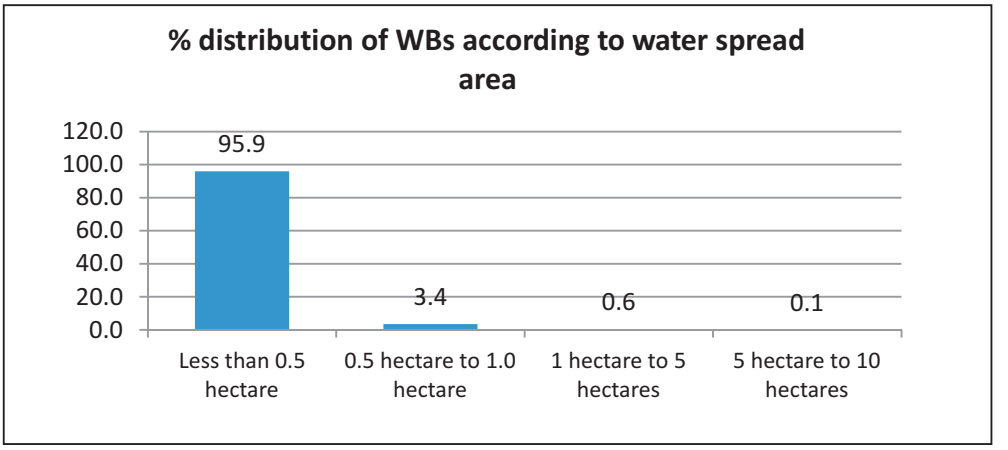
water bodies, 93.7% (1,58,389) water bodies had fully filled up storage capacity, 4.1% (7,035) water bodies had storage capacity filled upto three fourth level, 2.0% (3,341) water bodies had storage capacity filled upto half level, 0.1% (152) water bodies had storage capacity filled upto one fourth level whereas 0.1% (124) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 1,69,041 water bodies, 81.2% (1,37,340) water bodies are found to be filled up every year, 18.4% (31,135) are usually filled up, 0.3% (426) are rarely filled up and 0.1% (140) are never filled up. Percentage distribution of water bodies by 'status of filling' and 'filled up storage capacity' is shown in the diagram given below.



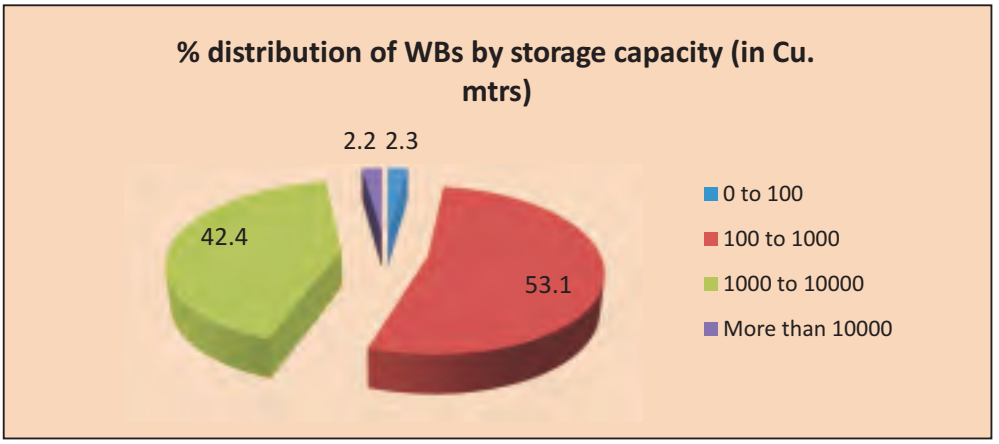


- Out of all water bodies, 4.0% (6,983) are covered in District Irrigation Plan/State Irrigation Plan. Among these 97.1% (6,779) are ponds and the remaining 2.9% (204) are tanks, lakes, reservoirs etc. Out of 'in use' water bodies, 82.7% (1,40,016) are benefitting one (01) city/town, 16.9% (28,666) water bodies are fulfilling requirements of 2- 5 cities/ towns and the remaining 0.4% (670) water bodies are benefitting more than five (05) cities/towns. Out of all the enumerated water bodies, State has reported encroachment in 13 water bodies which includes 12 ponds.

- Out of 1,72,492 water bodies, the information on 'water spread area' was reported in 1,72,479 water bodies. Out of these 1,72,479 water bodies, 95.9% (1,65,440) of the water bodies have water spread area less than 0.5 hectares whereas 3.4% (5,930) water bodies have water spread area between 0.5 hectares to 1.0 hectares. Distribution of water bodies by 'water spread area' is shown in charts given below:



- In terms of storage capacity, 53.1% (73,208) water bodies have storage capacity between 1,000 to 10,000 Cubic Meters whereas 2.2% (3,875) have storage capacity more than 10,000 cubic meters. Distribution of water bodies by 'storage capacity of water bodies' is shown in chart given below:



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

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	**Total Number of Water Bodies**	**no.**	1,72,492	
	Total Number of Water Bodies in Rural Areas	**no.**	1,70,112	98.62
	Total Number of Water Bodies in Urban Areas	**no.**	2,380	1.38
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		1,68,520	97.70
	Tanks		225	0.13
	Lakes		196	0.11
	Reservoirs		100	0.06
	Water Conservation Schemes/ Percolation tanks/ Check dams		14	0.01
	Others		3,437	1.99
b	**Water Bodies with Private Ownership**	**no.**	1,64,411	
	Water Bodies by area	**no.**		
	DPAP		64	0.04
	Tribal		1,517	0.88
	DDP		950	0.55
	Flood Prone		1,67,955	97.37
	Naxal affected area		125	0.07
	Others		1,881	1.09
	Total		1,72,492	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		532	0.31
	Industrial		1,279	0.76
	Pisciculture		1,52,698	90.17
	Domestic/ Drinking		13,459	7.95
	Recreation		64	0.04
	Religious		93	0.05
	Ground Water recharge		5	0.00
	Others		1,222	0.72
	Total		1,69,352	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		3,989	2.31
	Man Made		1,68,503	97.69
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		2,472	78.73
	Construction		21	0.67
	Siltation		5	0.16
	Destroyed beyond repair		18	0.57

S.No.	Parameter	Unit	Value	Percentage to Total *
	Salinity		7	0.22
	Due to industrial effluents		6	0.19
	Others		611	19.46
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		1,37,340	81.25
	Usually filled up		31,135	18.42
	Rarely filled up		426	0.25
	Never filled up		140	0.08
	Total		1,69,041	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		1,40,016	82.68
	2 to 5		28,666	16.93
	6 to 10		129	0.08
	11 to 20		205	0.12
	21 to 50		329	0.19
	50 to 500		5	0.00
	More than 500		2	0.00
	Total		1,69,352	100.00
7	**Distribution of Water Bodies by Water Spread Area**	**no.**		
	Less than 0.5 hectares		1,65,440	95.92
	0.5 hectares to 1.0 hectares		5,930	3.44
	1 hectares to 5 hectares		898	0.52
	5 hectares to 10 hectares		185	0.11
	10 hectares to 50 hectares		13	0.01
	More than 50 hectares		13	0.01
	Total		1,72,479	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		3,939	2.28
	100 to 1000		91,470	53.03
	1000 to 10000		73,208	42.44
	More than 10000		3,875	2.25
	Total		1,72,492	100.00
9	**Number of encroached water bodies**	**no.**	13	

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

BIHAR

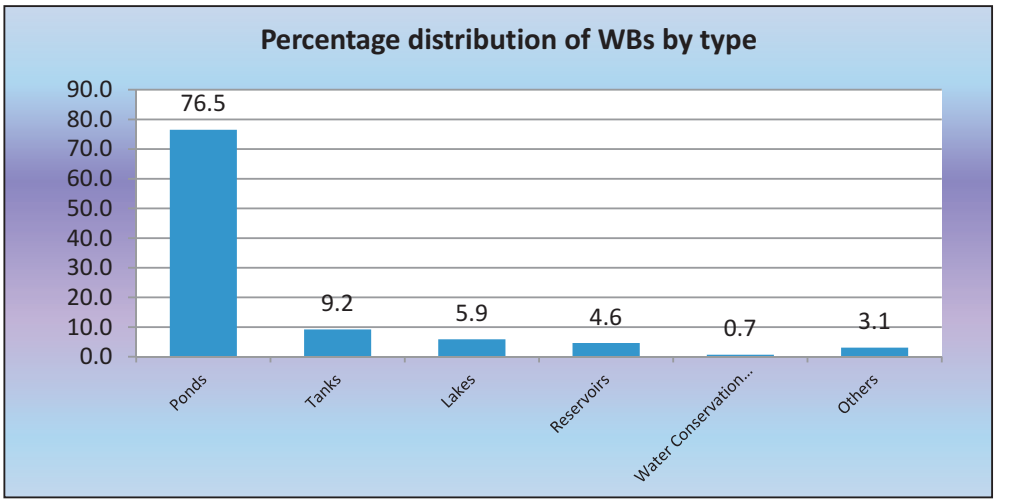
Bihar is a place full of history and spiritual significance. Located in the eastern part of India, this State is known as the land of monasteries. The great spiritual way of Buddhism originated and thrived in ancient Bihar, as Buddha attained his enlightenment in Bodh gaya. Therefore the region is full of remains of the monasteries known as Stupa.

The State has an area of 94,163 km^2. It has 38 districts with a population of 10,40,99,452.

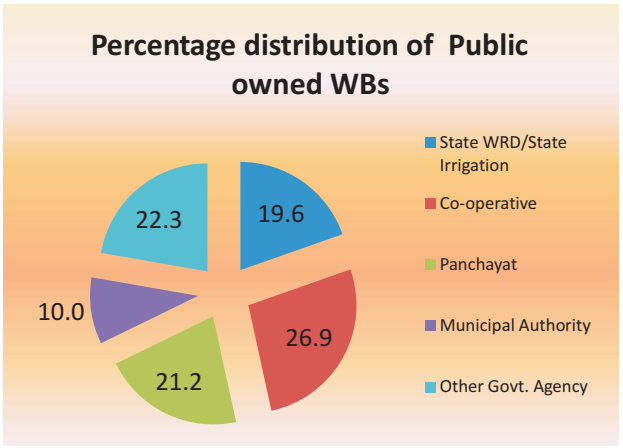
A pond in Madhubani District

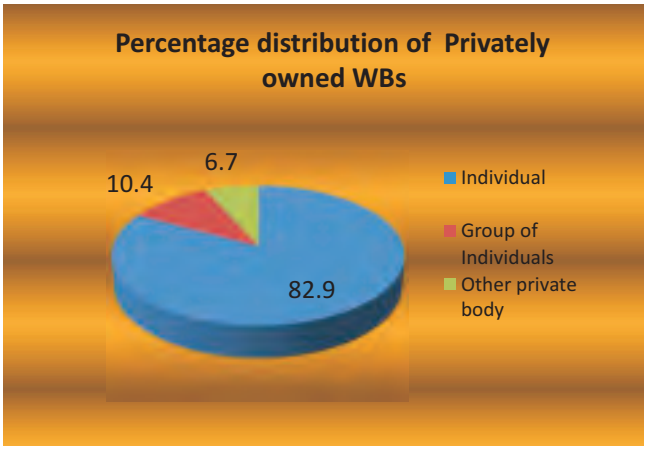
Major findings of the census

- In 1st census of water bodies, 45,793 water bodies have been enumerated in the State of Bihar, out of which 95.7% (43,831) are in rural areas and the remaining 4.3% (1,962) are in urban areas. Majority of the water bodies are ponds followed by tanks and lakes as depicted from chart given below.

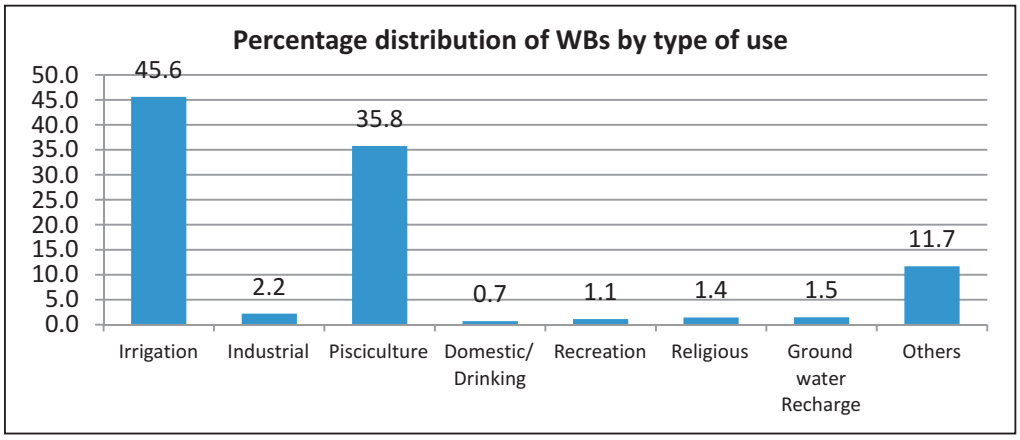


- 60.8% (27,835) water bodies are under public ownership whereas the remaining 39.2% (17,958) are under private ownership. Out of all the public owned water bodies, 26.9% (7,502) are with co-operatives whereas out of the privately owned water bodies, 82.9% (14,881) are in the hands of individual farmers. Distribution of water bodies by ownership status is shown in the charts given below. By location, 44.4% (20,328) water bodies are located in naxal affected area, 22.3% (10,216) in the area under 'Drought Prone Areas Programme' and the remaining 33.3% (15,249) are located in tribal, flood prone area and other areas.





- Out of 45,793 water bodies, 50.2% (22,994) water bodies are in use whereas rest 49.8% (22,799) are not in use on account of drying up, siltation, destroyed beyond repair and other reasons. Among of 'in use' water bodies, majority of them are used for Irrigation followed by Pisciculture. Percentage distribution of water bodies by type of use is shown in the diagram given below.

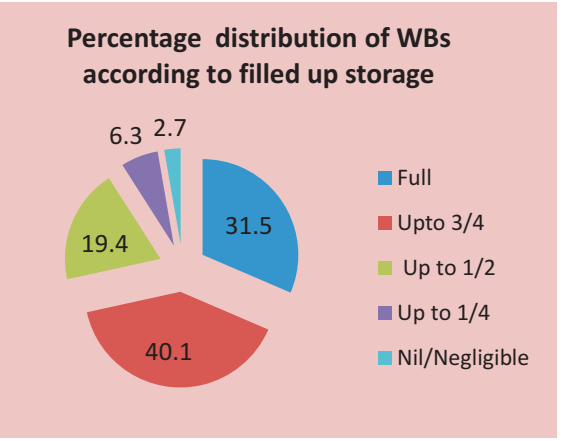


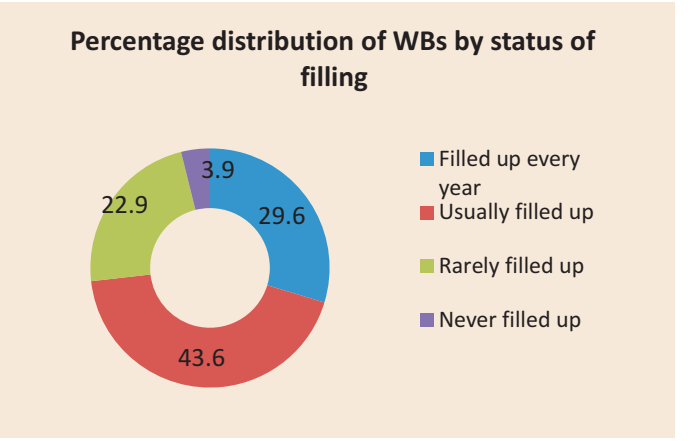
- There are 26,192 natural and 19,601 man-made water bodies in the State of Bihar. Out of 26,192 natural water bodies, 95.0% (24,880) water bodies are located in rural areas and the remaining 5.0% (1,312) are located in urban areas. Out of 19,601 man-made water bodies, 96.7% (18,951) water bodies are located in rural areas and the remaining 3.3% (650) are located in urban areas. Most of the man-made water bodies have original cost of construction upto Rs. 50,000.


A pond in Bhagalpur District

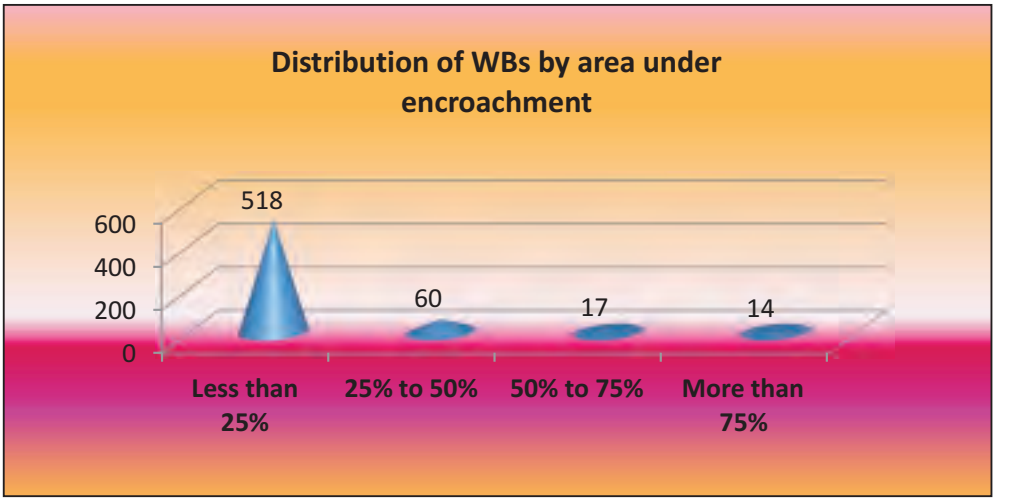
- Out of 45,793 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 44,067 water bodies. During reference year 2017-18, out of these 44,067 water bodies, 31.5% (13,867) water bodies had fully filled up storage capacity, 40.1% (17,663) water bodies had storage capacity filled upto three fourth level, 19.4% (8,547) water bodies had storage capacity filled upto half level, 6.3% (2,778) water bodies had storage

capacity filled upto one fourth level whereas 2.7% (1,212) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 44,067 water bodies, 29.6% (13,071) water bodies are found to be filled up every year, 43.6% (19,200) are usually filled up, 22.9% (10,082) are rarely filled up and 3.9% (1,714) are never filled up. Percentage distribution of water bodies by 'status of filling' and 'filled up storage capacity' is shown in the diagram given below.

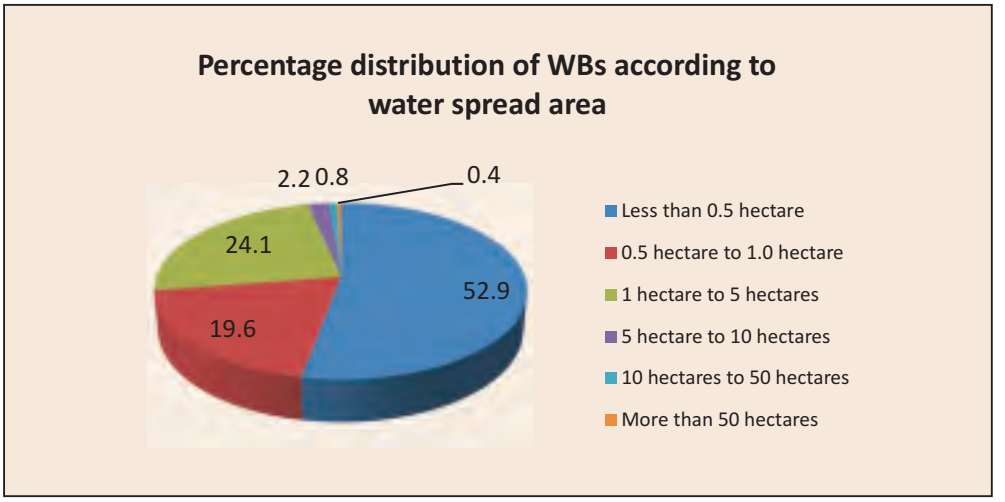




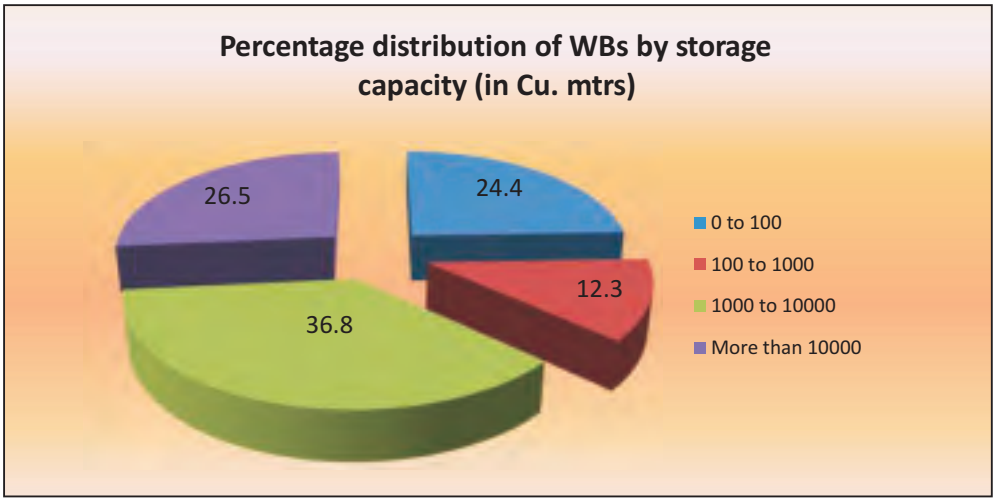
- 3,585 water bodies are covered in District Irrigation Plan/State Irrigation Plan. Among these 3,585 water bodies, 86.5% (3,101) are ponds whereas the remaining 13.5% (484) are tanks, lakes, reservoirs etc. Out of 'in use' water bodies, 18.4% (4,222) are benefitting one (01) city/town, 74.3% (17,097) water bodies are fulfilling requirements of 2- 5 cities/ towns and the remaining 7.3% (1,675) water bodies are benefitting more than five (05) cities/towns.
- State has reported encroachment in 871 water bodies out of all the enumerated water bodies. Among the 609 water bodies whose encroachment area can be assessed, 518 are assessed to have less than 25% area under encroachment, 77 having encroachment area ranging between 25% to 75% and 14 water bodies have more than 75% are a under encroachment.



- Out of 45,793 water bodies, the information on 'water spread area' was reported in 45,713 water bodies. Out of these 45,713 water bodies, 52.9% (24,187) of the water bodies have water spread area less than 0.5 hectares, 19.6% (8,964) have water spread area between 0.5 to 1.0 hectares, whereas 0.4% (200) water bodies have water spread area more than 50 hectares. Distribution of water bodies by 'water spread area' is shown in charts given below.



- In terms of storage capacity, 36.8% (16,842) water bodies have storage capacity between 1,000 to 10,000 Cubic Meters whereas 26.5% (12,145) water bodies have storage capacity more than 10,000 cubic meters. Distribution of water bodies by 'storage capacity of water bodies' is shown in charts given below.



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

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	**Total Number of Water Bodies**	**no.**	45,793	100.00
	Total Number of Water Bodies in Rural Areas	**no.**	43,831	95.72
	Total Number of Water Bodies in Urban Areas	**no.**	1,962	4.28
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		35,027	76.49
	Tanks		4,221	9.22
	Lakes		2,693	5.88
	Reservoirs		2,126	4.64
	Water Conservation Schemes/ Percolation tanks/ Check dams		312	0.68
	Others		1,414	3.09
b	**Water Bodies with Private Ownership**	**no.**	17,958	39.22
	Water Bodies by area	**no.**		
	DPAP		10,216	22.31
	Tribal		4,796	10.47
	DDP		2,899	6.33
	Flood Prone		3,968	8.67
	Naxal affected area		20,328	44.39
	Others		3,586	7.83
	Total		45,793	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		10,488	45.61
	Industrial		506	2.20
	Pisciculture		8,225	35.77
	Domestic/ Drinking		163	0.71
	Recreation		254	1.10
	Religious		330	1.44
	Ground Water recharge		339	1.47
	Others		2,690	11.70
	Total		22,995	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		26,192	57.20
	Man Made		19,601	42.80
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		3,957	17.36
	Construction		5,830	25.57
	Siltation		3560	15.61

S.No.	Parameter	Unit	Value	Percentage to Total *
	Destroyed beyond repair		1,742	7.64
	Salinity		489	2.14
	Due to industrial effluents		129	0.57
	Others		7,093	31.11
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		13,071	29.66
	Usually filled up		19,200	43.57
	Rarely filled up		10,082	22.88
	Never filled up		1,714	3.89
	Total		44,067	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		4,222	18.36
	2 to 5		17,097	74.35
	6 to 10		1,027	4.47
	11 to 20		233	1.01
	21 to 50		204	0.89
	50 to 500		211	0.92
	Total		22,994	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		24,187	52.91
	0.5 hectares to 1.0 hectares		8,964	19.61
	1 hectares to 5 hectares		11,026	24.12
	5 hectares to 10 hectares		983	2.15
	10 hectares to 50 hectares		353	0.77
	More than 50 hectares		200	0.44
	Total		45,713	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		11,196	24.45
	100 to 1000		5,610	12.25
	1000 to 10000		16,842	36.78
	More than 10000		12,145	26.52
	Total		45,793	100.00
9	**Number of encroached water bodies**	No.	871	

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

CHHATTISGARH

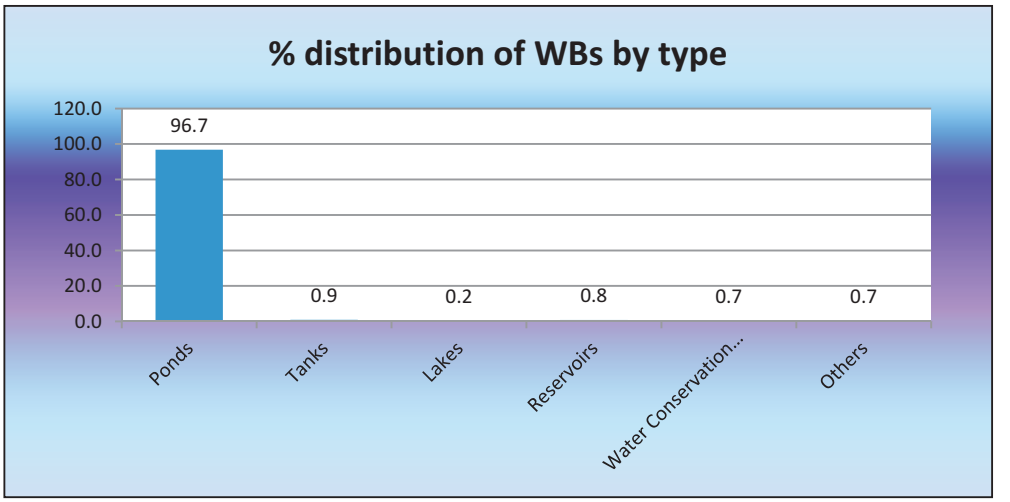
Chhattisgarh is known for its distinctive arts and crafts that mirror simplicity and traditions of the state and its people. The state has immense possibility for wildlife and eco-tourism because of its rich bio-diversity. Chhattisgarh is blessed with some of the most endangered and rare wildlife species.

A pond in Bilaspur District

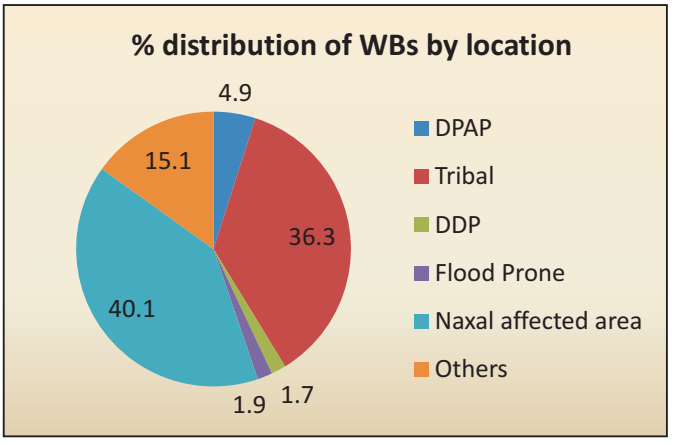
The State has an area of 1,35,191 km^2 and a population of 2,55,40,196 as per population census of 2011.

Major findings of the census

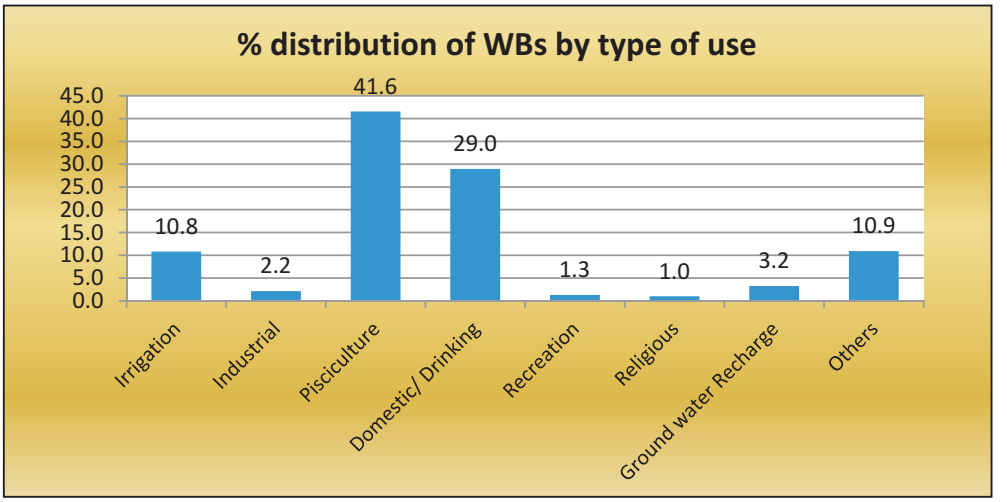
- In 1st census of water bodies, 34,000 water bodies have been enumerated in the State of Chhattisgarh, out of which majority, i.e. 98.6% (33,519) are in rural areas and the remaining 1.4% (481) are in urban areas. Majority of the water bodies are ponds as depicted from chart given below.



- 86.7% (29,463) water bodies are under public ownership whereas the remaining 13.3% (4,537) are under private ownership. By location, 36.3% (12,355) water bodies are in tribal areas, 40.1% (13,647) in naxal affected areas, 4.9% (1,677) in areas under 'Drought Prone Areas Programme' and the remaining 18.7% (6,321) are located in flood prone areas and other areas. Distribution of water bodies by location is shown in the chart given below.



- Out of 34,000 water bodies, 85.2% (28,976) water bodies are in use whereas rest 14.8% (5,024) are not in use on account of drying up, siltation, destroyed beyond repair, salinity and other reasons. Out of 'in use' water bodies, 12,042 (41.6%) are used for Pisciculture. Percentage distribution of water bodies by type of use is shown in the diagram given below.

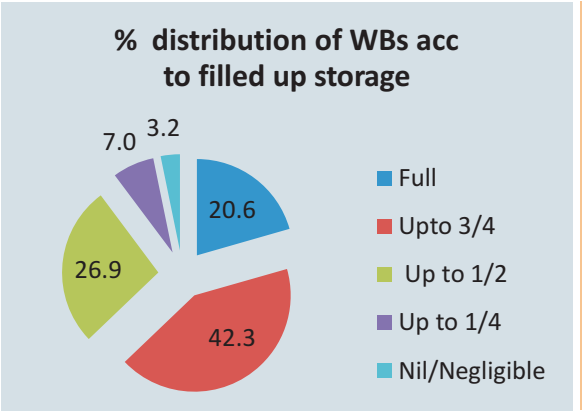


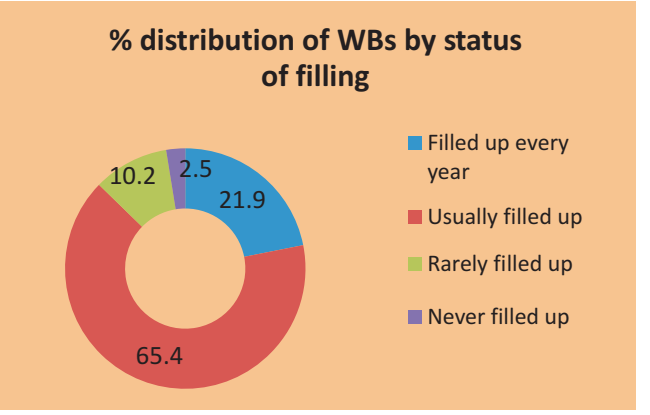
- There are 9,209 natural and 2,4791 man-made water bodies in the State of Chhattisgarh. Out of 9,209 natural water bodies, 97.2% (8,948) water bodies are located in rural areas and the remaining 2.8% (261) are located in urban areas. Out of 2,4791 man-made water bodies, 99.1% (24,571) water bodies are located in rural areas and the remaining 0.9% (220) are located in urban areas. Most of the man-made water bodies have original cost of construction upto Rs.50,000.

A pond in Kondagaon District

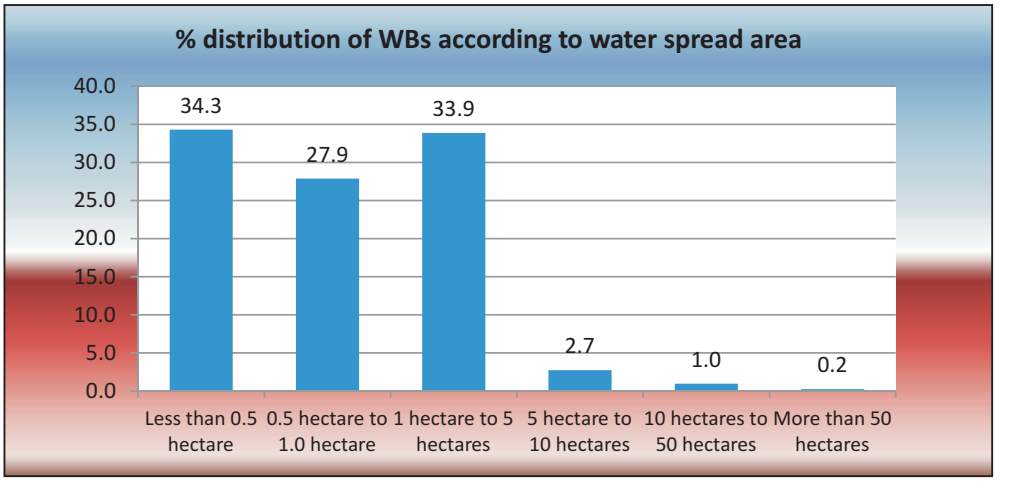
- Out of 34,000 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 33,546 water bodies. During reference year 2017-18, out of these 33,546 water bodies, 20.6% (6,902) water bodies had fully filled up storage capacity, 42.3% (14,183) water bodies had storage capacity filled upto three fourth level, 26.9% (9,035) water bodies had storage capacity filled upto half level, 7.0% (2,346) had storage capacity filled upto one fourth level whereas 3.2% (1,080) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity

during last 5 years, out of these 33,546 water bodies, 21.9% (7,338) are found to be filled up every year, 65.4% (21,939) water bodies are usually filled up, 10.2% (3,413) are rarely filled up and 2.5% (856) are never filled up. Percentage distribution of water bodies by 'status of filling' and 'filled up storage capacity' is shown in the charts given below.

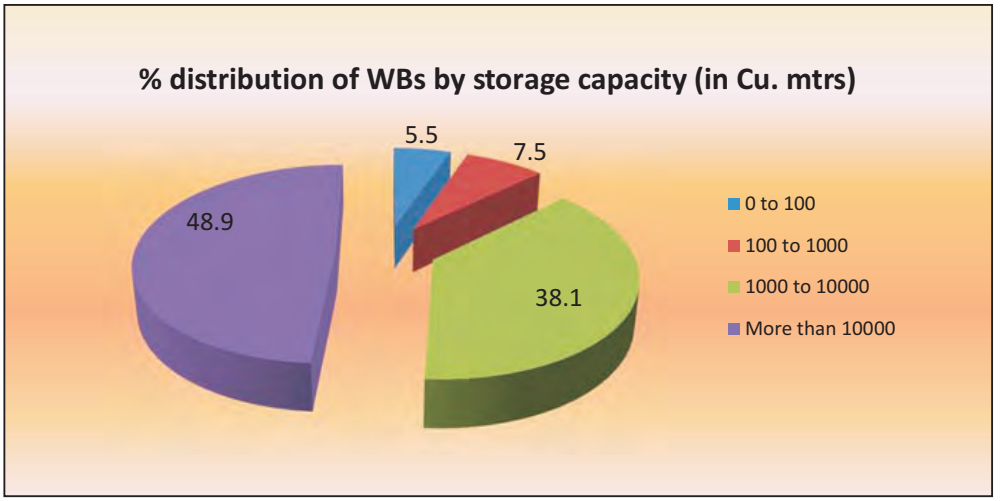




- 293 water bodies are covered in District Irrigation Plan/State Irrigation Plan. Among these water bodies, 82.9% (243) are ponds whereas the remaining 17.1% (50) are lakes, tanks reservoirs etc. Out of 'in use' water bodies, 95.0% (27,526) are benefitting one (01) city/town, 3.8% (1,108) water bodies are fulfilling requirements of 2- 5 cities/ towns and the remaining 1.2% (342) water bodies are benefitting more than five (05) cities/towns.
- State has reported encroachment in 111 water bodies, out of which 92.8% (103) are ponds and the remaining 7.2% (8) are tanks, lakes, reservoirs etc. Out of all these 111 water bodies, the encroachment area can be assessed in 21 water bodies. Among these 21 water bodies, 19 are assessed to have less than 25% area under encroachment and 2 are having encroachment area ranging between 25% to 50%.
- Out of 34,000 water bodies, the information on 'water spread area' was reported in 33,591 water bodies. Out of these 33591 water bodies, 34.3% (11,522) have water spread area less than 0.5 hectares, 27.9% (9,363) have water spread area ranging between 0.5 to 1.0 hectares, whereas 0.2% (83) water bodies have water spread area more than 50 hectares. Distribution of water bodies by 'water spread area' is shown in chart given below.



- In terms of storage capacity, 38.1% (12,938) water bodies have storage capacity between 1,000 to 10,000 Cubic Meters whereas 48.9% (16,627) water bodies have storage capacity more than 10,000 cubic meters. Distribution of water bodies by 'storage capacity of water bodies' is shown in pie chart given below.



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

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total*
1	**Total Number of Water Bodies**	**no.**	34,000	
	Total Number of Water Bodies in Rural Area s	**no.**	33,519	98.59
	Total Number of Water Bodies in Urban Areas	**no.**	481	1.41
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		32,893	96.74
	Tanks		311	0.91
	Lakes		73	0.21
	Reservoirs		269	0.79
	Water Conservation Schemes/ Percolation tanks/ Check dams		237	0.70
	Others		217	0.64
b	**Water Bodies with Private Ownership**	**no.**	4,537	13.34
	Water Bodies by area	**no.**		
	DPAP		1,677	4.93
	Tribal		12,355	36.34
	DDP		591	1.74
	Flood Prone		602	1.77
	Naxal affected area		13,647	40.14
	Others		5,128	15.08
	Total		34,000	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		3,139	10.83
	Industrial		627	2.16
	Pisciculture		12,042	41.56
	Domestic/ Drinking		8,389	28.95
	Recreation		376	1.30
	Religious		293	1.01
	Ground Water recharge		946	3.26
	Others		3,164	10.92
	Total		28,976	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		9,209	27.09
	Man Made		24,791	72.91
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		1,297	25.82
	Construction		546	10.87
	Siltation		203	4.04
	Destroyed beyond repair		90	1.79

S.No.	Parameter	Unit	Value	Percentage to Total*
	Salinity		19	0.38
	Due to industrial effluents		140	2.79
	Others		2,729	54.32
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		7,338	21.87
	Usually filled up		21,939	65.40
	Rarely filled up		3,413	10.17
	Never filled up		856	2.55
	Total		33,546	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		27,526	95.00
	2 to 5		1,108	3.82
	6 to 10		51	0.18
	11 to 20		79	0.27
	21 to 50		129	0.45
	50 to 500		75	0.26
	More than 500		8	0.03
	Total		28,976	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		11,522	34.30
	0.5 hectares to 1.0 hectares		9,363	27.87
	1 hectares to 5 hectares		11,379	33.88
	5 hectares to 10 hectares		919	2.74
	10 hectares to 50 hectares		325	0.97
	More than 50 hectares		83	0.25
	Total		33,591	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		1,858	5.46
	100 to 1000		2,577	7.58
	1000 to 10000		12,938	38.05
	More than 10000		16,627	48.90
	Total		34,000	100.00
9	**Number of encroached water bodies**	No.	111	

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

GOA

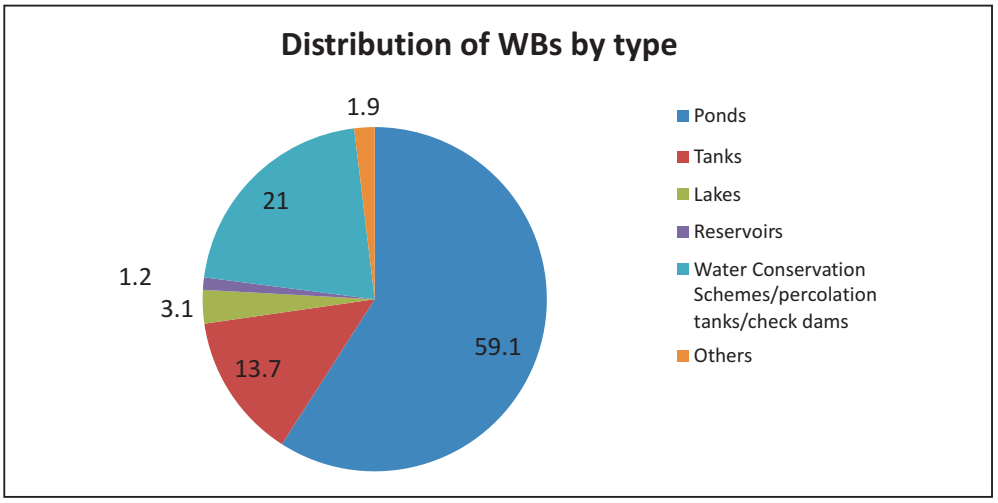
'Land of Islands'- Goa is one of India's smallest states located on the west coast of India about 400 km south to Mumbai. It is bounded by the states of Maharashtra on the north and Karnataka on the east and south and by the Arabian Sea on the west.

Maimollem Tollem lake in Mormugao town of South Goa district

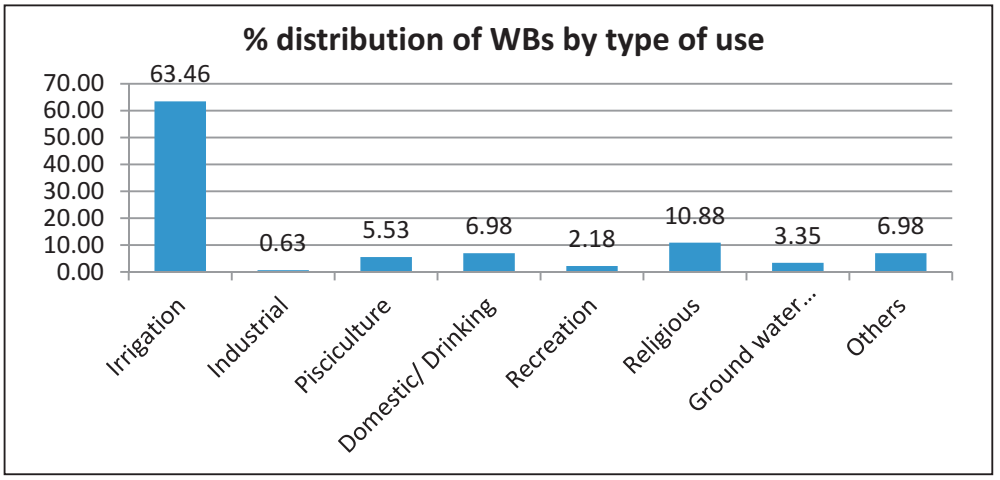
Goa has a total Geographic area of 3,702 km^2. According to the 2011 census, Goa had a population of 14,58,545 with highest per capita income.

Major findings of the census

- In 1st census of water bodies, total 1,463 water bodies are enumerated, out of which 96.1% (1,406) are in rural areas and the remaining 3.9% (57) are in urban areas. Out of total water bodies, 58.3% (853) are privately owned whereas the remaining 41.7% (610) are under public ownership. By location, 84 water bodies are in tribal areas and 2 water bodies are in flood prone area.
- Majority of the water bodies are Ponds followed by Water Conservation Schemes/percolation tanks/check dams and Tanks as depicted from chart given below.



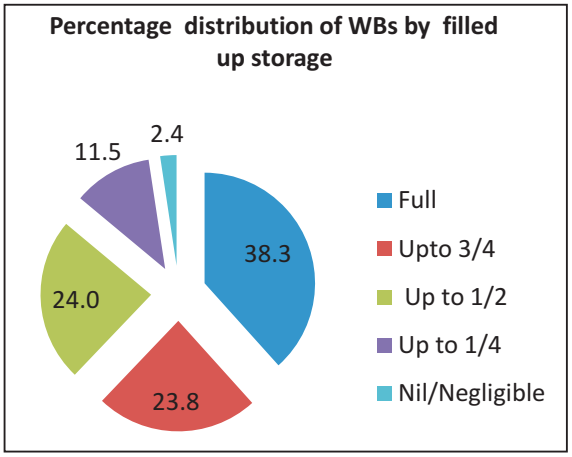
- Out of 1,463 water bodies, 75.4% (1,103) water bodies are in use; 24.6% (360) water bodies are reported not in use on account of being dried up, siltation, destroyed beyond repair and other reasons. Among all the 'in use' water bodies, 51.8% (571) are ponds, 25.1% (277) are water conservation schemes/ percolation tanks/check dams and the remaining 23.1% (255) are tanks, lakes, reservoirs etc. Out of total 'in use' water bodies, 63.5% (700) water bodies are used for Irrigation purpose in the State.

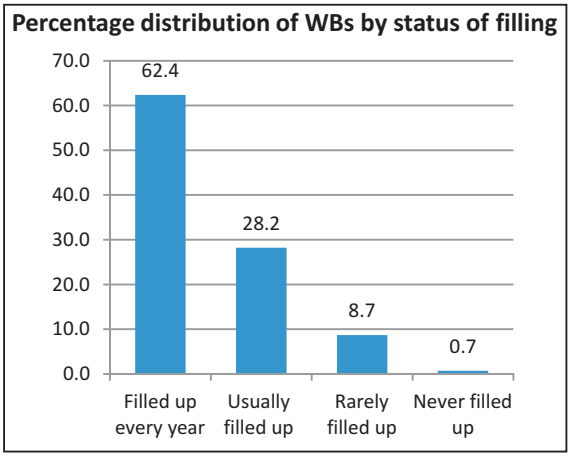


- There are 720 Natural and 743 man-made water bodies in Goa. Out of 720 Natural water bodies, 96.4% (694) water bodies are located in rural areas whereas 3.6% (26) are located in urban areas. Out of 743 man-made water bodies, 95.8% (712) water bodies are located in rural areas whereas 4.2% (31) are located in urban areas. Most of the man-made water bodies have original cost of construction up to Rs.50,000.

A pond in Verla village of North Goa district

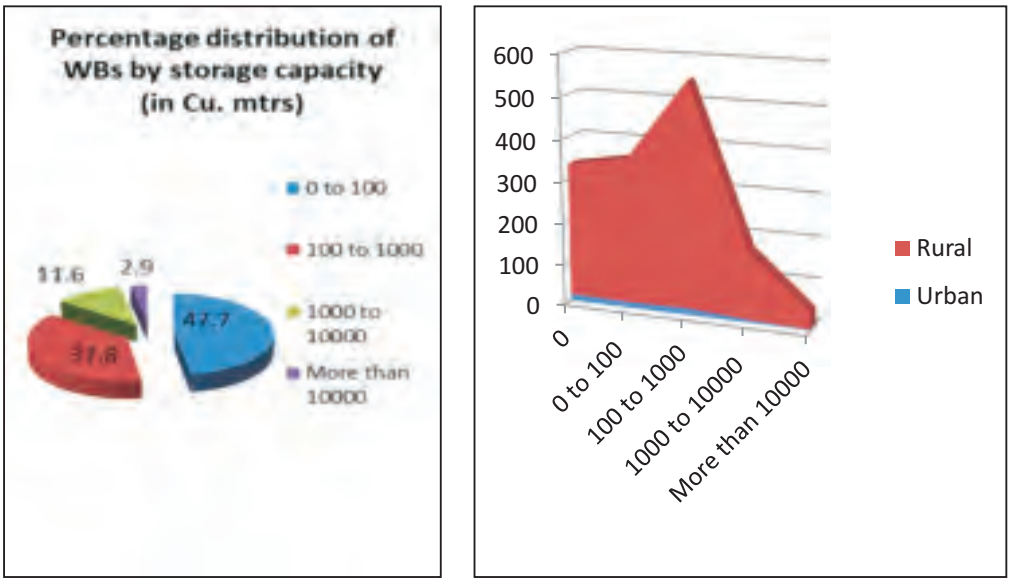
- Out of 1,463 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 1,127 water bodies. During reference year 2017-18, out of these 1,127 water bodies, capacity of 38.3% (432) water bodies had fully filled up storage, 23.8% (268) water bodies had storage capacity filled upto three fourth level, 24.0% (270) water bodies had storage capacity filled upto half level, 11.5% (130) water bodies had storage capacity filled upto one fourth level whereas 2.4% (27) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 1127 water bodies, 62.4% (703) water bodies are found to be filled up every year, 28.2% (318) are usually filled up, 8.7% (98) are rarely filled up and 0.7% (8) 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 1,463 water bodies, 128 (8.7%) are covered in District Irrigation Plan/State Irrigation Plan. Among these 128 water bodies, 75.8% (97) are basically water conservation schemes/ percolation dams/ check dams. Out of 'in use' water bodies, 88.6% (977) are benefitting one (01) city/town and 10.9% (120) water bodies are fulfilling requirements of 2- 5 cities/ towns.

- Out of 1,463 water bodies, the information on 'water spread area' was reported in 1,460 water bodies. Out of these 1,460 water bodies, 84.5% (1,234) of the water bodies have water spread area less than 0.5 hectares. In terms of storage capacity, out of total 1,463 water bodies, 37.8% (553) water bodies have storage capacity between 100 to 1,000 Cubic Meters. Distribution of storage capacity of water bodies is given in charts given below:



Storage Capacity (in Cu. Metres)

- Out of 1,463 water bodies, eight (08) water bodies are reported to be encroached. These are five (05) ponds followed by two (02) water conservation schemes/ percolation dams/ check dams and one (01) Tank. Among the water bodies whose encroachment area can be assessed, three (03) are assessed to have less than 25% area under encroachment, one (01) having encroachment area ranging between 25% to 75% and one (01) has more than 75% encroachment area.

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

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total*
1	**Total Number of Water Bodies**	**no.**	1,463	
	Total Number of Water Bodies in Rural Areas	**no.**	1,406	96.10
	Total Number of Water Bodies in Urban Areas	**no.**	57	3.90
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		864	59.06
	Tanks		200	13.67
	Lakes		46	3.14
	Reservoirs		17	1.16
	Water Conservation Schemes/ Percolation tanks/ Check dams		308	21.05
	Others		28	1.91
b	**Water Bodies with Private Ownership**	**no.**	853	58.30
	Water Bodies by area	**no.**		
	DPAP		0	0.00
	Tribal		84	5.74
	DDP		0	0.00
	Flood Prone		2	0.14
	Naxal affected area		0	0.00
	Others		1,377	94.12
	Total		1,463	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		700	63.46
	Industrial		7	0.63
	Pisciculture		61	5.53
	Domestic/ Drinking		77	6.98
	Recreation		24	2.18
	Religious		120	10.88
	Ground Water recharge		37	3.35
	Others		77	6.98
	Total		1,103	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		720	49.21
	Man Made		743	50.79
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		61	16.94
	Construction		1	0.28
	Siltation		25	6.94
	Destroyed beyond repair		14	3.89
	Salinity		18	5.00
	Due to industrial effluents		0	0.00
	Others		241	66.94

S.No.	Parameter	Unit	Value	Percentage to Total*
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		703	62.38
	Usually filled up		318	28.22
	Rarely filled up		98	8.70
	Never filled up		8	0.71
	Total		1,127	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		977	88.58
	2 to 5		120	10.88
	6 to 10		2	0.18
	11 to 20		3	0.27
	21 to 50		0	0.00
	50 to 500		1	0.09
	Total		1,103	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		1,234	84.52
	0.5 hectares to 1.0 hectares		134	9.18
	1 hectares to 5 hectares		73	5.00
	5 hectares to 10 hectares		5	0.34
	10 hectares to 50 hectares		5	0.34
	More than 50 hectares		9	0.62
	Total		1,460	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		698	47.71
	100 to 1000		553	37.80
	1000 to 10000		170	11.62
	More than 10000		42	2.87
	Total		1,463	100.00
9	**Number of encroached water bodies**	No.	8	0.55

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

GUJARAT

Gujarat is located on the western coast of India. It has the longest coastline of 1,600 Km. Gujarat is bounded by the Arabian Sea to the west and south west and by Pakistan in the North, Rajasthan and Madhya Pradesh towards the north east and east, Maharashtra and the Union Territories of Daman, Diu and Nagar Haveli, towards the south. Gujarat has diverse climatic conditions with mild and pleasant winters and hot and dry summers and heavy monsoon.

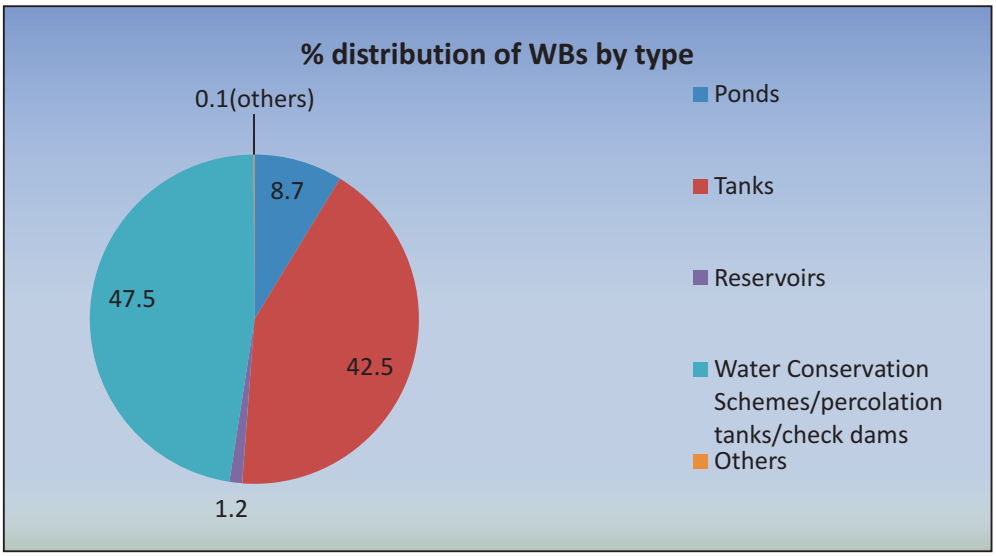
Gujarat has a total Geographic area of 1,96,244 km^2. According to the 2011 census, Gujarat had a population of 6,04,39,692.

A Tank in village-Naransari, District-Kachchh, Gujarat

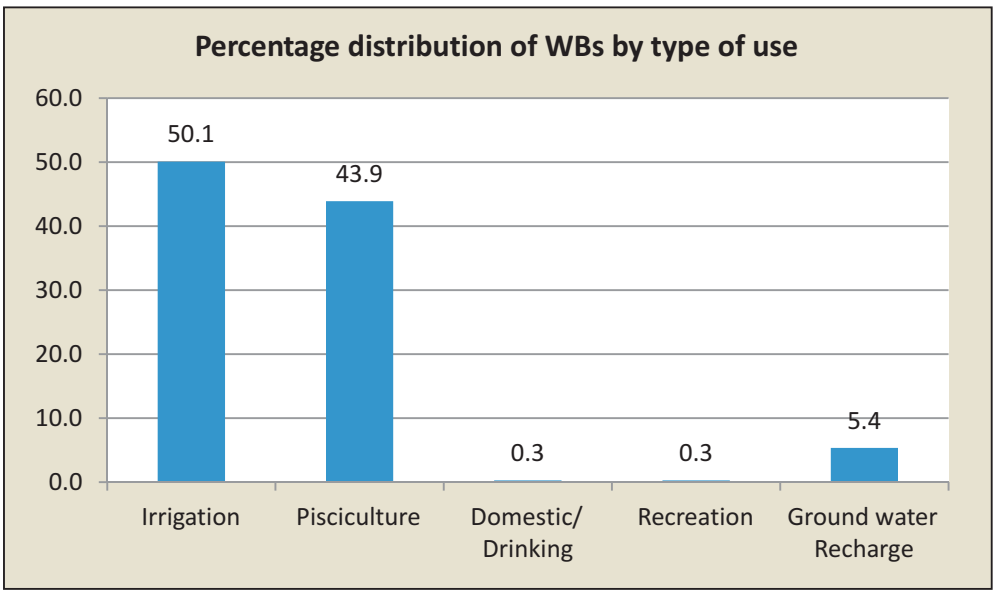
Major findings of the census

- In 1st census of water bodies, 54,069 water bodies have been enumerated, out of which 98.3% (53,156) are in rural areas and the remaining 1.7% (913) are in urban areas. Out of all water bodies, 99.8% (53,979) are under public ownership whereas the remaining 0.2% (90) are privately owned. Out of the public owned water bodies, 60.7% (32,781) are owned by Panchayat. By location, 20% (11,174) water bodies are in tribal areas.

- Majority of the water bodies are water conservation schemes/percolation tanks/check dams followed by tanks as depicted from chart given below.



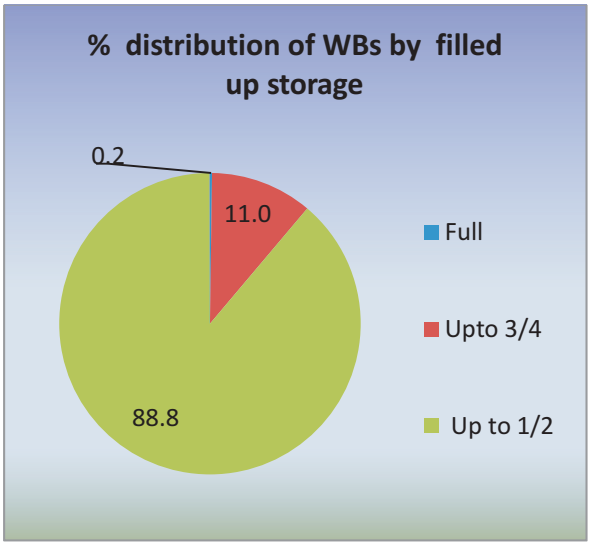
- 99.7% (53,903) water bodies are in use whereas 0.3% (166) water bodies are not in use on account of drying up, siltation, destroyed beyond repair and other reasons. Out of all water bodies, 50.1% (26,999) water bodies are used for irrigation purpose in the State and 43.9% (23,669) water bodies are used for pisciculture in Gujarat. Percentage distribution of water bodies by type of use is shown in the diagram given below.

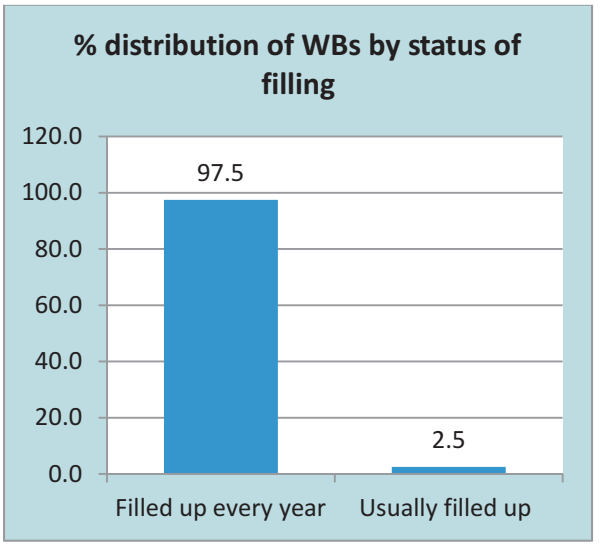


- There are 16,966 natural and 37,103 man-made water bodies in Gujarat. Out of 16,966 Natural water bodies, 95.3% (16,166) water bodies are located in rural areas whereas 4.7% (800) are located in urban areas. Out of 37,103 man-made water bodies, 99.7% (36,990) water bodies are located in rural areas whereas 0.3% (113) are located in urban areas. Most of the man-made water bodies have original cost of construction between Rs.1 Lakh to Rs.5 Lakh.

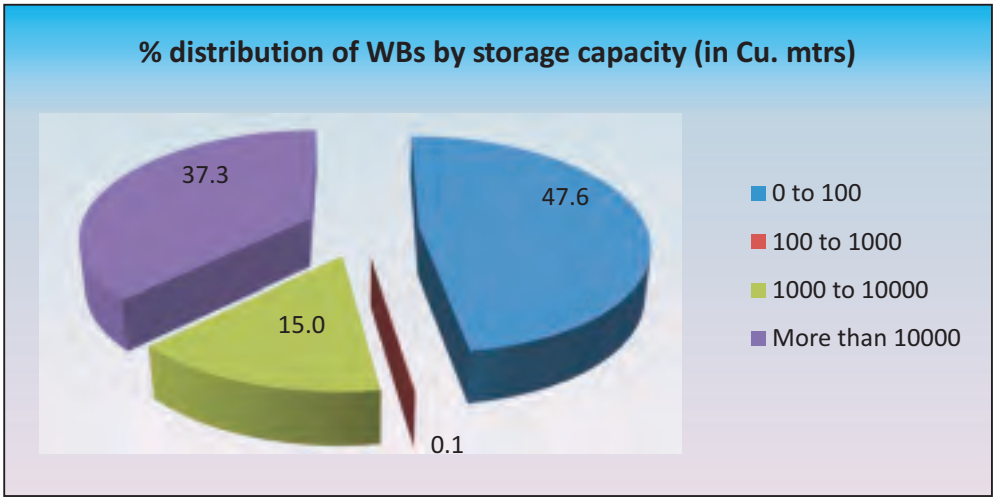
A Tank in Gujarat, Narmada district Amli village

- Out of 54,069 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 28,353 water bodies. During reference year 2017-18, out of these 28,353 water bodies, 0.2% (63) water bodies have fully filled up storage capacity, 11.0% (3,102) water bodies have storage capacity filled upto three fourth level and 88.8% (25,180) water bodies have storage capacity filled upto half level. Based on the criteria of filling up of storage capacity during last 5 years, out of 28,353 water bodies, 97.5% (27,643) water bodies are found to be filled up every year and 2.5% (709) are usually filled up. Percentage distribution of water bodies by status of filling and filled up storage is given in the diagram given below.





- Out of 54,069 water bodies only 17(0.03%) are reported to be covered in District Irrigation Plan/State Irrigation Plan. Out of 'in use' water bodies, 99.6% (53,707) are benefitting one (01) city/town and 0.3% (182) water bodies are fulfilling requirements of 2- 5 cities/ towns and remaining 14 water bodies are benefitting more than five (05) cities/ towns.
- Out of 54,069 water bodies, the information on 'water spread area' was reported in 54,057 water bodies. Out of these 54,057 water bodies, 68.3% (36,923) of the water bodies have water spread area between 1 hectare to 5 hectares. In terms of storage capacity, out of 54,069 water bodies, 47.6% (25,716) water bodies have storage capacity between 0 to 100 Cubic Meters. Distribution of storage capacity of water bodies is given in chart given below:



- Out of 54,069 water bodies, 22 water bodies are reported to be encroached. Out of these 22 encroached water bodies, 20 are tanks.
- Key parameters of First Census of Water Bodies for the State of Gujarat are given in the Annexure.

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	**Total Number of Water Bodies**	**no.**	54,069	
	Total Number of Water Bodies in Rural Areas	**no.**	53,156	98.31
	Total Number of Water Bodies in Urban Areas	**no.**	913	1.69
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		4,711	8.71
	Tanks		22,963	42.47
	Lakes		12	0.02
	Reservoirs		667	1.23
	Water Conservation Schemes/ Percolation tanks/ Check dams		25,667	47.47
	Others		49	0.09
b	**Water Bodies with Private Ownership**	**no.**	90	0.17
	Water Bodies by area	**no.**		
	DPAP		285	0.53
	Tribal		11,174	20.67
	DDP		2,323	4.30
	Flood Prone		0	0.00
	Naxal affected area		0	0.00
	Others		40,287	74.51
	Total		54,069	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		26,999	50.09
	Industrial		0	0.00
	Pisciculture		23,669	43.91
	Domestic/ Drinking		149	0.28
	Recreation		152	0.28
	Religious		20	0.04
	Ground Water recharge		2,889	5.36
	Others		25	0.05
	Total		53,903	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		16,966	31.38
	Man Made		37,103	68.62
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		3	1.81
	Construction		5	3.01
	Siltation		9	5.42
	Destroyed beyond repair		0	0.00
	Salinity		0	0.00
	Due to industrial effluents		0	0.00
	Others		149	89.76

S.No.	Parameter	Unit	Value	Percentage to Total*
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		27,643	97.50
	Usually filled up		709	2.50
	Rarely filled up		1	0.00
	Never filled up		0	0.00
	Total		28,353	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		53,707	99.64
	2 to 5		182	0.34
	6 to 10		5	0.01
	11 to 20		5	0.01
	21 to 50		4	0.01
	50 to 500		0	0.00
	Total		53,903	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		361	0.67
	0.5 hectares to 1.0 hectares		15,713	29.07
	1 hectares to 5 hectares		36,923	68.30
	5 hectares to 10 hectares		817	1.51
	10 hectares to 50 hectares		186	0.34
	More than 50 hectares		57	0.11
	Total		54,057	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		25,716	47.56
	100 to 1000		34	0.06
	1000 to 10000		8,122	15.02
	More than 10000		20,197	37.35
	Total		54,069	100.00
9	**Number of encroached water bodies**	No.	22	0.04

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

HARYANA

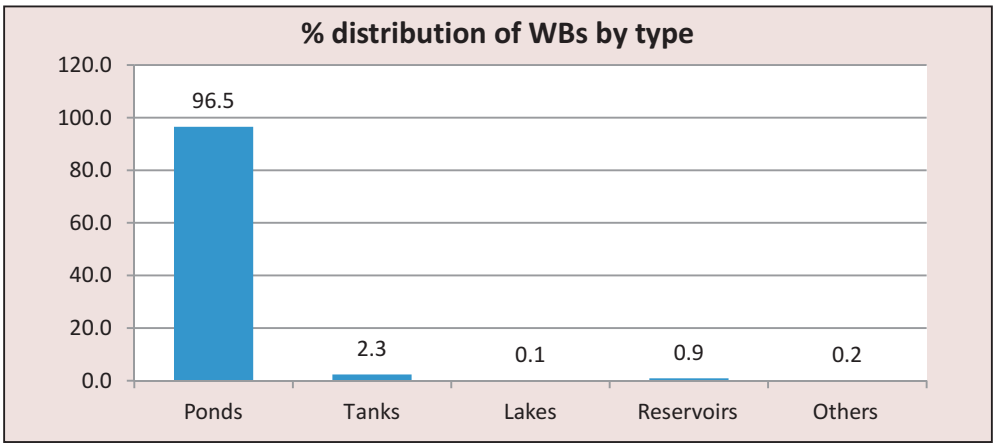
The name Haryana means the abode of God. It is a blend of two Sanskrit words 'Hari' which means God and 'ayana' meaning home. The State is a vivid kaleidoscope of diverse landscapes, showcasing magnificent archaeology and celebrating art and culture.

The State has an area of 44,212 km^2. It has 22 districts with a population of 2,53,51,462.

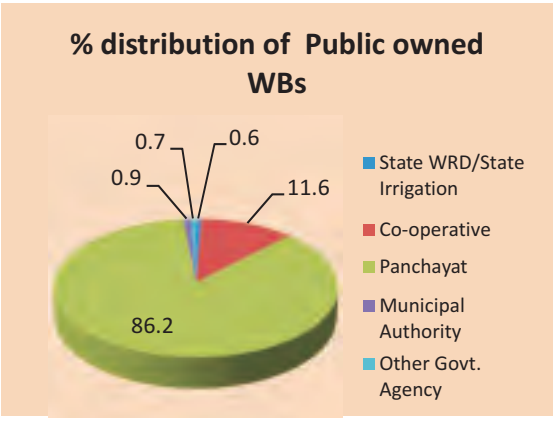
A pond in Hissar District

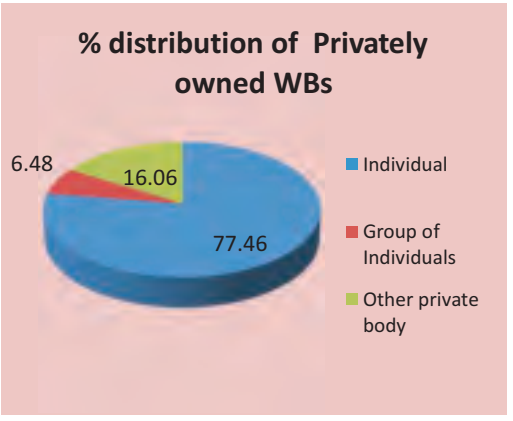
Major findings of the census

- In 1st census of water bodies, 14,898 water bodies have been enumerated in the State of Haryana and all the water bodies are in rural areas. 96.5% (14,376) of the water bodies are ponds as depicted from chart given below.

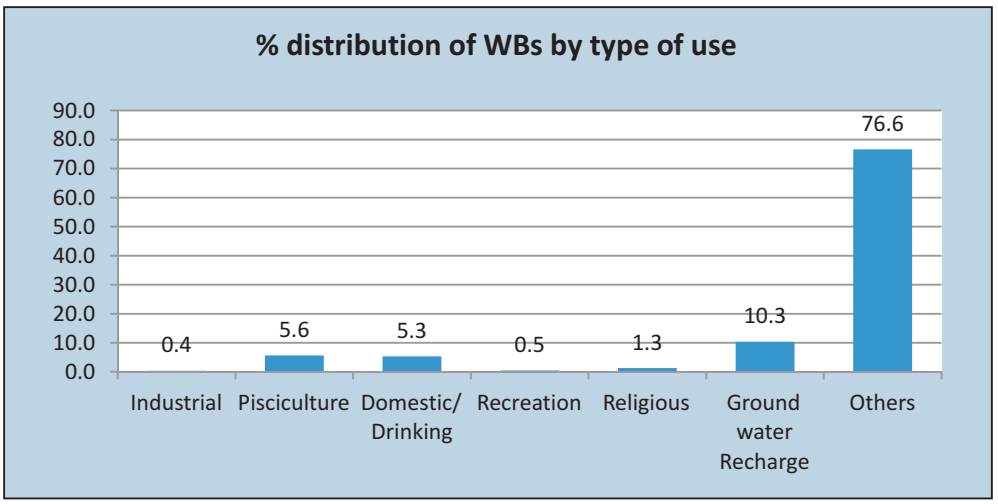


- 97.6% (14,543) are under public ownership whereas the remaining 2.4% (355) are under private ownership. Most of the public owned water bodies are Panchayat owned whereas most of the privately owned water bodies are owned by individual farmers. Percentage distribution of water bodies according to ownership is shown in the pie charts given below.





- By location, 4.3% (638) are located in naxal affected areas, 1.3% (200) in area under "Drought Prone Areas Programme" and the remaining 94.4% (14,060) in tribal, flood prone and other areas.
- Out of 14,898 water bodies, 59.0% (8,794) water bodies are in use whereas rest 41.0% (6,104) are not in use on account of drying up, siltation, destroyed beyond repair, salinity and other reasons. 10.3% (909) of 'in use' water bodies are used for Ground Water Recharge in Haryana. Percentage distribution of water bodies by type of use is shown in the diagram given below.

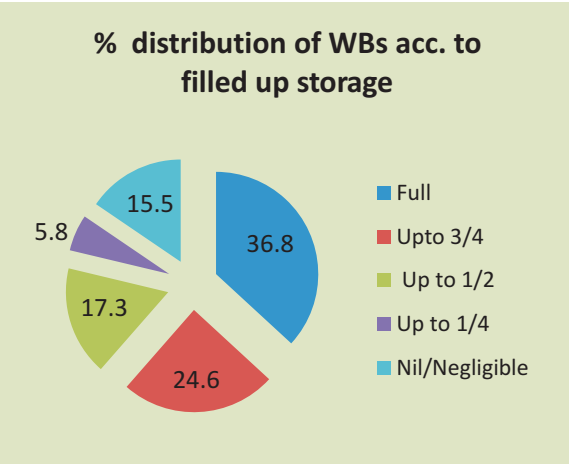


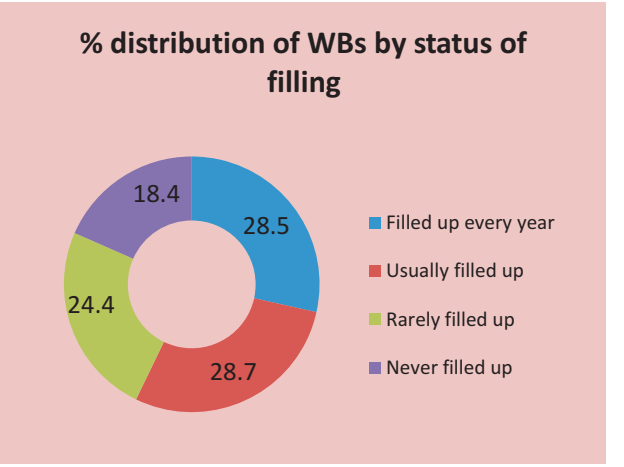
- There are 12,304 natural and 2,594 man-made water bodies in the State of Haryana. Most of the man-made water bodies have original cost of construction upto Rs.50,000.

A pond in Haryana, Hissar district Gandas village

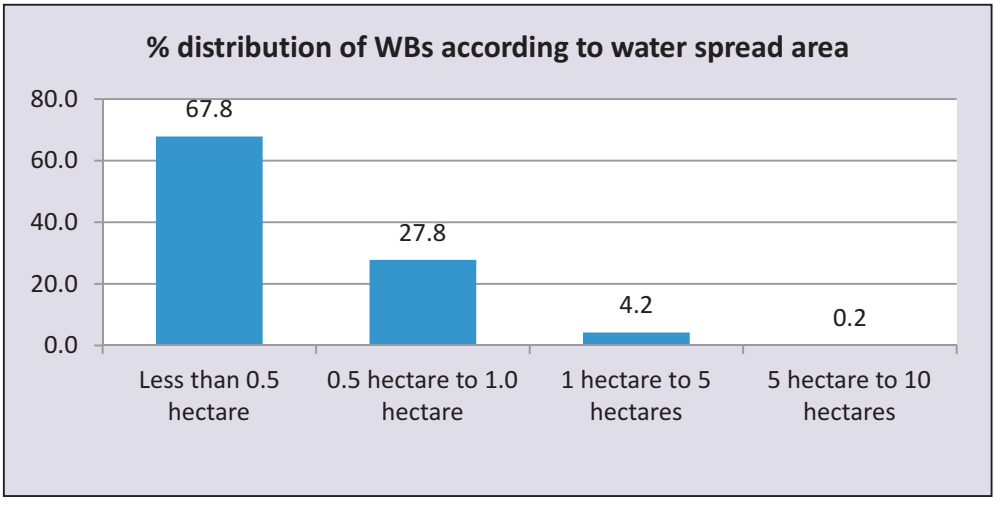
- Out of 14,898 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 14,876 water bodies. During reference year 2017-18, out of these 14,876 water bodies, 36.8% (5,482) water bodies had fully filled up storage capacity, 24.6% (3,658) water bodies had storage capacity filled upto three fourth level, 17.3% (2,572) water bodies had storage capacity filled upto half level, 5.8% (861) water bodies had storage capacity filled upto one fourth level whereas 15.5% (2,303) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of these 14,876 water bodies, 28.5% (4,240) water bodies

are found to be filled up every year, 28.7% (4,265) are usually filled up, 24.4% (3,630) are rarely filled up and 18.4% (2,741) are never filled up. Percentage distribution of water bodies by 'status of filling' and 'filled up storage capacity' is shown in the diagram given below.

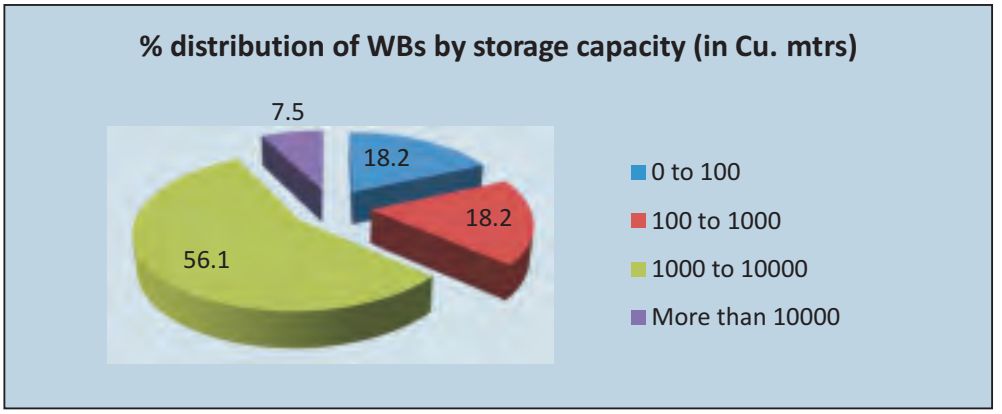




- Out of all water bodies, 814 water bodies are covered in District Irrigation Plan/State Irrigation Plan. Among these water bodies, 93.5% (761) are ponds whereas the remaining 6.5% (53) are tank, lakes, reservoirs etc. Out of 'in use' water bodies, 79.6% (6,998) are benefitting one (01) city/town, 19.9% (1,753) water bodies are fulfilling requirements of 2- 5 cities/ towns and the remaining 0.5% (43) water bodies are benefitting more than five (05) cities/towns.
- State has reported encroachment in 50 water bodies, all of which are ponds. Out of all these 50 water bodies, the encroachment area can be assessed in 47 water bodies. Among these 47 water bodies, 19.1% (9) are assessed to have less than 25% area under encroachment, 53.2% (25) having encroachment area ranging between 25% to 75% and remaining 27.7% (13) has more than 75% encroachment area.
- Out of 14,898 water bodies, the information on 'water spread area' was reported in 14,881 water bodies. Out of these 14,881 water bodies, 67.8% (10,094) of the water bodies have water spread area less than 0.5 hectares and 27.8% (4,133) have water spread area between 0.5 to 1.0 hectares. Distribution of water bodies by 'water spread area' is shown in chart given below.



- In terms of storage capacity, 56.1% (8,357) water bodies have storage capacity between 1,000 to 10,000 Cubic Meters whereas 7.5% (1,117) water bodies have storage capacity more than 10,000 cubic meters. Distribution of water bodies by 'storage capacity of water bodies' is shown in chart given below.



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

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total*
1	**Total Number of Water Bodies**	**no.**	14,898	100.00
	Total Number of Water Bodies in Rural Areas	**no.**	14,898	100.00
	Total Number of Water Bodies in Urban Areas	**no.**	0	
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		14,376	96.50
	Tanks		350	2.35
	Lakes		18	0.12
	Reservoirs		132	0.89
	Water Conservation Schemes/ Percolation tanks/ Check dams		6	0.04
	Others		16	0.11
b	**Water Bodies with Private Ownership**	**no.**	355	2.38
	Water Bodies by area	**no.**		
	DPAP		200	1.34
	Tribal		75	0.50
	DDP		10	0.07
	Flood Prone		92	0.62
	Naxal affected area		638	4.28
	Others		13,883	93.19
	Total		14,898	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		1	0.01
	Industrial		31	0.35
	Pisciculture		495	5.63
	Domestic/ Drinking		465	5.29
	Recreation		40	0.45
	Religious		113	1.28
	Ground Water recharge		909	10.34
	Others		6,740	76.64
	Total		8,794	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		12,304	82.59
	Man Made		2,594	17.41
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		180	2.95
	Construction		17	0.28
	Siltation		44	0.72
	Destroyed beyond repair		38	0.62
	Salinity		36	0.59

S.No.	Parameter	Unit	Value	Percentage to Total*
	Due to industrial effluents		20	0.33
	Others		5,769	94.51
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		4,240	28.50
	Usually filled up		4,265	28.67
	Rarely filled up		3,630	24.40
	Never filled up		2,741	18.43
	Total		14,876	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		6,998	79.58
	2 to 5		1,753	19.93
	6 to 10		20	0.23
	11 to 20		9	0.10
	21 to 50		5	0.06
	50 to 500		9	0.10
	Total		8,794	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		10,094	67.83
	0.5 hectares to 1.0 hectares		4,133	27.77
	1 hectares to 5 hectares		624	4.19
	5 hectares to 10 hectares		30	0.20
	10 hectares to 50 hectares		0	0.00
	More than 50 hectares		0	0.00
	Total		14,881	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		2,712	18.21
	100 to 1000		2,712	18.20
	1000 to 10000		8,357	56.09
	More than 10000		1,117	7.50
	Total		14,898	100.00
9	**Number of encroached water bodies**	No.	50	

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

Himachal Pradesh

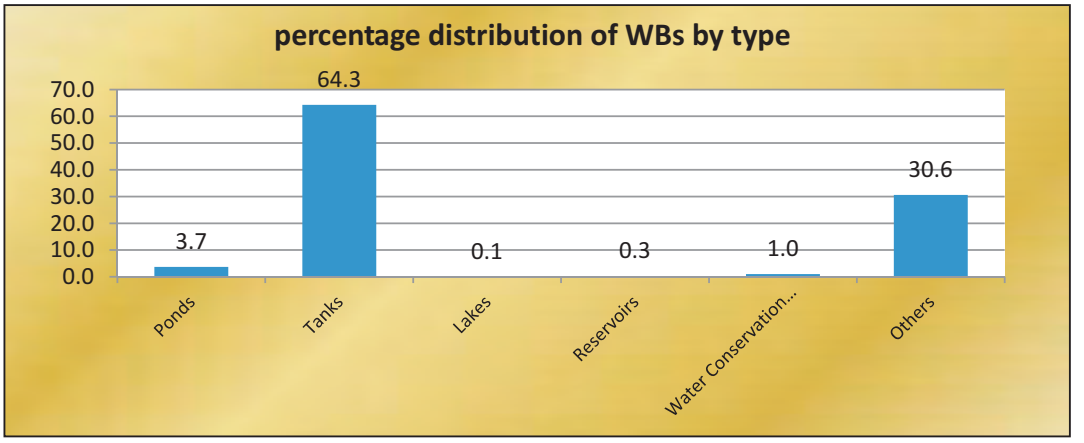
The State is popularly known as "Devabhoomi", the abode of the Gods. The splendid heights of the Himalayan ranges, with its great scenic beauty and aura of spiritual calm seem the natural home of the Gods. Two thousands or more temples all over the State, reiterate this fact.

A lake in Lahaul-spiti District

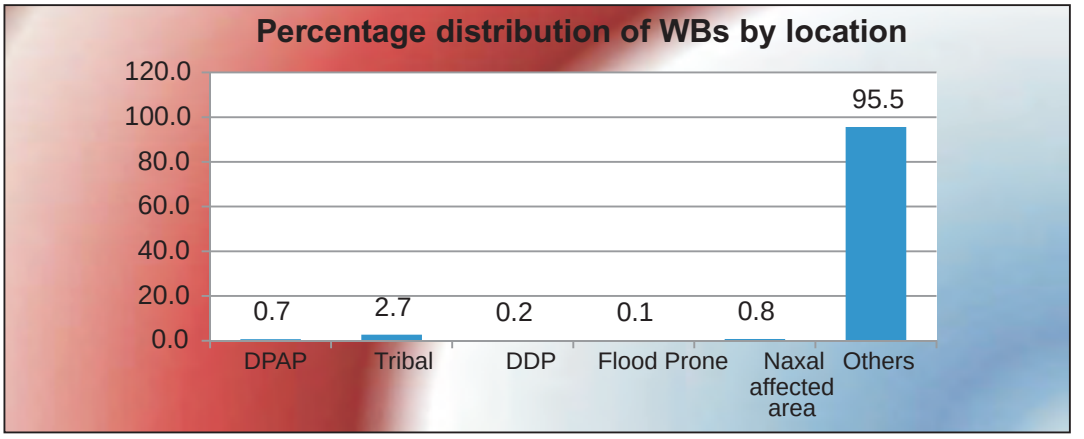
The State has an area of 55,673 km^2. It has 12 districts with a population of 68,64,602.

Major findings of the census

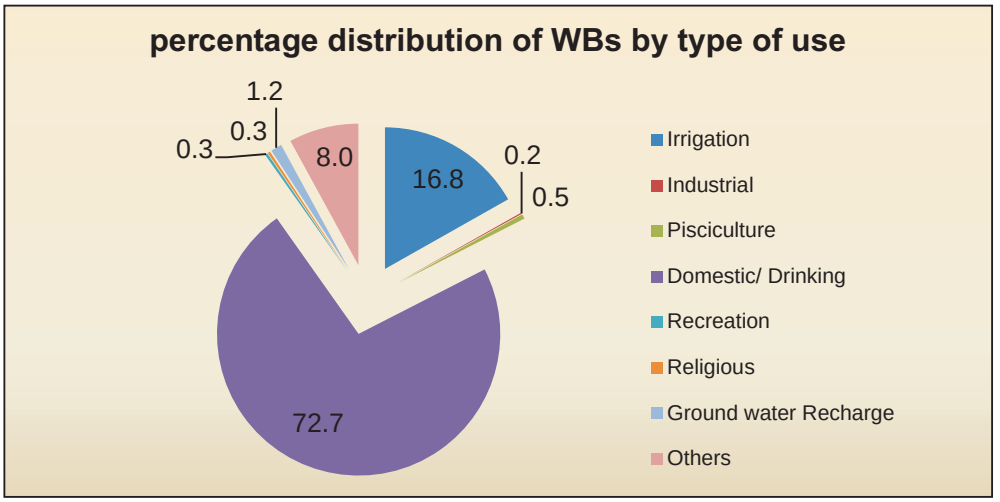
- In 1st census of water bodies, 88,017 water bodies have been enumerated in the State of Himachal Pradesh, out of which majority, i.e. 99.3% (87,364) are in rural areas and the remaining 0.7% (653) in urban areas. Majority of the water bodies are tanks followed by other water bodies as depicted from chart given below.



- 55.6% (48,927) are under public ownership whereas the remaining 44.4% (39,090) are under private ownership. By location, 2.7% (2,339) water bodies are located in tribal areas whereas the remaining 97.3% (85,678) are located in the areas under 'Drought Prone Areas Programme', flood prone area, naxal affected and other areas. Distribution of water bodies by location is shown in the charts given below.



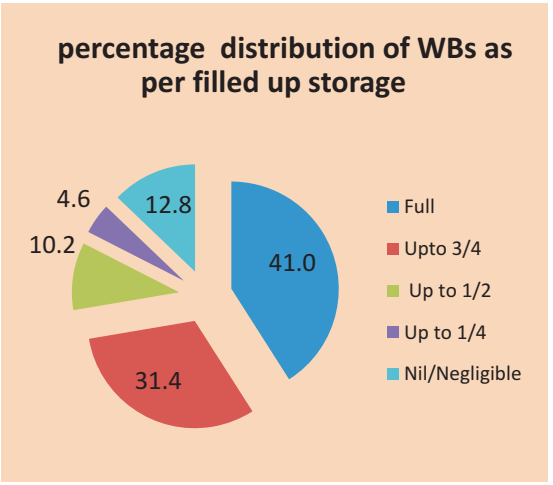
- Out of 88,017 water bodies, 86.2% (75,871) water bodies are in use whereas rest 13.8% (12,146) are not in use on account of drying up, siltation, destroyed beyond repair, salinity and other reasons. Out of 'in use' water bodies, majority of them are used for domestic/ drinking purpose followed by irrigation. Percentage distribution of water bodies by type of use is shown in the diagram given below.

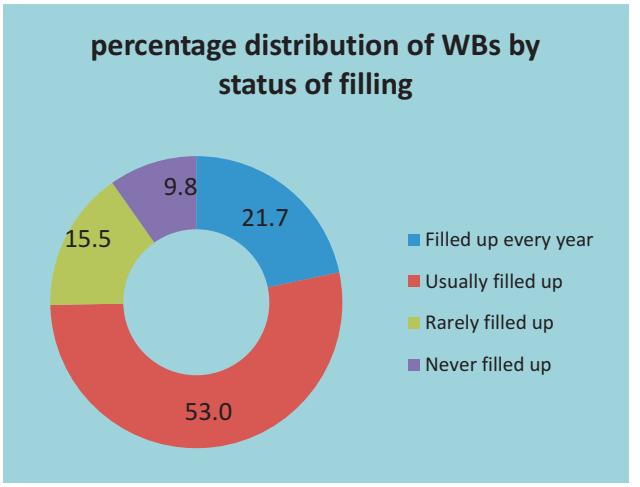


- There are 6,764 natural and 81,253 man-made water bodies in the State of Himachal Pradesh. Out of 6,764 natural water bodies, 98.5% (6,665) water bodies are located in rural areas and the remaining 1.5% (99) are located in urban areas. Out of 81,253 man-made water bodies, 99.3% (80,699) water bodies are located in rural areas and the remaining 0.7% (554) are located in urban areas. Most of the man-made water bodies have original cost of construction upto Rs.50,000.

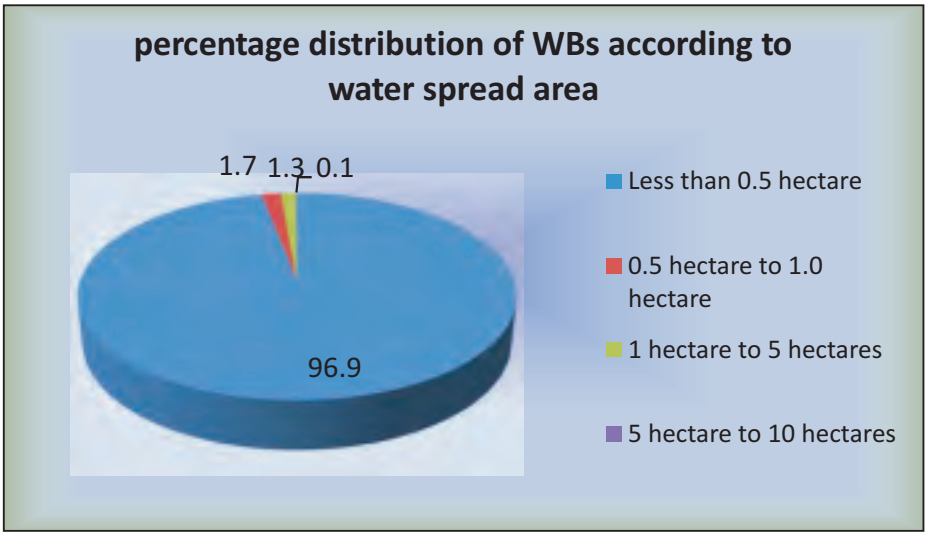

A tank in Chamba District

- Out of 88,017 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 60,185 water bodies. During reference year 2017-18, out of these 60,185 water bodies, 41.0% (24,656) water bodies had fully filled up storage capacity, 31.4% (18,875) water bodies had storage capacity filled upto three fourth level, 10.2% (6,135) water bodies had storage capacity filled upto half level, 4.6% (2,783) water bodies had storage capacity filled upto one fourth level whereas 12.8% (7,736) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of these 60,185 water bodies, 21.7% (13,072) water bodies are found to be filled up every year, 53.0% (31,884) are usually filled up, 15.5% (9,353) are rarely filled up and 9.8% (5,876) are never filled up. Percentage distribution of water bodies by 'status of filling' and 'filled up storage capacity' is shown in the diagram given below.

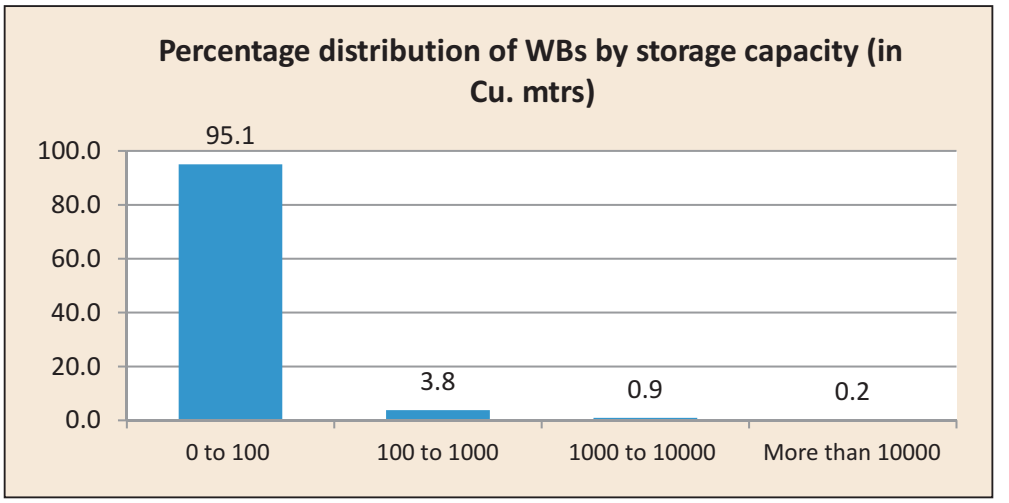




- Out of all water bodies, 2,731 water bodies are covered in District Irrigation Plan/State Irrigation Plan. Among these water bodies, 92.3% (2,521) are tanks whereas the remaining 7.7% (210) are ponds, lakes, reservoirs etc. Out of 'in use' water bodies, 93.2% (70,695) are benefitting one (01) city/town, 6.4% (4,844) water bodies are fulfilling requirements of 2- 5 cities/ towns and the remaining 0.4% (332) water bodies are benefitting more than five (05) cities/towns.
- State has reported encroachment in 42 water bodies, out of which 24 are tanks, 2 are ponds and the remaining 16 are others.
- Out of 88,017 water bodies, the information on 'water spread area' was reported in 87,352 water bodies. Out of these 87,352 water bodies, 96.9% (84,664) of the water bodies have water spread area less than 0.5 hectares, 1.7% (1,464) have water spread area between 0.5 to 1.0 hectares. Distribution of water bodies by 'water spread area' is shown in charts given below.



- In terms of storage capacity, 95.1% (83,677) water bodies have storage capacity upto 100 Cubic Meters whereas 0.2% (197) water bodies have storage capacity more than 10,000 cubic meters. Distribution of water bodies by 'storage capacity of water bodies' is shown in charts given below.



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

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	**Total Number of Water Bodies**	**no.**	88,017	
	Total Number of Water Bodies in Rural Areas	**no.**	87,364	99.26
	Total Number of Water Bodies in Urban Areas	**no.**	653	0.74
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		3,247	3.69
	Tanks		56,583	64.29
	Lakes		106	0.12
	Reservoirs		249	0.28
	Water Conservation Schemes/ Percolation tanks/ Check dams		893	1.01
	Others		26,939	30.61
b	**Water Bodies with Private Ownership**	**no.**	39,090	44.41
	Water Bodies by area	**no.**		
	DPAP		625	0.71
	Tribal		2,339	2.66
	DDP		165	0.19
	Flood Prone		49	0.06
	Naxal affected area		667	0.76
	Others		84,172	95.63
	Total		88,017	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		12,751	16.81
	Industrial		116	0.15
	Pisciculture		395	0.52
	Domestic/ Drinking		55,174	72.72
	Recreation		228	0.30
	Religious		207	0.27
	Ground Water recharge		965	1.27
	Others		6,035	7.95
	Total		75,871	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		6,764	7.68
	Man Made		81,253	92.32
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		4,904	40.38
	Construction		293	2.41
	Siltation		1,185	9.76
	Destroyed beyond repair		2,923	24.07

S.No.	Parameter	Unit	Value	Percentage to Total *
	Salinity		120	0.99
	Due to industrial effluents		18	0.15
	Others		2,703	22.25
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		13,072	21.72
	Usually filled up		31,884	52.98
	Rarely filled up		9,353	15.54
	Never filled up		5,876	9.76
	Total		60,185	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		70,695	93.18
	2 to 5		4,844	6.38
	6 to 10		194	0.26
	11 to 20		103	0.14
	21 to 50		25	0.03
	50 to 500		8	0.01
	Total		75,869	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		84,664	96.92
	0.5 hectares to 1.0 hectares		1,464	1.68
	1 hectares to 5 hectares		1,148	1.31
	5 hectares to 10 hectares		57	0.07
	10 hectares to 50 hectares		13	0.01
	More than 50 hectares		6	0.01
	Total		87,352	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		83,677	95.07
	100 to 1000		3,340	3.8
	1000 to 10000		803	0.91
	More than 10000		197	0.22
	Total		88,017	100.00
9	**Number of encroached water bodies**	No.	42	0.05

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

JHARKHAND

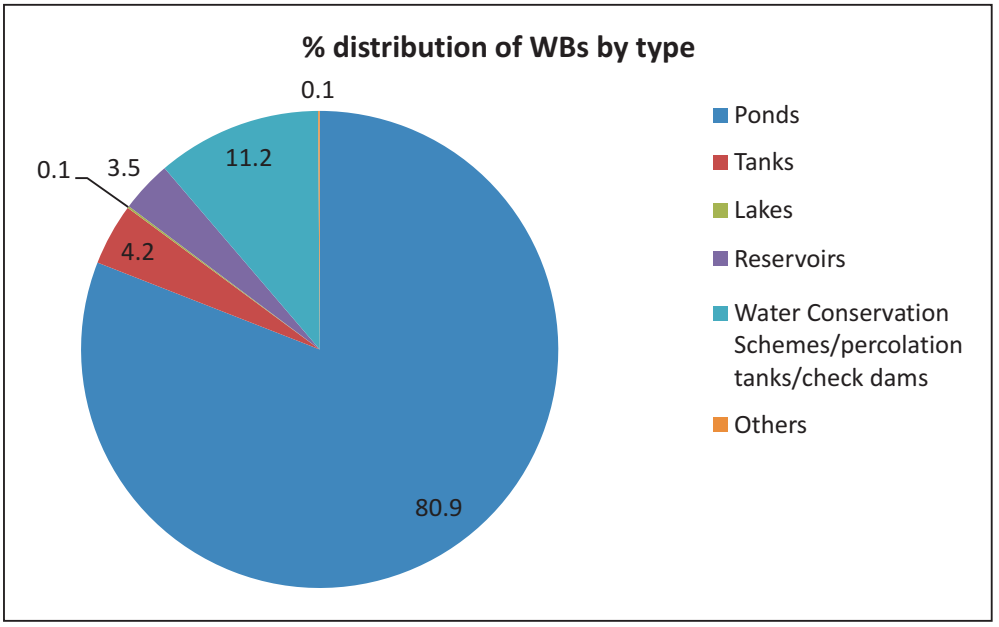
Jharkhand ("The land of forest") is a state in eastern India, created on 15 November 2000, from what was previously the southern half of Bihar. The state shares its border with the states of Bihar to the north, Uttar Pradesh to the northwest, Chhattisgarh to the west, Odisha to the south and West Bengal to the east. It has an area of 79,710 square km. Hindi is the official language of the state. The state is known for its waterfalls, hills and holy places. Total population of Jharkhand as per 2011 census is 3,29,66,238.

A Reservoire in village-Alinagar, District-Palamu, Jharkhand

Major findings of the census

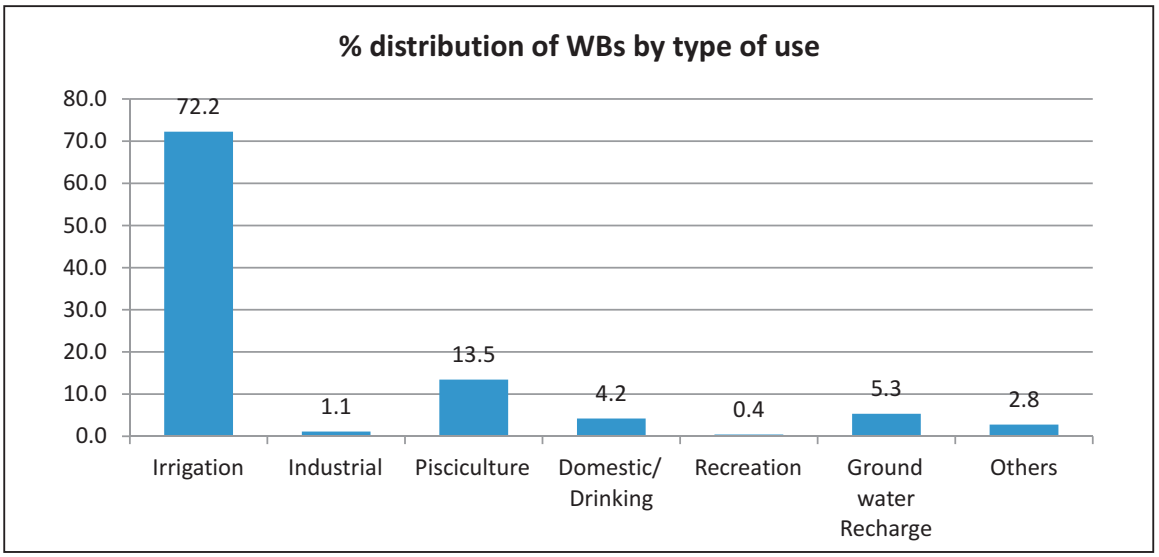
- In 1st census of water bodies, 1,07,598 water bodies have been enumerated, out of which 98.7% (1,06,176) are in rural areas and the remaining 1.3% (1,422) are in urban areas. 62% (66,659) are public owned whereas the remaining 38% (40,939) are under private ownership. By location, 53,574 water bodies are in tribal areas and 623 water bodies are in flood prone area.

- Majority of the water bodies are ponds followed by water conservation schemes/percolation tanks/check dams and tanks as depicted from chart given below.



- Out of 1,07,598 water bodies, 87.9% (94,534) water bodies are in use; 12.1% (13,064) water bodies are reported not in use on account of drying up, siltation, destroyed beyond repair and other reasons. Among all the 'in use' water bodies, 82.2% (77,685) are ponds, 10.1% (9,533) are water conservation schemes/ percolation tanks/check dams and the remaining 7.7% (7,316) are tanks,

lakes, reservoirs etc. Out of 'in use' water bodies (i.e. 94,534), 72.2% (68,286) water bodies are used for irrigation purpose in the State.



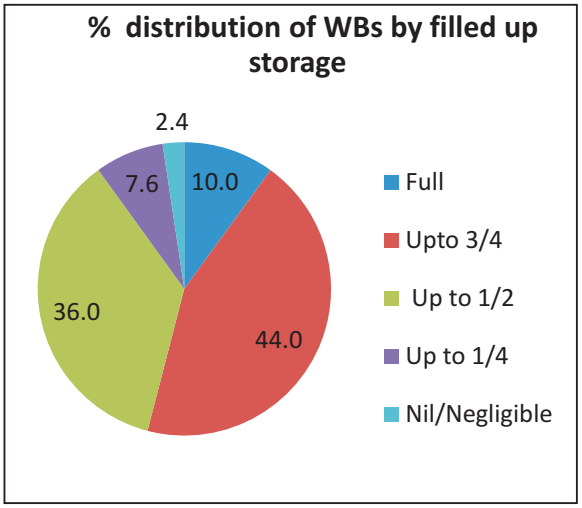
- There are 19,720 natural and 87,878 man-made water bodies in Jharkhand. Out of 19,720 natural water bodies, 99% (19,522) water bodies are located in rural areas whereas 1% (198) are located in urban areas. Out of 87,878 man-made water bodies, 98.6% (86,654) water bodies are located in rural areas whereas 1.4% (1,224) are located in urban areas. Most of the man-made water bodies have original cost of construction between Rs.1 Lakh to Rs.5 Lakh.

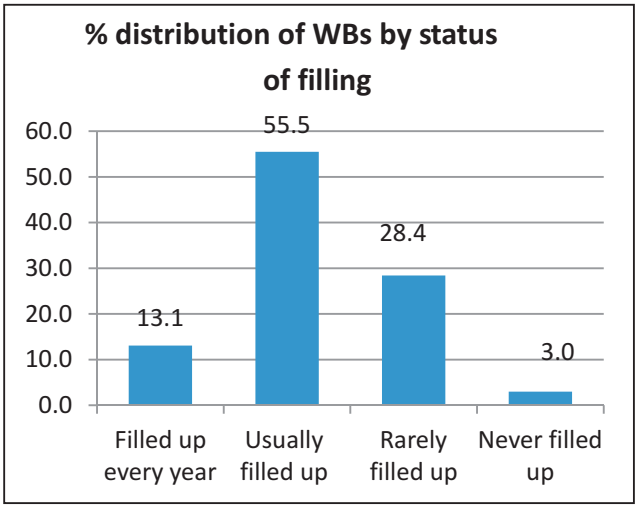
A Pond in village-Jamalpur, District-Sahebganj, Jharkhand

- Out of 1,07,598 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 95,478 water bodies. During reference year 2017-18, out of these 95,478 water bodies, 10% (9,546) water bodies had fully filled up storage capacity, 44% (42,057) water bodies had storage capacity filled upto three fourth level, 36% (34,352) water bodies had storage capacity filled upto half level, 7.6% (7,253) water bodies had storage capacity filled upto one fourth level

whereas 2.4% (2,270) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 95,478 water bodies, 55.5% (52,997) water bodies are usually filled up, 28.4% (27,126) rarely filled up, 13.1% (12,494) found to be filled up every year, 3% (2,861) are never filled up.

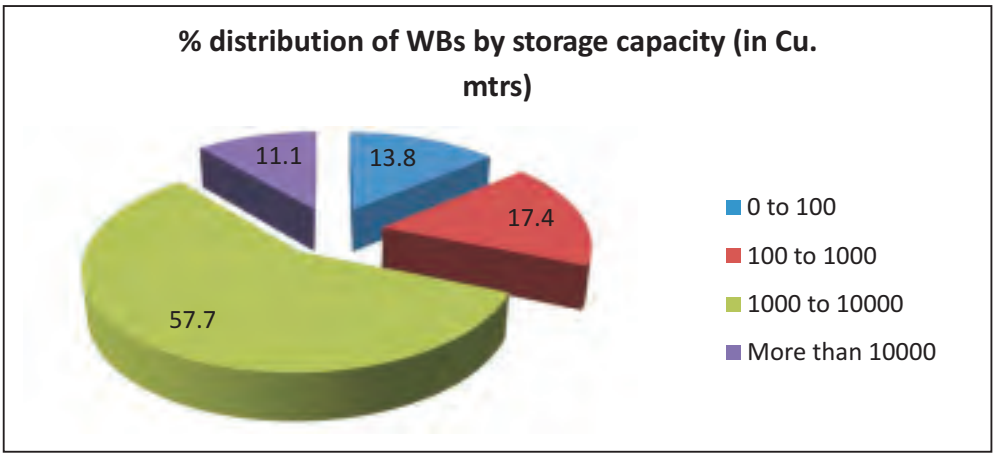
- Percentage distribution of water bodies by status of filling and filled up storage is given in the diagram given below. Out of total storage capacity (i.e. 3,07,03,70,460 cubic meters) of 'in use' water bodies, maximum storage capacity (99.3%, i.e. 3,05,00,06,787 cubic meters) is attributed to tanks and ponds.





- 11.2% (12,008) are basically water conservation schemes/ percolation dams/ check dams. Out of 'in use' water bodies, 89.8% (84,898) are benefitting one (01) city/town and 9.5% (8,994) water bodies are fulfilling requirements of 2- 5 cities/ towns.

- Out of 1,07,598 water bodies, the information on 'water spread area' was reported in 1,07,327 water bodies. Out of these 1,07,327 water bodies, 68.3% (73,286) of the water bodies have water spread area less than 0.5 hectares. In terms of storage capacity, out of total 1,07,598 water bodies, 57.7% (62,068) water bodies have storage capacity between 1,000 to 10,000 cubic meters and majority of these water bodies are in rural areas. Distribution of storage capacity of water bodies is given in charts given below:



- Out of 1,07,598 water bodies, 560 water bodies are reported to be encroached. These are 472 ponds by 37 water conservation schemes/ percolation dams/ check dams, 30 tanks, 15 reservoirs, 5 lakes and 1 others. Among the water bodies whose encroachment area can be assessed, twenty two (22) are assessed to have less than 25% area under encroachment, seven (7) having encroachment area ranging between 25% to 75% and one (01) has more than 75% encroachment area.
- Key parameters of First Census of Water Bodies for the State of Jharkhand are given in the Annexure.

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	**Total Number of Water Bodies**	**no.**	1,07,598	
	Total Number of Water Bodies in Rural Areas	**no.**	1,06,176	98.68
	Total Number of Water B odies in Urban Areas	**no.**	1,422	1.32
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		87,080	80.93
	Tanks		4,500	4.18
	Lakes		135	0.13
	Reservoirs		3,763	3.50
	Water Conservation Schemes/ Percolation tanks/ Check dams		12,008	11.16
	Others		112	0.10
b	**Water Bodies with Private Ownership**	**no.**	40,939	38.05
	Water Bodies by area	**no.**		
	DPAP		9,249	8.60
	Tribal		53,574	49.79
	DDP		2,040	1.90
	Flood Prone		623	0.58
	Naxal affected area		7,277	6.76
	Others		34,835	32.38
	Total		1,07,598	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		68,286	72.23
	Industrial		1,077	1.14
	Pisciculture		12,721	13.46
	Domestic/ Drinking		4,000	4.23
	Recreation		395	0.42
	Religious		391	0.41
	Ground Water recharge		5,036	5.33
	Others		2,630	2.78
	Total		94,536	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		19,720	18.33
	Man Made		87,878	81.67
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		4,075	31.19
	Construction		1,689	12.93
	Siltation		1,731	13.25
	Destroyed beyond repair		894	6.84
	Salinity		147	1.13
	Due to industrial effluents		114	0.87
	Others		4,416	33.80

S.No.	Parameter	Unit	Value	Percentage to Total *
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		12,494	13.09
	Usually filled up		52,997	55.51
	Rarely filled up		27,126	28.41
	Never filled up		2,861	3.00
	Total		95,478	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		84,898	89.81
	2 to 5		8,994	9.51
	6 to 10		217	0.23
	11 to 20		136	0.14
	21 to 50		76	0.08
	50 to 500		213	0.23
	Total		94,534	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		73,286	68.28
	0.5 hectares to 1.0 hectares		20,997	19.56
	1 hectares to 5 hectares		11,153	10.39
	5 hectares to 10 hectares		1,282	1.19
	10 hectares to 50 hectares		415	0.39
	More than 50 hectares		194	0.18
	Total		1,07,327	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		14,805	13.76
	100 to 1000		18,767	17.44
	1000 to 10000		62,068	57.69
	More than 10000		11,958	11.11
	Total		1,07,598	100.00
9	**Number of encroached water bodies**	No.	560	0.52

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

KARNATAKA

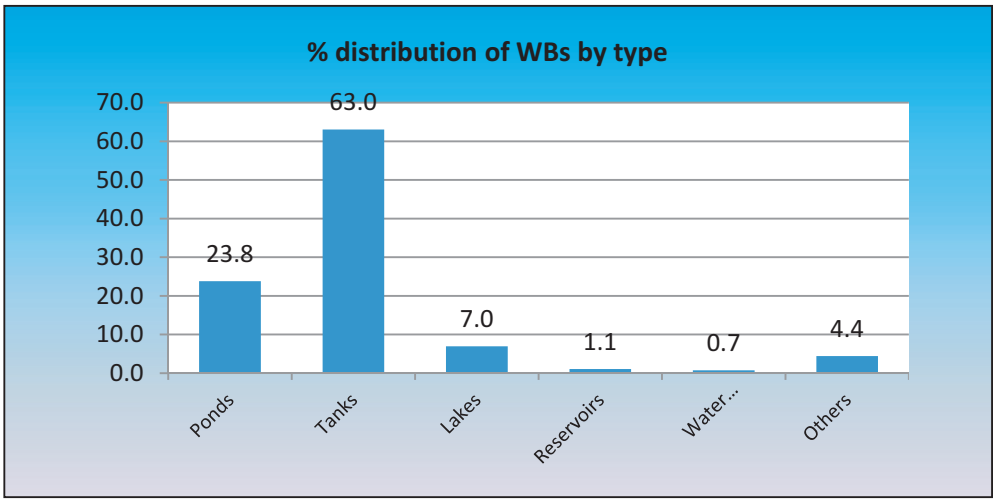
Karnataka State is blessed with nature in abundance. It has Western Ghats with rich forest resources; plain valleys with rich and varied crop pattern; and narrow Coastal line with many harbours. It has the remains of numerous pre-historic settlements, innumerable inscriptions and monuments of rich historical and cultural heritage.

A tank in Gulbargadistrict

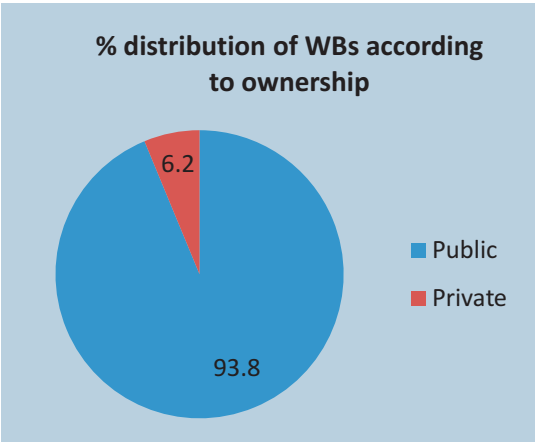
Karnataka has 30 districts with a total geographical area of 1,92,000 km^2 and a population of 6,10,95,000.

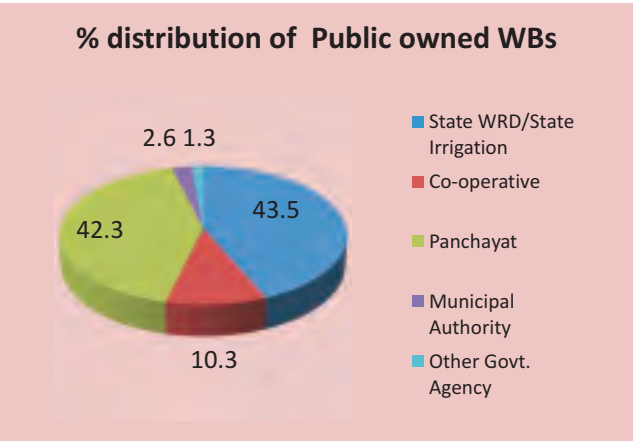
Major findings of the census

- In 1st census of water bodies, 27,013 water bodies have been enumerated in the State of Karnataka, out of which 97.1% (26,224) are in rural areas and the remaining 2.9% (789) are in urban areas. Majority of the water bodies are tanks as depicted from chart given below.

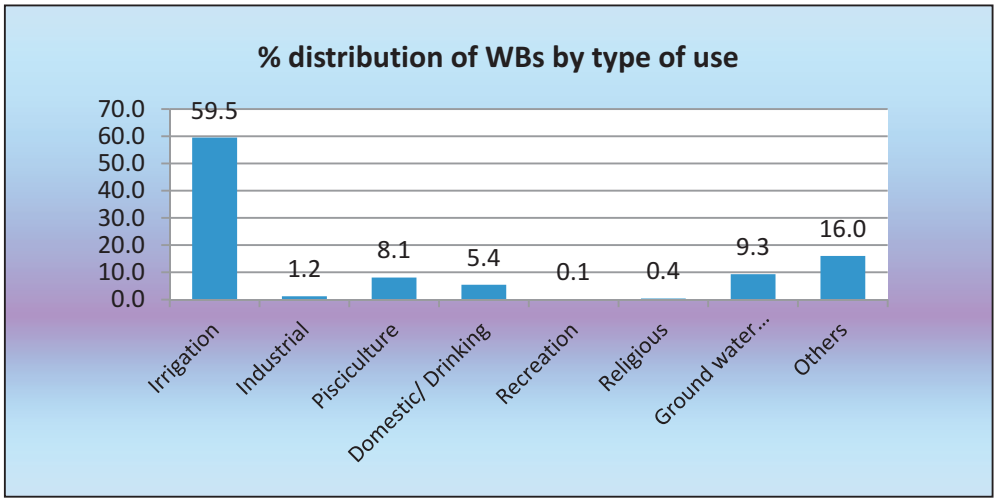


- 93.8% (25,327) are public owned whereas the remaining 6.2% (1,686) are under private ownership. This reflects the dominance of public authorities in ownership of water bodies. Distribution of water bodies by ownership status is shown in the charts given below. By location, 11.5% (3,110) water bodies are located in tribal areas, 9.4% (2,542) are located in areas under Drought Prone Area Programme (DPAP) and the remaining 79.1% (21,361) are located in naxal affected areas, DDP, flood prone and other areas.





- Out of all water bodies, 21.7% (5,874) water bodies are 'in use' whereas remaining 78.3% (21,139) are not in use on account of drying up, siltation, salinity, destroyed beyond repair and other reasons. Out of 'in use' water bodies, a major proportion of water bodies are used in irrigation. Percentage distribution of water bodies by type of use is shown in the diagram given below.

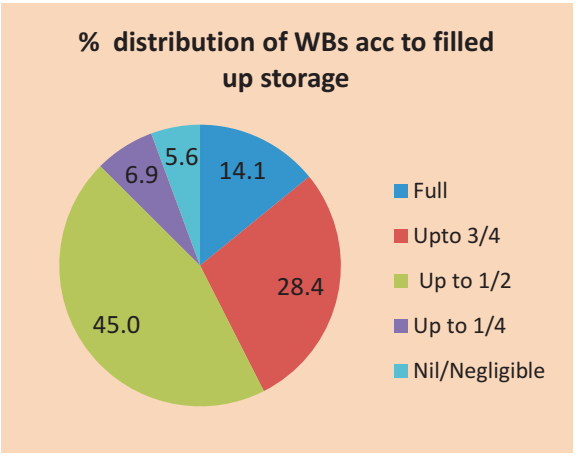


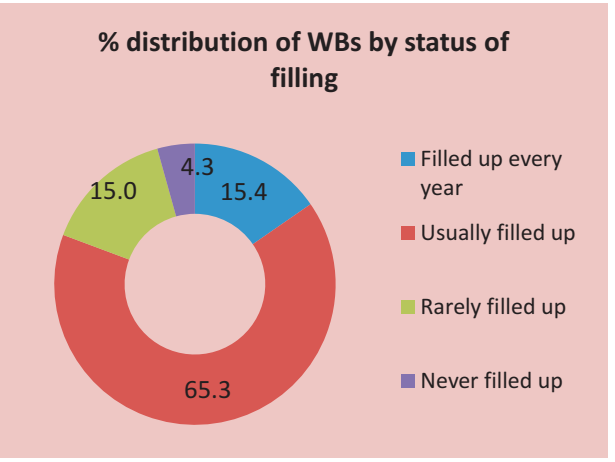
- In the State of Karnataka, there are 26,293 natural and 720 man-made water bodies. Out of 26,293 water bodies, 97% (25,504) are located in rural areas whereas remaining 3% (789) are located in urban areas. All man-made water bodies are located in rural areas. Most of the man-made water bodies have original cost of construction upto1 lakh.


A tank in Mysore District

- Out of 27,013 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 25,627 water bodies. During reference year 2017-18, out of these 25,627 water bodies, 14.1% (3,616) water bodies had fully filled up storage capacity, 28.4% (7,271) water bodies had storage capacity filled upto three fourth level, 45% (11,535) water bodies had

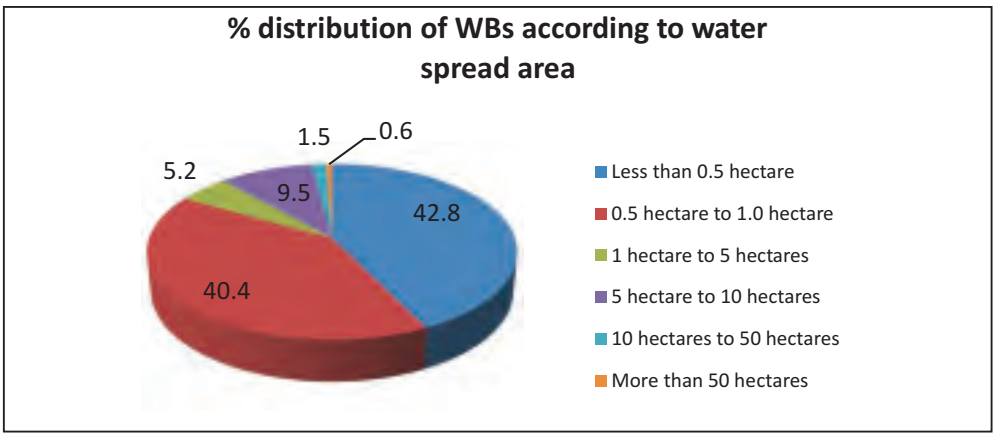
storage capacity filled upto half level, 6.9% (1,762) water bodies had storage capacity filled upto one fourth level whereas 5.6 % (1,443) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 25,627 water bodies, 15.4% (3,935) water bodies are found to be filled up every year, 65.3% (16,746) are usually filled up, 15% (3,841) are rarely filled up and 4.3% (1,105) are never filled up. Percentage distribution of water bodies by 'status of filling' and 'filled up storage capacity' is shown in the diagram given below.



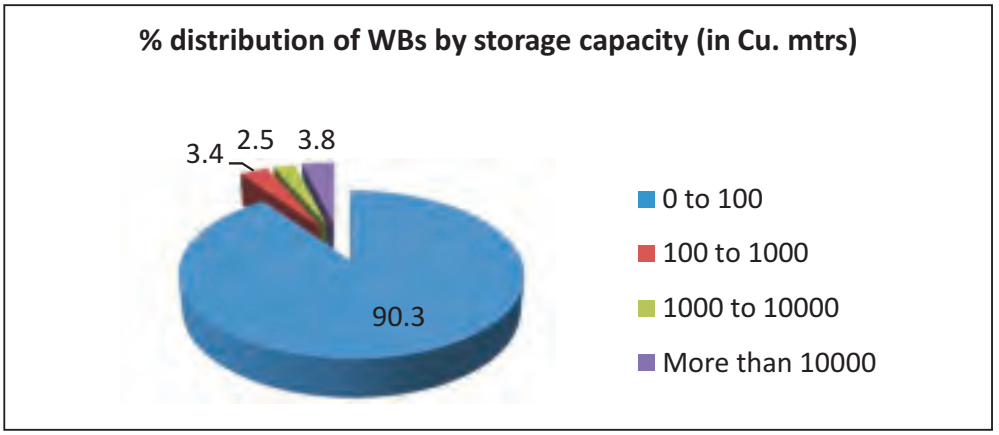


- Out of all water bodies, 4.2% (1,133) are covered in District Irrigation Plan/State Irrigation Plan. Among these 61.8% (700) are tanks and the remaining 38.2% (433) are ponds, lakes, reservoirs etc. Out of 'in use' water bodies, 23.7% (1,390) are benefitting one (01) city/town,70.1% (4,120) water bodies are fulfilling requirements of 2- 5 cities/ towns and the remaining 6.2% (364) water bodies are benefitting more than five (05) cities/towns. State has reported encroachment in 948 water bodies out of all the enumerated water bodies. 74.7% (708) encroached water bodies are tanks followed by 19.0% (180) ponds. Remaining 6.3% (60) encroached water bodies are lakes, reservoirs, water conservation schemes/ percolation tanks/ check dams and other bodies.

- Out of 27,013 water bodies, the information on 'water spread area' was reported in 26,817 water bodies. Out of these 26,817 water bodies, 42.8% (11,477) of the water bodies have water spread area less than 0.5 hectares whereas, 40.4% (10,845) water bodies have water spread area between 0.5 hectares to 1.0 hectares. Distribution of water bodies by 'water spread area' is shown in pie chart given below:



- In terms of storage capacity, 90.3% (24,403) water bodies have storage capacity between 0 to 100 cubic meters whereas 3.8% (1,027) have storage capacity more than 10000 cubic meters. Distribution of water bodies by 'storage capacity' is shown in pie chart given below:



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

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	Total Number of Water Bodies	no.	27,013	
	Total Number of Water Bodies in Rural Areas	no.	26,224	97.08
	Total Number of Water Bodies in Urban Areas	no.	789	2.92
a	Total Number of Water Bodies by type	no.		
	Ponds		6,431	23.81
	Tanks		17,015	62.99
	Lakes		1,892	7.00
	Reservoirs		289	1.07
	Water Conservation Schemes/ Percolation tanks/ Check dams		195	0.72
	Others		1,191	4.41
b	Water Bodies with Private Ownership	no.	1,686	6.25
	Water Bodies by area	no.		
	DPAP		2,542	9.42
	Tribal		3,110	11.52
	DDP		669	2.48
	Flood Prone		172	0.64
	Naxal affected area		333	1.23
	Others		20,187	74.71
	Total		27,013	100.00
2	Water Bodies by type of use	no.		
	Irrigation		3,495	59.50
	Industrial		70	1.19
	Pisciculture		476	8.10
	Domestic/ Drinking		320	5.45
	Recreation		4	0.07
	Religious		21	0.36
	Ground Water recharge		548	9.33
	Others		940	16.00
	Total		5,874	100.00
3	Natural/ Man Made Water Bodies	no.		
	Natural		26,293	97.33
	Man Made		720	2.67
4	Water Bodies Not in use due to reasons	no.		
	Dried up		3,204	15.16
	Construction		2,357	11.15
	Siltation		1,373	6.50
	Destroyed beyond repair		211	1.00
	Salinity		55	0.26

S.No.	Parameter	Unit	Value	Percentage to Total *
	Due to industrial effluents		96	0.45
	Others		13,843	65.49
5	Distribution of Water Bodies as per status of filling	no.		
	Filled up every year		3,935	15.35
	Usually filled up		16,746	65.35
	Rarely filled up		3,841	14.99
	Never filled up		1,105	4.31
	Total		25,627	100.00
6	Distribution of Water Bodies by number of city/ town benefitted	no.		
	1		1,390	23.66
	2 to 5		4,120	70.14
	6 to 10		197	3.35
	11 to 20		92	1.57
	21 to 50		56	0.95
	50 to 500		19	0.32
	more than 500		0	0.00
	Total		5,874	100.00
7	Distribution of Water Bodies by Water Spread Area	no.		
	Less than 0.5 hectares		11,477	42.80
	0.5 hectares to 1.0 hectares		10,845	40.44
	1 hectares to 5 hectares		1,397	5.21
	5 hectares to 10 hectares		2,536	9.46
	10 hectares to 50 hectares		394	1.47
	More than 50 hectares		168	0.63
	Total		26,817	100.00
8	Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)	Cu. Mtrs		
	0 to 100		24,403	90.33
	100 to 1000		900	3.33
	1000 to 10000		683	2.53
	More than 10000		1,027	3.80
	Total		27,013	100.00
9	Number of encroached water bodies	no.	948	3.51

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

KERALA

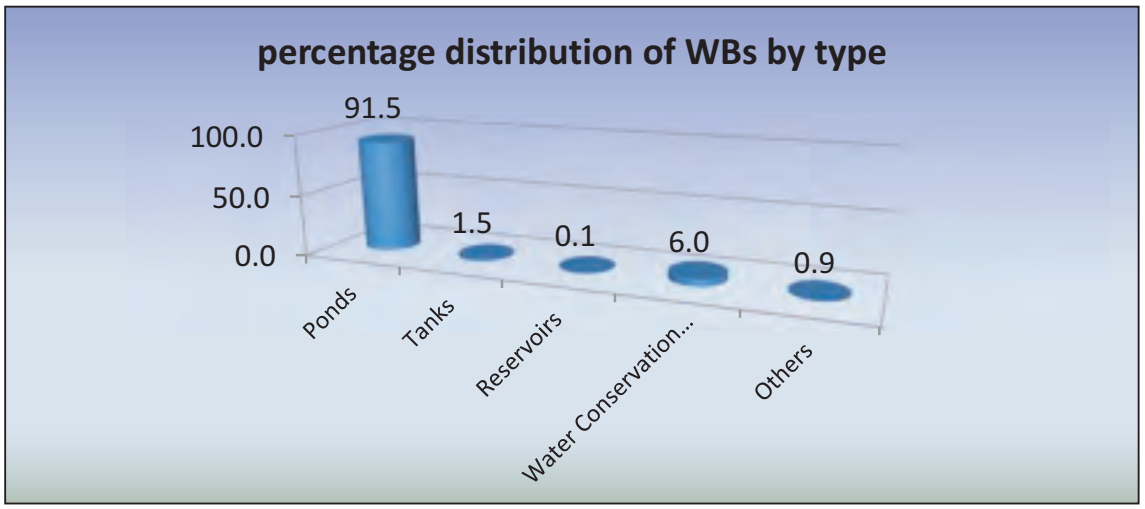
A State endowed with a wide variety of flora and fauna, wildlife, beaches, mountains and backwaters. State brings a magical tryst with nature through its various hills and hill stations on the windward side of the majestic Western Ghats. Kerala is home to a number of spectacular beaches, luscious waterfalls and many wildlife sanctuaries housing exotic and rare species of flora and fauna.

A pond in Palakkad District

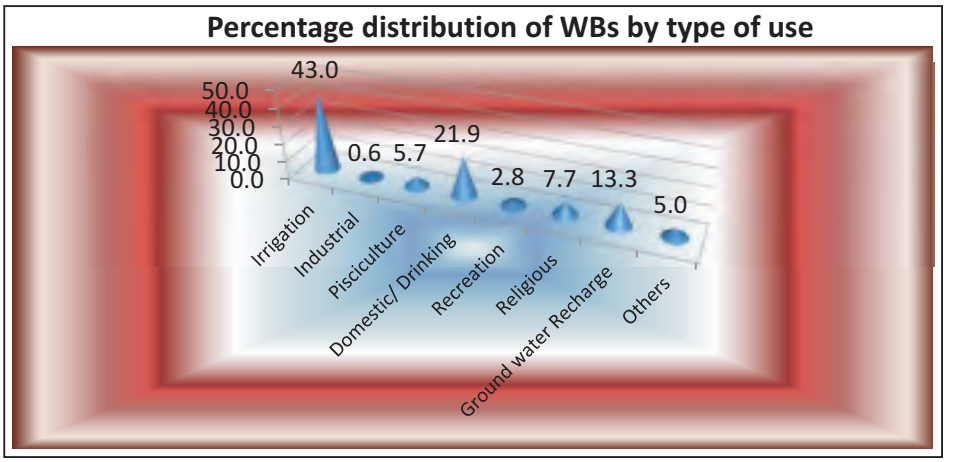
The State has an area of 38,863 km^2. It has 14 districts with a population of 3,34,06,061.

Major findings of the census

- In 1st census of water bodies, 55,734 water bodies have been enumerated in the State of Kerala, out of which majority, i.e. 89.2% (49,725) are in rural areas and the remaining 10.8% (6,009) are in urban areas. Out of all water bodies, 70.7% (39,389) are under private ownership whereas the remaining 29.3% (16,345) are under public ownership. Majority of the water bodies are ponds as depicted from chart given below.



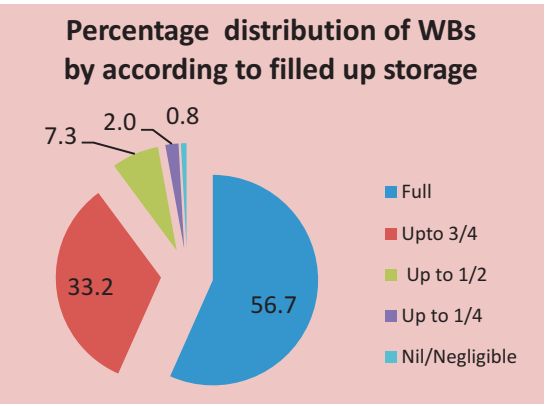
- 83.5% (46,550) water bodies are in use whereas rest 16.5% (9,184) are not in use on account of drying up, siltation, destroyed beyond repair, salinity and other reasons. Out of 'in use' water bodies, majority of them are used for irrigation followed by domestic/ drinking purpose. Percentage distribution of water bodies by type of use is shown in the diagram given below.

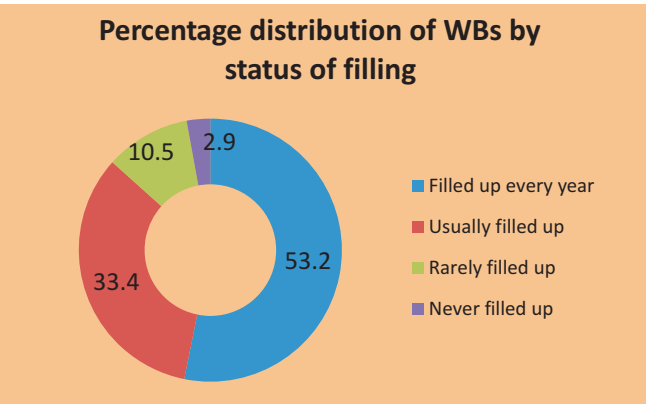


- There are 22,811 natural and 32,923 man-made water bodies in the State of Kerala. Out of 22,811 natural water bodies, 89.0% (20,306) water bodies are located in rural areas and the remaining 11.0% (2,505) are located in urban areas. Out of 32,923 man-made water bodies, 89.4% (29,419) water bodies are located in rural areas and the remaining 10.6% (3,504) are located in urban areas. Most of the man-made water bodies have original cost of construction upto Rs.50,000.


A Pond in Thiruvananthapuram District

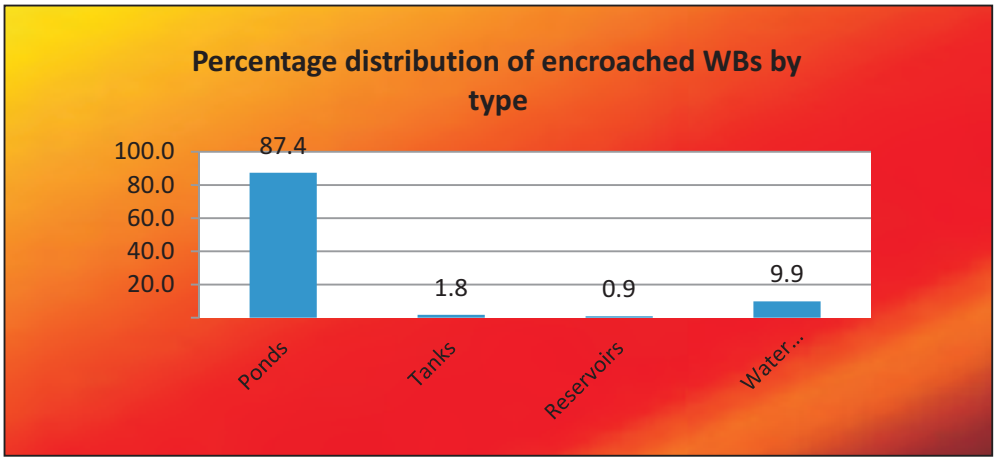
- Out of 55,734 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 51,922 water bodies. During reference year 2017-18, out of these 51,922 water bodies, 56.7% (29,424) water bodies had fully filled up storage capacity, 33.2% (17,233) water bodies had storage capacity filled upto three fourth level, 7.3% (3,781) water bodies had storage capacity filled upto half level, 2.0% (1,045) water bodies had storage capacity filled upto one fourth level whereas 0.8% (439) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of these 51,922 water bodies, 53.2% (27,612) water bodies are found to be filled up every year, 33.4% (17,373) are usually filled up, 10.5% (5431) are rarely filled up and 2.9% (1,506) are never filled up. Percentage distribution of water bodies by 'status of filling' and 'filled up storage capacity' is shown in the diagram given below.



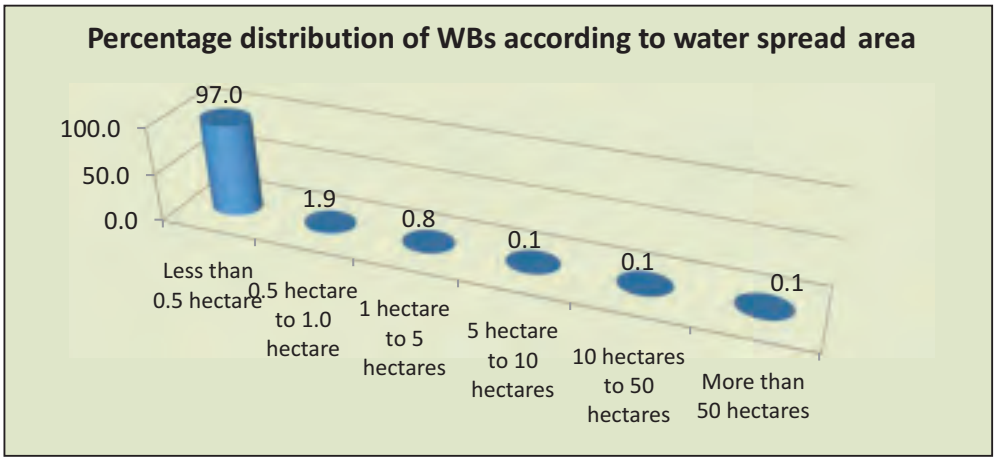


- Out of all water bodies, 1,397 water bodies are covered in District Irrigation Plan/State Irrigation Plan. Among these water bodies, 88.6% (1,238) are ponds whereas the remaining 11.4% (159) are tanks, lakes, reservoirs etc. Out of 'in use' water bodies, 93.4% (43,452) are benefitting one (01) city/town, 6.3% (2,952) water bodies are fulfilling requirements of 2- 5 cities/ towns and the remaining 0.3% (146) water bodies are benefitting more than five (05) cities/towns.

- State has reported encroachment in 111 water bodies, out of which 87.4% (97) are ponds and the remaining 12.6% (14) are tanks, reservoirs etc. Out of all these 111 water bodies, the encroachment area can be assessed in 47 water bodies. Among these 47 water bodies, 29 are assessed to have less than 25% area under encroachment, 11 having encroachment area ranging between 25% to 75% and remaining 7 have more than 75% area encroached.

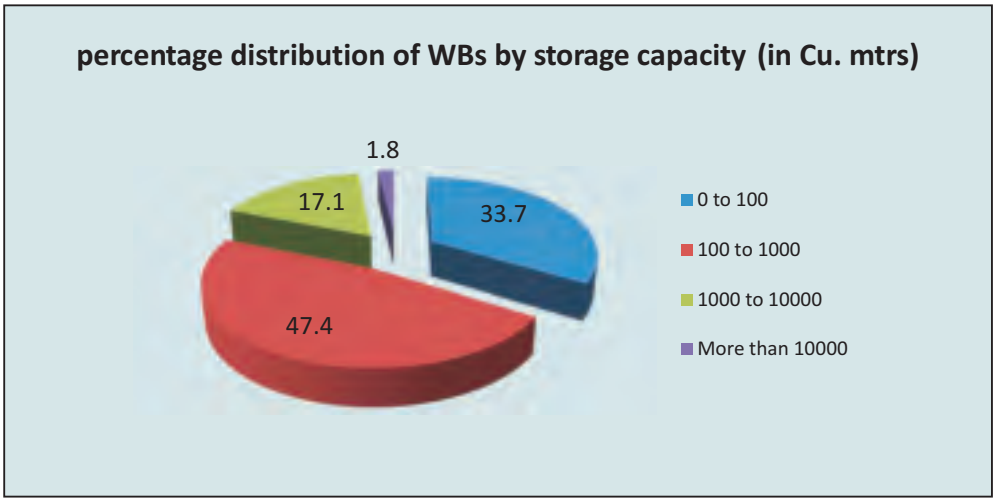


- Out of 55,734 water bodies, the information on 'water spread area' was reported in 55,725 water bodies. Out of these 55,725 water bodies, 97.0% (54,054) of the water bodies have water spread area less than 0.5 hectares, 1.9% (1,077) have water spread area between 0.5 to 1.0 hectares, whereas 0.1% (51) water bodies have water spread area more than 50 hectares. Distribution of water bodies by 'water spread area' is shown in charts given below.



- In terms of storage capacity, 17.1% (9,524) water bodies have storage capacity between 1,000 to 10,000 Cubic Meters whereas 1.8% (1,010) water bodies have storage capacity more than 10,000

cubic meters. Distribution of water bodies by 'storage capacity of water bodies' is shown in charts given below.



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

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	**Total Number of Water Bodies**	**no.**	55,734	
	Total Number of Water Bodies in Rural Areas	**no.**	49,725	89.22
	Total Number of Water Bodies in Urban Areas	**no.**	6,009	10.78
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		51,007	91.52
	Tanks		848	1.52
	Lakes		4	0.01
	Reservoirs		63	0.11
	Water Conservation Schemes/ Percolation tanks/ Check dams		3,349	6.01
	Others		463	0.83
b	**Water Bodies with Private Ownership**	**no.**	39,389	70.67
	Water Bodies by area	**no.**		
	DPAP		356	0.64
	Tribal		1,470	2.64
	DDP		0	0.00
	Flood Prone		1,098	1.97
	Naxal affected area		414	0.74
	Others		52,396	94.01
	Total		55,734	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		20,038	43.05
	Industrial		260	0.56
	Pisciculture		2,663	5.72
	Domestic/ Drinking		10,192	21.89
	Recreation		1,295	2.78
	Religious		3,591	7.71
	Ground Water recharge		6,199	13.32
	Others		2,312	4.97
	Total		46,550	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		22,811	40.93
	Man Made		32,923	59.07
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		642	6.99
	Construction		183	1.99
	Siltation		2,126	23.15

	Destroyed beyond repair		1,326	14.44
	Salinity		287	3.13
	Due to industrial effluents		43	0.47
	Others		4,577	49.84
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		27,612	53.18
	Usually filled up		17,373	33.46
	Rarely filled up		5,431	10.46
	Never filled up		1,506	2.90
	Total		51,922	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		43,452	93.34
	2 to 5		2,952	6.34
	6 to 10		29	0.06
	11 to 20		71	0.15
	21 to 50		26	0.06
	50 to 500		17	0.04
	More than 500		3	0.01
	Total		46,550	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		54,054	97.00
	0.5 hectares to 1.0 hectares		1,077	1.93
	1 hectares to 5 hectares		466	0.84
	5 hectares to 10 hectares		45	0.08
	10 hectares to 50 hectares		32	0.06
	More than 50 hectares		51	0.09
	Total		55,723	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		18,774	33.69
	100 to 1000		26,426	47.41
	1000 to 10000		9,524	17.09
	More than 10000		1,010	1.81
	Total		55,734	100.00
9	**Number of encroached water bodies**	No.	111	0.20

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

MADHYA PRADESH

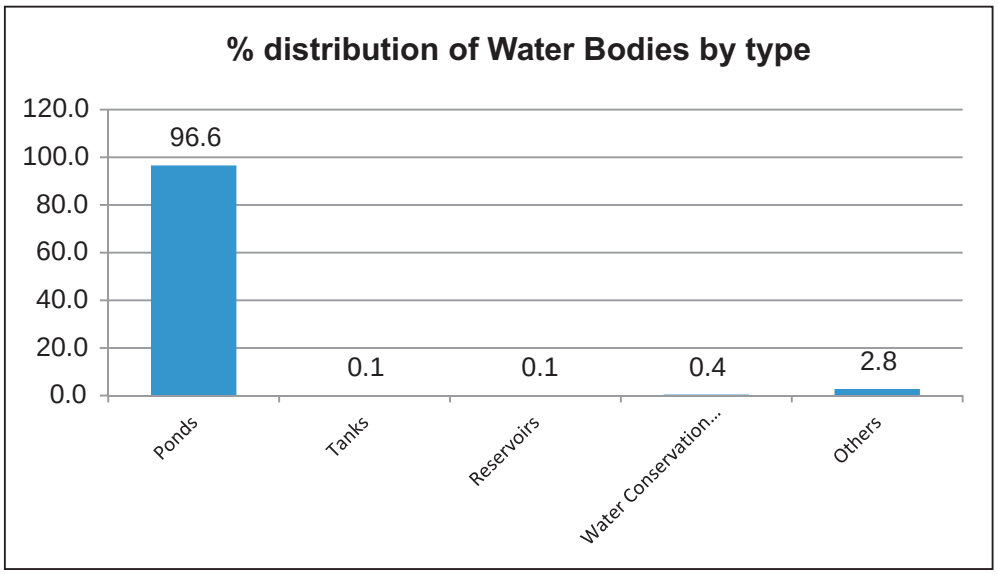
Madhya Pradesh is resplendent with the hill ranges of the Vindhyas and the Satpuras. Its natural settings beautified by hills, forests, rivers, rich heritages, exciting wild life and cultural diversity make it a land of many splendours. The landscape is made lucid by its rivers which carry their own legends and history with them. The land of Madhya Pradesh is steeped in distinctive traits of art and culture.

Amrit Sagar Talab in Ratlam District

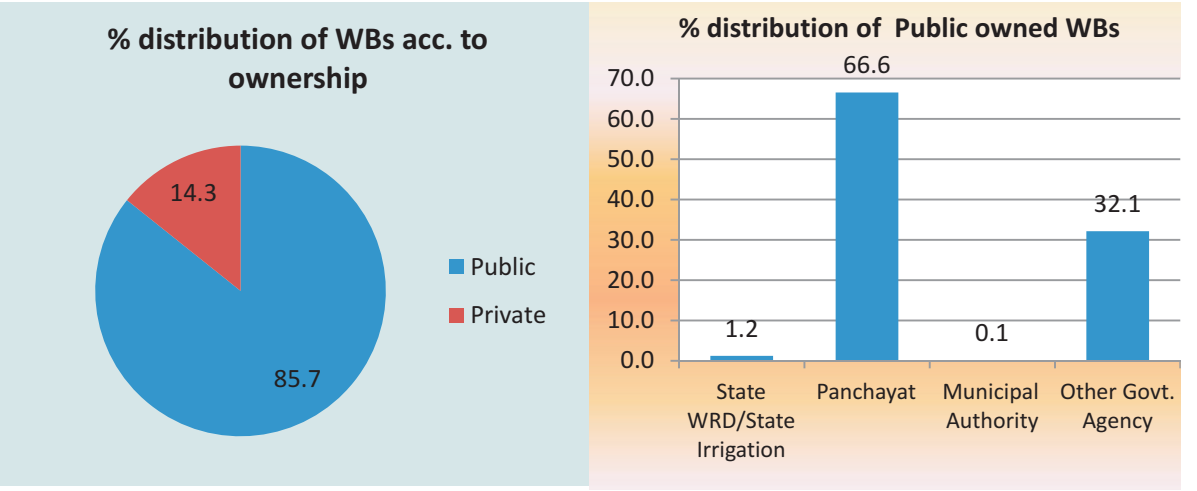
Madhya Pradesh has 52 districts with a total geographical area of 3,08,000 km^2 and a population of 7.27 crore.

Major findings of the census

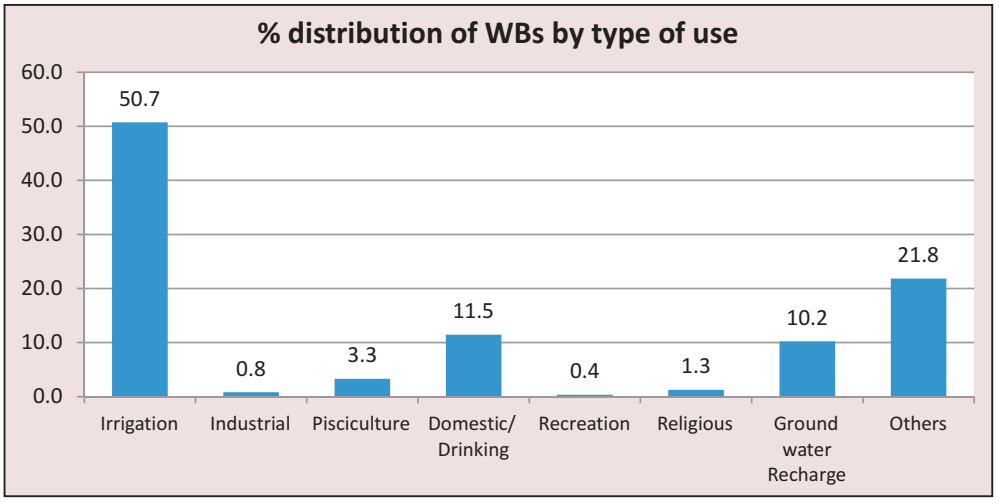
- In 1st census of water bodies, 82,643 water bodies have been enumerated in the State of Madhya Pradesh, out of which 98% (81,012) are in rural areas and the remaining 2% (1,631) are in urban areas. Majority of the water bodies are ponds as depicted from chart given below.



- Out of all water bodies, 85.7% (70,847) are under public ownership whereas the remaining 14.3% (11,796) are privately owned. This reflects the dominance of public authorities in ownership of water bodies. Distribution of water bodies by ownership status is shown in the following charts.



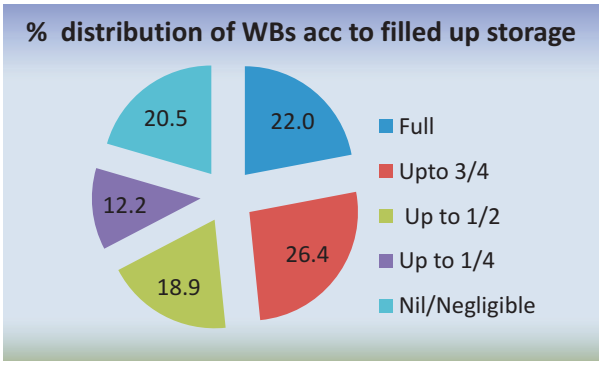
- 45.1% (37,257) water bodies are 'in use' whereas remaining 54.9% (45,386) are "not in use" on account of being dried up, destroyed beyond repair, siltation, salinity and other reasons. Among water bodies in use, a major proportion of water bodies are used in Irrigation. Percentage distribution of water bodies by type of use is shown in the diagram given below.

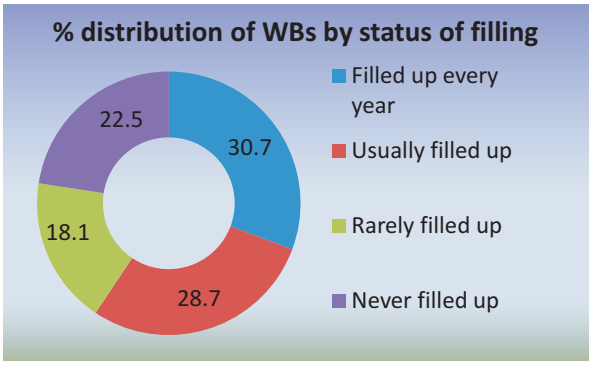


- In the State of Madhya Pradesh, there are 20.7% (17,093) natural water bodies and 79.3% (65,550) man-made water bodies. Out of 17,093 natural water bodies, 97.1% (16,600) water bodies are located in rural areas and the remaining 2.9% (493) are located in urban areas. Similarly, out of 65,550 man-made water bodies, 98.3% (64,412) water bodies are located in rural areas and the remaining 1.7% (1,138) are located in urban areas. Most of the man-made water bodies have original cost of construction upto Rs.50,000.

Yashwant Sagar in Indore District

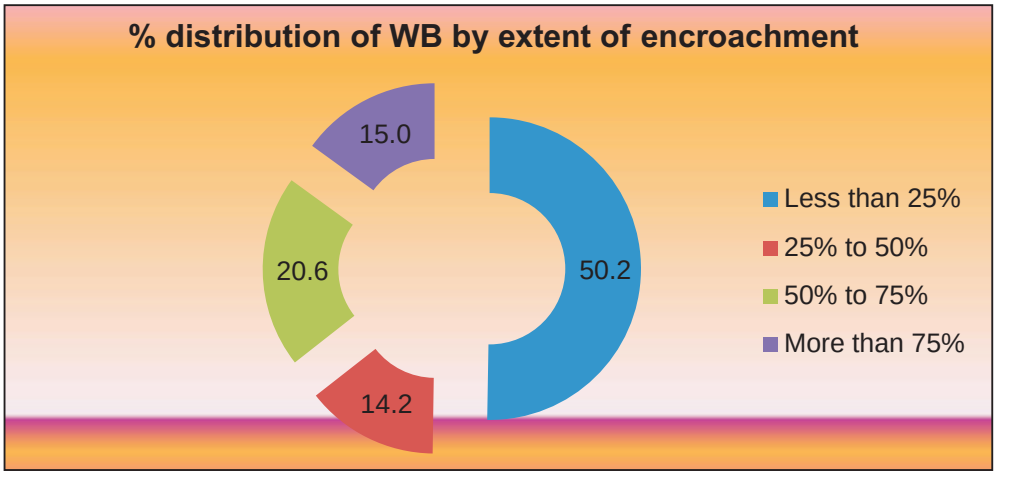
- Out of 82,643 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 79,994 water bodies. During reference year 2017-18, out of these 79,994 water bodies, 22% (17,607) water bodies had fully filled up storage capacity, 26.4% (21,109) water bodies had storage capacity filled upto three fourth level, 18.9% (15,151) water bodies had storage capacity filled upto half level, 12.2% (9,744) water bodies had storage capacity filled upto one fourth level whereas 20.5% (16,383) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 79,994 water bodies, 30.7% (24,545) water bodies are found to be filled up every year, 28.7% (22,949) are usually filled up, 18.1% (14,455) are rarely filled up and 22.5% (18,045) are never filled up. Percentage distribution of water bodies by 'status of filling' and 'filled up storage capacity' is shown in the diagram given below.



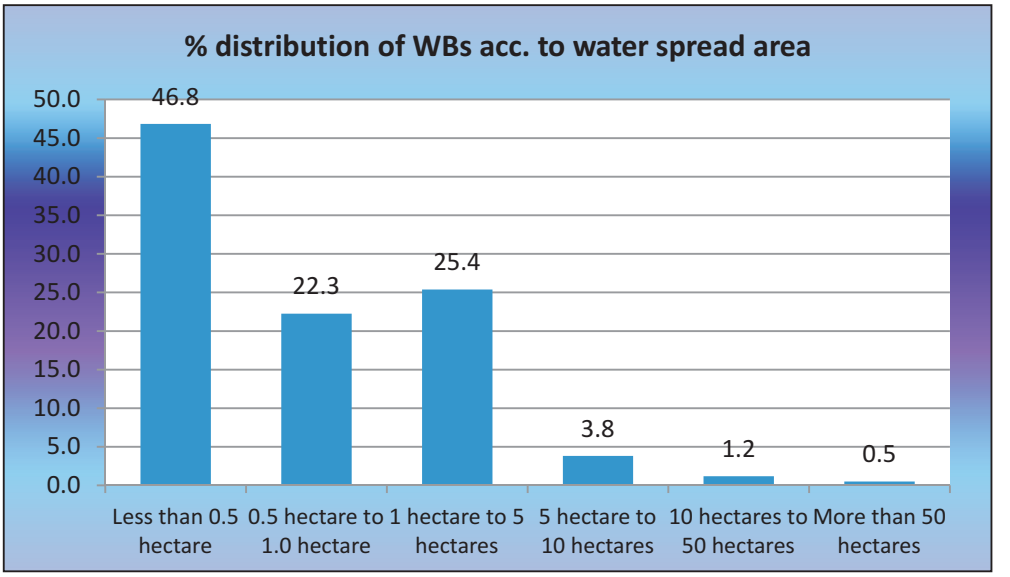


- 5.2% (4266) water bodies are covered in District Irrigation Plan/State Irrigation Plan. Among these 98.5% (4202) are ponds and the remaining 1.5% (64) are tanks, lakes, reservoirs and water conservation schemes/percolation tanks/check dams. Out of 'in use' water bodies, 33.5% (12,495) are benefitting one city/town, 65.1% (24,236) water bodies are fulfilling requirements of 2- 5 cities/ towns and the remaining 1.4% (526) water bodies are benefitting more than five (05) cities/towns.

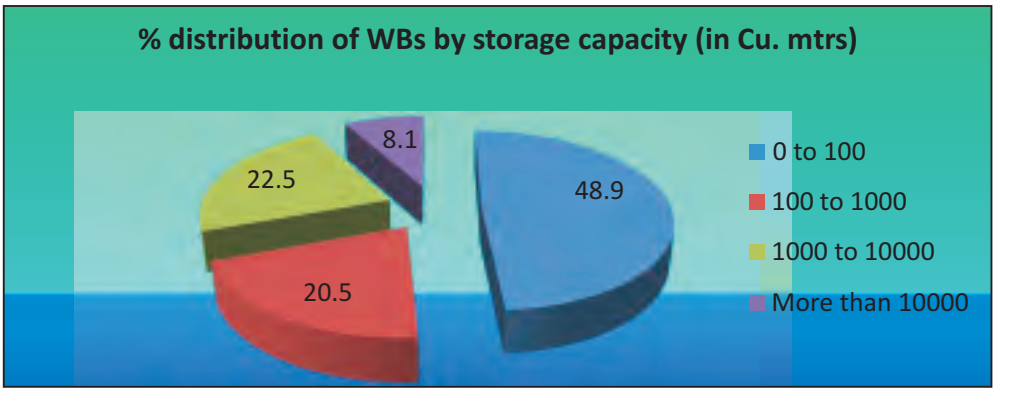
- State has reported encroachment in 2.1% (1779) water bodies out of all the enumerated water bodies. 99% (1,762) of the encroached water bodies are ponds and the remaining 1% (17) are tanks, lakes, reservoirs etc. Out of all the encroached water bodies, the area under encroachment can be assessed in 66% water bodies. The percentage distribution of water bodies according to extent of encroachment is shown in the chart given below.



- Out of 82,643 water bodies, the information on 'water spread area' was reported in 69,126 water bodies. Out of these 69,126 water bodies, 46.8% (32,375) of the water bodies have water spread area less than 0.5 hectares. Distribution of water bodies by 'water spread area' is shown in charts given below:



- In terms of storage capacity, 48.9% (40,400) water bodies have storage capacity upto 100 cubic meters whereas 8.1% (6,681) of the water bodies have storage capacity more than 10000 cubic meters in Madhya Pradesh. Distribution of water bodies by 'storage capacity of water bodies' is shown in chart given below:



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

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	Total Number of Water Bodies	no.	82,643	
	Total Numb er of Water Bodies in Rural Areas	no.	81,012	98.03
	Total Number of Water Bodies in Urban Areas	no.	1,631	1.97
a	Total Number of Water Bodies by type	no.		
	Ponds		79,818	96.58
	Tanks		71	0.09
	Lakes		30	0.04
	Reservoirs		75	0.09
	Water Conservation Schemes/ Percolation tanks/ Check dams		338	0.41
	Others		2,311	2.80
b	Water Bodies with Private Ownership	no.	11,796	14.27
	Water Bodies by area	no.		
	DPAP		77	0.09
	Tribal		22,395	27.10
	DDP		6	0.01
	Flood Prone		19	0.02
	Naxal affected area		1,915	2.32
	Others		58,231	70.46
	Total		82,643	100.00
2	Water Bodies by type of use	no.		
	Irrigation		18,901	50.73
	Industrial		305	0.82
	Pisciculture		1,231	3.30
	Domestic/ Drinking		4,272	11.47
	Recreation		133	0.36
	Religious		468	1.26
	Ground Water recharge		3,807	10.22
	Others		8,140	21.85
	Total		37,257	100.00
3	Natural/ Man Made Water Bodies	no.		
	Natural		17,093	20.68
	Man Made		65,550	79.32
4	Water Bodies Not in use due to reasons	no.		
	Dried up		8,036	17.71
	Construction		1,366	3.01
	Siltation		594	1.31
	Destroyed beyond repair		917	2.02
	Salinity		114	0.25

	Due to industrial effluents		168	0.37
	Others		34,191	75.33
5	Distribution of Water Bodies as per status of filling	no.		
	Filled up every year		24,545	30.68
	Usually filled up		22,949	28.69
	Rarely filled up		14,455	18.07
	Never filled up		18,045	22.56
	Total		79,994	100.00
6	Distribution of Water Bodies by number of city/ town benefitted	no.		
	1		12,495	33.54
	2 to 5		24,236	65.05
	6 to 10		334	0.90
	11 to 20		128	0.34
	21 to 50		29	0.08
	50 to 500		35	0.09
	more than 500		0	0.00
	Total		37,257	100.00
7	Distribution of Water Bodies by Water Spread Area	no.		
	Less than 0.5 hectares		32,375	46.83
	0.5 hectares to 1.0 hectares		15,388	22.26
	1 hectares to 5 hectares		17,551	25.39
	5 hectares to 10 hectares		2,642	3.82
	10 hectares to 50 hectares		823	1.19
	More than 50 hectares		347	0.50
	Total		69,126	100.00
8	Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)	Cu. Mtrs		
	0 to 100		40,400	48.89
	100 to 1000		16,910	20.46
	1000 to 10000		18,652	22.57
	More than 10000		6,681	8.08
	Total		82,643	100.00

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

MAHARASHTRA

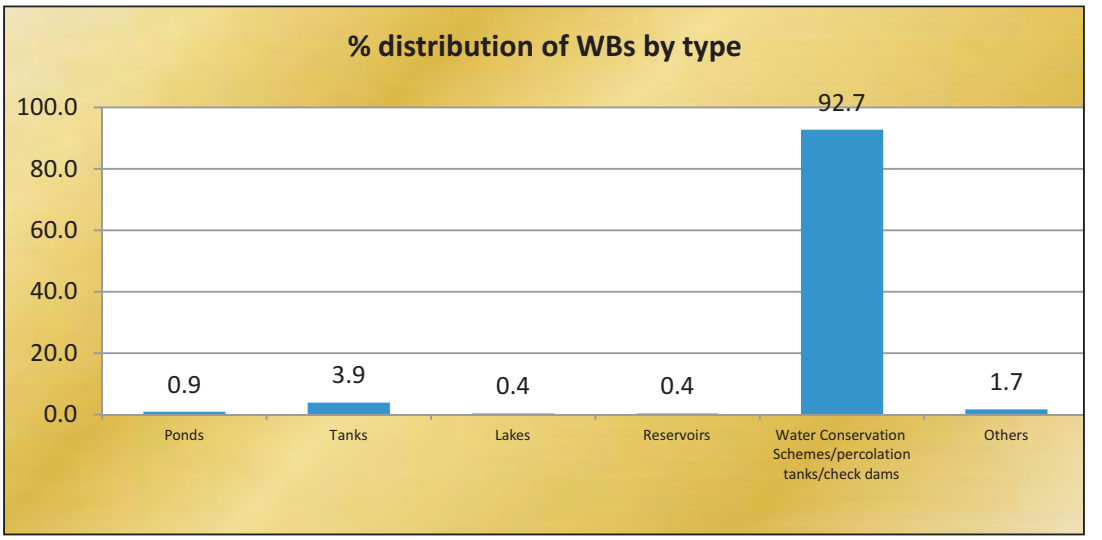
Maharashtra occupies the western and central part of the country and has a long coastline stretching nearly 720 kilometers along the Arabian Sea. The Sahyadri mountain ranges provide a physical backbone to the State on the west, while the Satpuda hills along the north and Bharnragad- Chiroli-Gaikhuri 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 km^2.

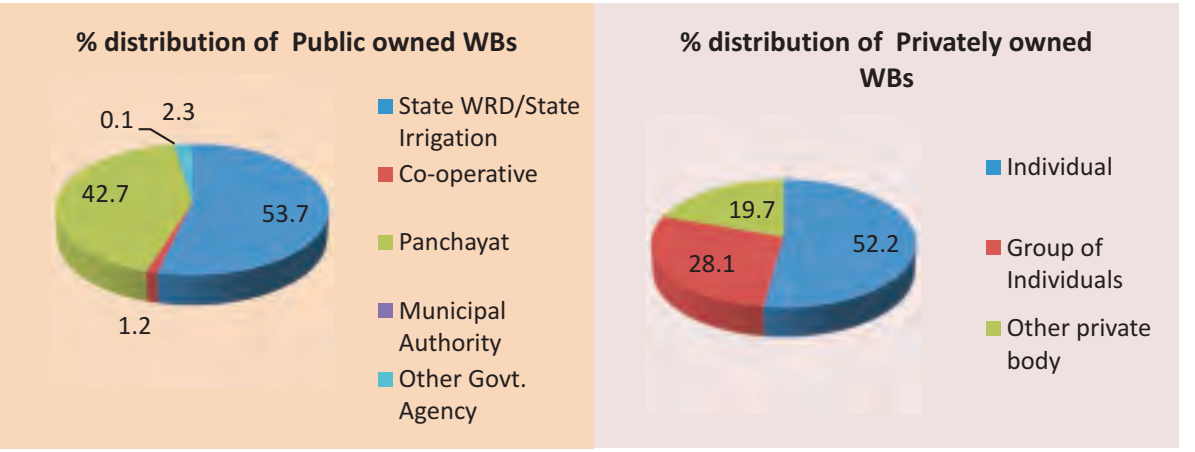
A water conservation scheme/percolation tank/check dams in Nirugudi village of Satara district

Major findings of the census

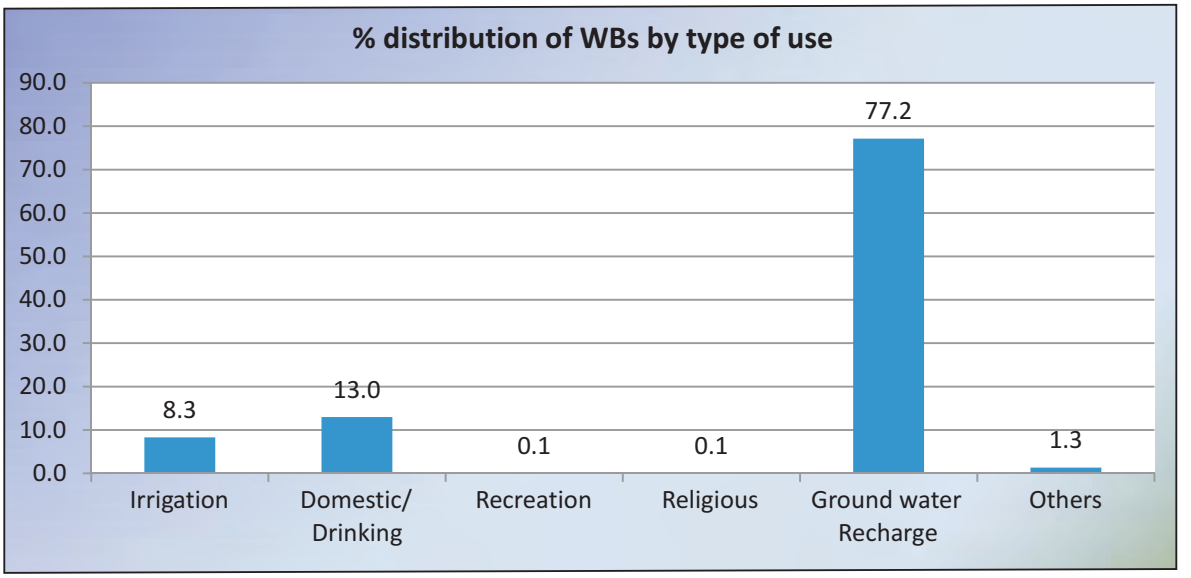
- In 1st census of water bodies, 97,062 water bodies have been enumerated in the State of Maharashtra, out of which 99.3% (96,343) are in rural areas and the remaining 0.7% (719) are in urban areas. Majority of the water bodies are water conservation schemes as depicted from chart given below.



- 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.



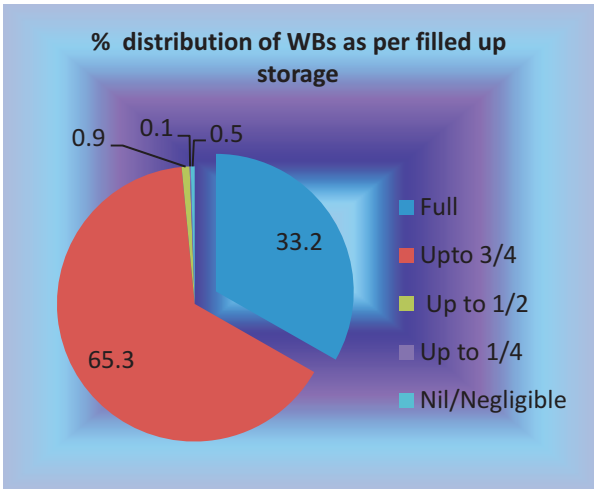
- Out of all water bodies, 98.9% (96,033) water bodies are "in use" whereas rest 1.1% (1,029) are "not in use" on account of drying up, siltation, destroyed beyond repair and other reasons. Out of 'in use' water bodies, a major proportion of water bodies are used in ground water recharge followed by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

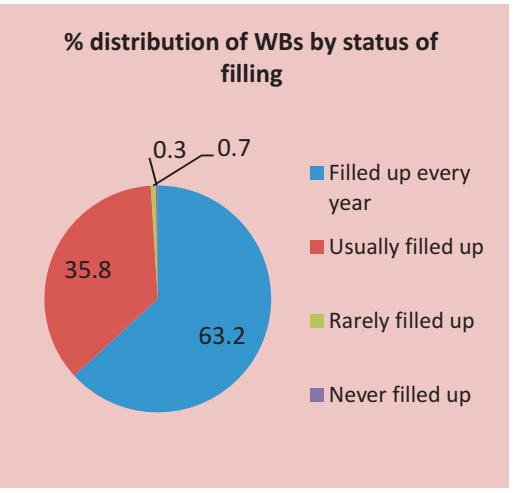


- In the State of Maharashtra, there are 574 natural and 96,488 man-made water bodies. Out of 574 water bodies, 98.4% (565) are located in rural areas whereas remaining 1.6% (9) are located in urban areas. Out of 96,488 man-made water bodies, 99.3% (95,778) water bodies are located in rural areas and 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

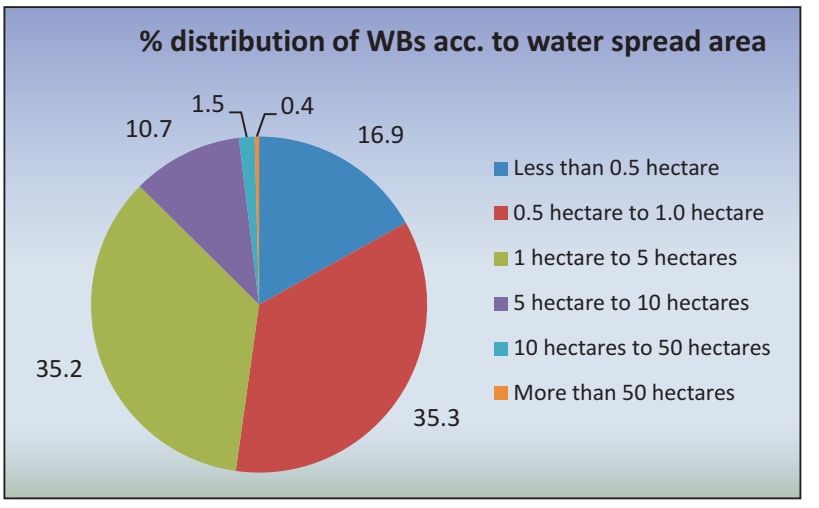
- Out of 97,062 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 5,403 water bodies. During reference year 2017-18, out of these 5,403 water bodies, 33.2% (1,796) water bodies had fully filled up storage capacity, 65.3% (3,525) had storage capacity 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.



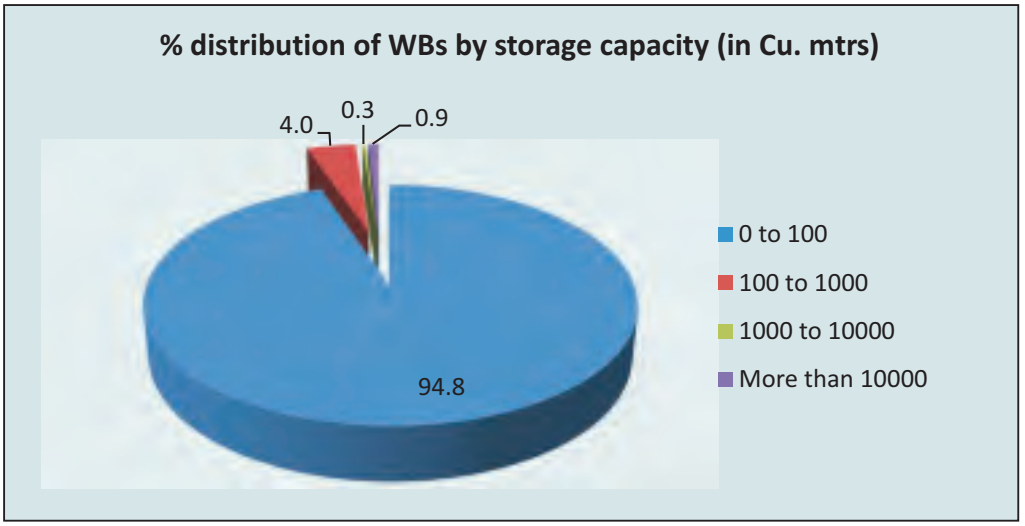


- Out of all water bodies, 60.7% (58,887) are covered in District Irrigation Plan/State Irrigation Plan. Among these 90.8% (53,449) are water conservation schemes/percolation tanks/check dams and the remaining 9.2% (5,438) are tanks, lakes, reservoirs etc. Out of 'in use' water bodies, 82.5% (79,238) 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 o f 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
	Tot al		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.

MANIPUR

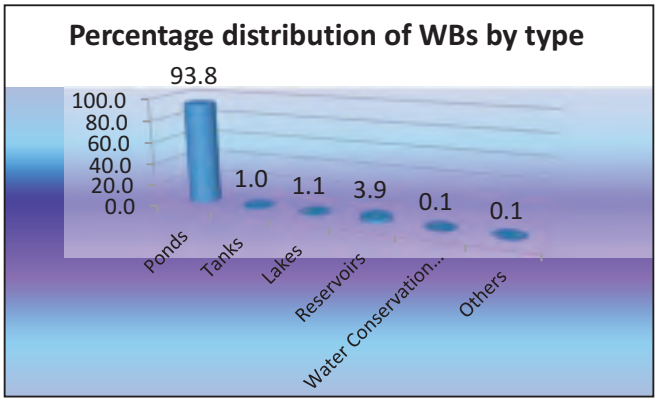
Manipur is affluent in natural as well as cultural beauty. This land of natural caves offers a unique experience to explore the hidden corners of nature. The state is rewarded with multiple rivers, waterfalls and the sparkling beauty of its water bodies.


A pond in Thoubal District

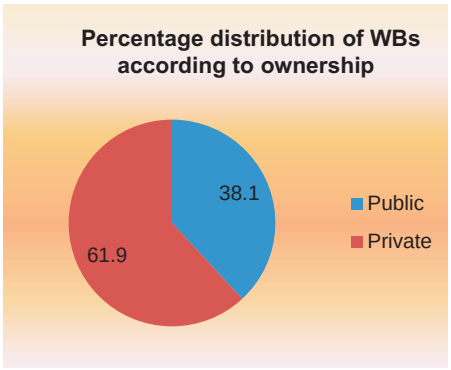
The State has an area of 22,327 km^2. It has 9 districts with a population of 27, 21,756.

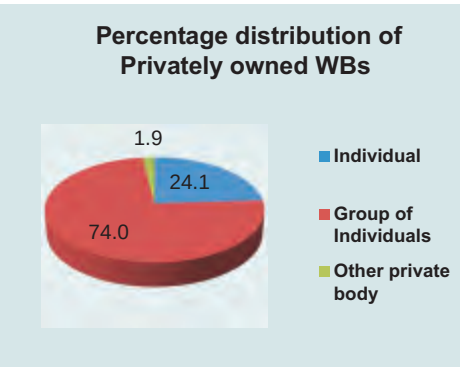
Major findings of the census

- In 1st census of water bodies, 1,658 water bodies have been enumerated in the State of Manipur, out of which 82.6% (1,369) are in rural areas and the remaining 17.4% (289) are in urban areas. Majority of the water bodies are ponds followed by reservoirs and lakes as depicted from chart given below.

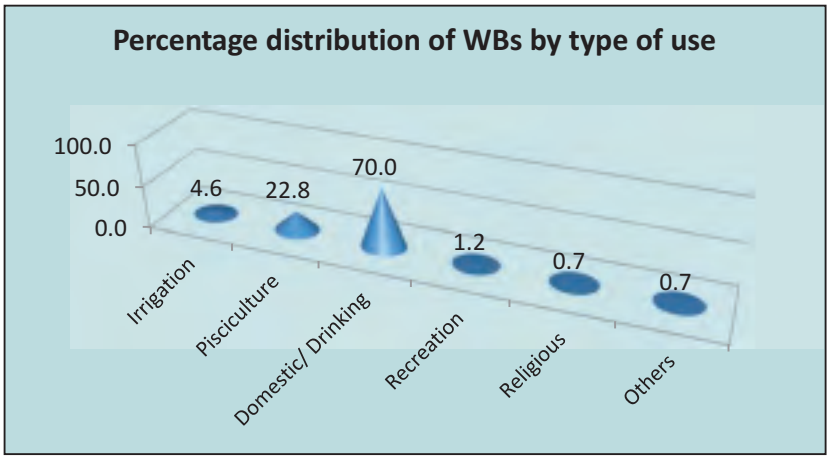


- 61.9% (1,026) are privately owned whereas the remaining 38.1% (632) are under public ownership. This reflects the dominance of private entities in ownership of water bodies. Out of all the privately owned water bodies, a major chunk of 74.0% (759) is in the hands of group of individual farmers. Distribution of water bodies by ownership status is shown in the charts given below. By location, 23.8% (395) water bodies are located in tribal areas and the remaining 76.2% (1,263) are in the area under 'Drought Prone Areas Programme', flood prone area, naxal affected and other areas.





- Out of 1,658 water bodies, 96.6% (1,601) water bodies are "in use" whereas rest 3.4% (57) are "not in use" on account of drying up, siltation and other reasons. Out of 'in use' water bodies, majority of them are used for domestic/drinking purpose followed by pisciculture and irrigation. Percentage distribution of water bodies by type of use is shown in the diagram given below.

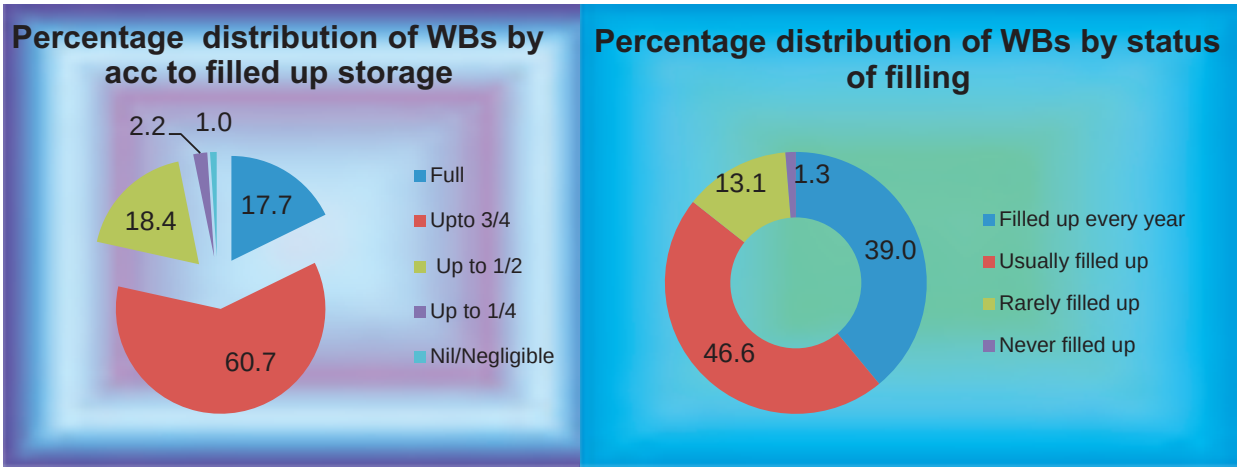


- In the State of Manipur, there are 222 natural and 1,436 man-made water bodies. Out of 222 natural water bodies, 89.2% (198) water bodies are located in rural areas and the remaining 10.8% (24) are located in urban areas. Out of 1,436 man-made water bodies, 81.5% (1,171) water bodies are located in rural areas and the remaining 18.5% (265) are located in urban areas. Most of the man-made water bodies have original cost of construction upto Rs.50, 000.

A pond in Moirang block of Bishnupur District

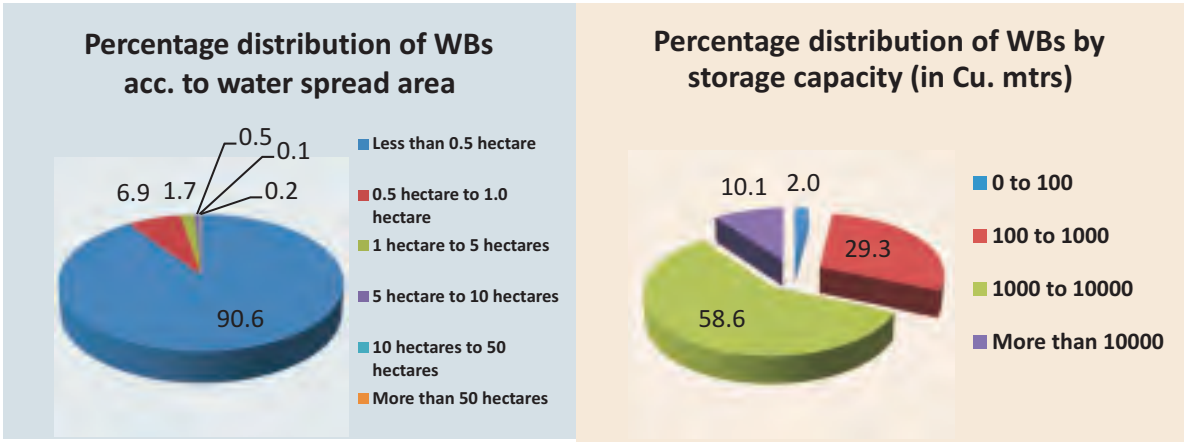
- Out of 1,658 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 1,656 water bodies. During reference year 2017-18, out of these 1,656 water bodies, 17.7% (294) water bodies had fully filled up storage capacity, 60.7% (1,005) water bodies had storage capacity filled upto three fourth level, 18.4% (304) water bodies had storage capacity filled upto half level, 2.2% (36) water bodies had storage capacity filled upto one fourth level whereas 1.0% (17) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 1,656 water bodies, 39.0% (646) water bodies are found to be filled up

every year, 46.6% (772) are usually filled up, 13.1% (217) are rarely filled up and 1.3% (21) are never filled up. Percentage distribution of water bodies by 'status of filling' and 'filled up storage capacity' is shown in the diagram given below.



- Out of all water bodies, only two (02) water bodies are covered in District Irrigation Plan/State Irrigation Plan. Both these water bodies are ponds. State has reported encroachment in six (06) water bodies out of all the enumerated water bodies. Out of 'in use' water bodies, 91.4% (1,464) are benefitting one (01) city/town, 8.2% (131) water bodies are fulfilling requirements of 2- 5 cities/ towns and the remaining 0.4% (6) water bodies are benefitting more than five (05) cities/towns.

- Out of all water bodies, 90.6% (1,502) of the water bodies have water spread area less than 0.5 hectares whereas 0.2% (3) water bodies have water spread area more than 50 hectares. In terms of storage capacity, 58.6% (971) water bodies have storage capacity between 1,000 to 10,000 cubic meters whereas 10.1% (168) water bodies have storage capacity more than 10,000 cubic meters. Distribution of water bodies by 'water spread area' and 'storage capacity of water bodies' is shown in charts given below.



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

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	**Total Number of Water Bodies**	**no.**	1,658	
	Total Number of Water Bodies in Rural Areas	**no.**	1,369	82.57
	Total Number of Water Bodies in Urban Areas	**no.**	289	17.43
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		1,556	93.85
	Tanks		17	1.03
	Lakes		19	1.15
	Reservoirs		64	3.86
	Water Conservation Schemes/ Percolation tanks/ Check dams		1	0.06
	Others		1	0.06
b	**Water Bodies with Private Ownership**	**no.**	1,026	61.88
	Water Bodies by area	**no.**		
	DPAP		19	1.15
	Tribal		395	23.82
	DDP		0	0.00
	Flood Prone		87	5.25
	Naxal affected area		4	0.24
	Others		1,153	69.54
	Total		1,658	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		74	4.62
	Industrial		0	0.00
	Pisciculture		365	22.80
	Domestic/ Drinking		1,120	69.96
	Recreation		19	1.19
	Religious		11	0.69
	Ground Water recharge		0	0.00
	Others		12	0.75
	Total		1,601	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		222	13.39
	Man Made		1,436	86.61
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		13	22.81
	Construction		14	24.56
	Siltation		3	5.26
	Destroyed beyond repair		2	3.51
	Salinity		0	0.00
	Due to industrial effluents		2	3.51
	Others		23	40.35

S.No.	Parameter	Unit	Value	Percentage to Total *
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		646	39.01
	Usually filled up		772	46.62
	Rarely filled up		217	13.10
	Never filled up		21	1.27
	Total		1,656	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		1,464	91.44
	2 to 5		131	8.18
	6 to 10		4	0.25
	11 to 20		1	0.06
	21 to 50		0	0.00
	50 to 500		1	0.06
	Total		1,601	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		1,502	90.59
	0.5 hectares to 1.0 hectares		115	6.94
	1 hectares to 5 hectares		29	1.75
	5 hectares to 10 hectares		7	0.42
	10 hectares to 50 hectares		2	0.12
	More than 50 hectares		3	0.18
	Total		1,658	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		34	2.05
	100 to 1000		485	29.25
	1000 to 10000		971	58.56
	More than 10000		168	10.13
	Total		1,658	100.00
9	**Number of encroached water bodies**	No.	6	0.36

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

MEGHALAYA

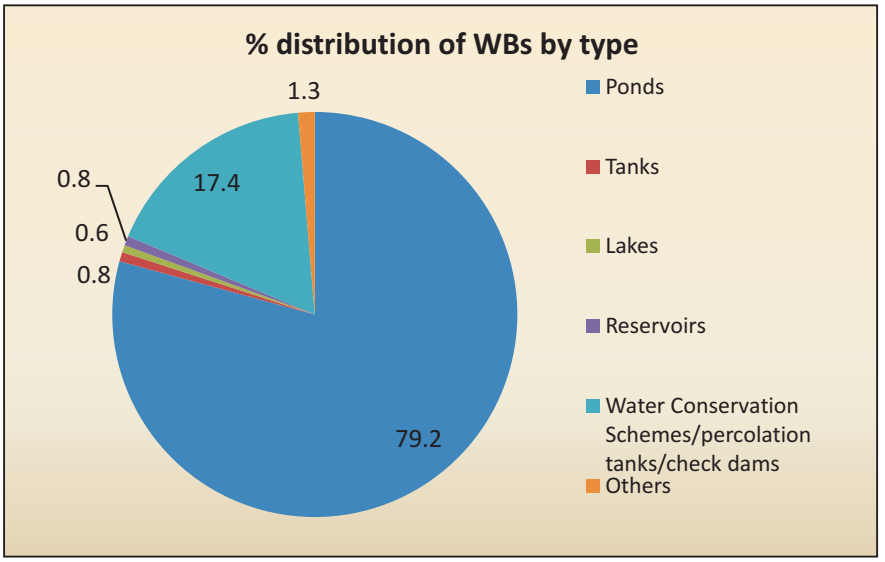
The State of Meghalaya is situated on the north east of India. It is bounded on the north by Goalpara, Kamrup and Nowgong districts, on the east by Karbi Anglong and North Cachar Hills districts, all of Assam, and on the south and west by Bangladesh. The Area of the Meghalaya is 22,429 Km^2 and total population is 29, 66,889 (As per 2011 Census).

A Lake in South Garo Hills, Meghalaya

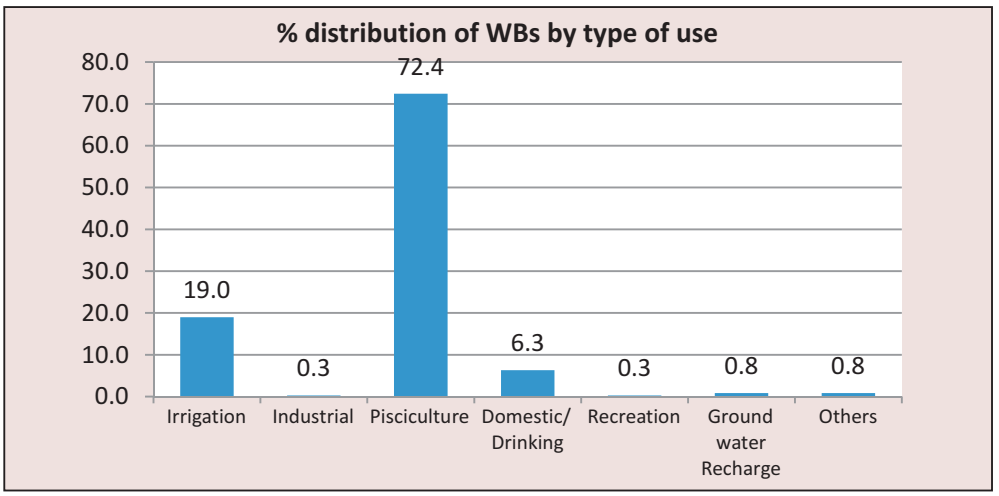
Major findings of the census

- In 1st census of water bodies, 13,332 water bodies have been enumerated, out of which 96% (12,798) are in rural areas and the remaining 4% (534) are in urban areas. Out of total waterbodies, 64.5% (8,600) are privately owned whereas the remaining 35.5% (4,732) are under public ownership. By location, 13,147 water bodies are in tribal areas and 6 water bodies are in flood prone area.

- Majority of the water bodies are ponds followed by water conservation schemes/percolation tanks/check dams and others as depicted from chart given below.



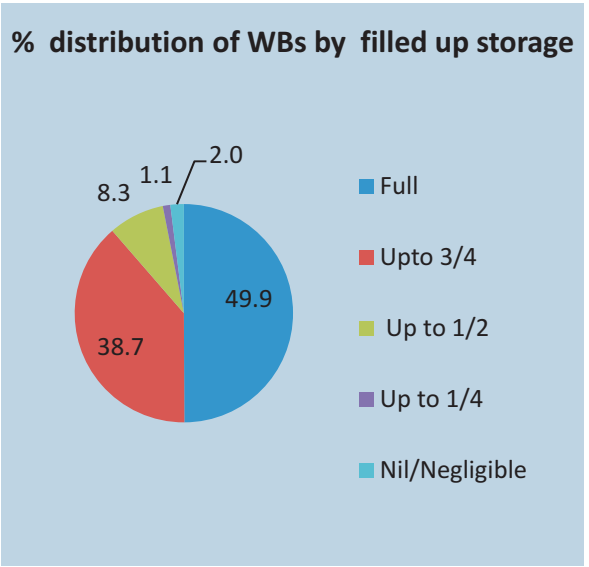
- 94.7% (12,620) water bodies are "in use"; 5.3% (712) water bodies are reported to be "not in use" on account of drying up, siltation, destroyed beyond repair and other reasons. Among all the 'in use' water bodies, 80% (10,098) are ponds, 16.6% (2,095) are water conservation schemes/ percolation tanks/check dams and the remaining 3.4% (427) are tanks, lakes, reservoirs etc. Out of 'in use' Water Bodies (i.e. 12,620), 72.4% (9,142) water bodies are used for pisciculture purpose in the State.

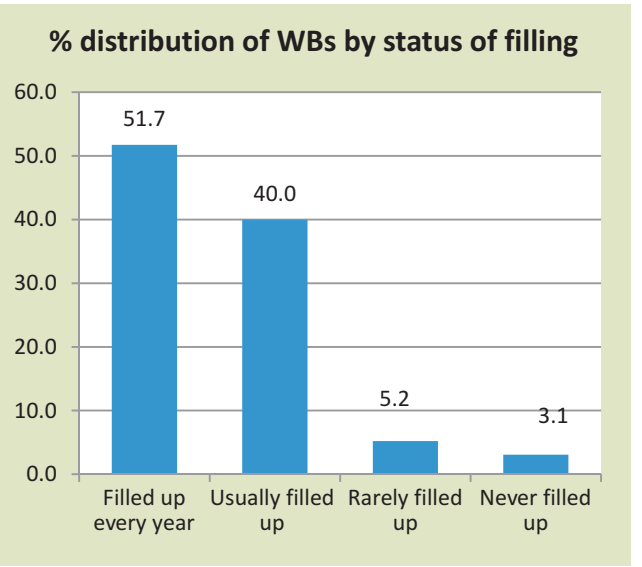


- There are 212 natural and 13,120 man-made water bodies in Meghalaya. Out of 212 Natural water bodies, 97.6% (207) water bodies are located in rural areas whereas 2.4% (5) are located in urban areas. Out of 13,120 man-made water bodies, 96% (12,591) water bodies are located in rural areas whereas 4% (529) are located in urban areas. Most of the man-made water bodies have original cost of construction between Rs. 50000 to 1 Lakhs.

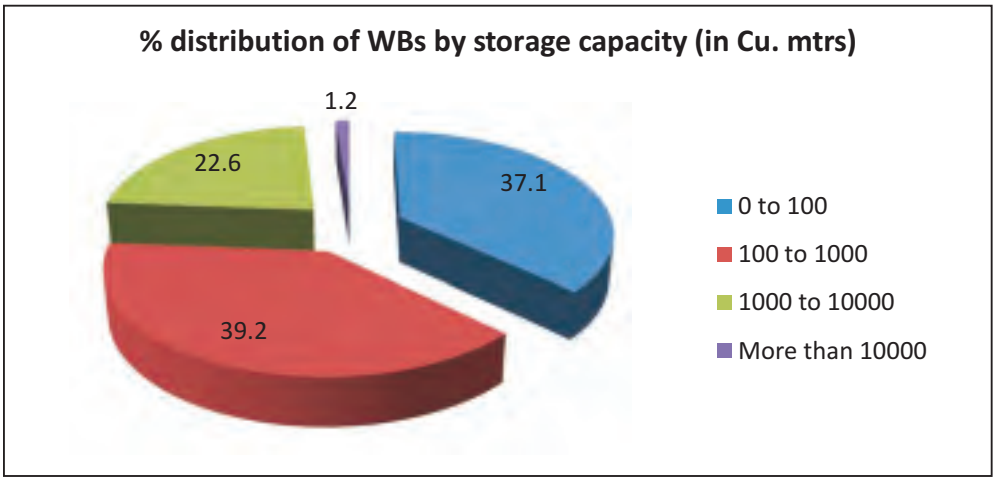
A Pond in Meghalaya, Ri Bhoi district Belahari village

- Out of 13,332 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 10,840 water bodies. During reference year 2017-18, out of these 10,840 water bodies, 49.9% (5,412) water bodies had fully filled up storage capacity, 38.7% (4,195) had storage capacity filled upto three fourth level, 8.3% (896) water bodies had storage capacity filled upto half level, 1.1% (121) water bodies had storage capacity filled upto one fourth level whereas 2% (216) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 10,840 water bodies, 51.7% (5,609) water bodies are filled up every year, 40% (4,332) water bodies are usually filled up, 5.2% (566) rarely filled up and 3.1% (333) found to be 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 total storage capacity (i.e. 5,95,42,575 cubic meters) of 'in use' water bodies, maximum storage capacity (68.7%, i.e. 4,09,37,834 cubic meters) is attributed to Reservoirs.





- 17.4% (2,316) are basically water conservation schemes/ percolation dams/ check dams. Out of 'in use' water bodies, 70.5% (8,894) are benefitting one (01) city/town and 26.7% (3,374) water bodies are fulfilling requirements of 2- 5 cities/ towns.
- Out of 13,332 water bodies, the information on 'water spread area' was reported in 13,318 water bodies. Out of these 13,318 water bodies, 91.9% (12,238) of the water bodies have water spread area less than 0.5 hectares. In terms of storage capacity, out of total 13,332 water bodies, 39.2% (5,220) water bodies have storage capacity between 100 to 1,000 Cubic Meters and majority of these water bodies are in rural areas. Distribution of storage capacity of water bodies is given in charts given below:



- Out of 13,332 water bodies, Six (6) water bodies are reported to be encroached. These are three (3) ponds followed by two (2) water conservation schemes/ percolation dams/ check dams and one (1) Tank.
- Key parameters of First Census of Water Bodies for the State of Meghalaya are given in the Annexure.

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total*
1	**Total Number of Water Bodies**	**no.**	13,332	
	Total Number of Water Bodies in Rural Areas	**no.**	12,798	95.99
	Total Number of Water Bodies in Urban Areas	**no.**	534	4.01
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		10,564	79.24
	Tanks		100	0.75
	Lakes		75	0.56
	Reservoirs		101	0.76
	Water Conservation Schemes/ Percolation tanks/ Check dams		2,316	17.37
	Others		176	1.32
b	**Water Bodies with Private Ownership**	**no.**	8,600	0.00
	Water Bodies by area	**no.**		
	DPAP		66	0.50
	Tribal		13,147	98.61
	DDP		15	0.11
	Flood Prone		6	0.05
	Naxal affected area		4	0.03
	Others		94	0.71
	Total		13,332	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		2,395	18.98
	Industrial		35	0.28
	Pisciculture		9,142	72.44
	Domestic/ Drinking		795	6.30
	Recreation		33	0.26
	Religious		10	0.08
	Ground Water recharge		105	0.83
	Others		105	0.83
	Total		12,620	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		212	1.59
	Man Made		13,120	98.41
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		134	18.82
	Construction		8	1.12

S.No.	Parameter	Unit	Value	Percentage to Total*
	Siltation		66	9.27
	Destroyed beyond repair		122	17.13
	Salinity		3	0.42
	Due to industrial effluents		1	0.14
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		5,609	51.7
	Usually filled up		4,332	40.0
	Rarely filled up		566	5.2
	Never filled up		333	3.1
	Total		10,840	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		8,894	70.48
	2 to 5		3,374	26.74
	6 to 10		313	2.48
	11 to 20		31	0.25
	21 to 50		3	0.02
	50 to 500		5	0.04
	Total		12,620	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		12,238	91.89
	0.5 hectares to 1.0 hectares		432	3.24
	1 hectares to 5 hectares		521	3.91
	5 hectares to 10 hectares		93	0.70
	10 hectares to 50 hectares		25	0.19
	More than 50 hectares		9	0.07
	Total		13,318	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		4,942	37.07
	100 to 1000		5,220	39.15
	1000 to 10000		3,009	22.57
	More than 10000		161	1.21
	Total		13,332	100.00
9	**Number of encroached water bodies**	No.	6	

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

MIZORAM

"Land of the hill people" –'Mizoram' is one of the states of Northeast India. Mizoram is a land of rolling hills, valleys, rivers and lakes. It is the 2nd least populous state in the country.

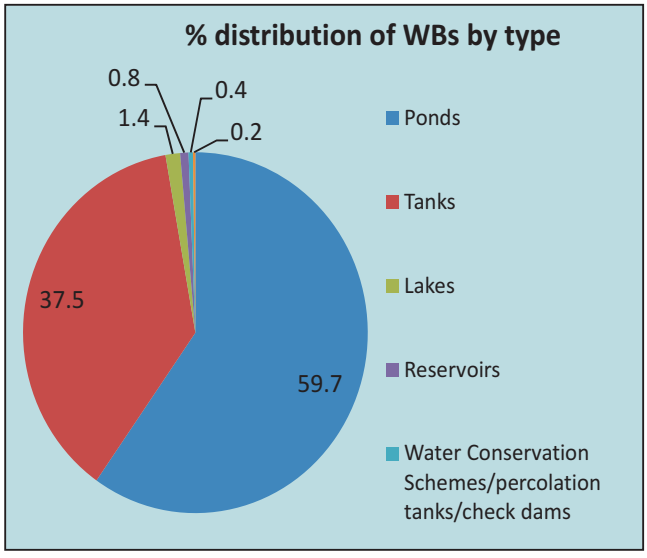
A lake in Champhai town in Champhai District, Mizoram

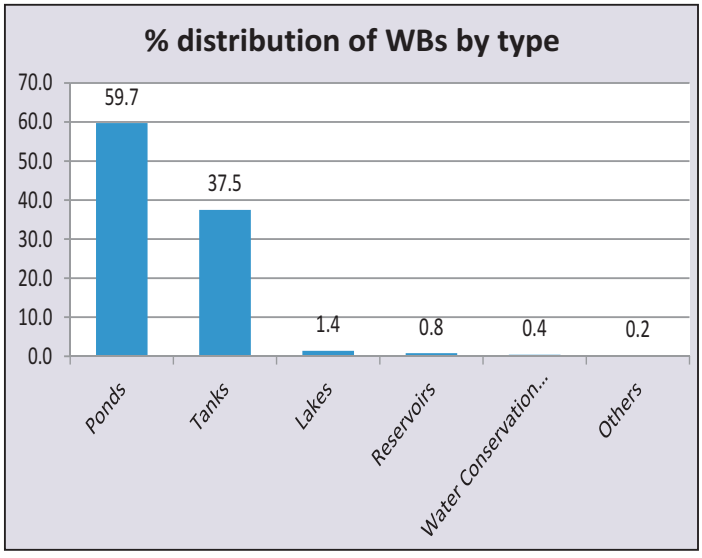
Mizoram has a total Geographic area of 21,087 km^2. According to the 2011 census, Mizoram had a population of 10,91,014.

Major findings of the census

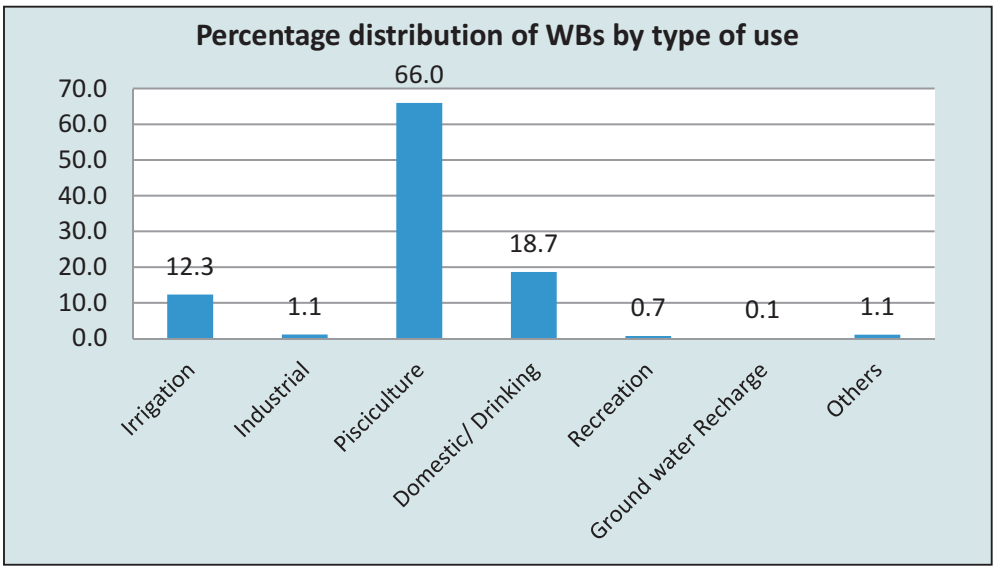
- In 1st census of water bodies, 2,185 water bodies have been enumerated, out of which 65.7% (1,436) are in rural areas and the remaining 34.3% (749) are in urban areas. 79.4% (1,734) are privately owned whereas the remaining 20.6% (451) are under public ownership. Out of the private owned water bodies, 86.9% (1,506) are in the hands of individual farmers. By location, 2,171 water bodies are in tribal areas.

- Majority of the water bodies are ponds followed by tanks as depicted from chart given below.





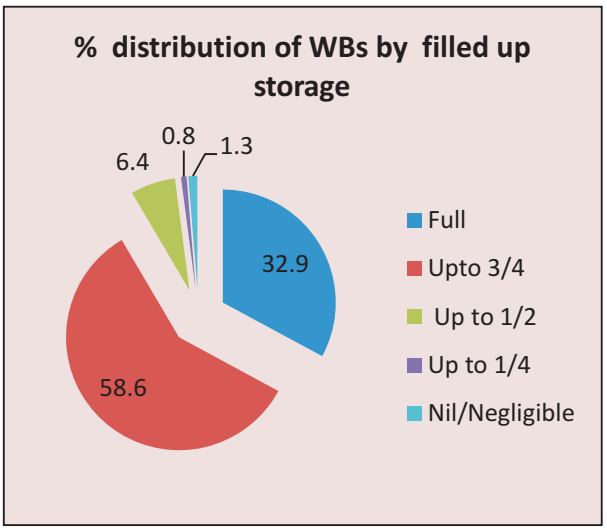
- Out of 2,185 water bodies, 94.4% (2,063) water bodies are 'in use' whereas 5.6% (122) water bodies are 'not in use' on account of drying up, siltation, destroyed beyond repair and other reasons. Out of 'in use' water bodies, 66% (1,361) water bodies are used for pisciculture purpose in the State. Percentage distribution of water bodies by type of use is shown in the diagram given below.

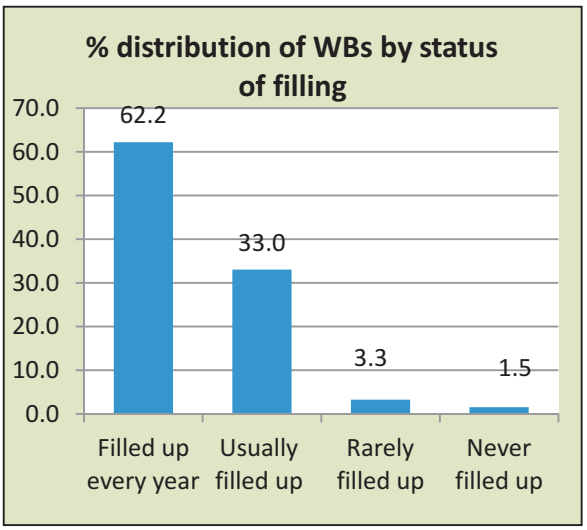


- There are 19 natural and 2,166 man-made water bodies in Mizoram. Out of 19 natural water bodies, 16 water bodies are located in rural areas whereas 3 are located in urban areas. Out of 2,166 man-made water bodies, 65.6% (1,420) water bodies are located in rural areas whereas 34.4% (746) are located in urban areas. Most of the man-made water bodies have original cost of construction below 5 Lakh.

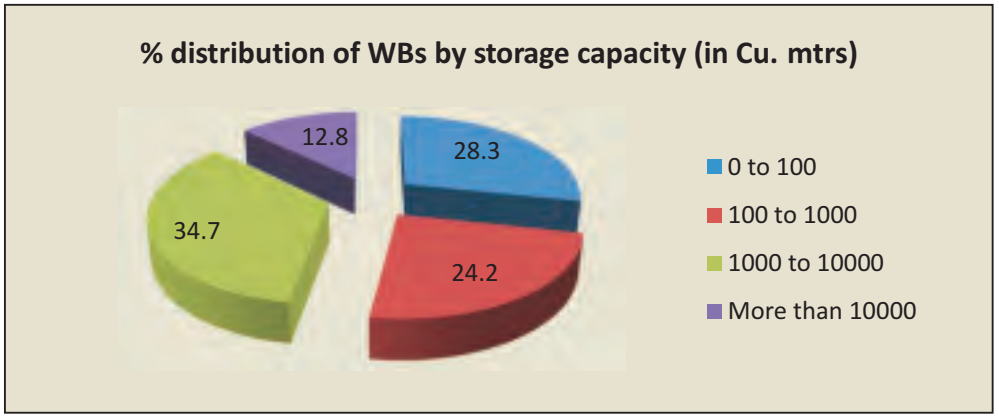
A pond in Saiphai village of Kolasib district,Mizoram

- Out of 2,185 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 2,171 water bodies. During reference year 2017-18, out of these 2,171 water bodies, 32.9% (714) water bodies had fully filled up storage capacity, 58.6% (1,273) water bodies had storage capacity filled upto three fourth level, 6.4% (139) water bodies had storage capacity filled upto half level, 0.8% (17) water bodies had storage capacity filled upto one fourth level whereas 1.3% (28) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 2,171 water bodies, 62.2% (1,350) water bodies are found to be filled up every year, 33% (717) are usually filled up, 3.3% (71) are rarely filled up and 1.5% (33) 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 2,185 water bodies, 40 (1.8%) are covered in District Irrigation Plan/State Irrigation Plan. Out of the 2,063 'in use' water bodies, 54.9% (1,132) are benefitting one (01) city/town and 45% (929) water bodies are fulfilling requirements of 2-5 cities/towns and remaining 2 water bodies are benefitting to 11-20 cities/ towns
- The information on 'water spread area' was reported in 2,183 water bodies. Out of these 2183 water bodies, 64.5% (1,409) of the water bodies have water spread area less than 0.5 hectares. In terms of storage capacity, out of 2185 water bodies, 34.7% (759) water bodies have storage capacity between 1,000 to 10,000 Cubic Meters. Distribution of storage capacity of water bodies is given in charts given below:



- Out of 2,185 water bodies, seven (07) water bodies are reported to be encroached. These are three (03) ponds and four (04) tanks.
- Key parameters of First Census of Water Bodies for the State of Mizoram are given in the Annexure.

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	**Total Number of Water Bodies**	**no.**	2,185	
	Total Number of Water Bodies in Rural Areas	**no.**	1,436	65.72
	Total Number of Water Bodies in Urban Areas	**no.**	749	34.28
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		1,305	59.73
	Tanks		819	37.48
	Lakes		30	1.37
	Reservoirs		17	0.78
	Water Conservation Schemes/ Percolation tanks/ Check dams		9	0.41
	Others		5	0.23
b	**Water Bodies with Private Ownership**	**no.**	1,734	79.36
	Water Bodies by area	**no.**		
	DPAP		12	0.55
	Tribal		2,171	99.36
	DDP		2	0.09
	Flood Prone		0	0.00
	Naxal affected area		0	0.00
	Others		0	0.00
	Total		2,185	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		254	12.31
	Industrial		23	1.11
	Pisciculture		1,361	65.97
	Domestic/ Drinking		385	18.66
	Recreation		15	0.73
	Religious		1	0.05
	Ground Water recharge		2	0.10
	Others		22	1.07
	Total		2,063	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		19	0.87
	Man Made		2,166	99.13
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		23	18.85
	Construction		51	41.80
	Siltation		9	7.38
	Destroyed beyond repair		7	5.74
	Salinity		0	0.00

S.No.	Parameter	Unit	Value	Percentage to Total *
	Due to industrial effluents		0	0.00
	Others		32	26.23
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		1,350	62.18
	Usually filled up		717	33.03
	Rarely filled up		71	3.27
	Never filled up		33	1.52
	Total		2,171	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		1,132	54.87
	2 to 5		929	45.03
	6 to 10		0	0.00
	11 to 20		2	0.10
	21 to 50		0	0.00
	50 to 500		0	0.00
	Total		2,063	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		1,409	64.54
	0.5 hectares to 1.0 hectares		655	30.00
	1 hectares to 5 hectares		116	5.31
	5 hectares to 10 hectares		1	0.05
	10 hectares to 50 hectares		1	0.05
	More than 50 hectares		1	0.05
	Total		2,183	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		619	28.33
	100 to 1000		527	24.12
	1000 to 10000		759	34.74
	More than 10000		280	12.81
	Total		2,185	100.00
9	**Number of encroached water bodies**	No.	7	

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

NAGALAND

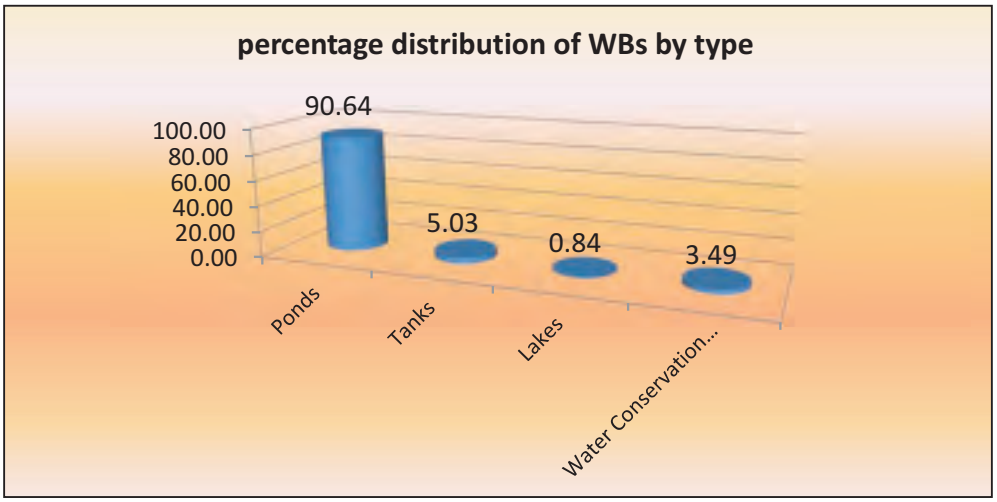
Nagaland is engulfed in mystery, inhabited by vibrant people zealously guarding their culture – dancers, warriors, head-hunters; mountains, valleys, forests. The topography of the State is nearly all hilly, many rivers cut through this mountainous terrain, like sharp swords slicing through rocks.

A pond in Dimapur District

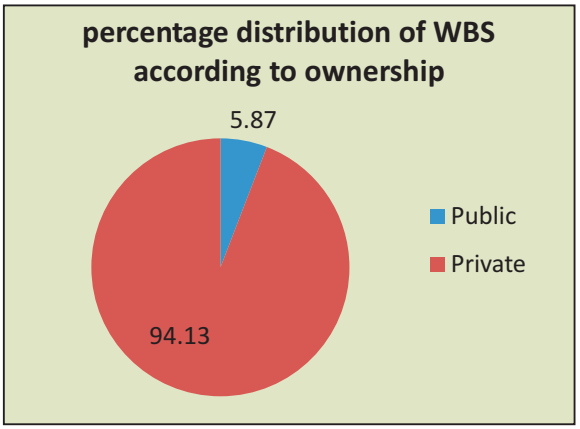
The State has an area of 16,579 km^2. It has 11 districts with a population of 1.9 million.

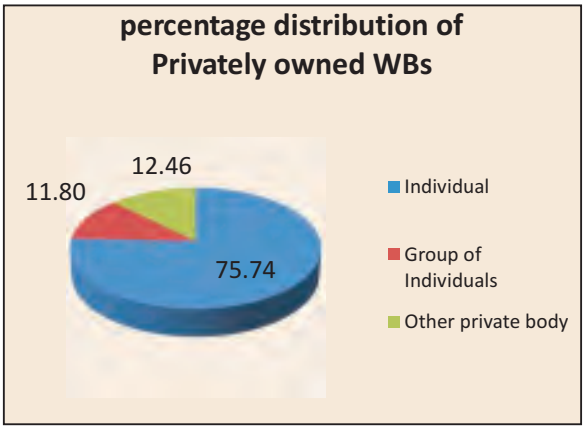
Major findings of the census

- In 1st census of water bodies, 1,432 water bodies have been enumerated in the State of Nagaland, out of which 89.87% (1,287) are in rural areas and the remaining 10.13% (145) are in urban areas. Majority of the water bodies are ponds as depicted from chart given below.

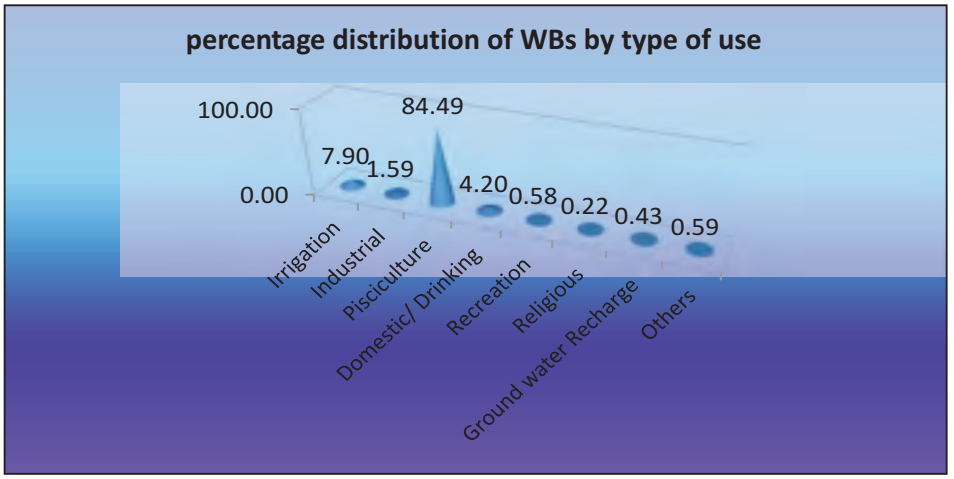


- 94.13% (1,348) are privately owned whereas the remaining 5.87% (84) are under public ownership. This reflects the dominance of private entities in ownership of water bodies. Out of all the privately owned water bodies, a major chunk of 75.74% (1,021) is in the hands of individual farmers. Distribution of water bodies by ownership status is shown in the charts given below. By location, out of 1,432 water bodies, 1,425 are located in tribal areas whereas remaining 7 are under 'Drought Prone Areas Programme' and other areas.





- Out of all water bodies, 96.37% (1,380) water bodies are "in use" whereas rest 3.63% (52) are "not in use" on account of drying up, siltation and other reasons. Majority of 'in use' water bodies are used for pisciculture followed by irrigation and domestic/ drinking purpose. Percentage distribution of water bodies by type of use is shown in the diagram given below.

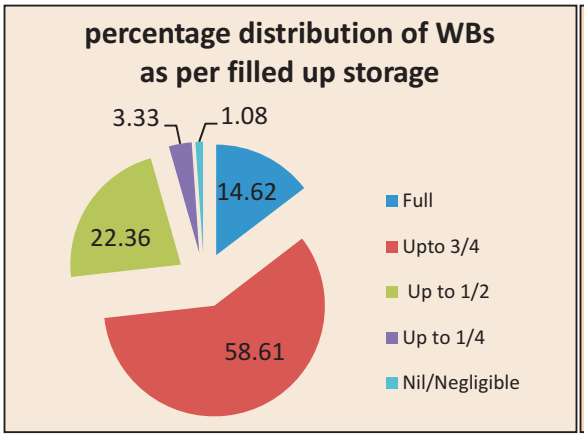


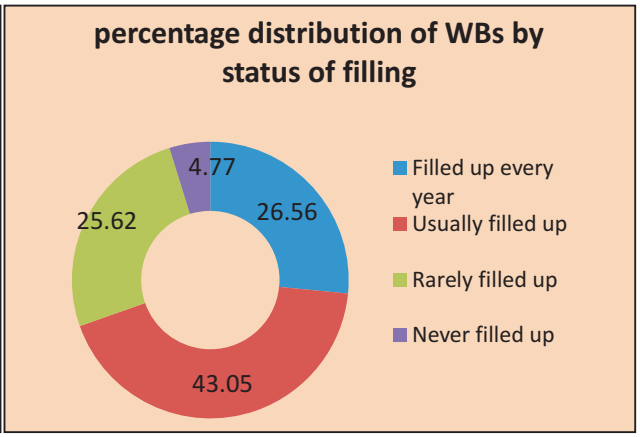
- In the State of Nagaland, there are 688 natural and 744 man-made water bodies. Out of 688 natural water bodies, 90.55% (623) water bodies are located in rural areas and the remaining 9.45% (65) are located in urban areas. Out of 744 man-made water bodies, 89.25% (664) water bodies are located in rural areas and the remaining 10.75% (80) are located in urban areas. Most of the man-made water bodies have original cost of construction upto Rs.50,000.


A pond in Kiphire District

- Out of 1,432 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 1,382 water bodies. During reference year 2017-18, out of these 1,382 water bodies, 14.62% (202) water bodies had fully filled up storage capacity, 58.61% (810) water bodies had storage capacity filled upto three fourth level, 22.36% (309) water bodies had storage capacity filled upto half level, 3.33% (46) water bodies had storage capacity filled upto

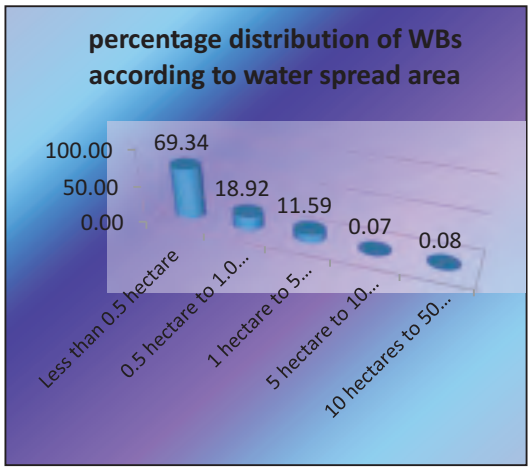
one fourth level whereas 1.08% (15) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 1,382 water bodies, 26.56% (367) water bodies are found to be filled up every year, 43.05% (595) are usually filled up, 25.62% (354) are rarely filled up and 4.77% (66) are never filled up. Percentage distribution of water bodies by 'status of filling' and 'filled up storage capacity' is shown in the diagram given below.

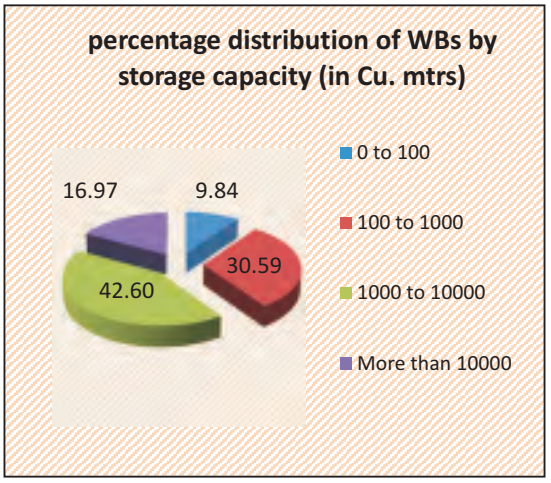




- Out of all water bodies, only eleven (11) water bodies are covered in District Irrigation Plan/State Irrigation Plan out of which eight (08) are ponds and three (03) are lakes. State has reported encroachment in only one (01) water body out of all the enumerated water bodies. Out of 'in use' water bodies, 99.5% (1,373) are benefitting one (01) city/town whereas the remaining 0.5% (7) water bodies are benefitting atleast two (02) cities/towns.

- 69.34% (993) of the water bodies have water spread area less than 0.5 hectares whereas 18.92% (271) water bodies have water spread area between 0.5 hectares to 1.0 hectares. In terms of storage capacity, 42.60% (610) water bodies have storage capacity between 1,000 to 10,000 Cubic Meters whereas 16.97% (243) water bodies have storage capacity more than 10,000 cubic meters. Distribution of water bodies by 'water spread area' and 'storage capacity of water bodies' is shown in charts given below.





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

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	**Total Number of Water Bodies**	**no.**	1,432	
	Total Number of Water Bodies in Rural Areas	**no.**	1,287	89.87
	Total Number of Water Bodies in Urban Areas	**no.**	145	10.13
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		1,298	90.64
	Tanks		72	5.03
	Lakes		12	0.84
	Reservoirs		0	0.00
	Water Conservation Schemes/ Percolation tanks/ Check dams		50	3.49
	Others		0	0.00
b	**Water Bodies with Private Ownership**	**no.**	1,348	94.13
	Water Bodies by area	**no.**		
	DPAP		5	0.35
	Tribal		1,425	99.51
	DDP		0	0.00
	Flood Prone		0	0.00
	Naxal affected area		0	0.00
	Others		2	0.14
	Total		1,432	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		109	7.90
	Industrial		22	1.59
	Pisciculture		1,166	84.49
	Domestic/ Drinking		59	4.28
	Recreation		8	0.58
	Religious		3	0.22
	Ground Water recharge		6	0.43
	Others		8	0.58
	Total		1,380	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		688	48.04
	Man Made		744	51.96
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		11	21.15
	Construction		1	1.92
	Siltation		18	34.62
	Destroyed beyond repair		3	5.77
	Salinity		0	0.00
	Due to industrial effluents		0	0.00
	Others		19	36.54

S.No.	Parameter	Unit	Value	Percentage to Total *
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		367	26.56
	Usually filled up		595	43.05
	Rarely filled up		354	25.62
	Never filled up		66	4.78
	Total		1,382	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		1,373	99.49
	2 to 5		5	0.36
	6 to 10		1	0.07
	11 to 20		1	0.07
	21 to 50		0	0.00
	50 to 500		0	0.00
	Total		1,380	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		993	69.34
	0.5 hectares to 1.0 hectares		271	18.92
	1 hectares to 5 hectares		166	11.59
	5 hectares to 10 hectares		1	0.07
	10 hectares to 50 hectares		1	0.07
	More than 50 hectares		0	0.00
	Total		1,432	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		141	9.85
	100 to 1000		438	30.59
	1000 to 10000		610	42.60
	More than 10000		243	16.97
	Total		1,432	100.00
9	**Number of encroached water bodies**	No.	1	

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

ODISHA

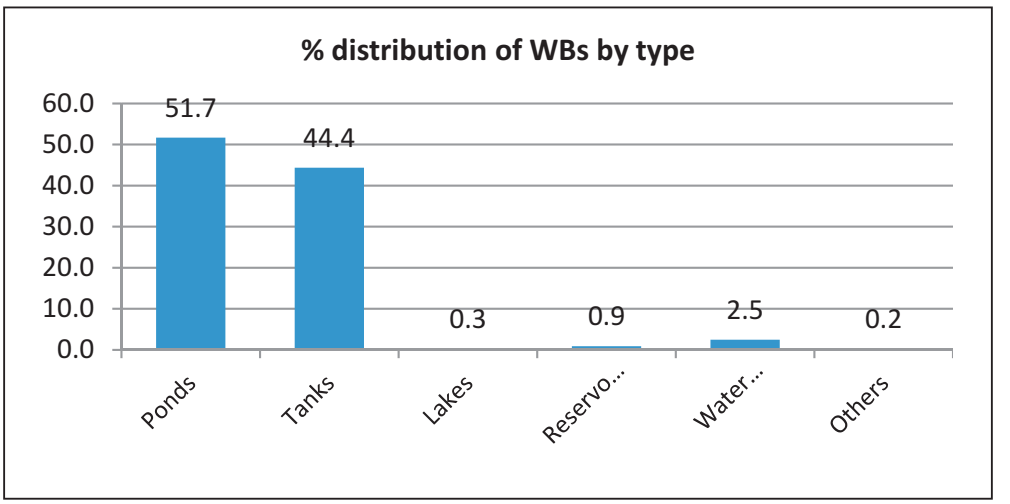
Odisha is a State with majestic mountains, serene beaches, spectacular wildlife, unique arts & crafts, breathtaking waterfalls, interesting culture and some gorgeous landscapes. The State is bounded by the bay in the east, West Bengal in the north-east, Bihar in the north, Madhya Pradesh in the west and Andhra Pradesh in the south.

A Tank in Sundargarh District

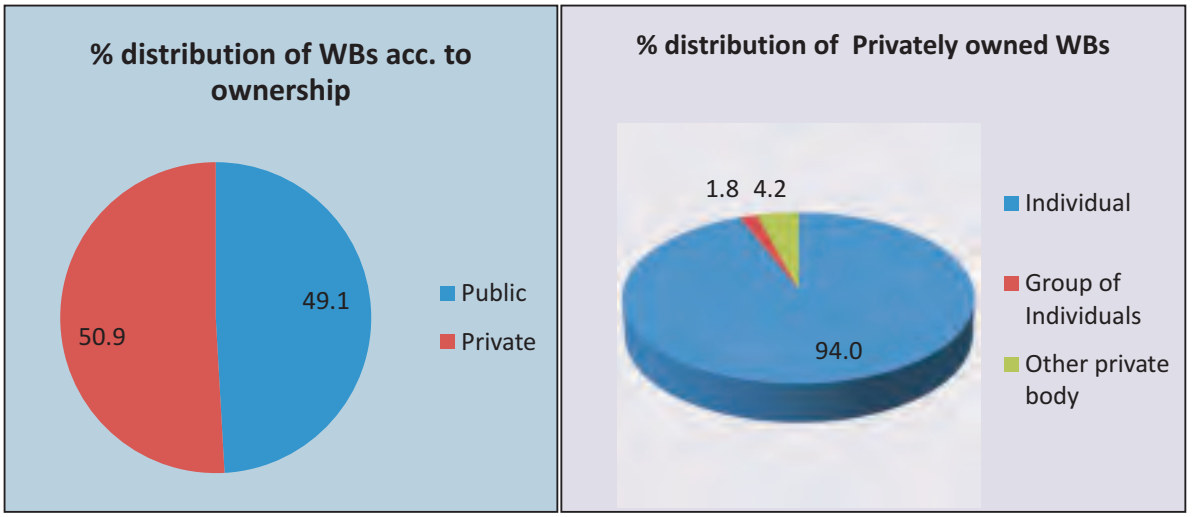
Odisha has 30 districts with a total geographical area of 1,55,707 km^2 and a population of 4,19,74,218.

Major findings of the census

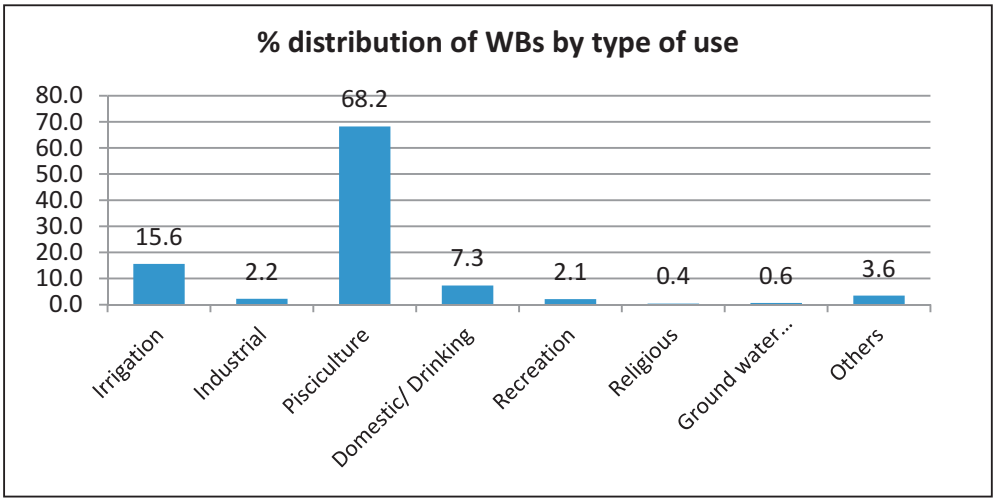
- In 1st census of water bodies, 1,81,837 water bodies have been enumerated in the State of Odisha, out of which 97.9% (1,78,054) are in rural areas and the remaining 2.1% (3,783) are in urban areas. Majority of the water bodies are ponds as depicted from chart given below.



- 50.9% (92,575) water bodies are privately owned whereas the remaining 49.1% (89,262) are under public ownership. Distribution of water bodies by ownership status is shown in the charts given below. By location, 31.3% (56,900) water bodies are located in tribal areas and the remaining 68.7% (1,24,937) are located in area under Drought Prone Area Program, flood prone areas, naxal affected areas and other areas.



- 89.2% (1,62,207) water bodies are in use whereas rest 10.8% (19,630) are not in use on account of drying up, siltation, salinity, destroyed beyond repair and other reasons. Out of 'in use' water bodies, a major proportion of water bodies are used in pisciculture followed by irrigation. Percentage distribution of water bodies by type of use is shown in the diagram given below.

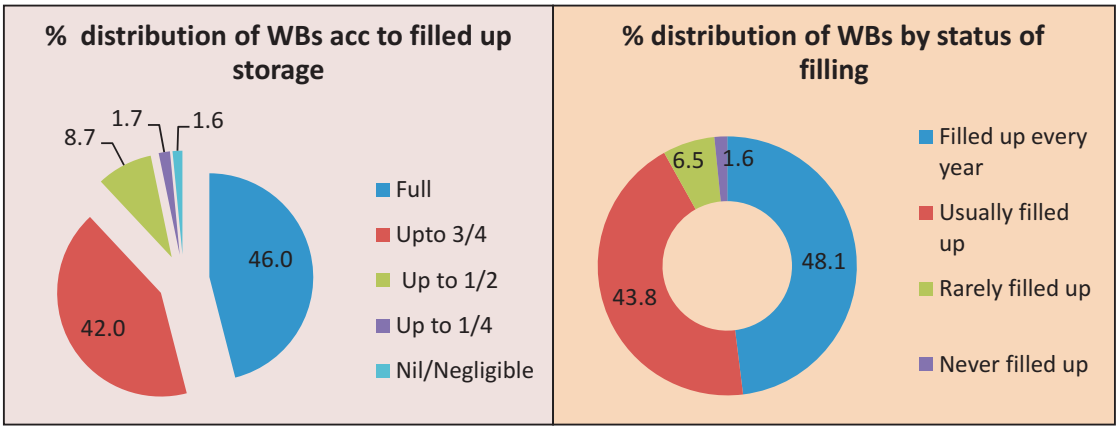


- In the State of Odisha, there are 7,109 natural and 1,74,728 man-made water bodies. Out of 7,109 natural water bodies, 97.3% (6,915) are located in rural areas whereas remaining 2.7% (194) are located in urban areas. Out of 1,74,728 man-made water bodies, 97.9% (1,71,139) water bodies are located in rural areas and the remaining 2.1% (3,589) are located in urban areas. Most of the man-made water bodies have original cost of construction upto Rs.50,000.


A Tank in Malkangiri District

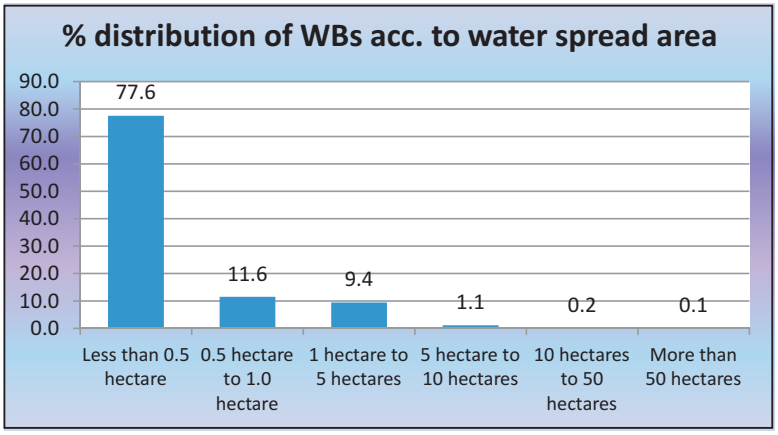
- Out of 1,81,837 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected

for 1,76,881 water bodies. During reference year 2017-18, out of these 1,76,881 water bodies, 46.0% (81,350) water bodies had fully filled up storage capacity, 42.0% (74,362) water bodies had storage capacity filled upto three fourth level, 8.7% (15,400) water bodies had storage capacity filled upto half level, 1.7% (3,081) water bodies had storage capacity filled upto one fourth level whereas 1.6% (2,688) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 1,76,881 water bodies, 48.1% (85,008) water bodies are found to be filled up every year, 43.8% (77,547) are usually filled up, 6.5% (11,497) are rarely filled up and 1.6% (2,829) are never filled up. Percentage distribution of water bodies by 'status of filling' and 'filled up storage capacity' is shown in the diagram given below.

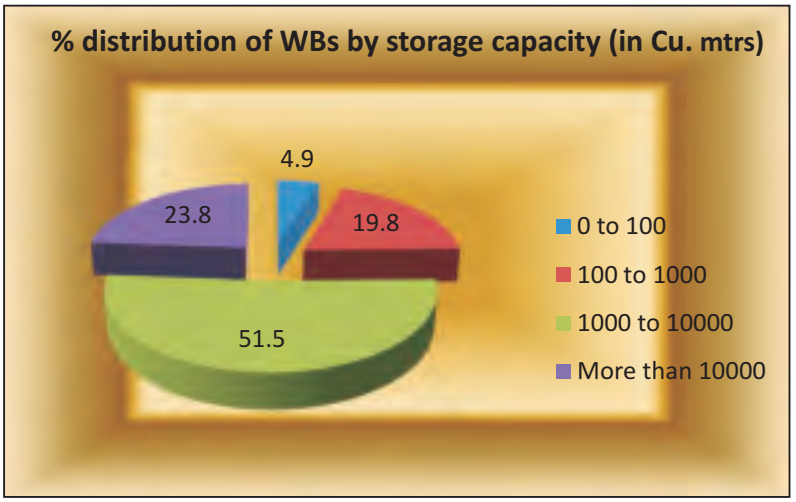


- 3.0% (5,445) of the water bodies are covered in District Irrigation Plan/State Irrigation Plan. Among these 44.9% (2,444) are tanks, 39.1% (2,129) are ponds and the remaining 16.0% (872) are lakes, reservoirs, water conservation schemes/percolation tanks/check dams etc. Out of 'in use' water bodies, 80.7% (1,30,930) are benefitting one (01) city/town, 18.0% (29,129) water bodies are fulfilling requirements of 2-5 cities/ towns and the remaining 1.3% (2,148) water bodies are benefitting more than five (05) cities/towns. State has reported encroachment in 1,048 out of all the enumerated water bodies, out of which 570 are ponds.

- Out of 1,81,837 water bodies, the information on 'water spread area' was reported in 1,80,532 water bodies. Out of these 1,80,532 water bodies, 77.6% (1,40,014) of the water bodies have water spread area less than 0.5 hectares whereas, 11.6% (20,801) water bodies have water spread area between 0.5 hectares to 1.0 hectares. Distribution of water bodies by 'water spread area' is shown in charts given below:



- In terms of storage capacity, 51.5% (93,706) water bodies have storage capacity between 1,000 to 10,000 cubic meters whereas 23.8% (43,268) have storage capacity more than 10,000 cubic meters. Distribution of water bodies by 'storage capacity of water bodies' is shown in charts given below:



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

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	**Total Number of Water Bodies**	**no.**	1,81,837	
	Total Number of Water Bodies in Rural Areas	**no.**	1,78,054	97.92
	Total Number of Water Bodies in Urban Areas	**no.**	3,783	2.08
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		94,025	51.71
	Tanks		80,671	44.36
	Lakes		579	0.32
	Reservoirs		1,606	0.88
	Water Conservation Schemes/ Percolation tanks/ Check dams		4,474	2.46
	Others		482	0.27
b	**Water Bodies with Private Ownership**	**no.**	92,575	50.91
	Water Bodies by area	**no.**		
	DPAP		22,735	12.50
	Tribal		56,900	31.29
	DDP		1,160	0.64
	Flood Prone		24,495	13.47
	Naxal affected area		1,518	0.83
	Others		75,029	41.26
	Total		1,81,837	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		25,289	15.59
	Industrial		3,609	2.22
	Pisciculture		1,10,647	68.21
	Domestic/ Drinking		11,899	7.34
	Recreation		3,452	2.13
	Religious		683	0.42
	Ground Water recharge		1,018	0.63
	Others		5,610	3.46
	Total		1,62,207	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		7,109	3.91
	Man Made		1,74,728	96.09
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		5,600	28.53
	Construction		1,941	9.89
	Siltation		3,564	18.16
	Destroyed beyond repair		1,154	5.88
	Salinity		320	1.63
	Due to industrial effluents		122	0.62
	Others		6,929	35.30

S.No.	Parameter	Unit	Value	Percentage to Total *
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		85,008	48.06
	Usually filled up		77,547	43.84
	Rarely filled up		11,497	6.50
	Never filled up		2,829	1.60
	Total		1,76,881	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		1,30,930	80.72
	2 to 5		29,129	17.96
	6 to 10		563	0.35
	11 to 20		497	0.31
	21 to 50		489	0.30
	50 to 500		589	0.36
	More than 500		10	0.01
	Total		1,62,207	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		1,40,014	77.56
	0.5 hectares to 1.0 hectares		20,801	11.52
	1 hectares to 5 hectares		16,997	9.41
	5 hectares to 10 hectares		2,056	1.14
	10 hectares to 50 hectares		428	0.24
	More than 50 hectares		236	0.13
	Total		1,80,532	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		8,868	4.88
	100 to 1000		35,995	19.80
	1000 to 10000		93,706	51.53
	More than 10000		43,268	23.79
	Total		1,81,837	100.00
9	**Number of encroached water bodies**	No.	1,048	0.58

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

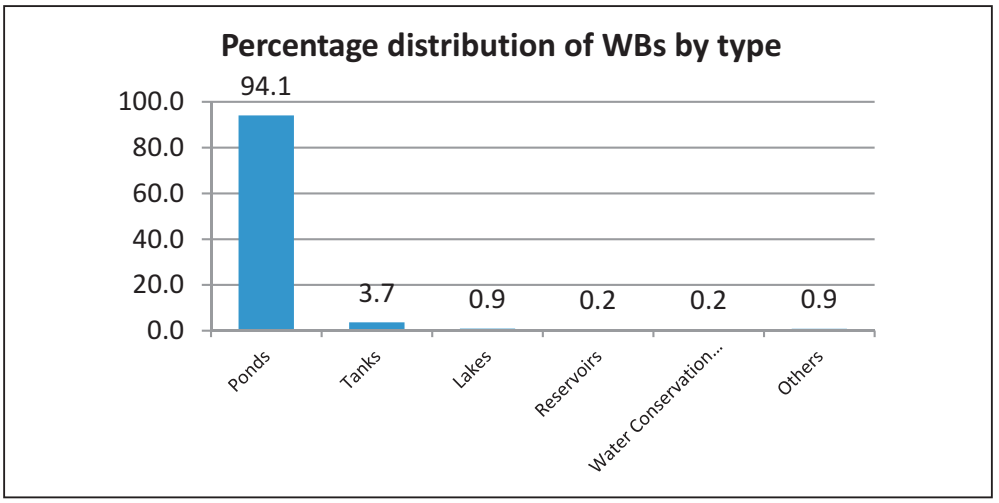
PUNJAB

A State better known as 'Land of five rivers', Sutlej, Ravi, Beas, Chenab and Jhelum. Punjab, located in northern India is primarily agriculture-based due to the presence of abundant water sources and fertile soils. As per 2011 Census of India, State has a population of 2,77,04,236 and an area of 50,362 km^2.

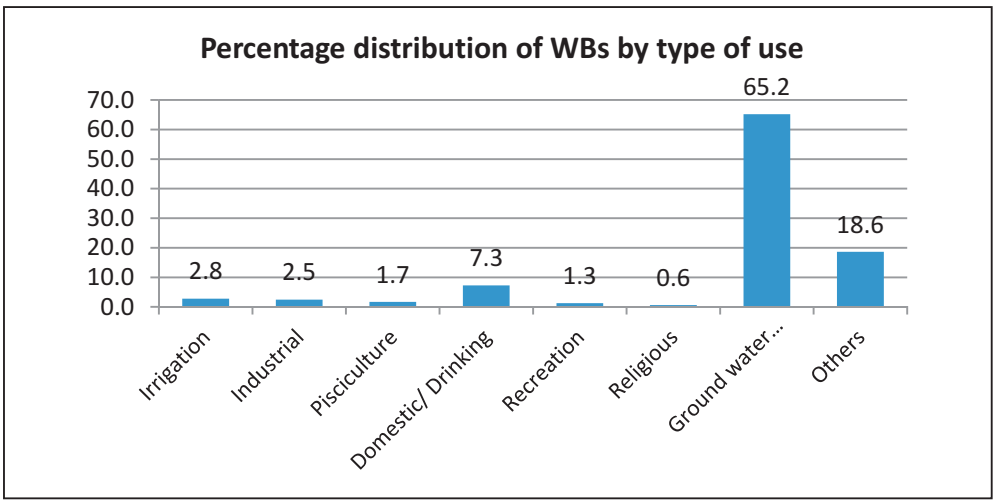
A Pond in Punjab Fazilka district Midda village

Major findings of the census

- In 1st census of water bodies, total 16,012 water bodies are enumerated, out of which 98.9% (15,831) are in rural areas and the remaining 1.1% (181) are in urban areas. Out of total water bodies, 97.6% (15,633) are under public ownership whereas the remaining 2.4% (379) are under private ownership.
- Majority of the water bodies are Ponds followed by Tanks and Lakes as depicted from chart given below.



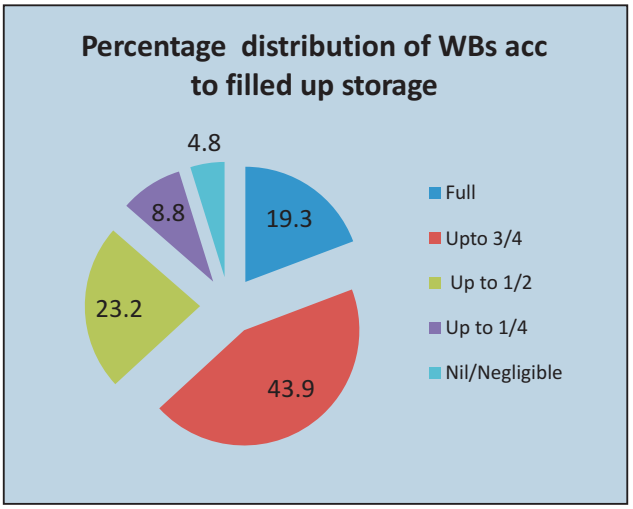
- Out of total 16,012 water bodies, 48.0% (7,680) water bodies are in use and a major chunk of 52.0% (8,332) water bodies are reported not in use on account of being dried up, siltation, destroyed beyond repair and other reasons. Among all the in use water bodies, majority of the water bodies, i.e. 95.8% (7,358) are ponds and the remaining 4.2% (322) are tanks, lakes, reservoirs, water conservation schemes/ percolation tanks/ check dams etc. Out of total in use water bodies, 65.2% (5,008) water bodies are used for ground water recharge in the State.

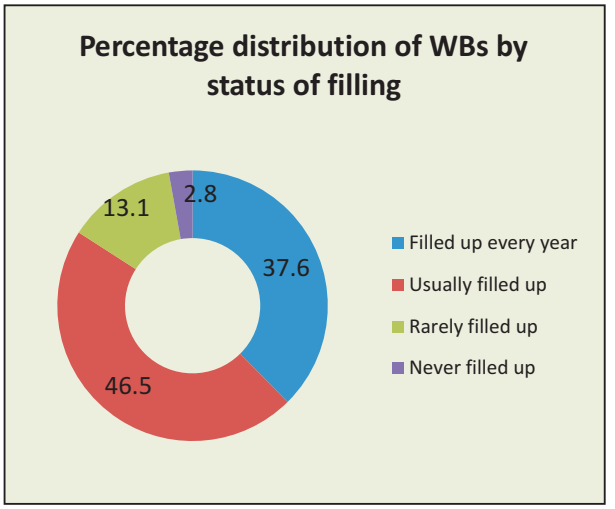


- There are 14,318 natural and 1,694 man-made water bodies in Punjab. Out of 14,318 natural water bodies, 98.9% (14,154) water bodies are located in rural areas whereas 1.1% (164) are located in urban areas. Out of 1,694 man-made water bodies, 99% (1,677) water bodies are located in rural areas whereas 1% (17) are located in urban areas. Most of the man-made water bodies have original cost of construction Up to Rs. 50,000.

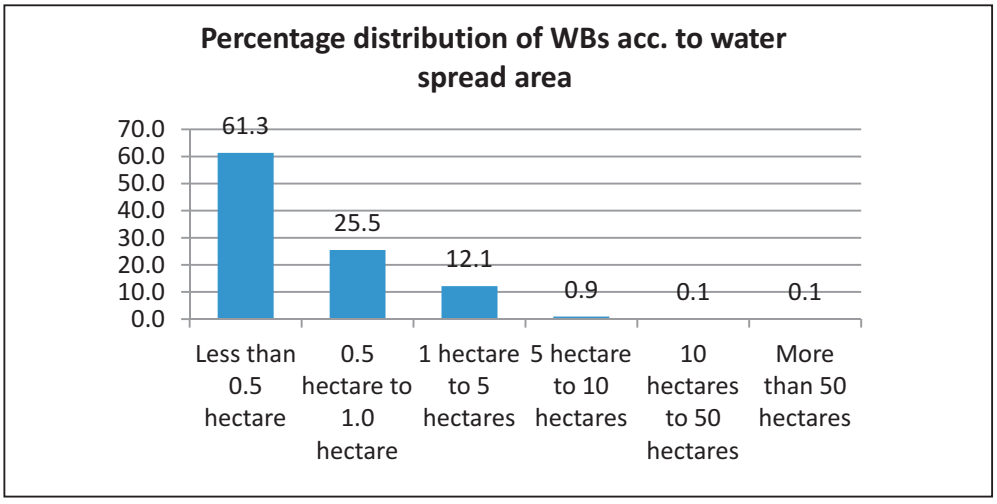
A pond in Punjab, Fazilka district Arniwali village

- Out of total 16,012 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 15,835 water bodies. During reference year 2017-18, out of these 15,835 water bodies, capacity of 19.3% (3,049) water bodies had fully filled up storage, 43.9% (6,953) water bodies had storage capacity filled upto three fourth level, 23.2% (3,681) water bodies had storage capacity filled upto half level, 8.8% (1,391) water bodies had storage capacity filled upto one fourth level whereas 4.8% (761) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 15,835 water bodies, 37.6% (5,956) water bodies are found to be filled up every year, 46.5% (7,368) are usually filled up, 13.1% (2,065) are rarely filled up and 2.8% (446) are never filled up. Percentage distribution of water bodies by status of filling and filled up storage capacity is given in the diagram given below.

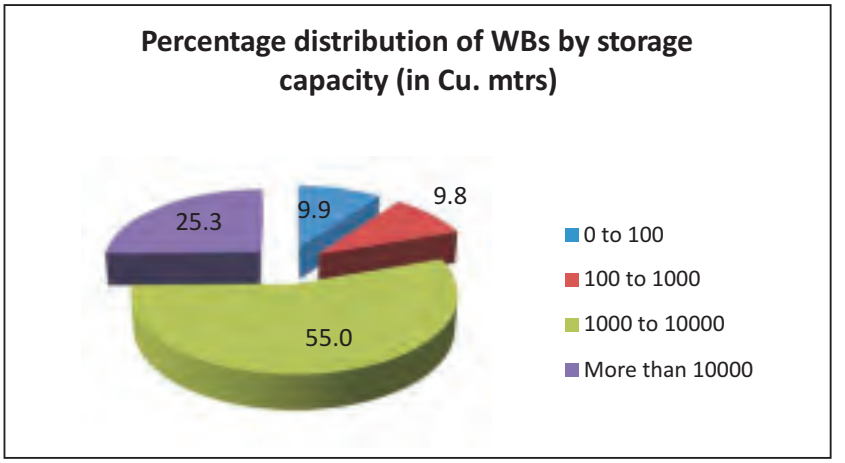




- Out of 16,012 water bodies, 150 (0.9%) are covered in District Irrigation Plan/State Irrigation Plan. Among these 150 water bodies, 74.7% (112) are ponds and the remaining 25.3% (38) are tanks, lakes, reservoirs, water conservation schemes/ percolation dams/ check dams etc. Out of 'in use' water bodies, 83.1% (6,383) are benefitting one (01) city/town, 15.5% (1,192) water bodies are fulfilling requirements of 2- 5 cities/ towns whereas the remaining 1.4% (105) are benefitting more than 5 cities/towns.
- Out of total 16,012 water bodies, the information on 'water spread area' was reported in 15,997 water bodies. Out of these 15,997 water bodies, 61.3% (9,814) of the water bodies have water spread area less than 0.5 hectares and 25.5% (4,081) have water spread area between 0.5 hectares to 1.0 hectares. Percentage distribution of water bodies according to 'water spread area' is shown in the chart given below.



- In terms of storage capacity, out of total water bodies, 55.0% (8,813) water bodies have storage capacity between 1000 to 10000 Cubic Meters whereas 25.3% (4,047) water bodies have storage capacity more than 10000 Cubic Meters. Distribution of storage capacity of water bodies is depicted in chart given below:



- Out of 16,012 water bodies, 9.9% (1,578) water bodies are reported to be encroached out of which encroachment area can be assessed for 1,486 water bodies. Among these 1,486 water bodies, 1,082 are assessed to have less than 25% area under encroachment, 381 having encroachment area ranging between 25% to 75% and 23 have more than 75% encroachment area.
- Key parameters of First Census of Water Bodies for the State of Punjab are given in the Annexure.

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	**Total Number of Water Bodies**	**no.**	16,012	
	Total Number of Water Bodies in Rural Areas	**no.**	15,831	98.87
	Total Number of Water Bodies in Urban Areas	**no.**	181	1.13
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		15,064	94.08
	Tanks		589	3.68
	Lakes		151	0.94
	Reservoirs		31	0.19
	Water Conservation Schemes/ Percolation tanks/ Check dams		36	0.22
	Others		141	0.88
b	**Water Bodies with Private Ownership**	**no.**	379	2.37
	Water Bodies by area	**no.**		
	DPAP		1,979	12.36
	Tribal		398	2.49
	DDP		271	1.69
	Flood Prone		30	0.19
	Naxal affected area		64	0.40
	Others		13,270	82.88
	Total		16,012	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		216	2.81
	Industrial		191	2.49
	Pisciculture		129	1.68
	Domestic/ Drinking		559	7.28
	Recreation		97	1.26
	Religious		48	0.63
	Ground Water recharge		5,008	65.21
	Others		1,432	18.65
	Total		7,680	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		14,318	89.42
	Man Made		1,694	10.58
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		471	5.65
	Construction		307	3.68

S.No.	Parameter	Unit	Value	Percentage to Total *
	Siltation		330	3.96
	Destroyed beyond repair		95	1.14
	Salinity		129	1.55
	Due to industrial effluents		94	1.13
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		5,956	37.61
	Usually filled up		7,368	46.53
	Rarely filled up		2,065	13.04
	Never filled up		446	2.82
	Total		15,835	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		6,383	83.11
	2 to 5		1,192	15.52
	6 to 10		39	0.51
	11 to 20		24	0.31
	21 to 50		31	0.40
	50 to 500		10	0.13
	More than 500		1	0.01
	Total		7,680	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		9,814	61.35
	0.5 hectares to 1.0 hectares		4,081	25.51
	1 hectares to 5 hectares		1,940	12.13
	5 hectares to 10 hectares		146	0.91
	10 hectares to 50 hectares		8	0.05
	More than 50 hectares		8	0.05
	Total		15,997	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		1,592	9.95
	100 to 1000		1,560	9.74
	1000 to 10000		8,813	55.04
	More than 10000		4,047	25.27
	Total		16,012	100.00
9	**Number of encroached water bodies**	No.	1,578	9.86

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

RAJASTHAN

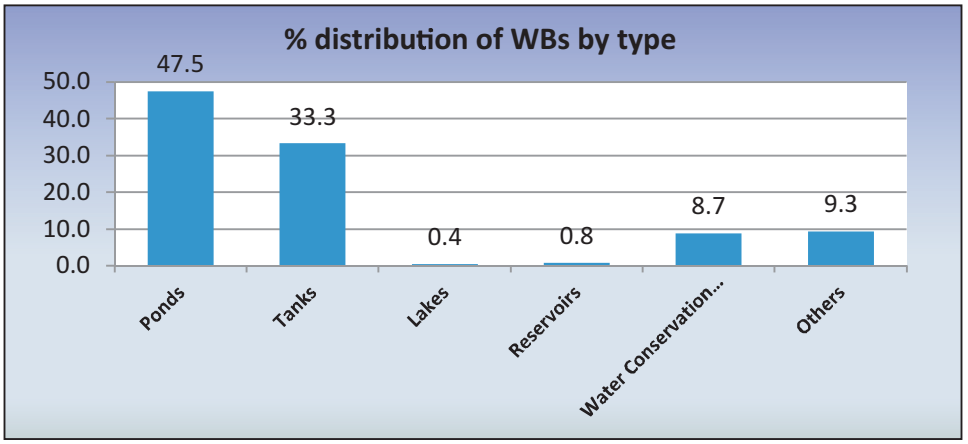
Rajasthan, 'Land of Kings' or 'Land of Kingdom' is India's largest state by area. The State located on northwest part of country and is a home of cultural diversity. Its features include the ruins of Indus Valley Civilization, Temples, Forts and Fortresses in almost every city.

A tank in Chittorgarh district

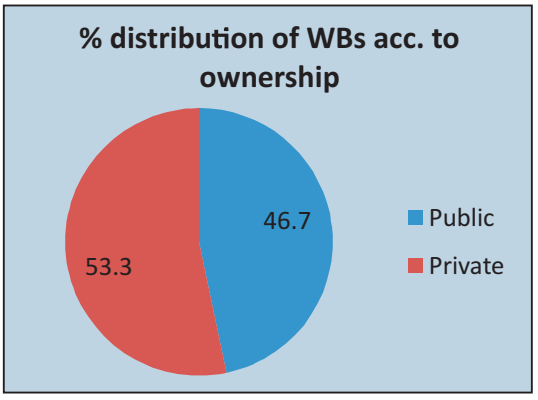
Rajasthan has 33 districts with a total geographical area of 3,42,239 square km^2 and a population of 6,85,48,437.

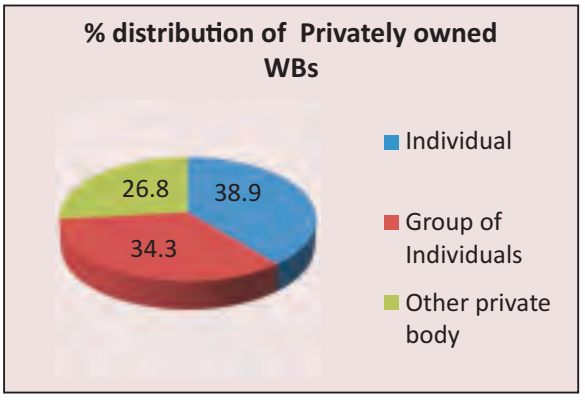
Major findings of the census

- In 1st census of water bodies, 16,939 water bodies have been enumerated in the State of Rajasthan, out of which 98.9% (16,750) are in rural areas and the remaining 1.1% (189) in urban areas. Majority of the water bodies are ponds as depicted from chart given below.

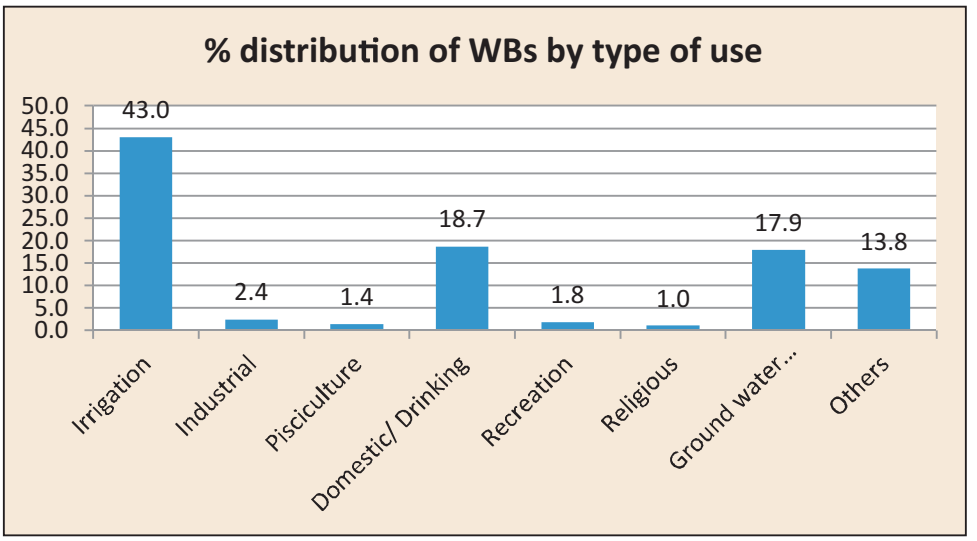


- 53.3% (9,033) are privately owned whereas the remaining 46.7% (7,906) are under public ownership. Distribution of water bodies by ownership status is shown in the charts given below. By location, 10.3% (1,745) water bodies are located in tribal areas, 6.1% (1037) in Drought Prone Area Program(DPAP) areas and remaining 83.6% (14,157) are located in Desert Development Plan (DDP), flood prone, naxal affected areas and other areas.





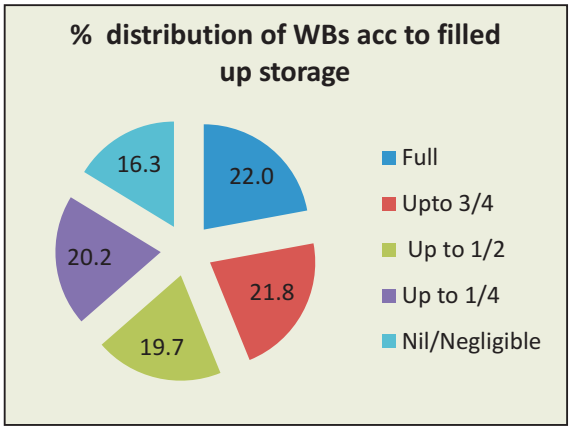
- Out of all water bodies, 79.2% (13,416) water bodies are in use whereas rest 20.8% (3,523) are not in use on account of drying up, siltation, salinity, destroyed beyond repair and other reasons. Out of 'in use' water bodies, a major proportion of water bodies are used in Irrigation followed by domestic/ drinking purpose. Percentage distribution of water bodies by type of use is shown in the diagram given below.

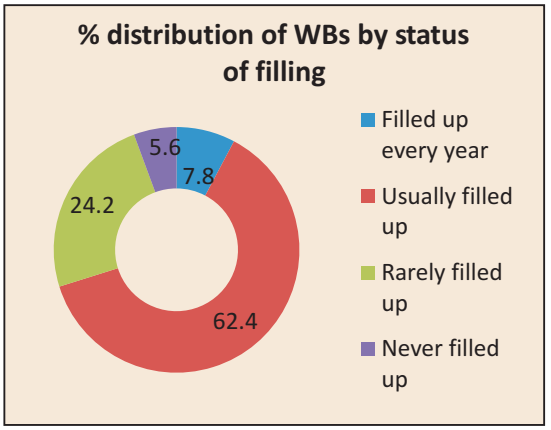


- In the State of Rajasthan, there are 4,799 natural and 12,140 man-made water bodies. Out of 4,799 natural water bodies, 98.5% (4,727) water bodies are located in rural areas and the remaining 1.5% (72) are located in urban areas. Out of 12,140 man-made water bodies, 99% (12,023) water bodies are located in rural areas and the remaining 1% (117) in urban areas. Most of the man-made water bodies have original cost of construction upto Rs. 1 lakh.

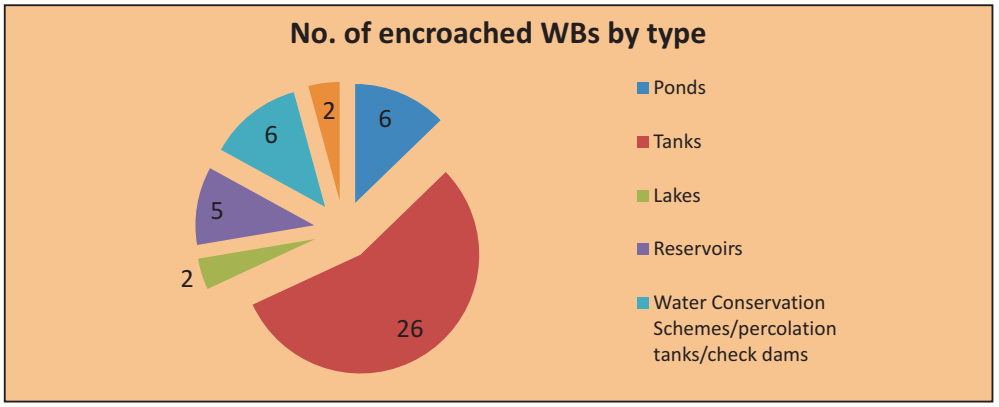

A lake in Bhilwara District

- Out of 16,939 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 13,883 water bodies. During reference year 2017-18, out of these 13,883 water bodies, 22% (3,067) water bodies had fully filled up storage capacity, 21.8% (3,022) water bodies had storage capacity filled upto three fourth level, 19.7% (2,736) water bodies had storage capacity filled upto half level, 20.2% (2,798) water bodies had storage capacity filled upto one fourth level whereas 16.3% (2,260) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 13,883 water bodies, 7.8% (1,077) water bodies are found to be filled up every year, 62.4% (8,664) are usually filled up, 24.2% (3,361) are rarely filled up and 5.6% (781) are never filled up. Percentage distribution of water bodies by 'status of filling' and 'filled up storage capacity' is shown in the diagram given below.

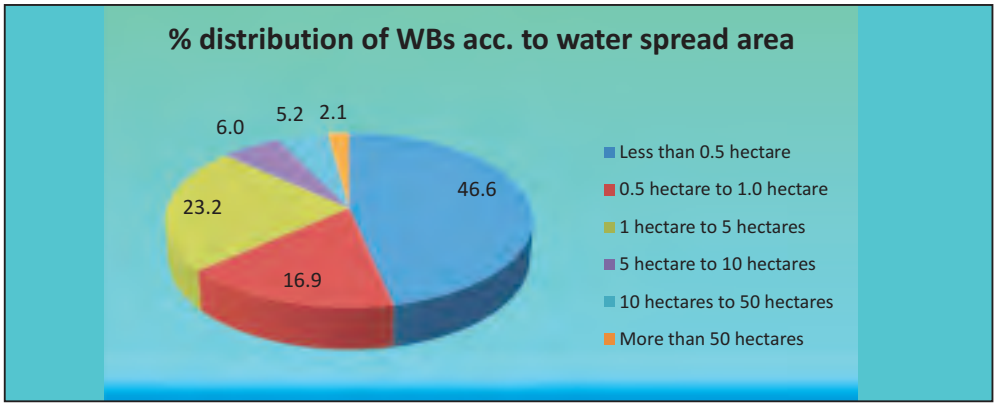




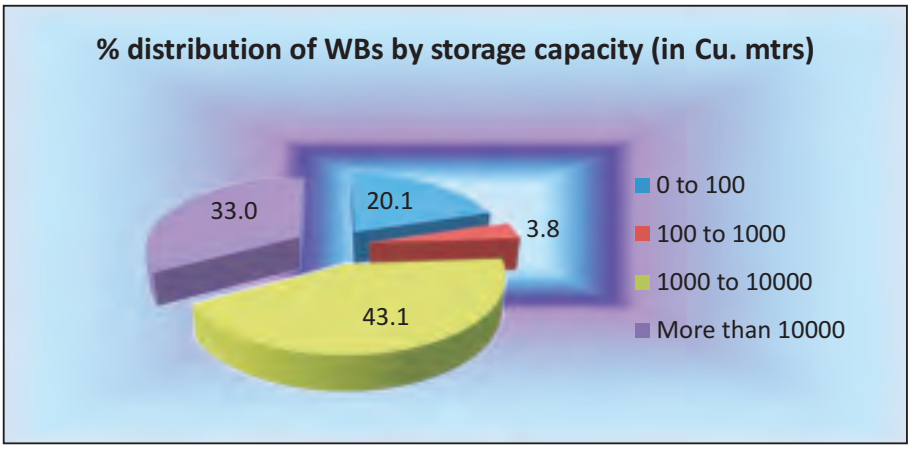
- Out of all water bodies, 3.7% (629) are covered in District Irrigation Plan/State Irrigation Plan. Among these 41.3% (260) are tanks and the remaining 58.7% (369) are ponds, lakes, reservoirs etc. Out of 'in use' water bodies, 89.9% (12,057) are benefitting one (01) city/town, 9.6% (1,282) water bodies are fulfilling requirements of 2- 5 cities/ towns and the remaining 0.5% (77) water bodies are benefitting more than five (05) cities/towns. State has reported encroachment in 0.3% (47) water bodies out of all the enumerated water bodies. The number of encroached water bodies by type is shown in the chart given below.



- Out of 16,939 water bodies, 46.6% (7,893) of the water bodies have water spread area less than 0.5 hectares whereas, 16.9% (2,861) water bodies have water spread area between 0.5 hectares to 1.0 hectares. Distribution of water bodies by 'water spread area' is shown in chart given below:



- In terms of storage capacity, 43.1% (7,294) water bodies have storage capacity between 1,000 to 10,000 Cubic Meters whereas 33.0% (5,590) have storage capacity more than 10,000 cubic meters. Distribution of water bodies by 'storage capacity of water bodies' is shown in chart given below:



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

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	**Total Number of Water Bodies**	**no.**	16,939	
	Total Number of Water Bodies in Rural Areas	**no.**	16,750	98.88
	Total Number of Water Bodies in Urban Areas	**no.**	189	1.12
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		8,046	47.50
	Tanks		5,639	33.29
	Lakes		66	0.39
	Reservoirs		132	0.78
	Water Conservation Schemes/ Percolation tanks/ Check dams		1,481	8.74
	Others		1,575	9.30
b	**Water Bodies with Private Ownership**	**no.**	9,033	53.33
	Water Bodies by area	**no.**		
	DPAP		1,037	6.12
	Tribal		1,745	10.30
	DDP		236	1.39
	Flood Prone		52	0.31
	Naxal affected area		46	0.27
	Others		13,823	81.60
	Total		16,939	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		5,766	42.98
	Industrial		322	2.40
	Pisciculture		187	1.39
	Domestic/ Drinking		2,511	18.72
	Recreation		244	1.82
	Religious		137	1.02
	Ground Water recharge		2,406	17.93
	Others		1,843	13.74
	Total		13,416	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		4,799	28.33
	Man Made		12,140	71.67
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		16,88	47.91
	Construction		235	6.67
	Siltation		268	7.61
	Destroyed beyond repair		104	2.95
	Salinity		25	0.71
	Due to industrial effluents		5	0.14
	Others		1,198	34.01

S.No.	Parameter	Unit	Value	Percentage to Total *
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		1,077	7.76
	Usually filled up		8,664	62.41
	Rarely filled up		3,361	24.21
	Never filled up		781	5.63
	Total		13,883	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		12,057	89.87
	2 to 5		1,282	9.56
	6 to 10		53	0.40
	11 to 20		13	0.10
	21 to 50		10	0.07
	50 to 500		1	0.01
	Total		13,416	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		7,893	46.60
	0.5 hectares to 1.0 hectares		2,861	16.89
	1 hectares to 5 hectares		3,938	23.25
	5 hectares to 10 hectares		1,018	6.01
	10 hectares to 50 hectares		873	5.15
	More than 50 hectares		356	2.10
	Total		16,939	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		3,419	20.18
	100 to 1000		636	3.75
	1000 to 10000		7,294	43.06
	More than 10000		5,590	33.00
	Total		16,939	100.00
9	**Number of encroached water bodies**	No.	47	

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

SIKKIM

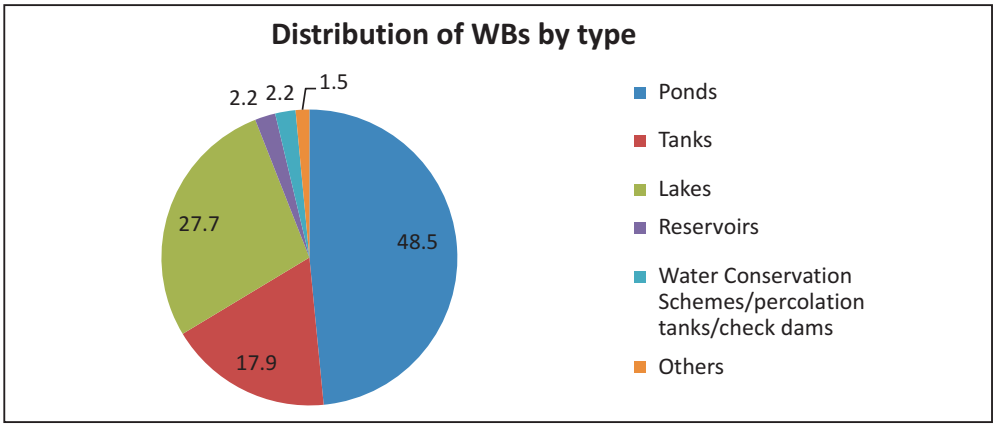
Sikkim is a host to Kangchenjunga, the highest peak in India and third highest on Earth. State offers Lush and thick forests, exotic flora, beautiful hills, picturesque villages, hot springs and waterfalls etc.

Gurudongmar lake in Lachen village of Sikkim

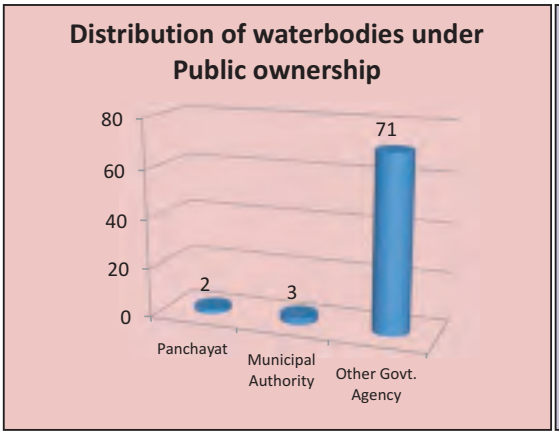
Sikkim has 04 districts with a total geographical area of 7,096 km^2. As per the census of 2011, Sikkim has a population of 6,10,577.

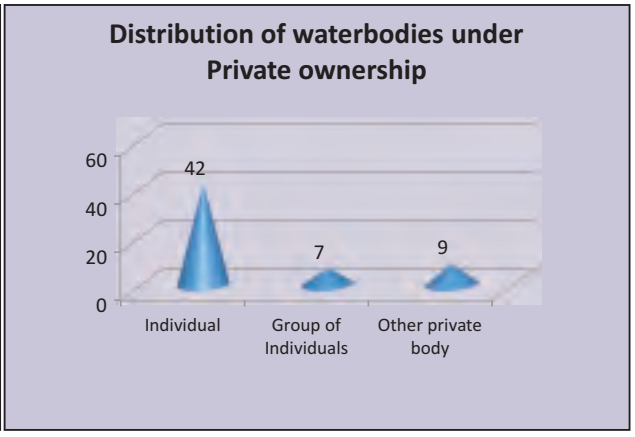
Major findings of the census

- In 1st census of water bodies, 134 water bodies have been enumerated in the State of Sikkim, out of which 91.0% (122) are in rural areas and the remaining 9.0% (12) are in urban areas. Majority of the water bodies are ponds followed by lakes and tanks as depicted from chart given below.

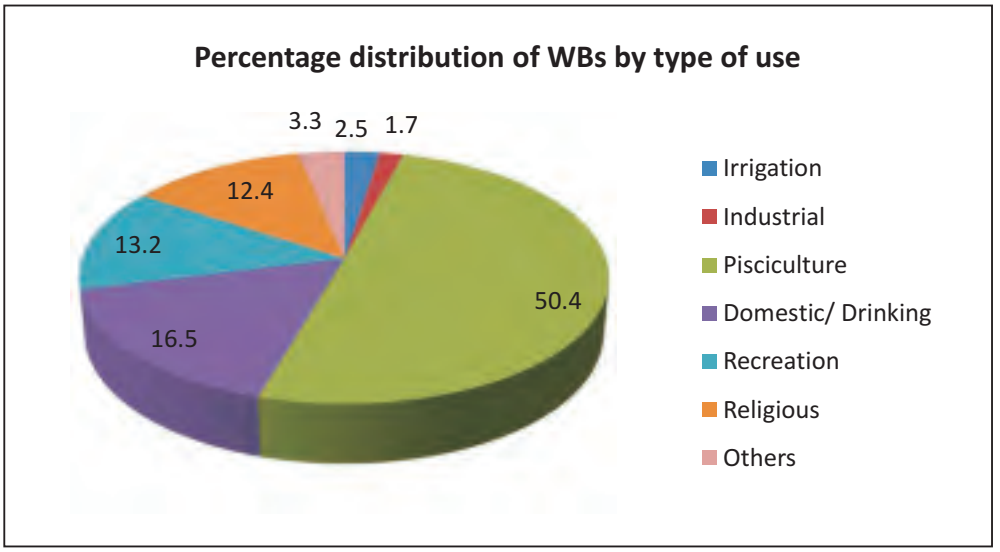


- 43.3% (58) water bodies are privately owned whereas the remaining 56.7% (76) are under public ownership. This reflects the dominance of public authorities in ownership of water bodies. Distribution of water bodies by ownership status is shown in the charts given below. By location, 27.6% (37) water bodies are located in tribal areas and the remaining 72.4% (97) are in flood prone and other areas.





- Out of 134 water bodies, 90.3% (121) water bodies are in use whereas rest 9.7% (13) are not in use on account of drying up, siltation and other reasons. Out of 'in use' water bodies, a major proportion of water bodies are used in pisciculture followed by domestic/ drinking purpose, recreation, religious etc. Percentage distribution of water bodies by type of use is shown in the diagram given below.

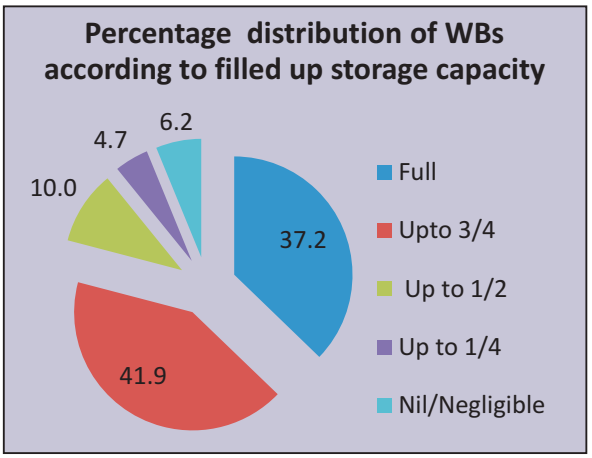


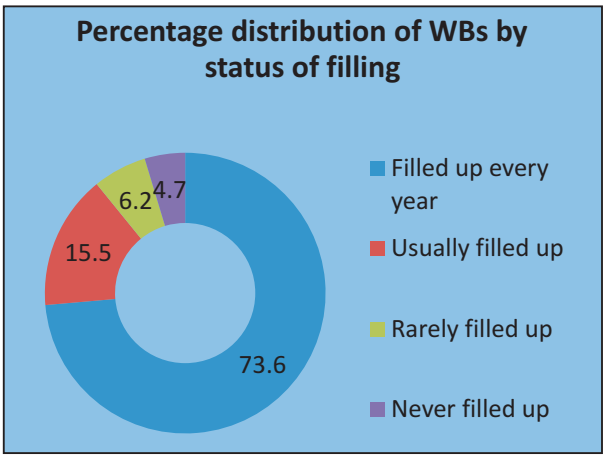
- In the State of Sikkim, there are 44 natural and 90 man-made water bodies. All the natural water bodies are located in rural areas whereas out of 90 man-made water bodies, 86.7% (78) water bodies are located in rural areas and the remaining 13.3% (12) are located in urban areas. Most of the man-made water bodies have original cost of construction upto Rs.50,000.

Rangit Hydropower project in Nordang village of Sikkim

- Out of 134 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 129 water bodies. During reference year 2017-18, out of these 129 water bodies, 37.2% (48) water bodies had fully filled up storage capacity, 41.9% (54) water bodies had storage

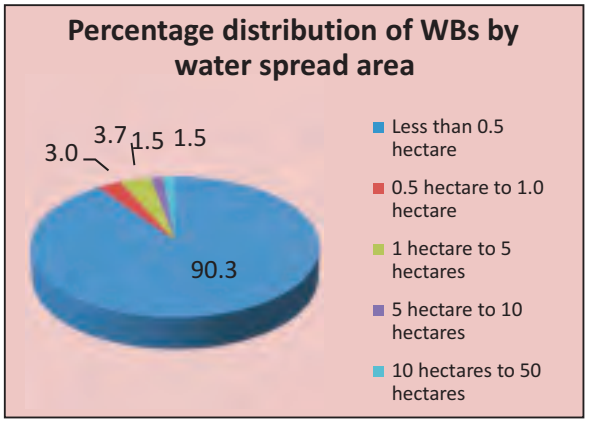
capacity filled upto three fourth level, 10.0% (13) water bodies had storage capacity filled upto half level, 4.7% (6) water bodies had storage capacity filled upto one fourth level whereas 6.2% (8) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 129 water bodies, 73.6% (95) water bodies are found to be filled up every year, 15.5% (20) are usually filled up, 6.2% (8) are rarely filled up and 4.7% (6) are never filled up. Percentage distribution of water bodies by 'status of filling' and 'filled up storage capacity' is shown in the diagram given below.

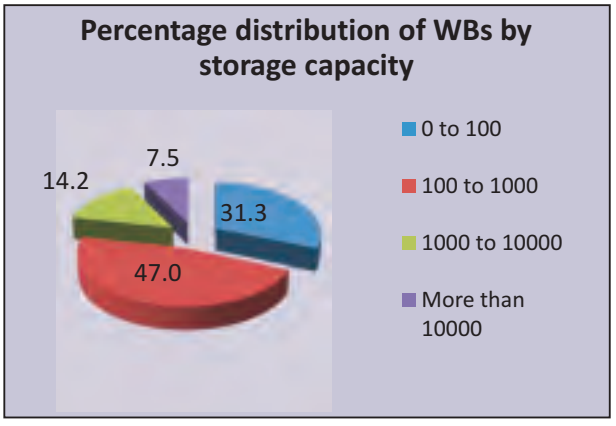




- Out of all water bodies, 6.0% (08) are covered in District Irrigation Plan/State Irrigation Plan. Among these eight (08) water bodies, seven (07) are ponds and one (01) is lake. Out of 'in use' water bodies, 28.1% (34) are benefitting one (01) city/town, 62.0% (75) water bodies are fulfilling requirements of 2- 5 cities/ towns and the remaining 9.9% (12) water bodies are benefitting more than five (05) cities/towns. State has not reported any encroachment in the enumerated water bodies.

- 90.3% (121) of the water bodies have water spread area less than 0.5 hectares. In terms of storage capacity, 47.0% (63) water bodies have storage capacity between 100 to 1000 Cubic Meters. Distribution of water bodies by 'water spread area' and 'storage capacity of water bodies' is shown in charts given below:





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

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	**Total Number of Water Bodies**	**no.**	134	
	Total Number of Water Bodies in Rural Areas	**no.**	122	91.04
	Total Number of Water Bodies in Urban Areas	**no.**	12	8.96
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		65	48.51
	Tanks		24	17.91
	Lakes		37	27.61
	Reservoirs		3	2.24
	Water Conservation Schemes/ Percolation tanks/ Check dams		3	2.24
	Others		2	1.49
b	**Water Bodies with Private Ownership**	**no.**	58	43.28
	Water Bodies by area	**no.**		
	DPAP		0	0.00
	Tribal		37	27.61
	DDP		0	0.00
	Flood Prone		1	0.75
	Naxal affected area		0	0.00
	Others		96	71.64
	Total		134	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		3	2.48
	Industrial		2	1.65
	Pisciculture		61	50.41
	Domestic/ Drinking		20	16.53
	Recreation		16	13.22
	Religious		15	12.40
	Ground Water recharge		0	0.00
	Others		4	3.31
	Total		121	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		44	32.84
	Man Made		90	67.16
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		8	61.54
	Construction		2	15.38
	Siltation		1	7.69
	Destroyed beyond repair		0	0.00
	Salinity		0	0.00
	Due to industrial effluents		0	0.00
	Others		2	15.38

S.No.	Parameter	Unit	Value	Percentage to Total *
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		95	73.64
	Usually filled up		20	15.50
	Rarely filled up		8	6.20
	Never filled up		6	4.65
	Total		129	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		34	28.10
	2 to 5		75	61.98
	6 to 10		7	5.79
	11 to 20		4	3.31
	21 to 50		1	0.83
	50 to 500		0	0.00
	Total		121	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		121	90.30
	0.5 hectares to 1.0 hectares		4	2.99
	1 hectares to 5 hectares		5	3.73
	5 hectares to 10 hectares		2	1.49
	10 hectares to 50 hectares		2	1.49
	More than 50 hectares		0	0.00
	Total		134	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		42	31.34
	100 to 1000		63	47.01
	1000 to 10000		19	14.18
	More than 10000		10	7.46
	Total		134	100.00
9	**Number of encroached water bodies**	No.	0	

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

Tamil Nadu

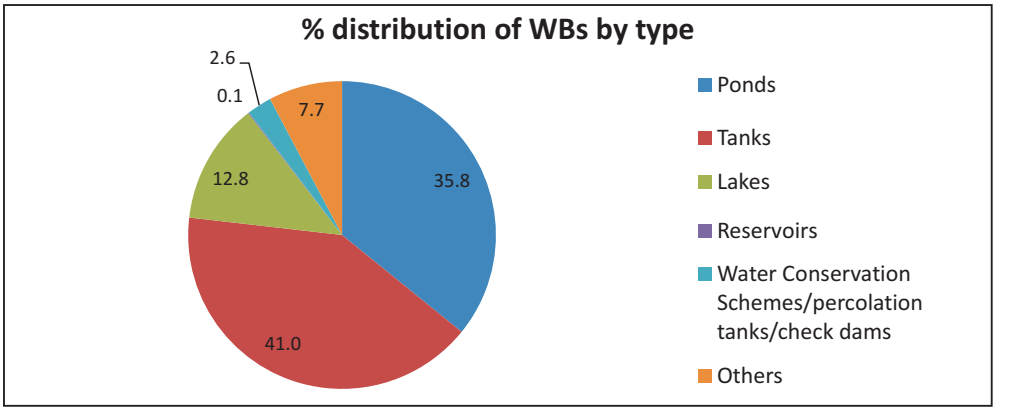
Tamil Nadu is one of the southern States in India bounded on north by Andhra Pradesh and Karnataka, on the west by Kerala, on the east by the Bay of Bengal, and on the south by the Indian Ocean. The State is famous for its wonderful temples and monuments.

Lake in Kodiyalam Village of Krishnagiri District of Tamil Nadu

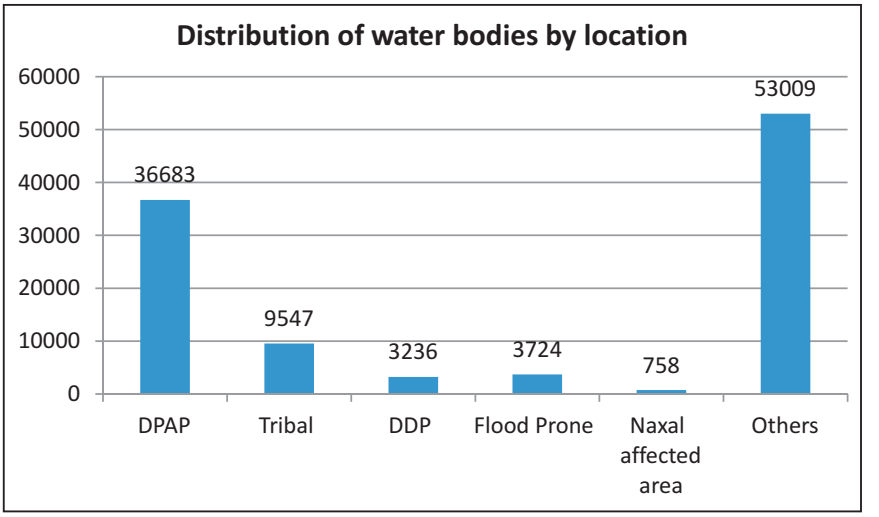
Tamil Nadu has a total Geographic area of 1,30,058 km^2. According to the 2011 census, Tamil Nadu had a population of 7,21,47,030.

Major findings of the census

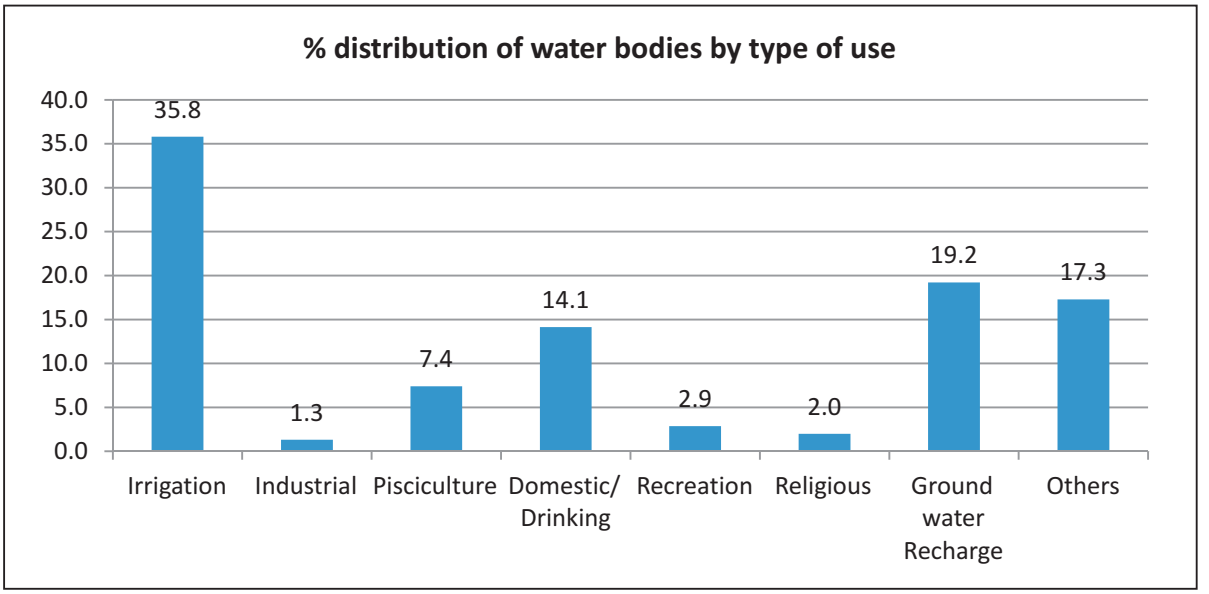
- In 1st census of water bodies, 1,06,957 water bodies have been enumerated, out of which 92.9% (99,414) are in rural areas and the remaining 7.1% (7,543) are in urban areas. Majority of the water bodies are tanks followed by ponds as depicted from chart given below.



- 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.



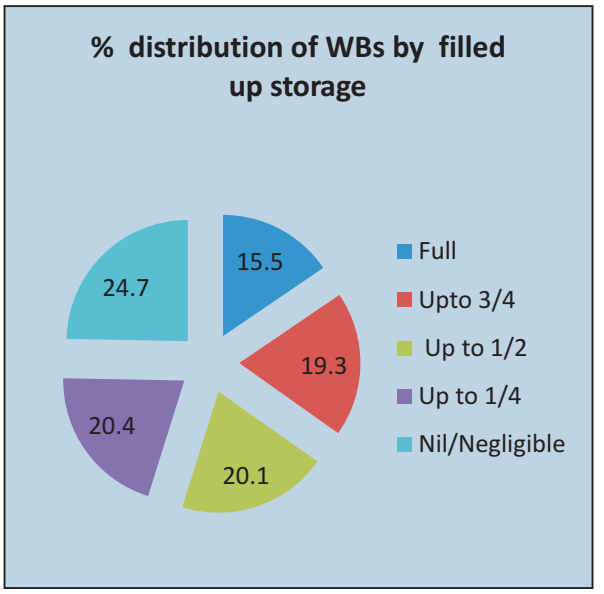
- Out of 1,06,957 water bodies, 53.1% (56,760) water bodies are in use whereas 46.9% (50,197) water bodies are not in use on account of drying up, siltation, destroyed beyond repair, salinity and other reasons. Out of 'in use' water bodies, 35.8% (20,324) water bodies are used for irrigation purpose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

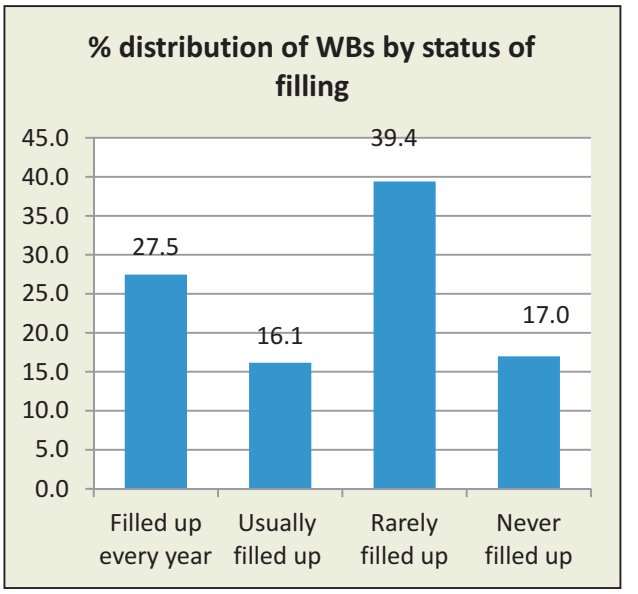


- There are 77,244 natural and 29,713 man-made water bodies in Tamil Nadu. Out of 77,244 natural water bodies, 91.9% (70,974) water bodies are located in rural areas whereas 8.1% (6,270) are located in urban areas. Out of 29,713 man-made water bodies, 95.7% (28,440) water bodies are located in rural 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.

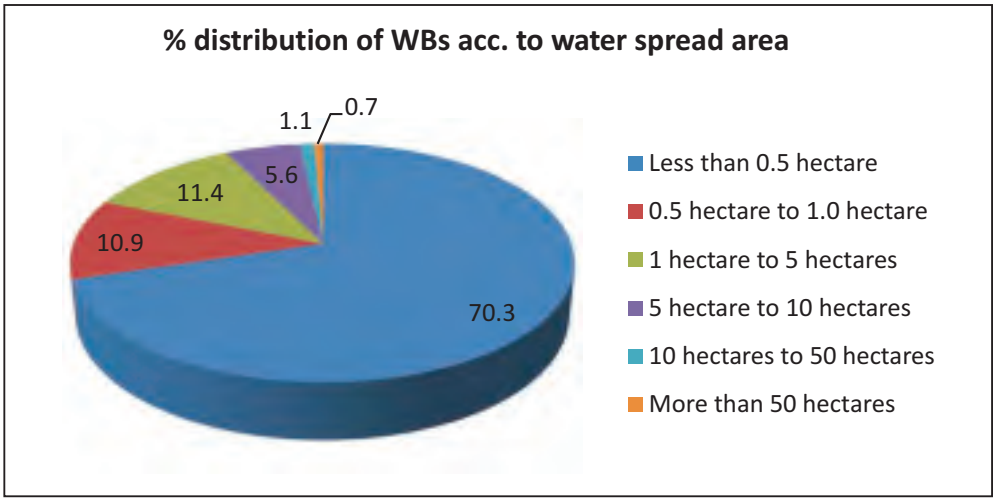
A Lake in Vetriyur village of Ariyalur district ofTamil Nadu

- 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.

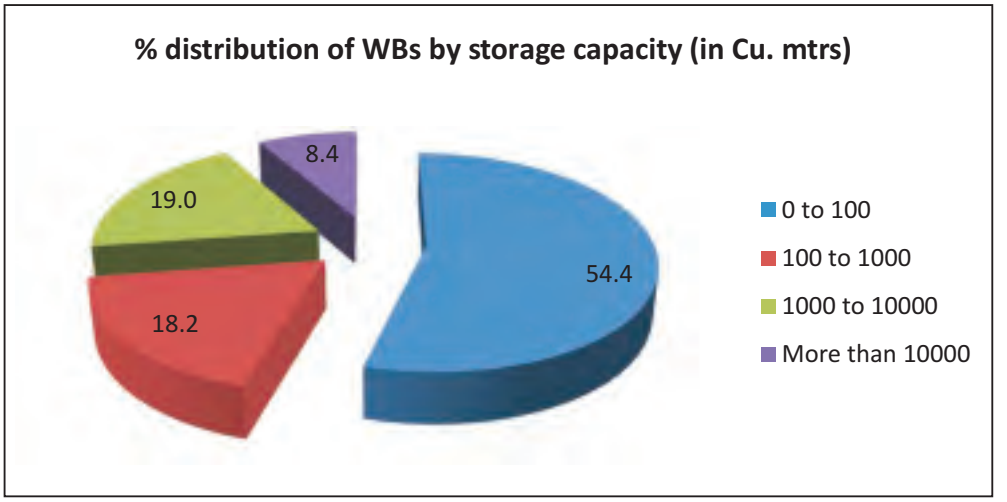




- Out of 10,6957 water bodies, 13,651 (12.8%) are covered in District Irrigation Plan/State Irrigation Plan. Among these 13,651 water bodies, 43.2% (5,896) are tanks. Out of 'in use' water bodies, 57.5% (32,671) are benefitting one (01) city/town, 39.1% (22,168) water bodies are fulfilling requirements 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.

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.

TELANGANA

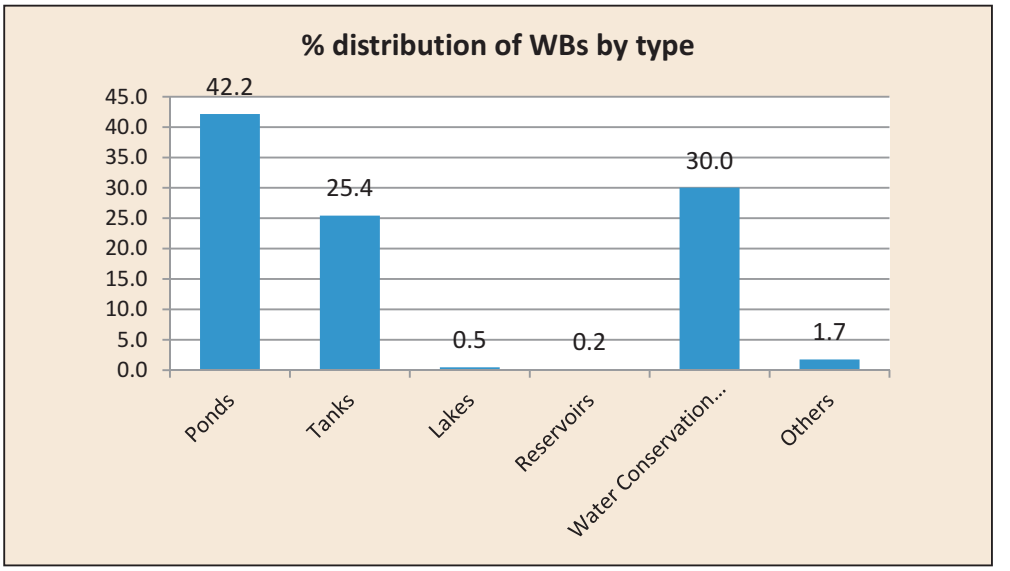
Telangana is the 29th state of India, formed on the 2nd of June 2014. After decades of movement for a separate State, Telangana was created by passing the AP State Reorganization Bill in both houses of Parliament. The State is located on the uplands of Deccan plateau with rich culture, beautiful and unique art forms.

A pond in Khammam District

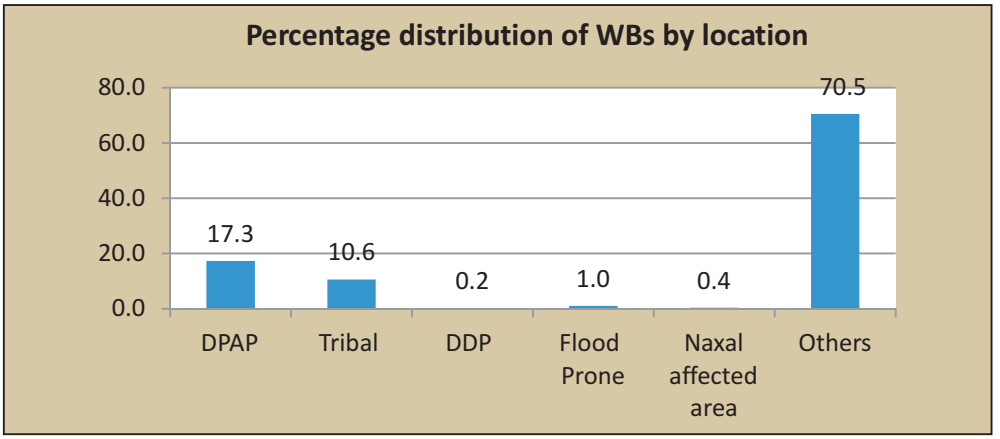
The State has an area of 1,12,077 km^2 and a population of 3,50,03,674.

Major findings of the census

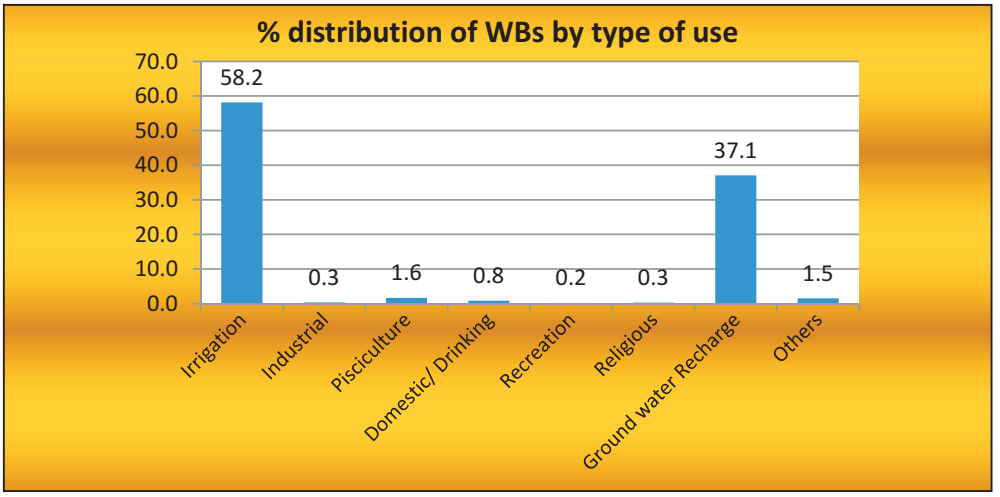
- In 1st census of water bodies, 64,055 water bodies have been enumerated in the State of Telangana, out of which majority, i.e. 98.5% (63,063) are in rural areas and the remaining 1.5% (992) are in urban areas. Majority of the water bodies are ponds followed by water conservation schemes/percolation tanks/check dams and tanks as depicted from chart given below.



- 80.5% (51,593) are under public ownership whereas the remaining 19.5% (12,462) are under private ownership. By location, 17.3% (11,076) water bodies are located in the areas under 'Drought Prone Areas Programme', 10.6% (6,781) in tribal areas and the remaining 72.1% (46,198) are located in flood prone area, naxal affected and other areas. Distribution of water bodies by location is shown in the chart given below.



- Out of 64,055 water bodies, 80.8% (51,732) water bodies are in use whereas rest 19.2% (12,323) are not in use on account of drying up, siltation, destroyed beyond repair, salinity and other reasons. Out of 'in use' water bodies, majority of them are used for irrigation followed by ground water recharge. Percentage distribution of water bodies by type of use is shown in the diagram given below.

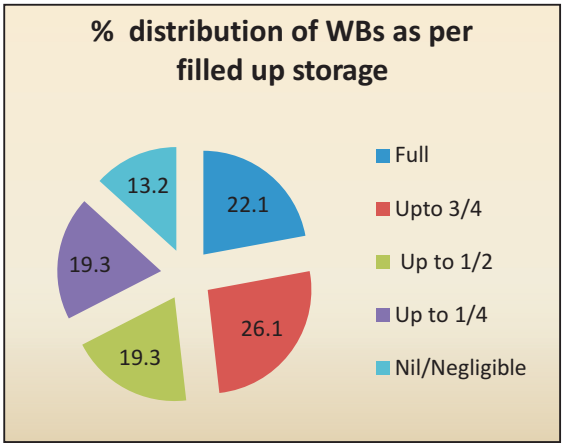


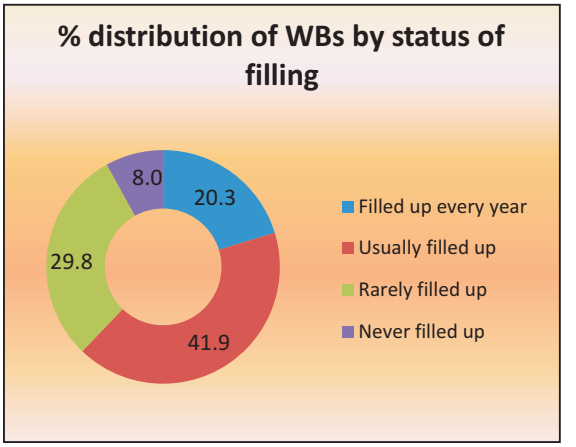
- There are 10,170 natural and 53,885 man-made water bodies in the State of Telangana. Out of 10,170 natural water bodies, 96.2% (9,781) water bodies are located in rural areas and the remaining 3.8% (389) are located in urban areas. Out of 53,885 man-made water bodies, 98.9% (53,282) water bodies are located in rural areas and the remaining 1.1% (603) are located in urban areas. Most of the man-made water bodies have original cost of construction upto Rs.50,000.


A tank in Adilabad district

- Out of 64,055 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 43,695 water bodies. During reference year 2017-18, out of these 43,695 water bodies, 22.1% (9,657) water bodies had fully filled up storage capacity, 26.1% (11,403) water bodies had storage capacity filled upto three fourth level, 19.3% (8,416) water

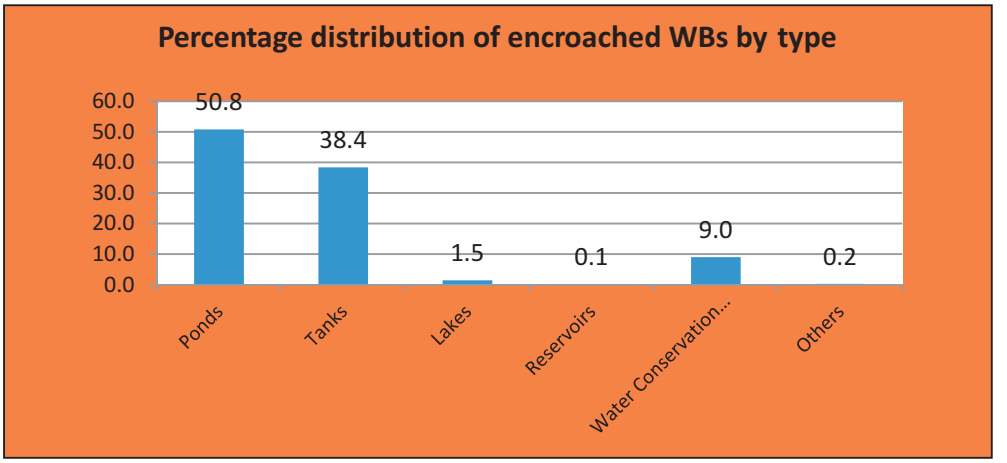
bodies had storage capacity filled upto half level, 19.3% (8,429) water bodies had storage capacity filled upto one fourth level whereas 13.2% (5,790) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of these 43,695 water bodies, 20.3% (8,862) water bodies are found to be filled up every year, 41.9% (18,301) are usually filled up, 29.8% (13,033) are rarely filled up and 8.0% (3,499) are never filled up. Percentage distribution of water bodies by 'status of filling' and 'filled up storage capacity' is shown in the diagram given below.



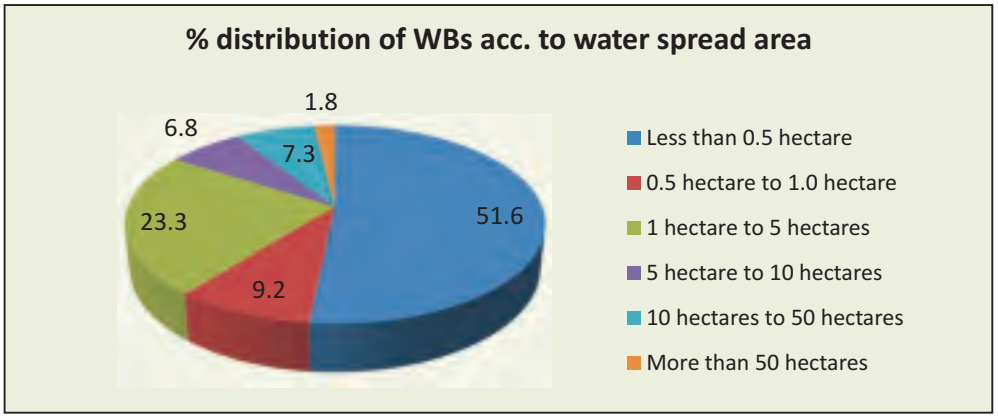


- Out of all water bodies, 38,540 water bodies are covered in District Irrigation Plan/State Irrigation Plan. Among these water bodies, 45.9% (17,681) are ponds whereas the remaining 54.1% (20,859) are tanks, lakes, reservoirs, water conservation schemes/percolation tanks/check dams etc. Out of 'in use' water bodies, 64.7% (33,468) are benefitting one (01) city/town, 32.9% (17,009) water bodies are fulfilling requirements of 2-5 cities/ towns and the remaining 2.4% (1,255) water bodies are benefitting more than five (05) cities/towns.

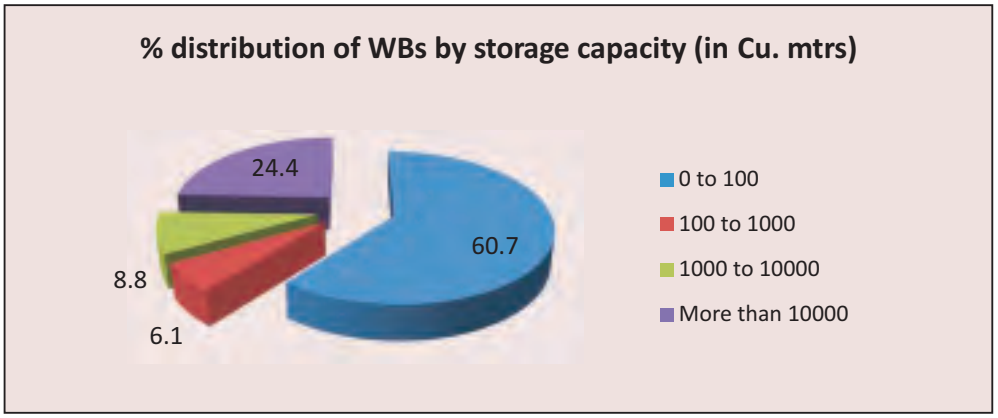
- State has reported encroachment in 3,032 water bodies, out of which 50.8% (1,540) are ponds and the remaining 49.2% (1,492) are tanks, lakes, reservoirs, water conservation schemes/percolation tanks/check dams etc. Out of these 3,032 encroached water bodies, the encroachment area can be assessed in 2,028 water bodies. Among these 2,028 water bodies, 69.8% (1,415) are assessed to have less than 25% area under encroachment, 19.8% (402) having encroachment area ranging between 25% to 75% and remaining 10.4% (211) have more than 75% area encroached.



- Out of 64,055 water bodies, the information on 'water spread area' was reported in 63,768 water bodies. Out of these 63,768 water bodies, 51.6% (32,913) of the water bodies have water spread area less than 0.5 hectares whereas 1.8% (1,166) water bodies have water spread area more than 50 hectares. Distribution of water bodies by 'water spread area' is shown in chart given below.



- In terms of storage capacity, 24.4% (15,634) water bodies out of 64,055 enumerated water bodies have more than 10,000 cubic meters of storage capacity. Distribution of water bodies by 'storage capacity of water bodies' is shown in charts given below.



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

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total*
1	**Total Number of Water Bodies**	**no.**	64,055	
	Total Number of Water Bodies in Rural Areas	**no.**	63,063	98.45
	Total Number of Water Bodies in Urban Areas	**no.**	992	1.55
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		27,003	42.16
	Tanks		16,292	25.43
	Lakes		289	0.45
	Reservoirs		111	0.17
	Water Conservation Schemes/ Percolation tanks/ Check dams		19,239	30.03
	Others		1,121	1.75
b	**Water Bodies with Private Ownership**	**no.**	12,462	19.46
	Water Bodies by area	**no.**		
	DPAP		11,076	17.29
	Tribal		6,781	10.59
	DDP		161	0.25
	Flood Prone		639	1.00
	Naxal affected area		234	0.37
	Others		45,164	70.51
	Total		64,055	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		30,085	58.15
	Industrial		168	0.32
	Pisciculture		850	1.64
	Domestic/ Drinking		432	0.84
	Recreation		110	0.21
	Religious		145	0.28
	Ground Water recharge		19,165	37.05
	Others		777	1.50
	Total		51,732	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		10,170	15.88
	Man Made		53,885	84.12
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		9,540	77.40
	Construction		179	1.45
	Siltation		192	1.56
	Destroyed beyond repair		535	4.34
	Salinity		24	0.19

S.No.	Parameter	Unit	Value	Percentage to Total*
	Due to industrial effluents		30	0.24
	Others		1,823	14.81
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		8,862	20.28
	Usually filled up		18,301	41.88
	Rarely filled up		13,033	29.83
	Never filled up		3,499	8.01
	Total		43,695	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		33,468	64.70
	2 to 5		17,009	32.88
	6 to 10		467	0.90
	11 to 20		410	0.79
	21 to 50		336	0.65
	50 to 500		42	0.08
	Total		51,732	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		32,913	51.61
	0.5 hectares to 1.0 hectares		5,838	9.15
	1 hectares to 5 hectares		14,838	23.27
	5 hectares to 10 hectares		4,362	6.84
	10 hectares to 50 hectares		4,651	7.29
	More than 50 hectares		1,166	1.83
	Total		63,768	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		38,884	60.70
	100 to 1000		3,883	6.06
	1000 to 10000		5,654	8.83
	More than 10000		15,634	24.41
	Total		64,055	100.00
9	**Number of encroached water bodies**	No.	3,032	4.73

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

TRIPURA

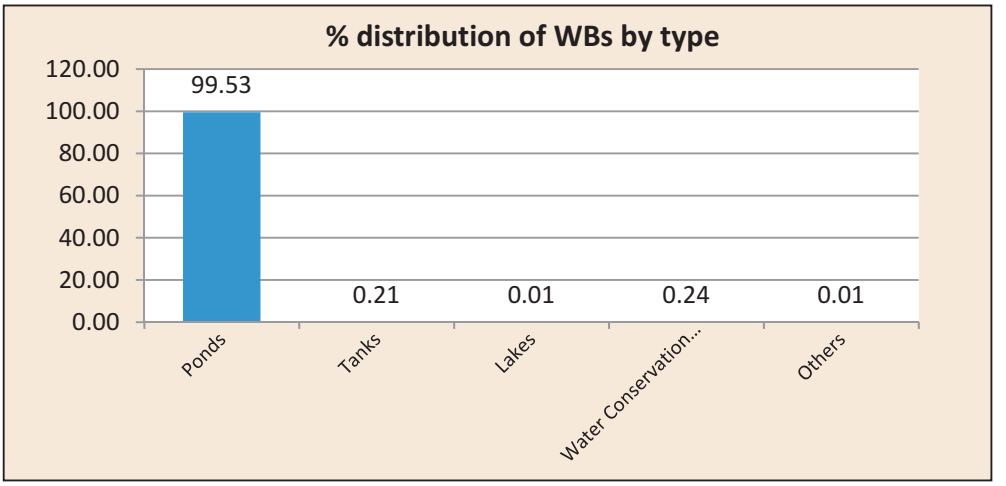
Tripura is a North-Eastern state which shares its borders with Bangladesh, Mizoram and Assam. It flourishes on the bounties of nature and the beauty of the state is heightened by its human resources and rich cultural tradition. Folk culture of the tribal and non-tribal people of the state forms the backbone of Tripura's cultural tradition.

A pond in Gomati district

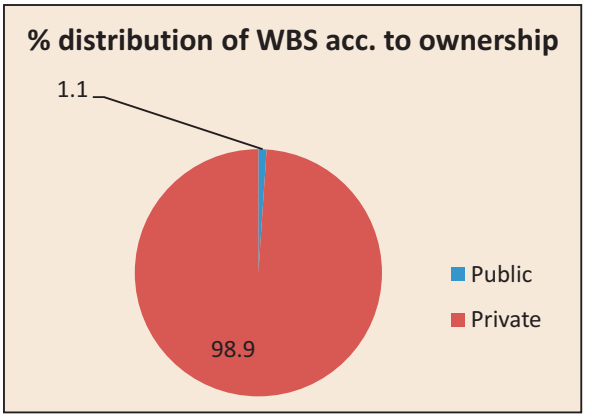
Tripura has eight districts with a total geographical area of 10,491.69 km^2 and a population of 36,73,917 according to 2011 census.

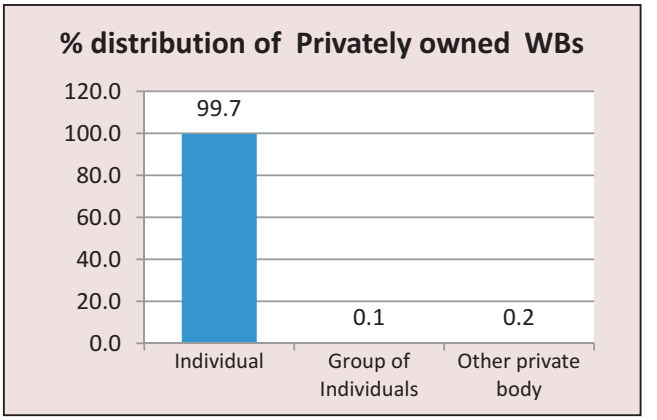
Major findings of the census

- In 1st census of water bodies, 36,239 water bodies have been enumerated in the State of Tripura, out of which 88.7% (32,140) are in rural areas and the remaining 11.3% (4,099) are in urban areas. Majority of the water bodies are ponds as depicted from chart given below.

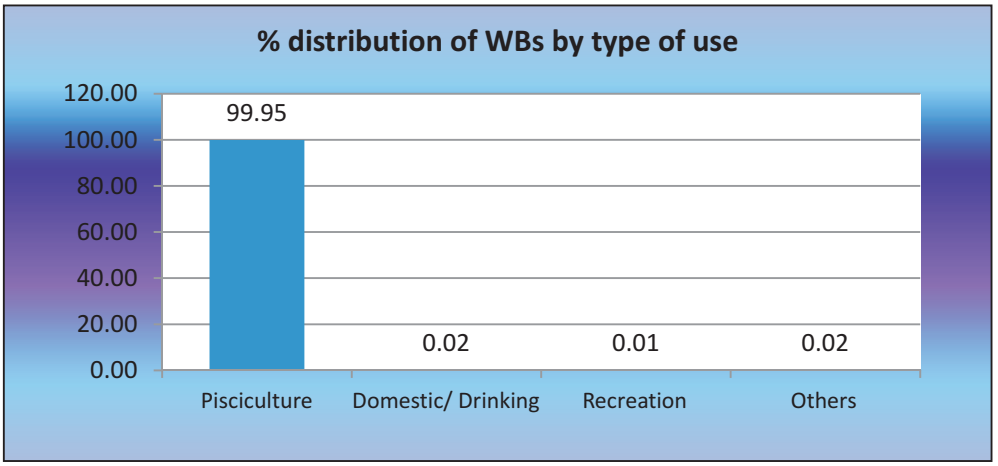


- 98.9% (35,857) are privately owned whereas the remaining 1.1% (382) are under public ownership. This reflects the dominance of private entities in ownership of water bodies. Distribution of water bodies by ownership status is shown in the charts given below.





- Out of all water bodies, 99.99% (36,235) water bodies are in use whereas only 0.01% (4) are not in use. Out of 'in use' water bodies, a major proportion of water bodies are used in pisciculture. Percentage distribution of 'in use' water bodies by type of use is shown in the diagram given below.

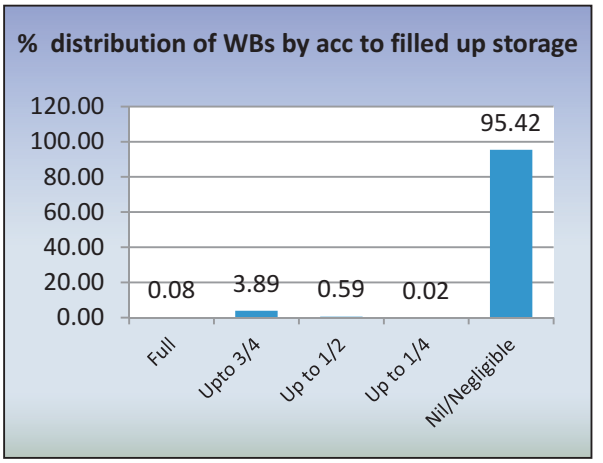


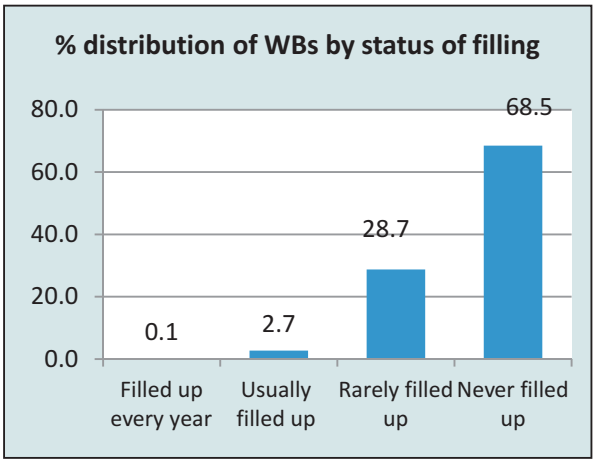
- Out of 36,239 water bodies in Tripura, there is only one natural water body and rest all are man-made water bodies. Out of 36,238 man-made water bodies, 88.7% (32,140) water bodies are located in rural areas and the remaining 11.3% (4,098) are in urban areas. Most of the man-made water bodies have original cost of construction upto Rs. 50,000.

A Pond in Sepahijala District

- Out of 36,239 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 36,150 water bodies. During reference year 2017-18, out of these 36,150 water bodies, 0.08% (28) water bodies had fully filled up storage capacity, 3.89% (1,407) water bodies had storage capacity filled upto three fourth level, 0.59% (214) water bodies had storage capacity filled upto half level, 0.02% (6) water bodies had storage capacity filled upto one fourth level whereas 95.42% (34,495) had nil/negligible storage capacity.Based on the criteria of filling up of storage

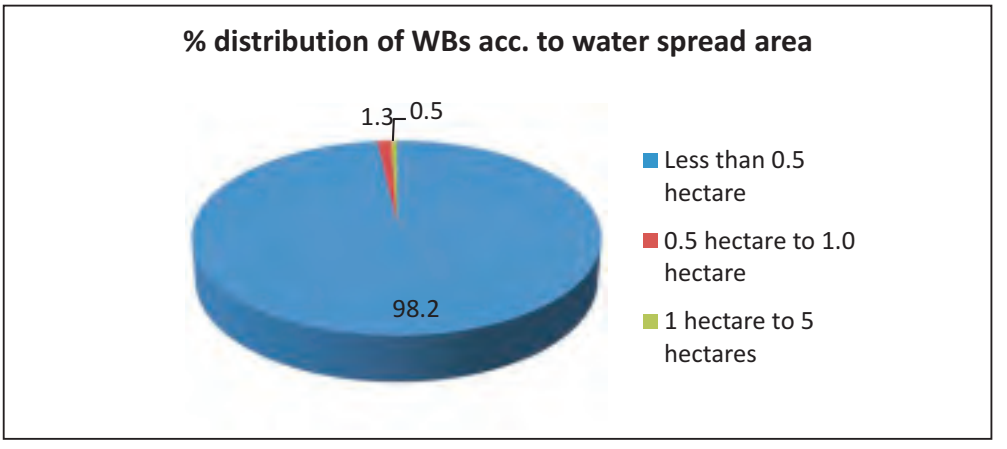
capacity during last 5 years, out of 36,150 water bodies, 0.1% (25) water bodies are found to be filled up every year, 2.7% (972) are usually filled up, 28.7% (10,388) are rarely filled up and 68.5% (24,765) are never filled up. Percentage distribution of water bodies by 'status of filling' and 'filled up storage capacity' is shown in the diagram given below.



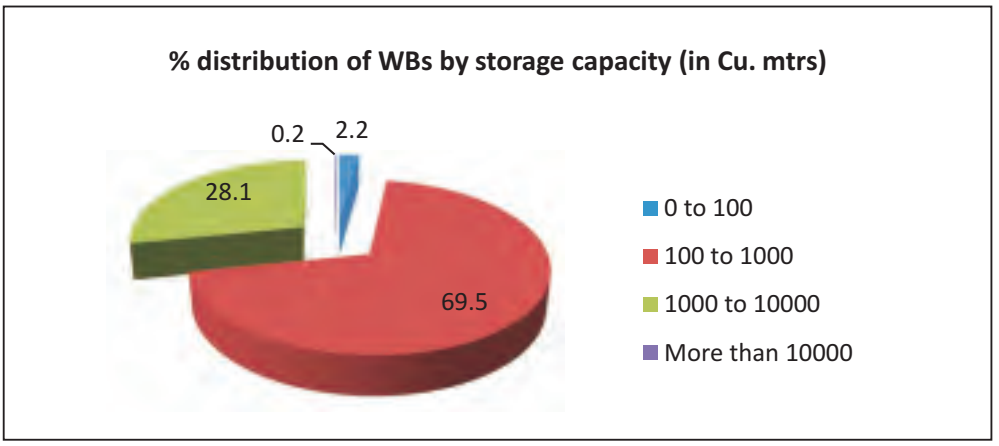


- Out of all water bodies, 85.1% (30,841) are covered in District Irrigation Plan/State Irrigation Plan. Among these 99.7% (30,753) are ponds and the remaining 0.3% (106) are tanks, lakes, reservoirs etc. Out of 'in use' water bodies, 98.93% (35,847) are benefitting one (01) city/town, 0.34% (123) water bodies are fulfilling requirements of 2- 5 cities/ towns and the remaining 0.73% (265) water bodies are benefitting more than five (05) cities/towns. Out of all the enumerated water bodies, State has reported encroachment in only 01 water body which is a pond.

- Out of 36,239 water bodies, 98.2% (35,569) of the water bodies have water spread area less than 0.5 hectares whereas, 1.3% (454) water bodies have water spread area between 0.5 hectares to 1.0 hectares. Distribution of water bodies by 'water spread area' is shown in chart given below:



- In terms of storage capacity, 69.5% (25,191) water bodies have storage capacity between 100 to 1,000 cubic meters whereas 0.2% (63) have storage capacity more than 10,000 cubic meters. Distribution of water bodies by 'storage capacity of water bodies' is shown in chart given below:



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

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	**Total Number of Water Bodies**	**no.**	36,239	
	Total Number of Water Bodies in Rural Areas	**no.**	32,140	88.69
	Total Number of Wa ter Bodies in Urban Areas	**no.**	4,099	11.31
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		36,070	99.53
	Tanks		77	0.21
	Lakes		3	0.01
	Reservoirs		0	0.00
	Water Conservation Schemes/ Percolation tanks/ Check dams		87	0.24
	Others		2	0.01
b	**Water Bodies with Private Ownership**	**no.**	35,857	98.95
	Water Bodies by area	**no.**		
	DPAP		2	0.01
	Tribal		4,399	12.14
	DDP		0	0.00
	Flood Prone		0	0.00
	Naxal affected area		4	0.01
	Others		31,834	87.84
	Total		36,239	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		0	0.00
	Industrial		0	0.00
	Pisciculture		36,216	99.95
	Domestic/ Drinking		7	0.02
	Recreation		3	0.01
	Religious		1	0.00
	Ground Water recharge		0	0.00
	Others		8	0.02
	Total		36,235	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		1	0.00
	Man Made		36,238	100.00
4	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		25	0.07
	Usually filled up		972	2.69
	Rarely filled up		10,388	28.74
	Never filled up		24,765	68.51
	Total		36,150	100.00

S.No.	Parameter	Unit	Value	Percentage to Total *
5	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		35,847	98.93
	2 to 5		123	0.34
	6 to 10		200	0.55
	11 to 20		15	0.04
	21 to 50		5	0.01
	50 to 500		28	0.08
	More than 500		17	0.05
	Total		36,235	100.00
6	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		35,569	98.15
	0.5 hectares to 1.0 hectares		454	1.25
	1 hectares to 5 hectares		194	0.54
	5 hectares to 10 hectares		16	0.04
	10 hectares to 50 hectares		6	0.02
	More than 50 hectares		0	0.00
	Total		36,239	100.00
7	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		804	2.22
	100 to 1000		25,191	69.51
	1000 to 10000		10,181	28.09
	More than 10000		63	0.17
	Total		36,239	100.00
8	**Number of encroached water bodies**	No.	1	

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

Uttar Pradesh

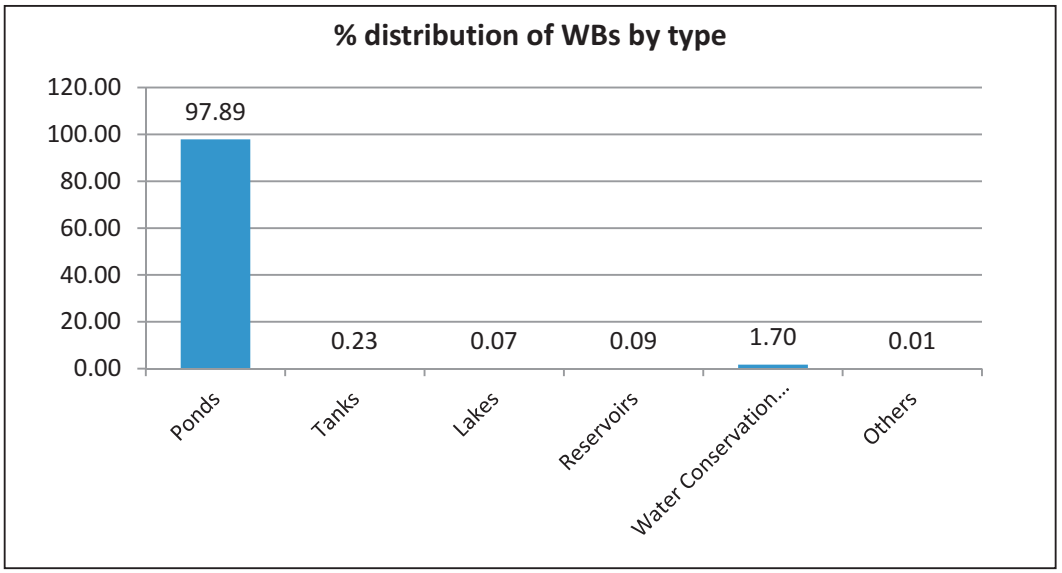
Uttar Pradesh in one of the most ancient cradles of Indian culture. A land of epics, holy rivers, ancient cities and pilgrimage. In the State, Fairs and festivals have always been a moment to be cherished. From natural to man-made wonders, Uttar Pradesh hosts umpteen places reflecting the priceless and timeless art and natural beauty.

A Pond in Lucknow District

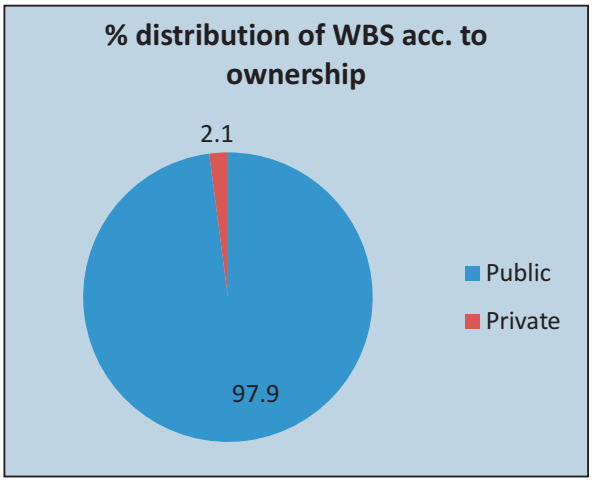
Uttar Pradesh has 75 districts with a total geographical area of 2,43,286 km^2 and a population of 24crore.

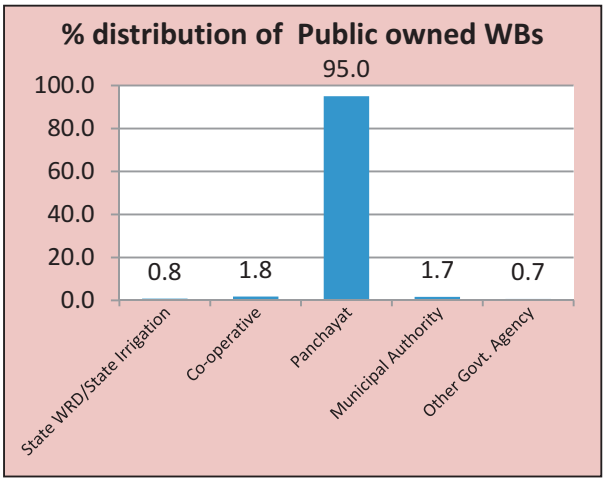
Major findings of the census

- In 1st census of water bodies, total 2,45,087 water bodies are enumerated in the State of Uttar Pradesh, out of which 98% (2,40,139) are in rural areas and the remaining 2% (4,948) are in urban areas. Majority of the water bodies are Ponds as depicted from chart given below.

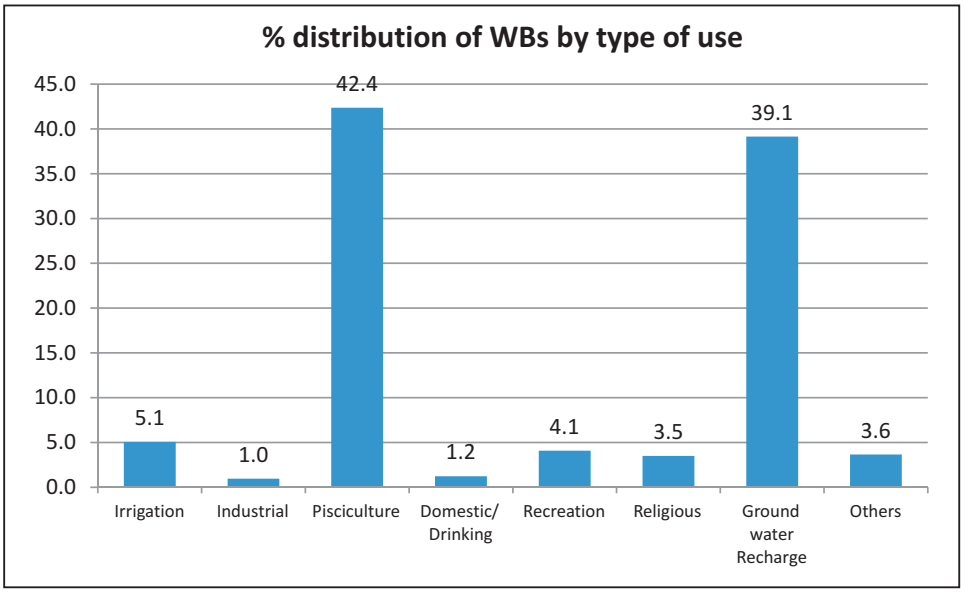


- Out of total water bodies, 97.9% (2,40,027) are under public ownership whereas the remaining 2.1% (5,060) are privately owned. This reflects the dominance of public authorities in ownership of water bodies. Distribution of water bodies by ownership status is shown in the next chart. 95% of the water bodies are owned by Gram Panchayats





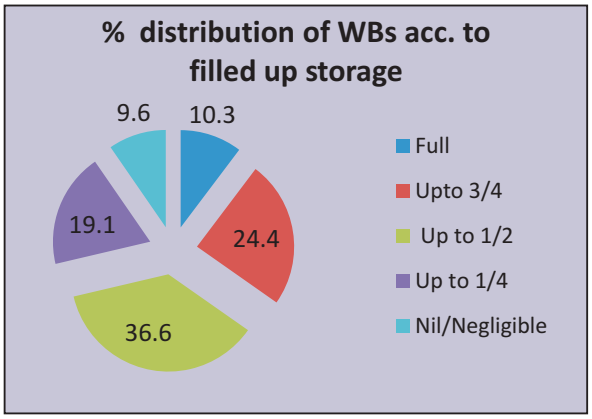
- Out of total water bodies, 73.3% (1,795,86) water bodies are in use whereas rest 26.7% (65,501) are not in use on account of being dried up, siltation, salinity, destroyed beyond repair and other reasons. Among water bodies in use, a major proportion of water bodies are used in Pisciculture (42.4%) followed by ground water recharge (39.1%). Percentage distribution of water bodies by type of use is shown in the diagram given below.

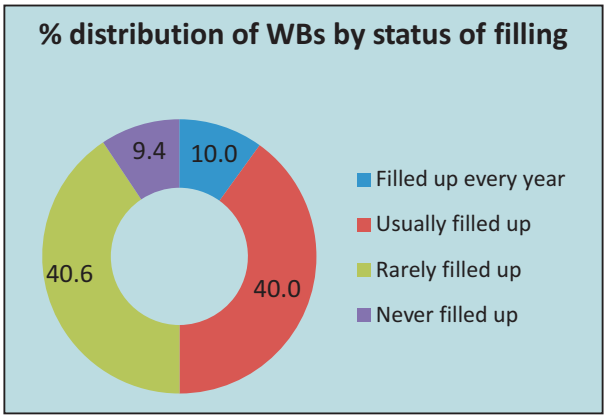


- In the State of Uttar Pradesh, there are 91% (2,23,150) natural water bodies and 9% (21,937) man-made water bodies. Out of 2,23,150 natural water bodies, 98% (2,18,639) water bodies are located in rural areas and the remaining 2% (4,511) are located in urban areas. Similarly, out of 21,937 man-made water bodies, 98% (21,500) water bodies are located in rural areas and the remaining 2% (437) are located in urban areas. Most of the man-made water bodies have original cost of construction upto Rs. 5 lakhs.

A Pond in Prayagraj District

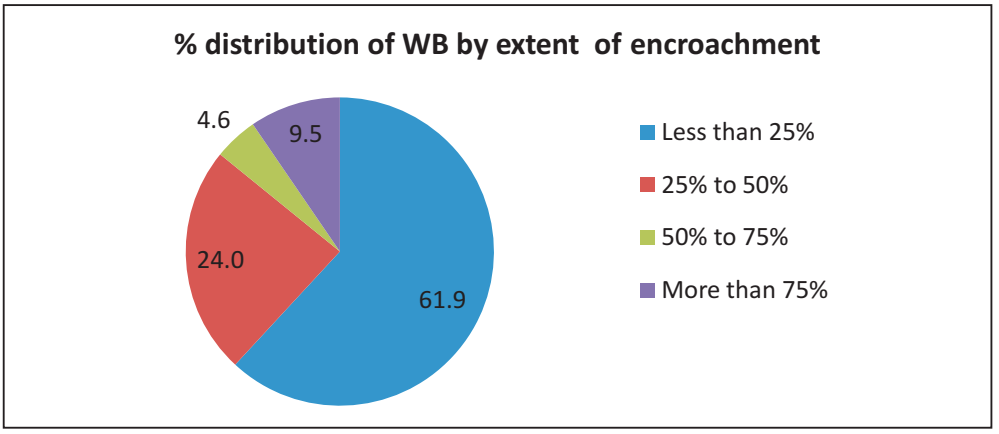
- Out of total 2,45,087 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 2,40,874 water bodies. During reference year 2017-18, out of these 2,40,874 water bodies, 10.3% (24,787) water bodies had fully filled up storage capacity, 24.4% (58,882) water bodies had storage capacity filled upto three fourth level, 36.6% (88,177) water bodies had storage capacity filled upto half level, 19.1% (45,888) water bodies had storage capacity filled upto one fourth level whereas 9.6% (23,140) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 2,40,874 water bodies, 10% (23,975) water bodies are found to be filled up every year, 40% (96,435) are usually filled up, 40.6% (97,870) are rarely filled up and 9.4% (22,594) are never filled up. Percentage distribution of water bodies by 'status of filling' and 'filled up storage capacity' is shown in the diagram given below.



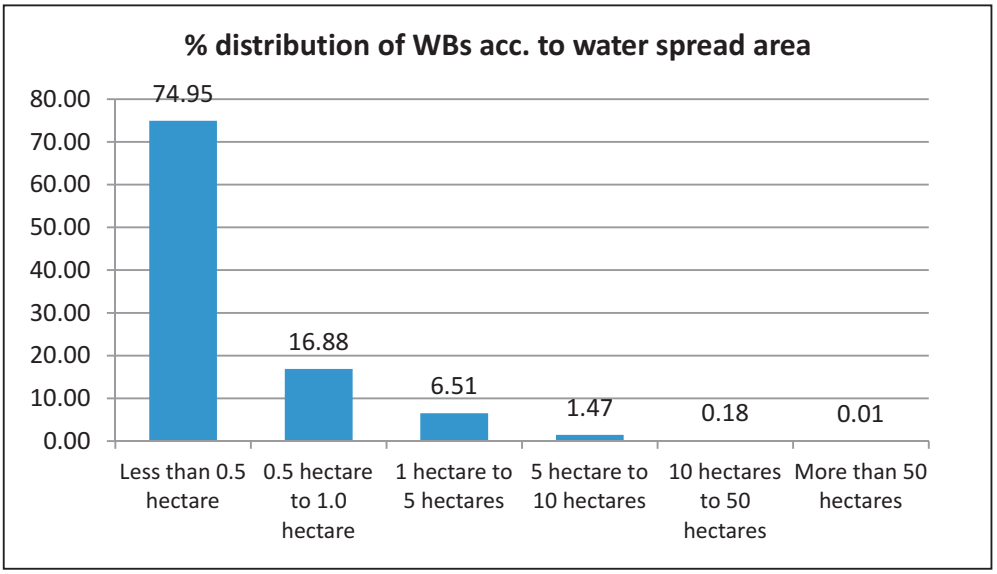


- Out of total water bodies, 3,925 are covered in District Irrigation Plan/State Irrigation Plan. Among these 89% (3,495) are ponds and the remaining 11% (430) are Water Conservation Schemes/percolation tanks/check dams, tanks, lakes and reservoirs. Out of total in use water bodies, 89.5% (1,60,748) are benefitting one (01) city/town, 8.9% (15,905) water bodies are fulfilling requirements of 2-5 cities/towns and the remaining 1.6% (2,933) water bodies are benefitting more than five (05) cities/towns.

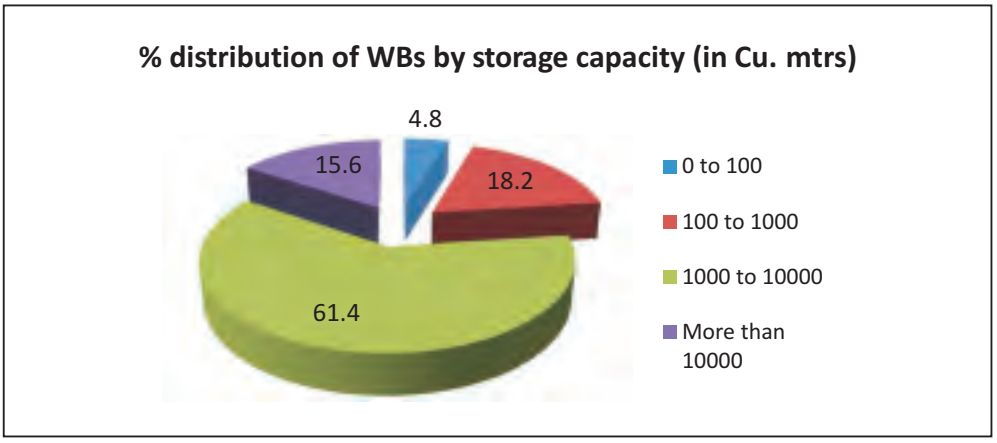
- State has reported encroachment in 6.2% (15,301) water bodies out of all the enumerated water bodies. 99.1% (15,168) of the encroached water bodies are ponds and the remaining 0.9% (133) are tanks, lakes, reservoirs etc. Out of all the encroached water bodies, the area under encroachment can be assessed in 68.4% (10,461) water bodies. The percentage distribution of water bodies according to extent of encroachment is shown in the chart given below.



- Out of total 2,45,087 water bodies, the information on 'water spread area' was reported in 2,29,354 water bodies. Out of these 2,29,354 water bodies, 75% (1,71,902) of the water bodies have water spread area less than 0.5 hectares. Distribution of water bodies by 'water spread area' is shown in charts given below:



- In terms of storage capacity, 15.6% (38,200) of the water bodies have storage capacity more than 10000 cubic meters in Uttar Pradesh. Distribution of water bodies by 'storage capacity of water bodies' is shown in chart given below:



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

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total*
1	**Total Number of Water Bodies**	**no.**	2,45,087	
	Total Number of Water Bodies in Rural Areas	**no.**	2,40,139	97.98
	Total Number of Water Bodies in Urban Areas	**no.**	4,948	2.02
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		2,39,912	97.89
	Tanks		573	0.23
	Lakes		180	0.07
	Reservoirs		209	0.09
	Water Conservation Schemes/ Percolation tanks/ Check dams		4,177	1.70
	Others		36	0.01
b	**Water Bodies with Private Ownership**	**no.**	5,060	2.06
	Water Bodies by area	**no.**		
	DPAP		12,074	4.93
	Tribal		1,753	0.72
	DDP		1,161	0.47
	Flood Prone		2,238	0.91
	Naxal affected area		1,072	0.44
	Others		2,26,789	92.53
	Total		2,45,087	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		9,090	5.06
	Industrial		1,733	0.96
	Pisciculture		76,071	42.36
	Domestic/ Drinking		2,199	1.22
	Recreation		7,326	4.08
	Religious		6,300	3.51
	Ground Water recharge		70,298	39.15
	Others		6,569	3.66
	Total		1,79,586	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		2,23,150	91.05
	Man Made		21,937	8.95
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		21,374	32.63
	Construction		1,908	2.91

S.No.	Parameter	Unit	Value	Percentage to Total*
	Siltation		2,799	4.27
	Destroyed beyond repair		6,369	9.72
	Salinity		771	1.18
	Due to industrial effluents		1,929	2.94
	Others		30,351	46.34
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		23,975	9.95
	Usually filled up		96,435	40.04
	Rarely filled up		97,870	40.63
	Never filled up		22,594	9.38
	Total		2,40,874	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		1,60,748	89.51
	2 to 5		15,905	8.86
	6 to 10		598	0.33
	11 to 20		1,407	0.78
	21 to 50		460	0.26
	50 to 500		468	0.26
	Total		1,79,586	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		1,71,902	74.95
	0.5 hectares to 1.0 hectares		38,717	16.88
	1 hectares to 5 hectares		14,922	6.51
	5 hectares to 10 hectares		3,379	1.47
	10 hectares to 50 hectares		403	0.18
	More than 50 hectares		31	0.01
	Total		2,29,354	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		11,689	4.77
	100 to 1000		44,611	18.20
	1000 to 10000		1,50,587	61.44
	More than 10000		38,200	15.59
	Total		2,45,087	100.00
9	**Number of encroached water bodies**	No.	15,301	6.24

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

UTTARAKHAND

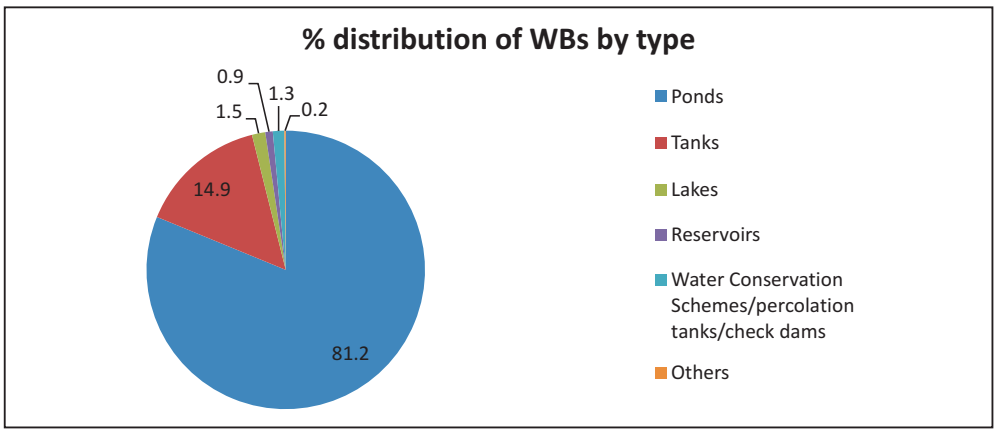
Uttarakhand is largely a hilly State located at the foothills of the Himalayan mountain ranges. The State has international boundaries with China in the north and Nepal in the east. It is rich in natural resources especially water and forests with many glaciers, rivers, dense forests and snow-clad mountain peaks.

A pond in Pindari village of Udham Singh Nagar district

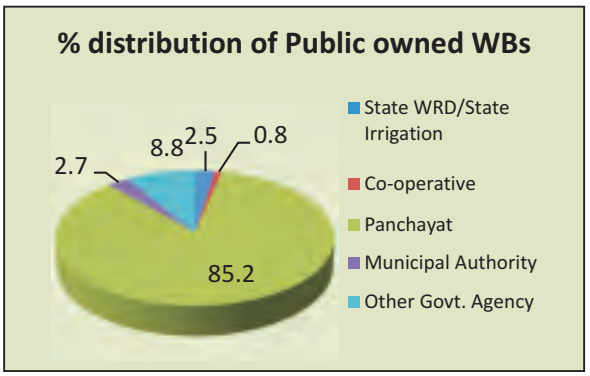
Uttarakhand has a total Geographic area of 53,483 km^2. Total population of Uttarakhand as per 2011 census is 10,086,292.

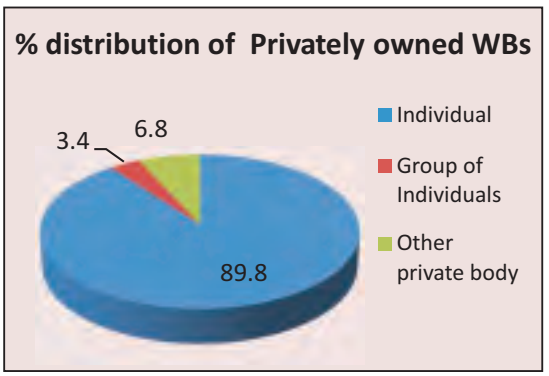
Major findings of the census

- In 1st census of water bodies, 3,096 water bodies have been enumerated, out of which 95.9% (2,970) are in rural areas and the remaining 4.1% (126) are in urban areas. Majority of the water bodies are ponds as depicted from chart given below.

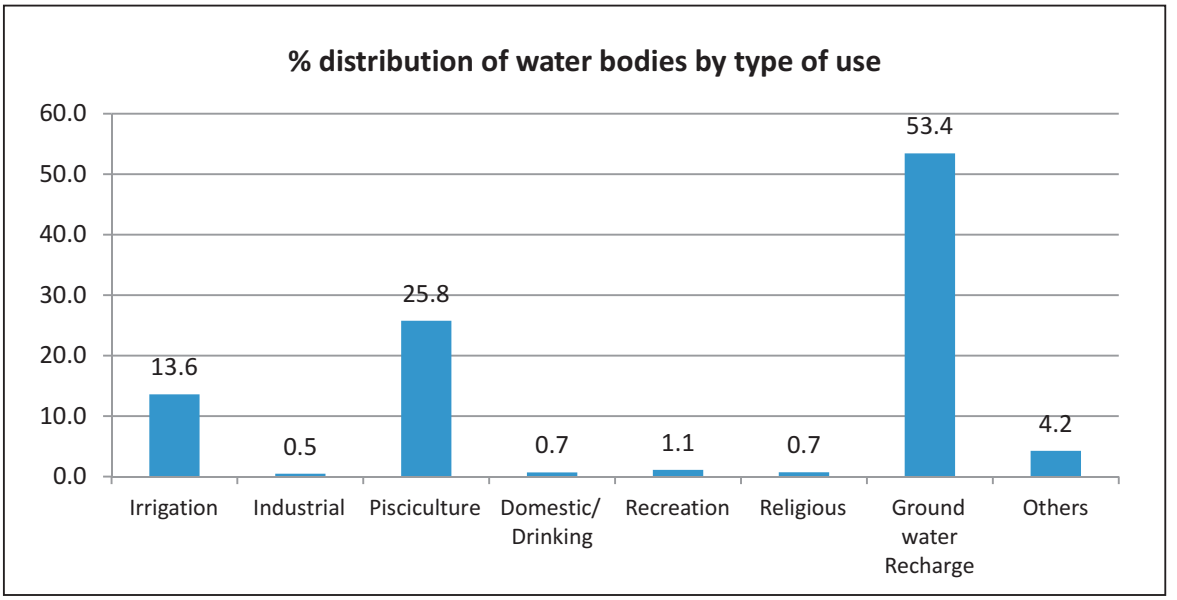


- 76.3% (2,361) water bodies are public owned whereas the remaining 23.7% (735) are under private ownership. Most of the public owned water bodies are Panchayat owned whereas most of the privately owned water bodies are owned by individual farmers. Percentage distribution water bodies according to ownership is shown in the pie charts given below.





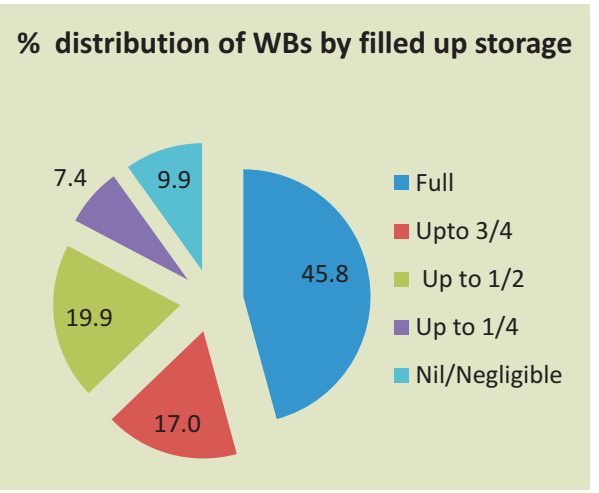
- Out of 3,096 water bodies, 76.6% (2,371) water bodies are 'in use' whereas 23.4% (725) water bodies are not in use on account of drying up, siltation, destroyed beyond repair and other reasons. Out of 'in use' water bodies, 53.4% (1,267) water bodies are used for ground water recharge followed by 25.8% (611) for pisciculture. Percentage distribution of water bodies by type of use is shown in the diagram given below.

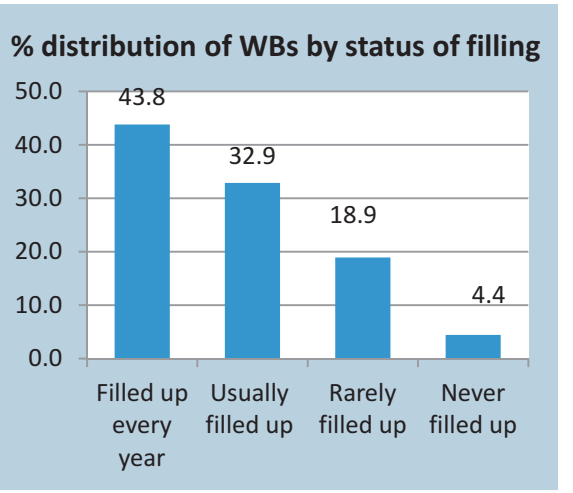


- There are 1,654 natural and 1,442 man-made water bodies in Uttarakhand. Out of 1,654 natural water bodies, 94.3% (1,560) water bodies are located in rural areas whereas 5.7% (94) are located in urban areas. Out of 1,442 man-made water bodies, 97.8% (1,410) water bodies are located in rural areas whereas 2.2% (32) are located in urban areas. Most of the man-made water bodies have original cost of construction up to Rs.1,00,000.

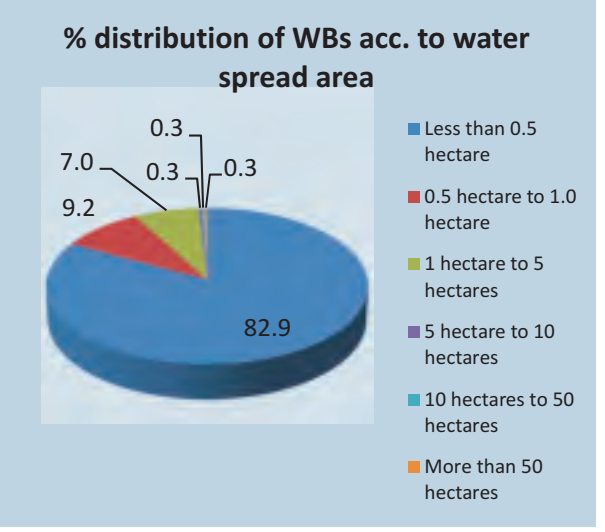
A Tank in KanelBunga village of Almora district of Uttarakhand

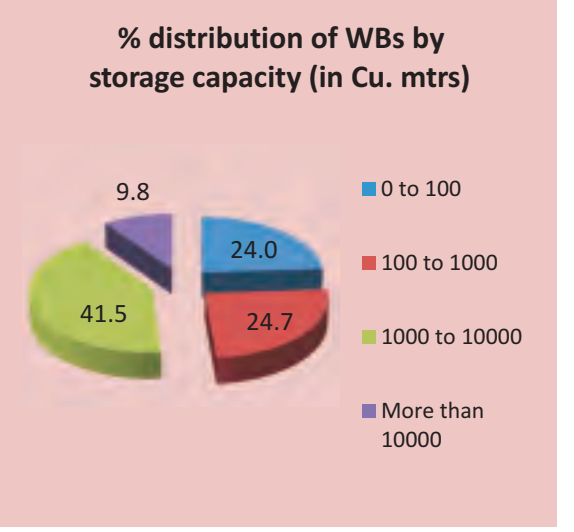
- Out of 3,096 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 3,050 water bodies. During reference year 2017-18, out of these 3,050 water bodies, 45.8% (1,396) water bodies had fully filled up storage capacity, 17% (520) water bodies had storage capacity filled upto three fourth level, 19.9% (607) water bodies had storage capacity filled upto half level, 7.4% (225) water bodies had storage capacity filled upto one fourth level whereas 9.9% (302) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 3,050 water bodies, 43.8% (1,336) water bodies are found to be filled up every year, 32.9% (1,002) are usually filled up, 18.9% (577) are rarely filled up and 4.4% (135) 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 total storage capacity (i.e. 2,75,60,55,678 cubic meters) of 'in use' water bodies, maximum storage capacity (99.3%, i.e. 2,73,62,45,216 cubic meters) is attributed to Reservoirs.





- Out of 3,096 water bodies, 213 (6.9%) are covered in District Irrigation Plan/State Irrigation Plan. Among these 213 water bodies, 70 are ponds, 112 are tanks and the remaining 31 are lakes, reservoirs, water conservation schemes/percolation tanks/check dams etc. Out of 'in use' water bodies, 83.2% (1,973) are benefitting one (01) city/town, 16.2% (383) water bodies are fulfilling requirements of 2- 5 cities/ towns and the remaining 0.6% (15) water bodies are benefitting more than five (05) cities/towns.
- Out of 3,096 water bodies, 82.9% (2,567) of the water bodies have water spread area less than 0.5 hectares. In terms of storage capacity, out of 3,096 water bodies, 41.5% (1,286) water bodies have storage capacity between 1,000 to 10,000 Cubic Meters. Distribution of water bodies by water spread area and storage capacity is given in charts given below:





- Out of 3,096 water bodies, 5 water bodies are reported to be encroached. These are 4 ponds and 1 tank. Among the water bodies whose encroachment area can be assessed, only 1 is assessed to have encroachment area ranging between 25% to 50%.
- Key parameters of First Census of Water Bodies for the State of Uttarakhand are given in the Annexure.

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	**Total Number of Water Bodies**	**no.**	3,096	
	Total Number of Water Bodies in Rural Areas	**no.**	2,970	95.93
	Total Number of Water Bodies in Urban Areas	**no.**	126	4.07
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		2,514	81.20
	Tanks		461	14.89
	Lakes		48	1.55
	Reservoirs		27	0.87
	Water Conservation Schemes/ Percolation tanks/ Check dams		41	1.32
	Others		5	0.16
b	**Water Bodies with Private Ownership**	**no.**	735	23.74
	Water Bodies by area	**no.**		
	DPAP		16	0.52
	Tribal		183	5.91
	DDP		26	0.84
	Flood Prone		0	0.00
	Naxal affected area		2	0.06
	Others		2,869	92.67
	Total		3,096	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		323	13.62
	Industrial		11	0.46
	Pisciculture		611	25.76
	Domestic/ Drinking		16	0.67
	Recreation		26	1.10
	Religious		17	0.72
	Ground Water recharge		1,267	53.41
	Others		101	4.26
	Total		2,371	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		1,654	53.42
	Man Made		1,442	46.58
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		204	28.14
	Construction		4	0.55
	Siltation		49	6.76
	Destroyed beyond repair		21	2.90
	Salinity		64	8.83
	Due to industrial effluents		33	4.55
	Others		350	48.28

S.No.	Parameter	Unit	Value	Percentage to Total *
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		1,336	43.80
	Usually filled up		1,002	32.85
	Rarely filled up		577	18.92
	Never filled up		135	4.43
	Total		3,050	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		1,973	83.21
	2 to 5		383	16.15
	6 to 10		3	0.13
	11 to 20		3	0.13
	21 to 50		2	0.08
	50 to 500		7	0.30
	Total		2,371	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		2,567	82.91
	0.5 hectares to 1.0 hectares		283	9.14
	1 hectares to 5 hectares		217	7.01
	5 hectares to 10 hectares		10	0.32
	10 hectares to 50 hectares		10	0.32
	More than 50 hectares		9	0.29
	Total		3,096	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		742	23.97
	100 to 1000		766	24.74
	1000 to 10000		1,286	41.54
	More than 10000		302	9.75
	Total		3,096	100.00
9	**Number of encroached water bodies**	No.	5	

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

WEST BENGAL

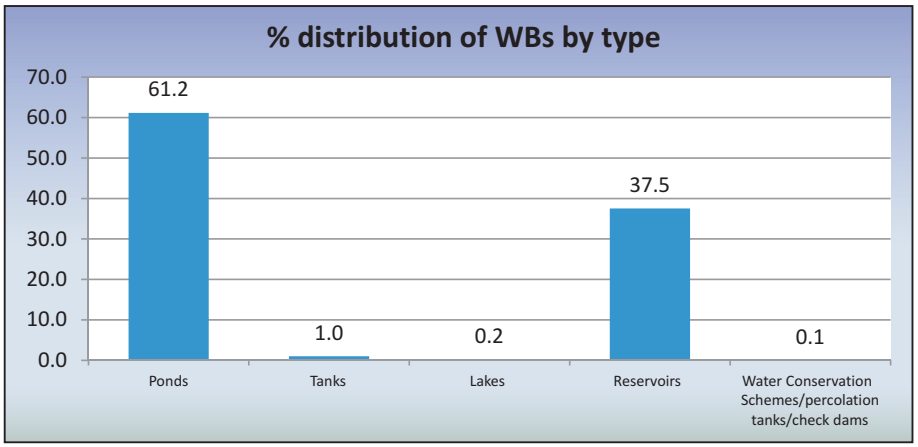
West Bengal located in Eastern India is bordered by five different states. Its capital Kolkata is often termed as the cultural capital of India. West Bengal offers a unique flavour to the richness of India with its synthesis of various languages, religions, customs, traditions, cuisines and lifestyle. It is bounded by the Himalayas in the North and the Bay of Bengal in the South.


Santragachi Jheel

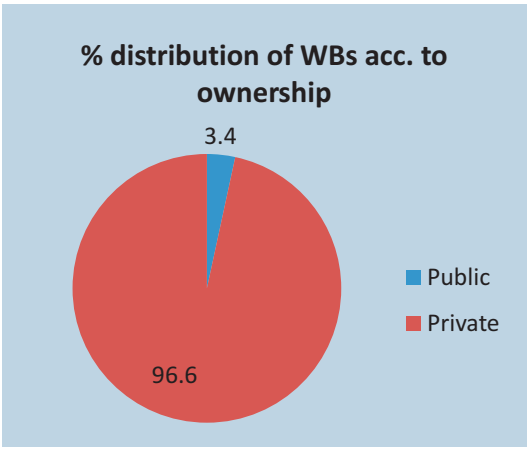
West Bengal has 23 districts with a total geographical area of 88,752 km^2 and a population of 91,276,115.

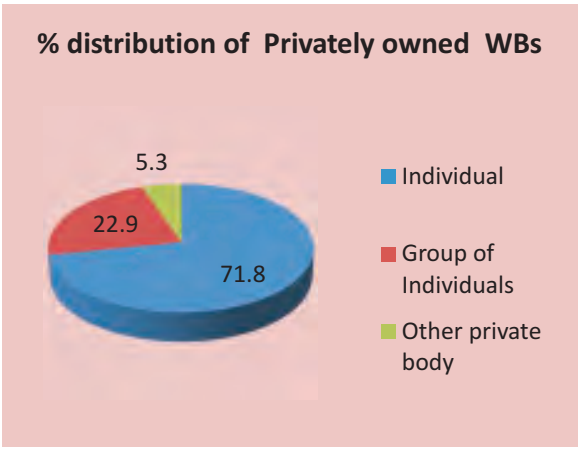
Major findings of the census

- In 1st census of water bodies, 7,47,480 water bodies have been enumerated in the State of West Bengal, out of which 96.3% (7,19,654) are in rural areas and the remaining 3.7% (27,826) are in urban areas. Majority of the water bodies are ponds as depicted from chart given below.

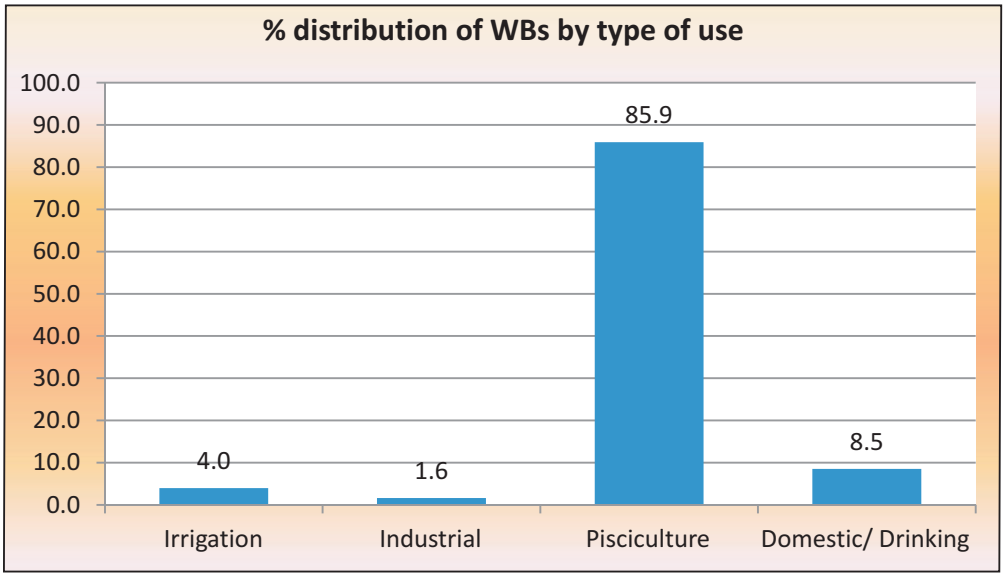


- 96.6% (7,22,126) water bodies are privately owned whereas the remaining 3.4% (25,354) are under public ownership. This reflects the dominance of private entities in ownership of water bodies. Distribution of water bodies by ownership status is shown in the next charts.





- 93.5% (6,98,944) water bodies are in use whereas rest 6.5% (48,536) are not in use on account of drying up, siltation, salinity, destroyed beyond repair and other reasons. Among 'in use' water bodies, a major proportion of water bodies are used in Pisciculture (85.9%). Percentage distribution of water bodies by type of use is shown in the diagram given below.

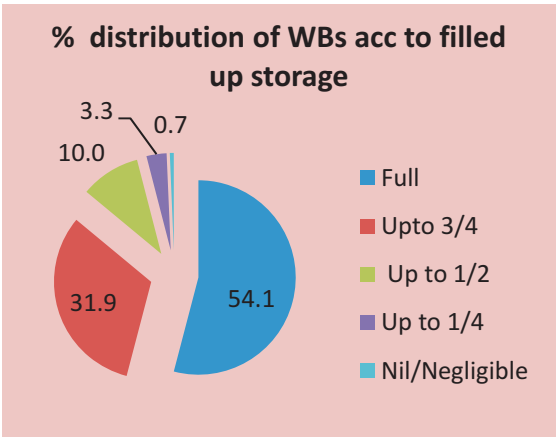


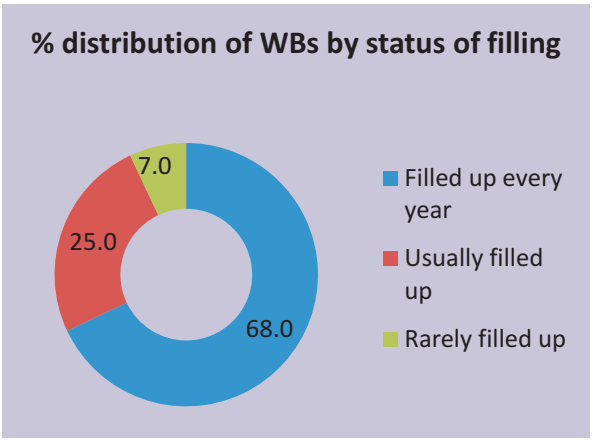
- In the State of West Bengal, all the water bodies are man-made in nature. Out of these, 96.3% (7,19,654) are located in rural areas whereas remaining 3.7% (27,826) are located in urban areas. Most of the man-made water bodies have original cost of construction up to Rs.1,00,000. State has not reported encroachment in any of the water bodies.

Gadiara in Howrah District

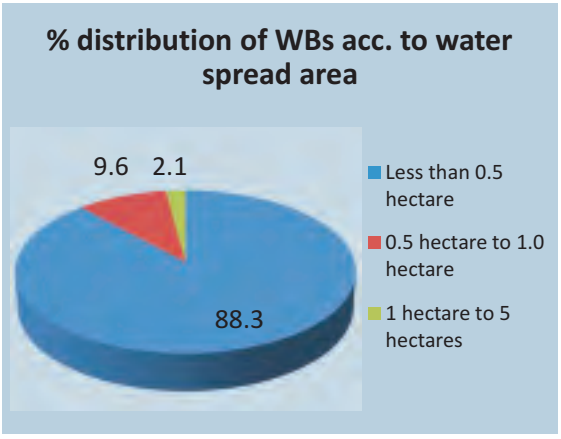
- Out of 7,47,480 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 7,46,793 water bodies. During reference year 2017-18, out of these 7,46,793 water bodies, 54.1% (4,03,804) water bodies had fully filled up storage capacity, 31.9% (2,38,495) water bodies had storage capacity filled upto three fourth level, 10% (74,449) water bodies had storage capacity filled upto half level, 3.3% (24,997) water bodies had storage capacity filled upto

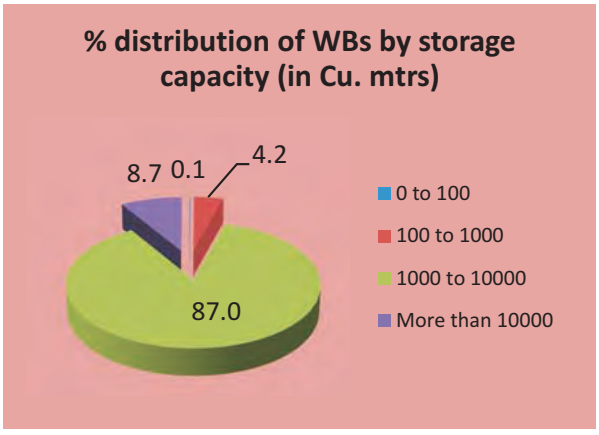
one fourth level whereas 0.7% (5,048) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 7,46,793 water bodies, 68% (5,07,719) water bodies are found to be filled up every year, 25% (1,86,737) are usually filled up, 7% (52,336) are rarely filled up and only 01 water body is never filled up. Percentage distribution of water bodies by 'status of filling' and 'filled up storage capacity' is shown in the diagram given below.





- Out of 7,47,480 water bodies, 88.3% (6,60,040) have water spread area less than 0.5 hectares whereas, 9.6% (71,617) water bodies have water spread area between 0.5 hectares to 1.0 hectares. In terms of storage capacity, 87% (6,50,192) water bodies have storage capacity between 1,000 to 10,000 cubic meters whereas there are 8.7% (65,010) water bodies which have storage capacity more than 10,000 cubic meters. Distribution of water bodies by 'water spread area' and by 'storage capacity of water bodies'are shown in charts given:





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

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	Total Number of Water Bodies	no.	7,47,480	
	Total Number of Water Bodies in Rural Areas	no.	7,19,654	96.28
	Total Number of Water Bodies in Urban Areas	no.	27,826	3.72
a	Total Number of Water Bodies by type	no.		
	Ponds		4,57,274	61.18
	Tanks		7,585	1.01
	Lakes		1,349	0.18
	Reservoirs		2,80,585	37.54
	Water Conservation Schemes/ Percolation tanks/ Check dams		610	0.08
	Others		77	0.01
b	Water Bodies with Private Ownership	no.	7,22,126	96.61
2	Water Bodies by area	no.		
	DPAP		6,144	0.82
	Tribal		1,282	0.17
	DDP		17	0.00
	Flood Prone		1,762	0.24
	Naxal affected area		69	0.01
	Others		7,38,206	98.76
	Total		7,47,480	100.00
3	Water Bodies by type of use	no.		
	Irrigation		27,626	3.95
	Industrial		11,218	1.60
	Pisciculture		6,00,612	85.93
	Domestic/ Drinking		59,488	8.51
	Total		6,98,944	100.00
4	Natural/ Man Made Water Bodies	no.		
	Natural		0	0.00
	Man Made		7,47,480	100.00
5	Water Bodies Not in use due to reasons	no.		
	Dried up		337	0.69
	Construction		59	0.12
	Siltation		434	0.89
	Destroyed beyond repair		326	0.67
	Salinity		111	0.23
	Due to industrial effluents		54	0.11
	Others		47,215	97.28

S.No.	Parameter	Unit	Value	Percentage to Total *
6	Distribution of Water Bodies as per status of filling	no.		
	Filled up every year		5,07,719	67.99
	Usually filled up		1,86,737	25.01
	Rarely filled up		52,336	7.01
	Never filled up		1	0.00
	Total		7,46,793	100.00
7	Distribution of Water Bodies by Water Spread Area	no.		
	Less than 0.5 hectares		6,60,040	88.30
	0.5 hectares to 1.0 hectares		71,617	9.58
	1 hectares to 5 hectares		15,481	2.07
	5 hectares to 10 hectares		287	0.04
	10 hectares to 50 hectares		52	0.01
	More than 50 hectares		3	0.00
	Total		7,47,480	100.00
8	Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)	Cu. Mtrs		
	0 to 100		875	0.12
	100 to 1000		31,403	4.20
	1000 to 10000		6,50,192	86.98
	More than 10000		65,010	8.70
	Total		7,47,480	100.00
9	Number of encroached water bodies	no.	0	

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

ANDAMAN & NICOBAR ISLANDS

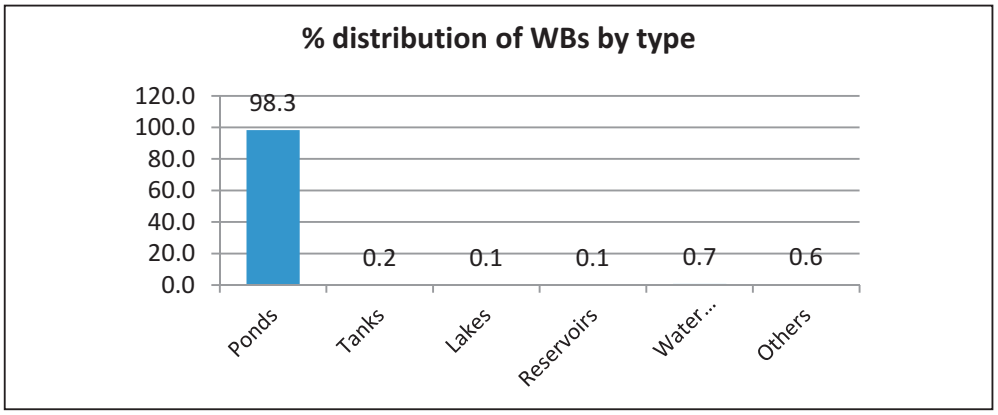
The Union Territory (UT) is surrounded by emerald sea, lush green forest, mountains, scenic beauty, unpolluted corals, serene white sandy beaches and marine national park.

A Pond in Campbellbay block of Nicobar District

The UT has an area of 8,249 Km^2. It has 03 districts with a population of 3,80,581 (as per 2011 Census).

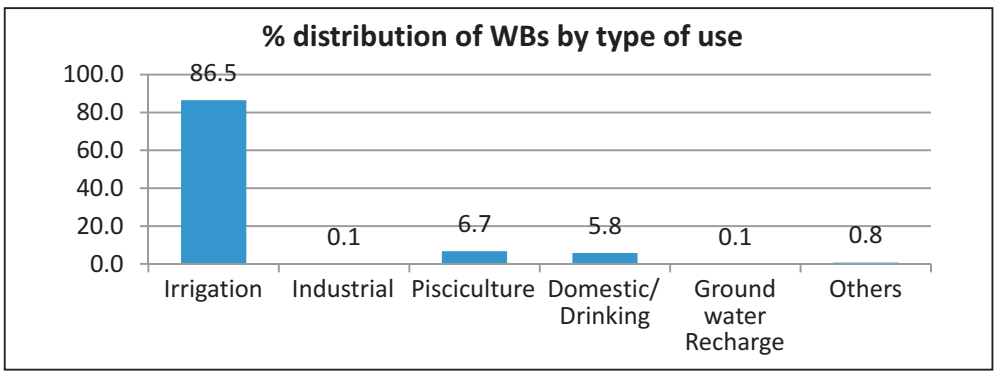
Major findings of the census

- In 1st census of water bodies, 3,528 water bodies have been enumerated in the UT of Andaman & Nicobar Islands, out of which majority, i.e. 99.1% (3,497) are in rural areas and the remaining 0.9% (31) are in urban areas. 98.3% (3,469) of the water bodies are ponds as depicted from chart given below.



- 81.4% (2,871) are under private ownership whereas the remaining 18.6% (657) are under public ownership. By location, 0.48% (17) water bodies are located in tribal areas, 0.46% (16) are located in flood prone areas and the remaining 99.06% (3,495) water bodies are located in other areas.

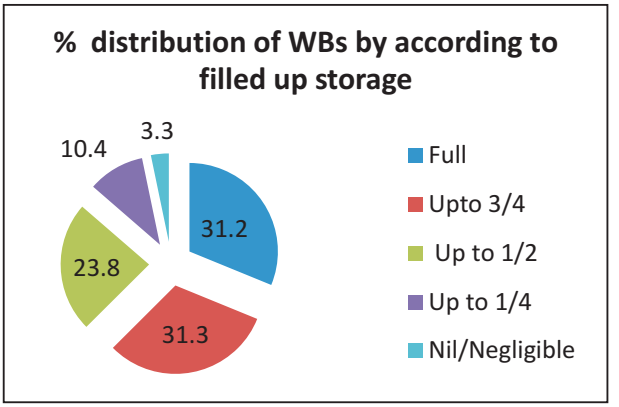
- Out of 3,528 water bodies, 94.5% (3,334) water bodies are in use whereas rest 5.5% (194) are not in use on account of drying up, siltation, destroyed beyond repair, salinity and other reasons. Out of 'in use' water bodies, majority of them are used for irrigation followed by pisciculture. Percentage distribution of water bodies by type of use is shown in the diagram given below.

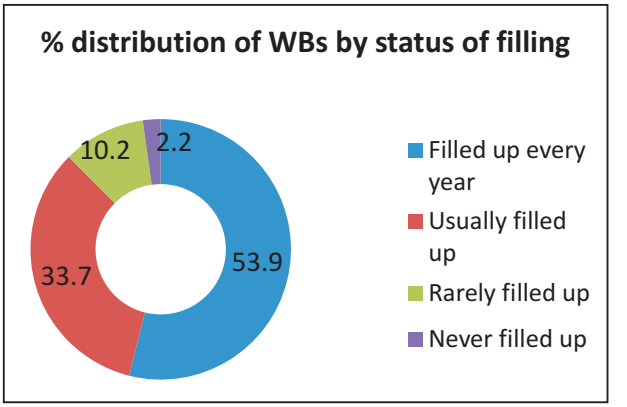


- There are 3,489 man-made and 39 natural water bodies in the UT of Andaman & Nicobar Islands. Out of 3,489 man-made water bodies, 99.4% (3,468) water bodies are located in rural areas and the remaining 0.6% (21) are located in urban areas. Out of 39 natural water bodies, 29 water bodies are located in rural areas and the remaining 10 are located in urban areas. Most of the man-made water bodies have original cost of construction upto Rs.50,000.

A pond in Diglipur block of
North & Middle Andaman District

- Out of 3,528 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 3,485 water bodies. During reference year 2017-18, out of these 3,485 water bodies, 31.2% (1,087) water bodies had fully filled up storage capacity, 31.3% (1,092) water bodies had storage capacity upto three fourth level, 23.8% (831) water bodies had storage capacity filled upto half level, 10.4% (361) water bodies had storage capacity filled upto one fourth level whereas 3.3% (114) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of these 3,485 water bodies, 53.9% (1,878) water bodies are found to be filled up every year, 33.7% (1,173) are usually filled up, 10.2% (357) are rarely filled up and 2.2% (77) are never filled up. Percentage distribution of water bodies by 'status of filling' and 'filled up storage capacity' is shown in the diagram given below.

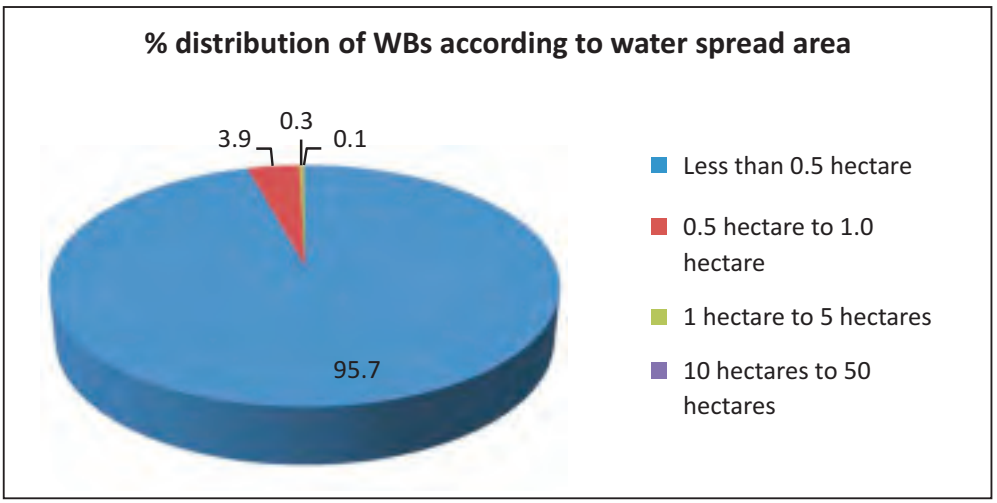




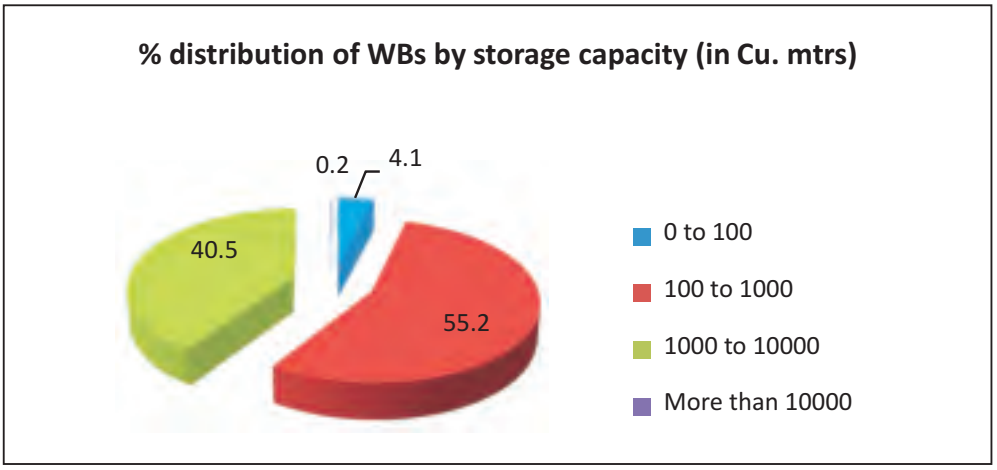
- Out of all water bodies, 116 water bodies are covered in District Irrigation Plan/State Irrigation Plan out of which 113 are ponds. Out of 'in use' water bodies, 92.2% (3,073) are benefitting one (01) city/town, 7.7% (257) water bodies are fulfilling requirements of 2- 5 cities/ towns and the remaining 0.1% (4) water bodies are benefitting more than five (05) cities/towns.

- State has reported encroachment in 59 water bodies, all of which are ponds. Out of all these 59 water bodies, the encroachment area can be assessed in 5 water bodies. All these 5 water bodies have more than 75% encroachment area.

- Out of 3,528 water bodies, the information on 'water spread area' was reported in 3,520 water bodies. Out of these 3,520 water bodies, 95.7% (3,369) of the water bodies have water spread area less than 0.5 hectares and 3.9% (137) have water spread area between 0.5 to 1.0 hectares. Distribution of water bodies by 'water spread area' is shown in charts given below.



- In terms of storage capacity, 40.5% (1,430) water bodies have storage capacity between 1,000 to 10,000 Cubic Meters whereas 0.2% (6) water bodies have storage capacity more than 10,000 cubic meters. Distribution of water bodies by 'storage capacity of water bodies' is shown in charts given below.



- Key parameters of First Census of Water Bodies for the UT of Andaman & Nicobar Islands are given in the Annexure.

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	**Total Number of Water Bodies**	**no.**	3,528	
	Total Number of Water Bodies in Rural Areas	**no.**	3,497	99.12
	Total Number of Water Bodies in Urban Areas	**no.**	31	0.88
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		3,469	98.33
	Tanks		6	0.17
	Lakes		5	0.14
	Reservoirs		5	0.14
	Water Conservation Schemes/ Percolation tanks/ Check dams		26	0.74
	Others		17	0.48
b	**Water Bodies with Private Ownership**	**no.**	2,871	
	Water Bodies by area	**no.**		
	DPAP		0	0.00
	Tribal		17	0.48
	DDP		0	0.00
	Flood Prone		16	0.45
	Naxal affected area		0	0.00
	Others		3,495	99.06
	Total		3,528	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		2,883	86.47
	Industrial		3	0.09
	Pisciculture		224	6.72
	Domestic/ Drinking		193	5.79
	Recreation		1	0.03
	Religious		1	0.03
	Ground Water recharge		5	0.15
	Others		24	0.72
	Total		3,334	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		39	1.11
	Man Made		3,489	98.89
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		102	52.58
	Construction		2	1.03
	Siltation		16	8.25
	Destroyed beyond repair		16	8.25

S.No.	Parameter	Unit	Value	Percentage to Total *
	Salinity		3	1.55
	Due to industrial effluents		1	0.52
	Others		54	27.84
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		1,878	53.89
	Usually filled up		1,173	33.66
	Rarely filled up		357	10.24
	Never filled up		77	2.21
	Total		3,485	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		3,073	92.17
	2 to 5		257	7.71
	6 to 10		1	0.03
	11 to 20		3	0.09
	21 to 50		0	0.00
	50 to 500		0	0.00
	Total		3,334	100.00
7	**Distribution of Water Bodies by Water Spread Area**	**no.**		
	Less than 0.5 hectares		3,369	95.71
	0.5 hectares to 1.0 hectares		137	3.89
	1 hectares to 5 hectares		12	0.34
	5 hectares to 10 hectares		0	0.00
	10 hectares to 50 hectares		2	0.06
	More than 50 hectares		0	0.00
	Total		3,520	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		144	4.08
	100 to 1000		1,948	55.22
	1000 to 10000		1,430	40.53
	More than 10000		6	0.17
	Total		3,528	100.00
9	**Number of encroached water bodies**	**no.**	59	

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

CHANDIGARH

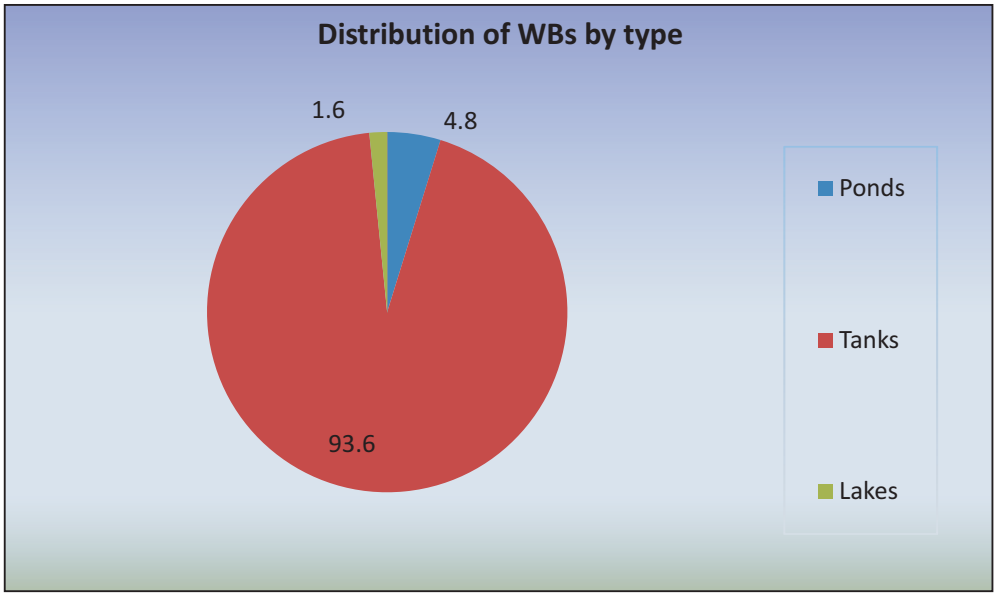
Chandigarh is located near the foothills of the Shivalik Range of the Himalayas in northwest India. It is known as one of the best experiments in urban planning and modern architecture in the twentieth century in India.

Sukhna Lake in Chandigarh

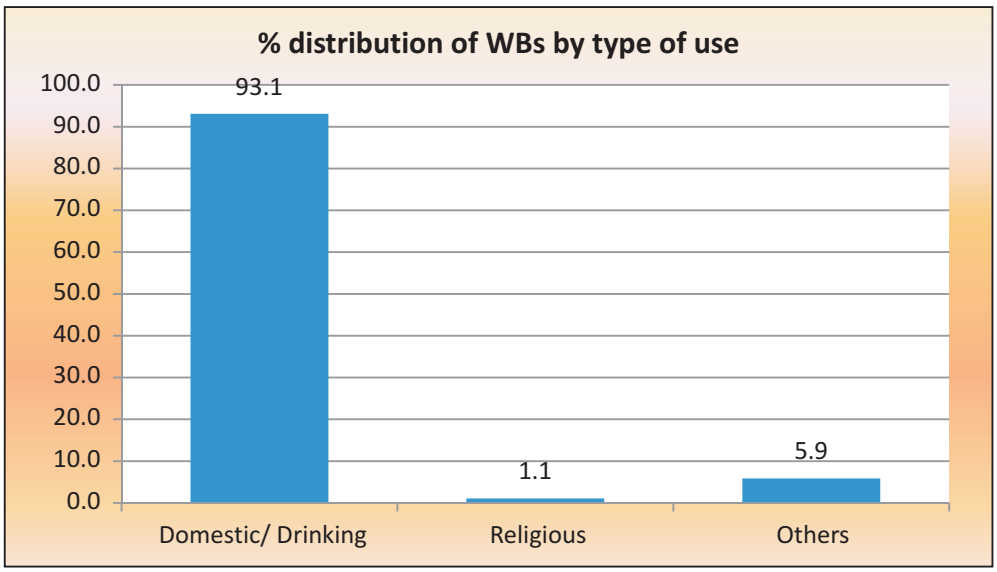
Chandigarh has a total Geographic area of 114 km^2. As per the census of 2011, Chandigarh has a population of 10,55,450.

Major findings of the census

- In 1st census of water bodies, 188 water bodies have been enumerated, out of which 87.8% (165) are in urban areas and the remaining 12.2% (23) are in rural areas. All water bodies in Chandigarh are under public ownership.
- Majority of the water bodies are tanks followed by ponds and lakes as depicted from chart given below.



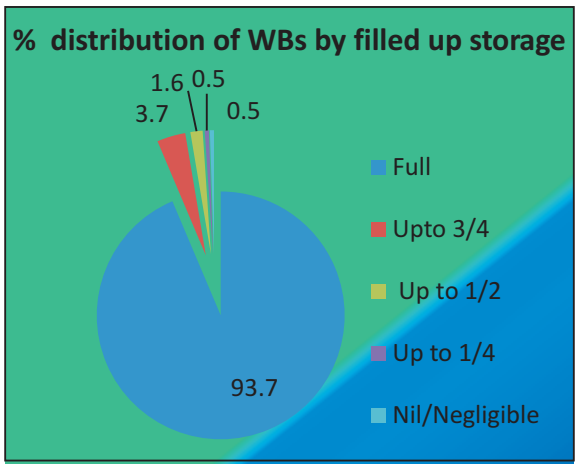
- All the enumerated water bodies of Chandigarh are in use. Among all these water bodies, 93.6% (176) are tanks, 4.8% (9) are ponds and the remaining 1.6% (3) are lakes. Majority of the water bodies i.e.,93.1% (175) are used for domestic/ drinking purpose in the Chandigarh. Remaining 13 water bodies are used for religious and other purposes.

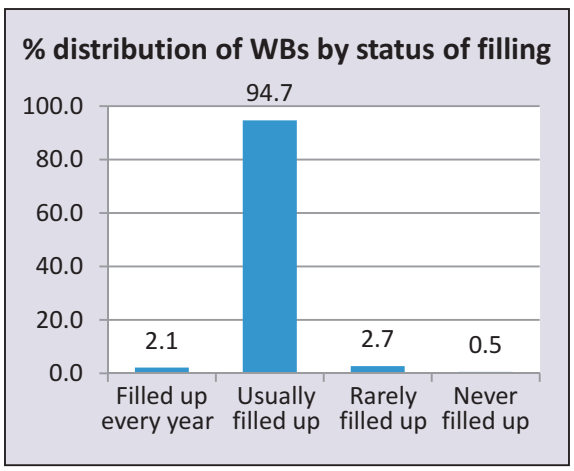


- There are 6 natural and 182 man-made water bodies in Chandigarh. All natural water bodies are located in rural areas. Out of 182 man-made water bodies, 90.6% (165) water bodies are located in urban areas whereas 9.4% (17) are located in rural areas. Most of the man-made water bodies have original cost of construction between Rs.10 Lakh to Rs.50 Lakh.

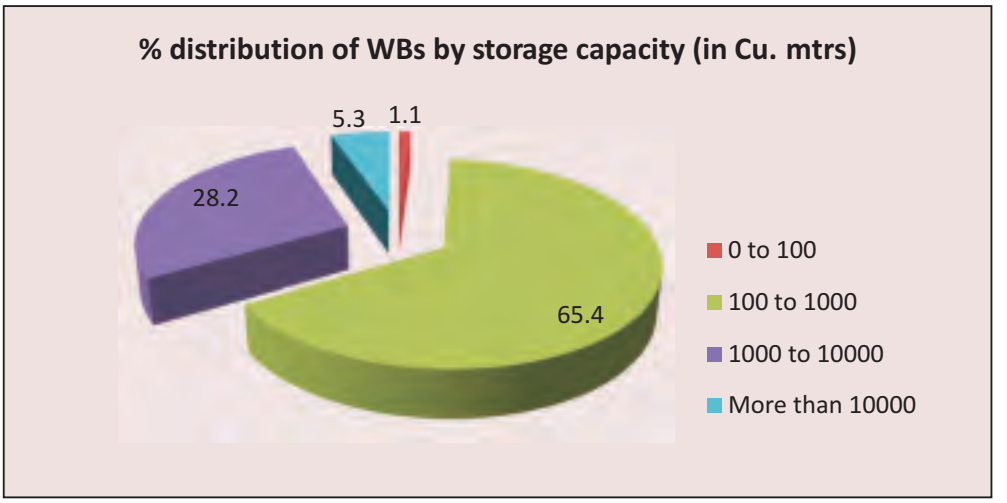

A pond in Khuda Jassu village of Chandigarh

- During reference year 2017-18, out of 188 water bodies, 93.7% (176) water bodies had fully filled up storage capacity, 3.7% (7) water bodies had storage capacity filled upto three fourth level, 1.6% (3) water bodies had storage capacity filled upto half level, 0.5% (1) water bodies had storage capacity filled upto one fourth level whereas 0.5% (1) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of total water bodies (188), 2.1% (4) water bodies are found to be filled up every year, 94.7% (178) are usually filled up, 2.7% (5) are rarely filled up and 0.5% (1) 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 188 'in use' water bodies, 187 are benefitting one (01) city/town and remaining one water body is fulfilling requirements of 2- 5 cities/ towns. 97.3% (183) of the water bodies have water spread area less than 0.5 hectares. In terms of storage capacity, out of 188 water bodies, 65.4% (123) water bodies have storage capacity between 100 to 1,000 Cubic Meters and majority of these water bodies are in urban areas. Distribution of storage capacity of water bodies is given in chart given below:



- Out of 188 water bodies in Chandigarh, none of the water bodies are reported to be encroached.
- Key parameters of First Census of Water Bodies for the Union Territory of Chandigarh are given in the Annexure.

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	**Total Number of Water Bodies**	**no.**	188	
	Total Number of Water Bodies in Rural Areas	**no.**	23	12.23
	Total Number of Water Bodies in Urban Areas	**no.**	165	87.77
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		9	4.79
	Tanks		176	93.62
	Lakes		3	1.60
b	**Water Bodies with Private Ownership**	**no.**	0	0.00
	Water Bodies by area	**no.**		
	DPAP		0	0.00
	Tribal		0	0.00
	DDP		0	0.00
	Flood Prone		0	0.00
	Naxal affected area		0	0.00
	Others		188	100.00
	Total		188	100.00
2	**Water Bodies by type of use**	**no.**		
	Domestic/ Drinking		175	93.09
	Religious		2	1.06
	Ground Water recharge		0	0.00
	Others		11	5.85
	Total		188	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		6	3.19
	Man Made		182	96.81
4	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		4	2.13
	Usually filled up		178	94.68
	Rarely filled up		5	2.66
	Never filled up		1	0.53
	Total		188	100.00
5	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		187	99.47
	2 to 5		1	0.53
	Total		188	

S.No.	Parameter	Unit	Value	Percentage to Total *
6	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		183	97.34
	0.5 hectares to 1.0 hectares		2	1.06
	1 hectares to 5 hectares		2	1.06
	5 hectares to 10 hectares		0	0.00
	10 hectares to 50 hectares		0	0.00
	More than 50 hectares		1	0.53
	Total		188	100.00
7	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		2	1.06
	100 to 1000		123	65.43
	1000 to 10000		53	28.19
	More than 10000		10	5.32
	Total		188	100.00
8	**Number of encroached water bodies**	No.	0	

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

DELHI

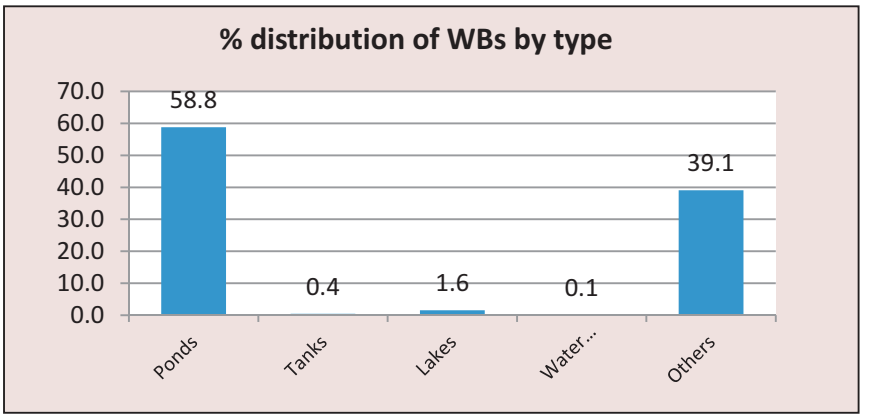
Delhi, officially the National Capital Territory (NCT) of Delhi, is a city and a union territory of India, sprawled over the west bank of the river Yamuna. It is surrounded on three sides by Haryana and to the east, across the river Yamuna by Uttar Pradesh. Delhi is not only the largest commercial centre in northern India, but also the largest centre of small industries. Being a cosmopolitan city, all major festivals of India are celebrated here.

Delhi has 11 districts with area of 1,483 km^2 and population of 1,67,53,235 as per 2011 census.

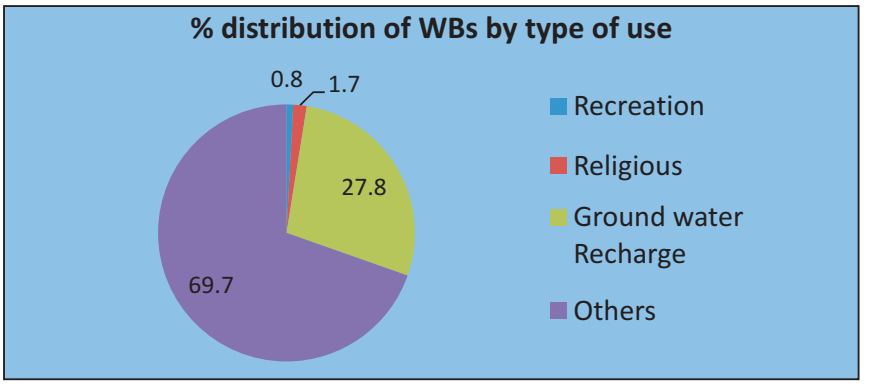
A pond in West District

Major findings of the census

- In 1st census of water bodies, 893 water bodies have been enumerated, out of which 95.1% (849) are in rural areas and the remaining 4.9% (44) are in urban areas. 95.1% (849) are public owned whereas the remaining 4.9% (44) are under private ownership. Majority of the water bodies are ponds as depicted from chart given below.



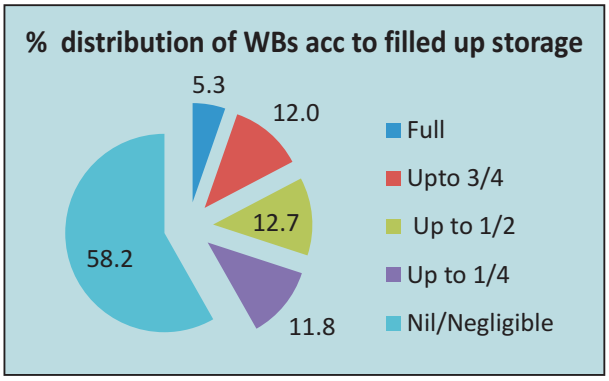
- Out of 893 water bodies, 26.5% (237) water bodies are in use while 73.5% (656) water bodies are reported 'not in use' on account of drying up, industrial effluents and other reasons. Among 237 'in use' water bodies, 27.8% (66) water bodies are used for ground water recharge purpose whereas the remaining water bodies are used for recreation, religious and other purposes.

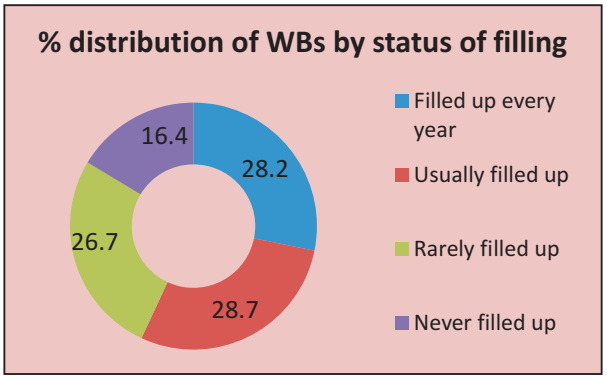


- There are 887 natural and 6 man-made water bodies in Delhi. Out of 887 natural water bodies,95.4% (846) water bodies are located in rural areas whereas 4.6% (41) are located in urban areas. Out of 6 man-made water bodies, 3 waterbodies are located in rural areas whereas remaining 3 are located in urban areas. Out of all 'in use' water bodies, 47.3% (112) are benefitting one (01) city/town and 52.7% (125) water bodies are fulfilling requirements of 2- 5 cities/ towns.

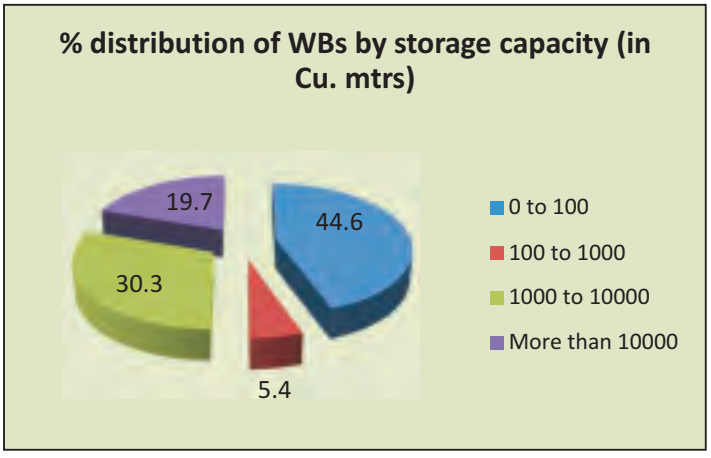
A lake in Central District

- Out of 893 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 543 water bodies. During reference year 2017-18, out of these 543 waterbodies, 5.3% (29)water bodies had fully filled up storage capacity, 12.0% (65) water bodies had storage capacity filled upto three fourth level, 12.7% (69) water bodies had storage capacity filled upto half level, 11.8% (64) water bodies had storage capacity filled upto one fourth level whereas 58.2% (316) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 543 water bodies, 28.2% (153) are filled up every year, 28.7% (156) water bodies are usually filled up, 26.7% (145) are found to berarely filled up and 16.4% (89) 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 893 water bodies, the information on 'water spread area' was reported in 887 water bodies. Out of these 887 water bodies, 92.2% (818) of the water bodies have water spread area less than 0.5 hectares. In terms of storage capacity, out of these 893 water bodies, 44.6% (398) water bodies have storage capacity between 0 to 100 cubic meters. Distribution of storage capacity of waterbodies is given in charts given below:



- Out of 893 waterbodies, 216 waterbodies are reported to be encroached. These are 66 ponds, 1 tank and 149 other water bodies. Among the 158 water bodies whose encroachment area can be assessed, seven (7) are assessed to have less than 25% area under encroachment, nineteen (19) having encroachment area ranging between 25% to 75% and one hundred thirty two(132) have more than 75% encroachment area.
- Key parameters of First Census of Water Bodies for the State of Delhi are given in the Annexure.

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	Total Number of Water Bodies	no.	893	
	Total Number of Water Bodies in Rural Areas	no.	849	95.07
	Total Number of Water Bodies in Urban Areas	no.	44	4.93
a	Total Number of Water Bodies by type	no.		
	Ponds		525	58.79
	Tanks		4	0.45
	Lakes		14	1.57
	Reservoirs		0	0.00
	Water Conservation Schemes/ Percolation tanks/ Check dams		1	0.11
	Others		349	39.08
b	Water Bodies with Private Ownership	no.	44	4.93
	Water Bodies by area	no.		
	DPAP		29	3.25
	Flood Prone		12	1.34
	Naxal affected area		2	0.22
	Others		850	95.18
	Total		893	100.00
2	Water Bodies by type of use	no.		
	Recreation		2	0.84
	Religious		4	1.69
	Ground Water recharge		66	27.85
	Others		165	69.62
	Total		237	100.00
3	Natural/ Man Made Water Bodies	no.		
	Natural		887	99.33
	Man Made		6	0.67
4	Water Bodies Not in use due to reasons	no.		
	Dried up		77	11.74
	Construction		90	13.72
	Siltation		8	1.22
	Destroyed beyond repair		1	0.15
	Salinity		10	1.52
	Due to industrial effluents		120	18.29
	Others		350	53.35
5	Distribution of Water Bodies as per status of filling	no.		
	Filled up every year		153	28.18
	Usually filled up		156	28.73

S.No.	Parameter	Unit	Value	Percentage to Total *
	Rarely filled up		145	26.70
	Never filled up		89	16.39
	Total		543	100.00
6	Distribution of Water Bodies by number of city/ town benefitted	no.		
	1		112	47.26
	2 to 5		125	52.74
	Total		237	100.00
7	Distribution of Water Bodies by Water Spread Area	no.		
	Less than 0.5 hectares		818	92.22
	0.5 hectares to 1.0 hectares		38	4.28
	1 hectares to 5 hectares		29	3.27
	5 hectares to 10 hectares		1	0.11
	10 hectares to 50 hectares		1	0.11
	Total		887	100.00
8	Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)	Cu. Mtrs		
	0 to 100		398	44.56
	100 to 1000		48	5.38
	1000 to 10000		271	30.35
	More than 10000		176	19.71
	Total		893	100.00
9	Number of encroached water bodies	no.	216	24.19

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

JAMMU & KASHMIR

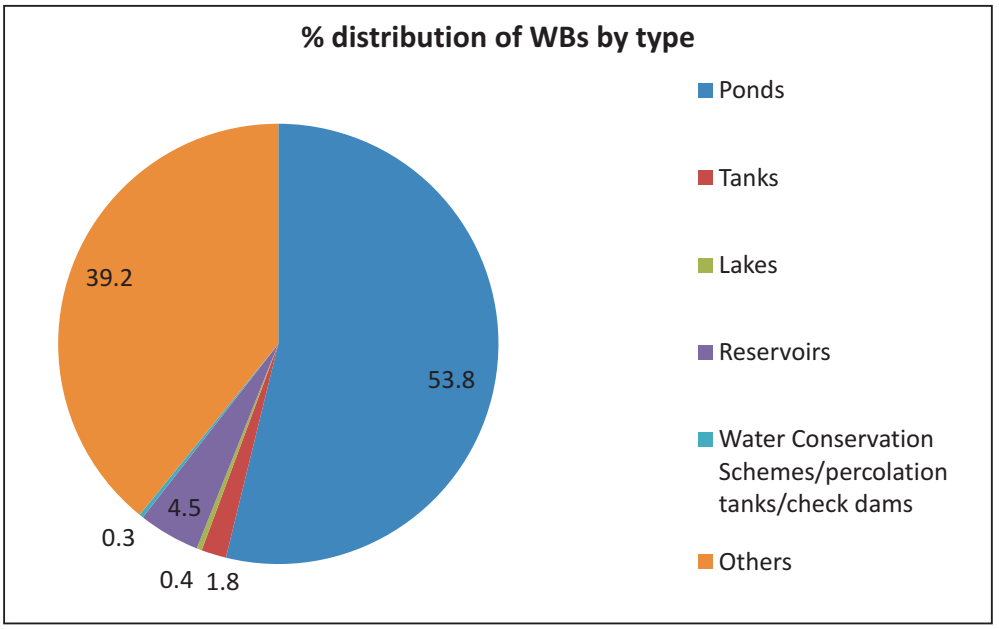
Jammu & Kashmir is located to the north of Himachal Pradesh & Punjab and to the west of Ladakh. Jammu is known as the City of Temples & offers plentiful sightseeing opportunities with its gardens, palaces, forts & religious attractions. Kashmir Valley is famous for its meadows, lakes, high altitude passes, hill stations, Mughal Gardens, Dal Lake, Shikara Ride & ancient religious sites.

A pond in Rang village of Udhampur district of J & K

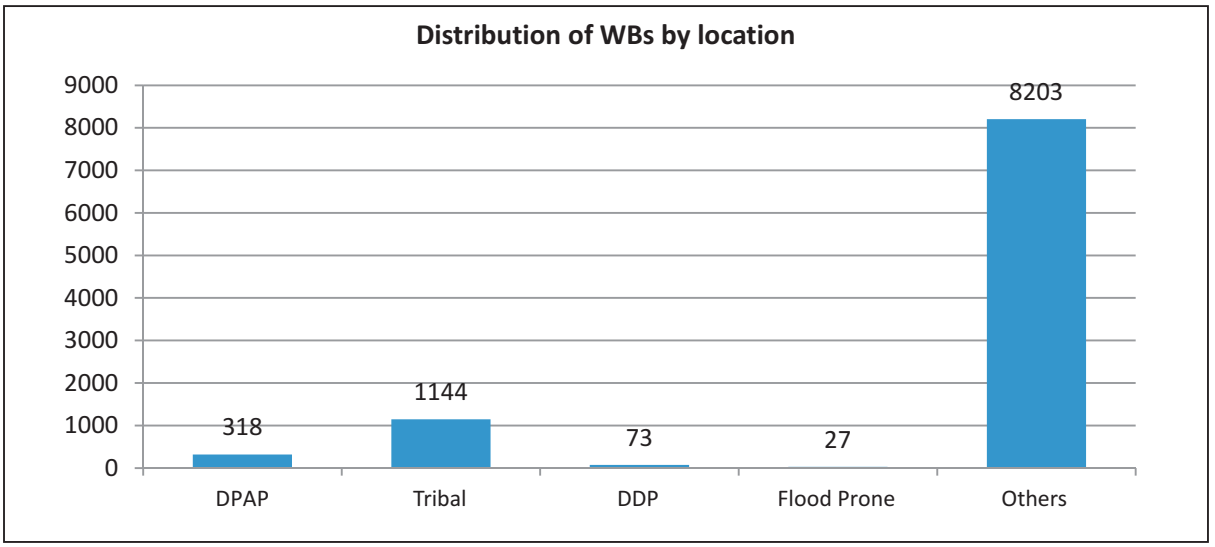
As per Census 2011, Jammu & Kashmir has a total population of 1,25,41,302. The total geographical area of J&K is 2,22,236 km^2.

Major findings of the census

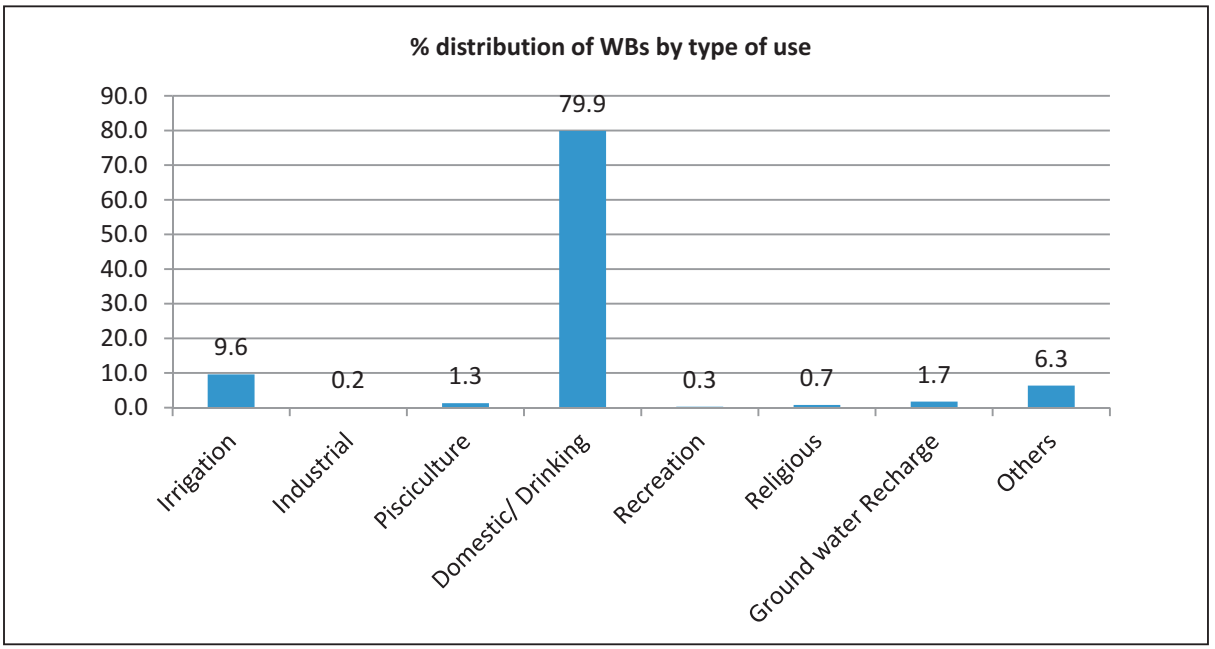
- In 1st census of water bodies, 9,765 water bodies have been enumerated in the State of Jammu & Kashmir, out of which 99.2% (9,687) are in rural areas and the remaining 0.8% (78) are in urban areas. Majority of the water bodies are ponds as depicted from chart given below.



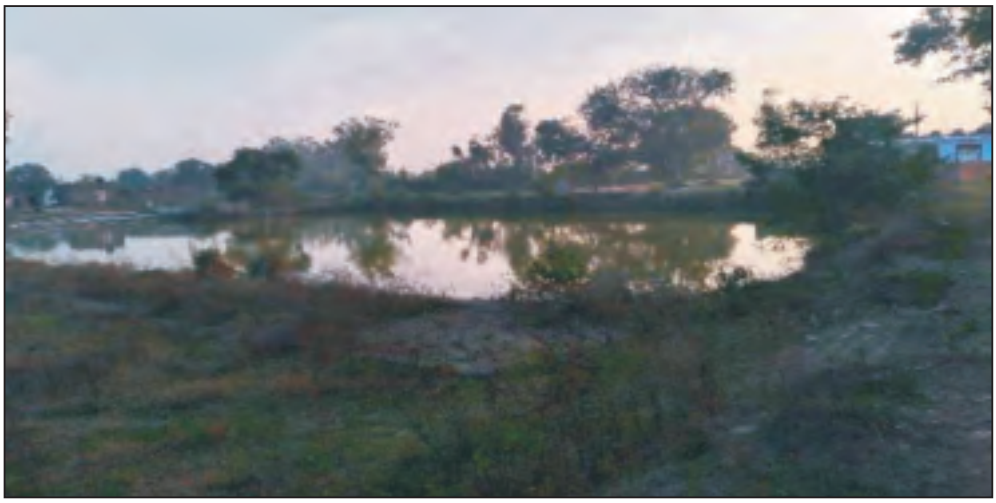
- 48.6% (4,749) are privately owned whereas the remaining 51.4% (5,016) are under public ownership. By location, 27 water bodies are located in flood prone areas and 1,144 water bodies are located in tribal areas as depicted in the chart below:



- Out of all water bodies, 76.7% (7,493) water bodies are in use whereas rest 23.3% (2,272) are not in use on account of drying up, destroyed beyond repair and other reasons. Out of 'in use' water bodies, a major proportion of water bodies are used in domestic/ drinking purpose followed by irrigation purpose. Percentage distribution of water bodies by type of use is shown in the diagram given below.

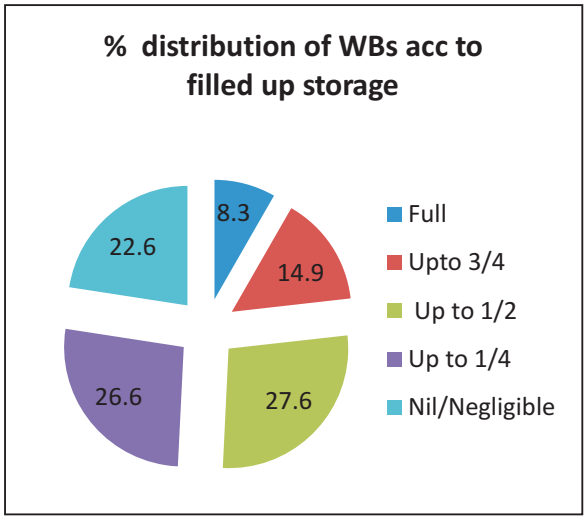


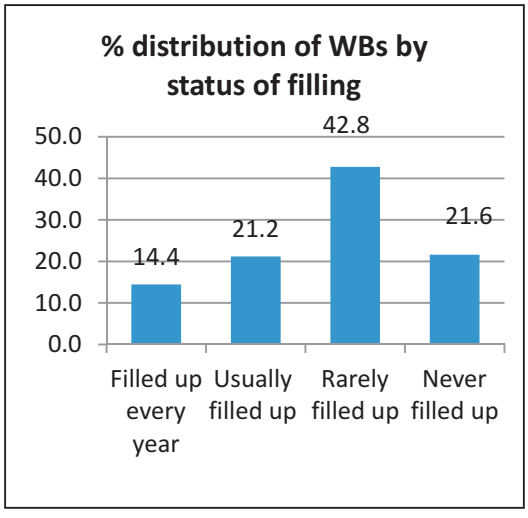
- In the State of Jammu & Kashmir, there are 36% (3,519) natural and 64% (6,246) man-made water bodies. Out of 3,519 natural water bodies, 99.5% (3,502) are located in rural areas whereas remaining 0.5% (17) are located in urban areas. Out of 6,246 man-made water bodies, 99% (6,185) water bodies are located in rural areas and the remaining 1% (61) are located in urban areas. Most of the man-made water bodies have original cost of construction up to Rs.50,000/-.



A pond in Gulwal village of Samba district of J & K

- Out of 9,765 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 5,913 water bodies. During reference year 2017-18, out of these 5,913 water bodies, 8.3% (490) water bodies had fully filled up storage capacity, 14.9% (883) water bodies had storage capacity filled upto three fourth level, 27.6% (1,630) water bodies had storage capacity filled upto half level, 26.6% (1,576) water bodies had storage capacity filled upto one fourth level whereas 22.6% (1,334) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 5,913 water bodies, 14.4% (854) water bodies are found to be filled up every year, 21.2% (1,253) are usually filled up, 42.8% (2,528) are rarely filled up and 21.6% (1,278) are never filled up. Percentage distribution of water bodies by 'status of filling' and 'filled up storage capacity' is shown in the diagram given below.

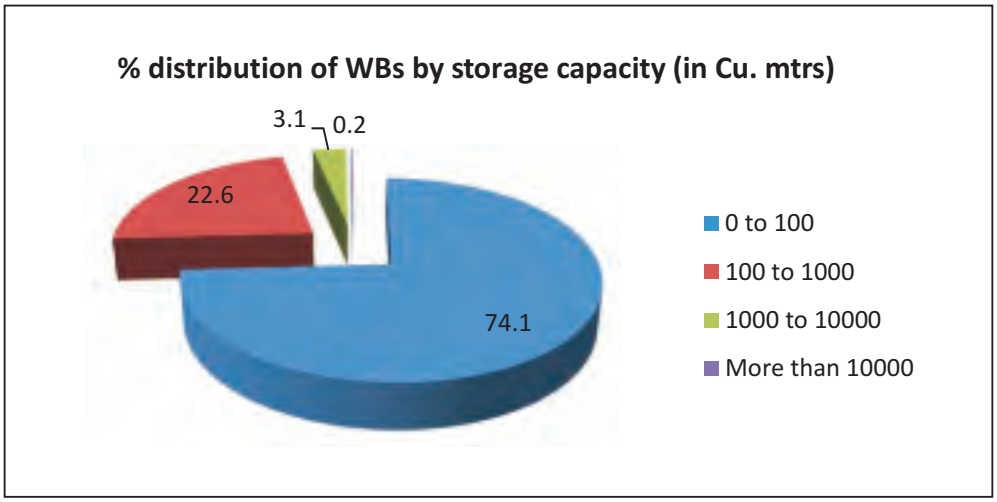




- Out of all water bodies, 1.2% (122) are covered in District Irrigation Plan/State Irrigation Plan. Among these 44.3% (54) are reservoirs, 31.1% (38) are ponds and the remaining 24.6% (30) are tanks and water conservation schemes/percolation tanks/check dams. Out of 'in use' water bodies, 93.0% (6,968) are benefitting one (01) city/town, 6.8% (510) water bodies are fulfilling requirements of 2-5 cities/ towns and the remaining 0.2% (15) water bodies are benefitting more

than five (05) cities/towns.State has reported encroachment in 103 water bodies out of all the enumerated water bodies, out of which 95 are ponds

- Out of 9,765 water bodies, the information on 'water spread area' was reported in 9,759 water bodies. Out of these 9,759 water bodies, 98.4% (9,602) of the water bodies have water spread area less than 0.5 hectares whereas, 1.1% (104) water bodies have water spread area between 0.5 hectares to 1.0 hectares and the remaining 0.5% (53) water bodies have more than 1 hectare water spread area.
- In terms of storage capacity, 74.1% (7,238) water bodies have storage capacity between 0 to 100 Cubic Meters. Distribution of water bodies by 'storage capacity of water bodies' is shown in chart given below:



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

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	**Total Number of Water Bodies**	**no.**	9,765	
	Total Number of Water Bodies in Rural Areas	**no.**	9,687	99.20
	Total Number of Water Bodies in Urban Areas	**no.**	78	0.80
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		5,256	53.82
	Tanks		179	1.83
	Lakes		37	0.38
	Reservoirs		441	4.52
	Water Conservation Schemes/ Percolation tanks / Check dams		29	0.30
	Others		3,823	39.15
b	**Water Bodies with Private Ownership**	**no.**	4,749	48.63
	Water Bodies by area	**no.**		
	DPAP		318	3.26
	Tribal		1,144	11.72
	DDP		73	0.75
	Flood Prone		27	0.28
	Naxal affected area		0	0.00
	Others		8,203	84.00
	Total		9,765	100.00
2	**Water Bodies by type of use**	**no.**		
	Irrigation		719	9.60
	Industrial		12	0.16
	Pisciculture		97	1.29
	Domestic/ Drinking		5,986	79.89
	Recreation		19	0.25
	Religious		56	0.75
	Ground Water recharge		129	1.72
	Others		475	6.34
	Total		7,493	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		3,519	36.04
	Man Made		6,246	63.96
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		1,051	46.26
	Construction		24	1.06
	Siltation		20	0.88
	Destroyed beyond repair		214	9.42
	Salinity		1	0.04
	Due to industrial effluents		1	0.04
	Others		961	42.30

S.No.	Parameter	Unit	Value	Percentage to Total *
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		854	14.44
	Usually filled up		1,253	21.19
	Rarely filled up		2,528	42.75
	Never filled up		1,278	21.61
	Total		5,913	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		6,968	92.99
	2 to 5		510	6.81
	6 to 10		13	0.17
	11 to 20		1	0.01
	21 to 50		0	0.00
	50 to 500		1	0.01
	Total		7,493	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		9,602	98.39
	0.5 hectares to 1.0 hectares		104	1.07
	1 hectares to 5 hectares		45	0.46
	5 hectares to 10 hectares		2	0.02
	10 hectares to 50 hectares		1	0.01
	More than 50 hectares		5	0.05
	Total		9,759	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		7,238	74.12
	100 to 1000		2,202	22.55
	1000 to 10000		305	3.12
	More than 10000		20	0.20
	Total		9,765	100.00
9	**Number of encroached water bodies**	No.	103	

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

PUDUCHERRY

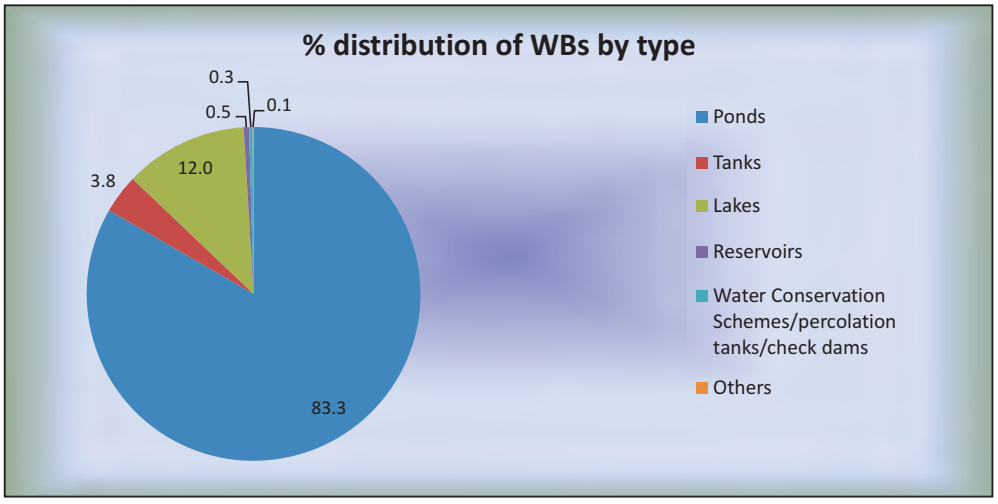
The Union Territory of Puducherry consists of four regions, namely Puducherry, Karaikal, Mahe and Yanam. All the four regions are at different locations, geographically separated from each other. The people, culture, festivals together contribute to the lively ambiance of Puducherry.

A pond in Karaikal district

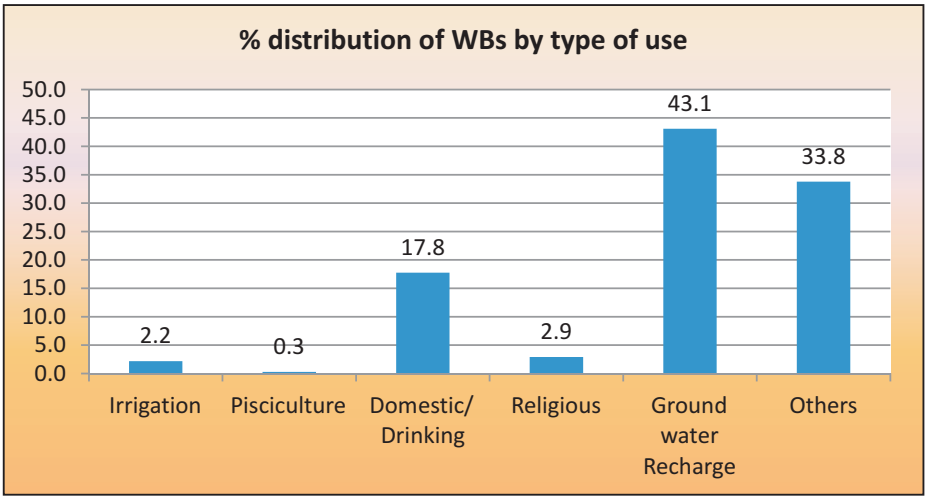
Puducherry has a total Geographic area of 490 km^2 including all the four regions. According to the 2011 census, UT had a population of 12,47,953.

Major findings of the census

- In 1st census of water bodies, 1,171 water bodies have been enumerated, out of which 89.7% (1,050) are in rural areas and the remaining 10.3% (121) are in urban areas. Out of all water bodies, 95.9% (1,123) are public owned whereas the remaining 4.1% (48) are under private ownership.
- Majority of the water bodies are ponds followed by lakes and tanks as depicted from chart given below.



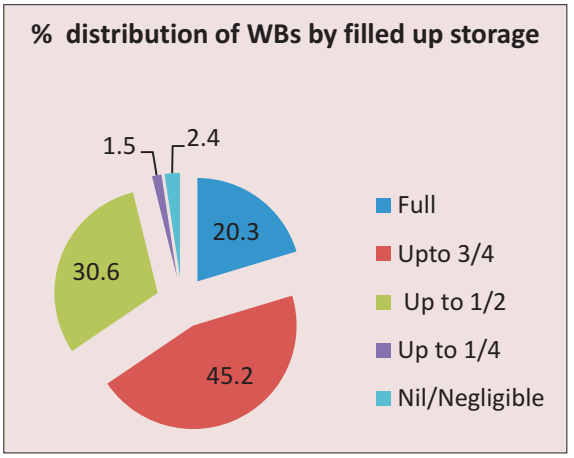
- Out of 1,171 water bodies, 58.7% (687) water bodies are in use whereas rest 41.3% (484) water bodies are not in use on account of drying up, siltation and other reasons. Among all the 'in use' water bodies, 92.7% (637) are ponds, 4.7% (32) are lakes and the remaining 2.6% (18) are tanks, water conservation schemes/ percolation tanks/check dams, reservoirs etc. Out of 'in use' water bodies, 43.1% (296) water bodies are used for ground water recharge in Puducherry. Percentage distribution of 'in use' water bodies by type of use is shown in the diagram given below.

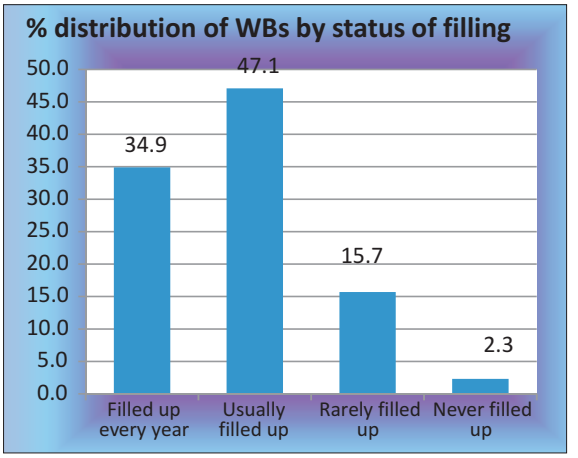


- There are 1,168 natural and 3 man-made water bodies in Puducherry. Out of 1,168 natural water bodies, 89.9% (1,050) water bodies are located in rural areas whereas 10.1% (118) are located in urban areas. All the three man-made water bodies are located in urban areas and two of them have original cost of construction between Rs.10 Lakh to Rs.50 Lakh.

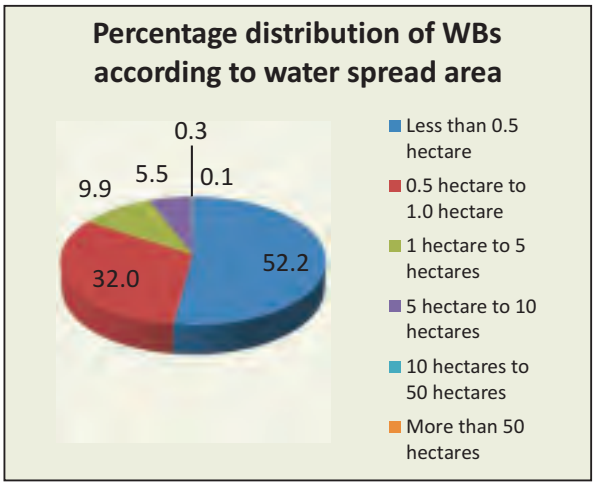

A lake in Puducherry district

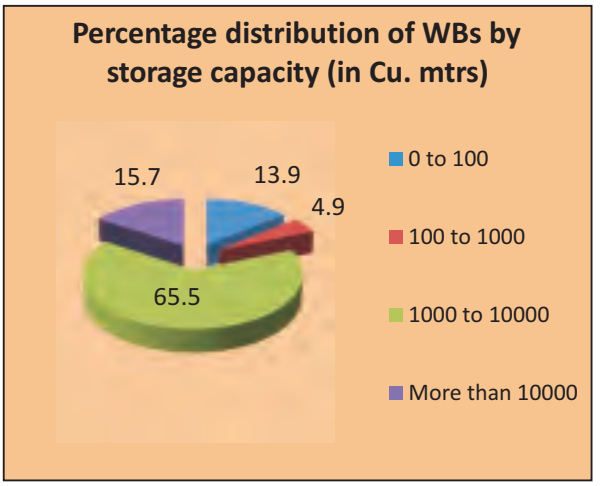
- Out of 1,171 water bodies, the information on 'filled up storage capacity' and 'status of filling' was collected for 1,166 water bodies. During reference year 2017-18, out of these 1,166 water bodies, 20.3% (237) water bodies had fully filled up storage capacity, 45.2% (527) water bodies had storage capacity filled upto three fourth level, 30.6% (357) water bodies had storage capacity filled upto half level, 1.5% (17) water bodies had storage capacity filled upto one fourth level whereas 2.4% (28) had nil/negligible storage capacity. Based on the criteria of filling up of storage capacity during last 5 years, out of 1,166 water bodies, 34.9% (407) water bodies are found to be filled up every year, 47.1% (549) are usually filled up, 15.7% (183) are rarely filled up and 2.3% (27) are never filled up. Percentage distribution of water bodies by status of filling and filled up storage is shown in the diagrams given below.





- Out of 1,171 water bodies, 13 are covered in District Irrigation Plan/State Irrigation Plan. These 13 water bodies comprise of 5 ponds and 8 lakes. Out of 'in use' water bodies, 97.1% (667) are benefitting one (01) city/town and 2.9% (20) water bodies are fulfilling requirements of 2 or more cities/ towns.
- Out of all water bodies, 52.2% (611) of the water bodies have water spread area less than 0.5 hectares. In terms of storage capacity, 65.5% (767) water bodies have storage capacity between 1,000 to 10,000 cubic meters whereas 15.7% (184) water bodies have storage capacity more than 10,000 cubic meters. Distribution of water bodies by 'water spread area' and 'storage capacity' is shown in charts given below:





- Out of 1,171 water bodies, 34 water bodies are reported to be encroached. These are 29 ponds and 5 lakes. Among the water bodies whose encroachment area can be assessed, 13 are assessed to have less than 25% area under encroachment, 02 having encroachment area ranging between 25% to 75% and 07 have more than 75% encroachment area.
- Key parameters of First Census of Water Bodies for the UT of Puducherry are given in the Annexure.

Annexure

S.No.	Parameter	Unit	Value	Percentage to Total *
1	**Total Number of Water Bodies**	**no.**	1,171	
	Total Number of Water Bodies in Rural Areas	**no.**	1,050	89.67
	Total Number of Water Bodies in Urban Areas	**no.**	121	10.33
a	**Total Number of Water Bodies by type**	**no.**		
	Ponds		976	83.35
	Tanks		44	3.76
	Lakes		140	11.96
	Reservoirs		6	0.51
	Water Conservation Schemes/ Percolation tanks/ Check dams		4	0.34
	Others		1	0.09
b	**Water Bodies with Private Ownership**	**no.**	48	4.10
	Water Bodies by area	**no.**		
	Flood Prone		1	0.09
	Naxal affected area		0	0.00
	Others		1,170	99.91
	Total		1,171	
2	**Water Bodies by type of use**	**no.**		
	Irrigation		15	2.18
	Industrial		0	0.00
	Pisciculture		2	0.29
	Domestic/ Drinking		122	17.76
	Recreation		0	0.00
	Religious		20	2.91
	Ground Water recharge		296	43.09
	Others		232	33.77
	Total		687	100.00
3	**Natural/ Man Made Water Bodies**	**no.**		
	Natural		1,168	99.74
	Man Made		3	0.26
4	**Water Bodies Not in use due to reasons**	**no.**		
	Dried up		2	0.41
	Construction		0	0.00
	Siltation		18	3.71
	Destroyed beyond repair		0	0.00
	Salinity		0	0.00
	Due to industrial effluents		465	95.88
	Others		485	100.00

S.No.	Parameter	Unit	Value	Percentage to Total *
5	**Distribution of Water Bodies as per status of filling**	**no.**		
	Filled up every year		407	34.91
	Usually filled up		549	47.08
	Rarely filled up		183	15.69
	Never filled up		27	2.32
	Total		1,166	100.00
6	**Distribution of Water Bodies by number of city/ town benefitted**	**no.**		
	1		667	97.09
	2 to 5		16	2.33
	6 to 10		4	0.58
	11 to 20		0	0.00
	21 to 50		0	0.00
	50 to 500		0	0.00
	Total		687	100.00
7	**Distribution of Water Bodies by Water Spread Area**	Ha.		
	Less than 0.5 hectares		611	52.18
	0.5 hectares to 1.0 hectares		375	32.02
	1 hectares to 5 hectares		116	9.91
	5 hectares to 10 hectares		65	5.55
	10 hectares to 50 hectares		3	0.26
	More than 50 hectares		1	0.09
	Total		1,171	100.00
8	**Distribution of Water Bodies by Storage Capacity (in Cu. Mtrs)**	Cu. Mtrs		
	0 to 100		163	13.92
	100 to 1000		57	4.87
	1000 to 10000		767	65.50
	More than 10000		184	15.71
	Total		1,171	100.00
9	**Number of encroached water bodies**	No.	34	2.90

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

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