WATER BODIES

FIRST CENSUS REPORT

GOVERNMENT OF KERALA

Office of the Chief Engineer (I&A)
Department Of Irrigation
RMIS Cell
2023

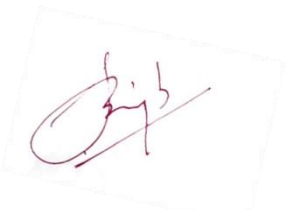
Preface

Along with the rest of the country first Census of Water Bodies had been launched in our State in convergence with 6th Minor Irrigation (MI) Census under the Centrally Sponsored Scheme "Irrigation Census". At national level, Ministry of Jal Shakti have initiated the venture by providing technical guidance, viz. preparation of methodology, designing of schedules for data collection and developing data entry software, etc. The objective of the Census of Water Bodies is to develop a reliable database for all water bodies by collecting information on all important aspects of the subject including their size, condition, status of encroachments, use, storage capacity, status of filling up of storage, etc.

The First Census of Water Bodies conducted in convergence with the 6thMI Census resulted in substantial savings in respect of planning, training of field staff, security, data entry, validation, etc. because the coverage area of both the Censuses in rural area is same. The First Census of Water Bodies also covered urban areas and took into account all types of uses of Water Bodies like Irrigation, Industry, Pisciculture, Domestic/Drinking, Recreation, Religious purpose, Ground Water Recharge and other purposes. The photograph of the water bodies along with the latitude and longitude was captured by a mobile app developed for this purpose.

RMIS cell headed by Joint Director (Statistics) of this office has brought out First Census report on Water Bodies. There port consists of a data base of all the water bodies in the State. I wish to congratulate the RMIS Cell for having taken earnest effort in bringing out such a worthy publication.

This report will help policy planers, researchers and other stake holders in the field water resource management.



Thiruvananthapuram,
08-06-2023

Chief Engineer (I&A)
(FAC)

CONTENT

Sl. No.	Description	Page No.
1	Highlights	1-3
2	Key Parameters - Kerala at a Glance	4-5
3	Water Body Census in Kerala	6-11
4	Results and Salient Findings	11-37
5	Statistical Tables	45-108

Highlights

- 55734 water bodies have been enumerated in the State, out of which 89.2% (49725) are in rural areas and only 10.8% (6009)are in urban areas.
- 91.5% (51007) of water bodies are ponds, followed by tanks 1.5%, i.e., 848, Reservoirs 0.1%, i.e. 63, Water conservation schemes/percolation tanks/check dams 6%, i.e., 3349, others 0.83%, i.e. 463 and negligible number of lakes (4).
- Palakkad has highest number of ponds (5795) yield 11.36% of the total ponds in the State. Whereas Ernakulam has highest number of tanks (204), this constitute with 24.1%of the total tanks, Name sake number of lakes are there in Wayanadu(2), Thiruvananthapuram(1) and Kollam(1) respectively. Pathanamthitta has highest number of Reservoirs (16) followed by Idukki(13) and Malappuram is the leading district for water conservation scheme.
- A major proportion of water bodies i.e., 83.52% (46550) are in use whereas remaining 16.48% (9184) are not in use on account of drying up, construction, siltation, destroyed beyond repair, salinity and other reasons.
- Most of the water bodies are used in irrigation followed by domestic/drinking purpose and ground water recharge purpose.
- 2.64%(1470)water bodies are located in tribal areas, 1.97%(1098) in flood prone areas,0.64%(356) in the area under "Drought Prone Areas Programme", 0.74% (414) water bodies are in the naxal affected areas. As far as the State Kerala is concern no water bodies are located in the area under "Desert Development Programme (DDP)" whereas remaining 94.01% (52396) water bodies are located in other areas.
- 70.67% (39389) of water bodies are owned by private entities where as 29.33% (16345)of water bodies are in the domain of public ownership. Out of all public owned water bodies, maximum water bodies are owned by Panchayats, followed by State Irrigation/ State WRD. Out of all private owned water bodies, maximum water bodies are in hands of Individual owner/ farmer followed by other private bodies.

- 59.07% (32923) of enumerated water bodies are man-made where as the remaining 40.93% (22811) are natural water bodies. In terms of present storage capacity, 47.41% (26426) water bodies have storage capacity between 100 to 1000 cubic meters, 26.85% (14962) have storage capacity between 0 to100 cubic meters 17.09% (9524) of water bodies have storage capacity between 1000 to 10000 cubic meters whereas 1.81% (1010) have storage capacity more than 10,000 cubic meters. Remaining 6.84% (3812) water bodies are belonging to the category **NA (0).** NA(0) category refers to the number of water bodies coming under the type 'others' for which storage capacity has been recorded as'0'while doing data entry.

- Out of 55734 enumerated water bodies, the information on 'water spread area' has been reported in respect of 55723 water bodies. Out of these 55723 water bodies, 97% of water bodies have water spread area less than 0.5 hectare, where as only 3% of water bodies have water spread area more than 0.5 hectares.

- 92% of the 'in use' water bodies are fulfilling requirements of up to 100 people, whereas 0.13% water bodies are fulfilling the requirements of more than 50,000 people. In terms of benefits to city/towns/villages 93.34% water bodies are benefitting one city/town/village, 6.34% are benefitting 2-5 city/town/ village where as remaining 0.32% are benefitting more than 5cities/towns/ villages.

- For the first time, information on encroachment of water bodies is collected under the 1st Census of Water Bodies. 0.2% (111) water bodies out of all the enumerated water bodies are reported to be encroached out of which 92.79% are in rural areas and remaining 7.21% in urban areas. Out of all 111 encroached water bodies only 47 water bodies whose area could be assessed of which 45 are in rural areas and 2 in urban areas. Out of the 47 encroached water bodies 61.70%(29) water bodies have less than 25% area under encroachment, where as 14.89% water bodies have more than 75% area under encroachment. 10.64% (5) water bodies have between 25% to 50% area under

encroachment and 12.78% (6) water bodies have between 50% to 75% area under encroachment.

- Out of all water bodies, 1397 are covered in District Irrigation Plan/State Irrigation Plan. Among these 1238 are ponds and the remaining 5 are tanks, 1 lake and 10 reservoirs. There are 136 water bodies covered in Water Conservation Schemes / Percolation tanks/ check dams.

- The information on 'filled up storage capacity' has been collected for 51922 water bodies which are ponds/tanks/lakes/reservoirs. Out of these water bodies, 56.67% (29424) water bodies had fully filled up storage capacity, 33.19% (17233) had storage capacity filled up to three fourth level, where as 7.28% (3781), 2.01% (1045), 0.84% (439) water bodies had storage capacity up to half, one fourth and negligible respectively.

- In terms of maximum depth 90.10% (50195) water bodies have depth between 0 to 5 meters, 9.32% (5197) have depth between 5 to 10meters, where as 0.58% (325) have depth more than10 meters.

- In terms of original cost for man-made water bodies 70.18% (23,106) of cost up to Rs.50,000/-, 11.33% (3729) water bodies of cost between Rs.50,000/- to 1,00,000/- and 12.07% (3974) water bodies of cost between Rs.1,00,000/- to Rs.5,00,000/-, where as 6.42% (2114) water bodies of cost more than Rs.5,00,000/-.

Key Parameters - Kerala at a Glance

Sl. No.	Parameter	Unit	Value	Percentage to Total *
1	**Total Number of Water Bodies**	**no.**	55,734	
	Total Number of Water Bodies in RuralAreas	**no.**	49,725	89.22
	Total Number of Water Bodies in UrbanAreas	**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 statusof 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 ofcity/ 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 WaterSpread 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 StorageCapacity (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 up to 100 at certain places.

Water Body Census in Kerala

Introduction

Water is a precious national resource& essential for human civilization, living organisms, and natural habitat. Water is linked with every aspect of development. It drives economic growth, supports healthy ecosystems, and is essential and fundamental for life itself. Water is used for drinking, cleaning, agriculture, industrial purpose, recreation, animal husbandry, generation of electricity and lot of other purposes as well.

Water is a recyclable resource but the availability is limited and the gap between the supply and demand is widening overtime. Climate change at the global scale will be creating more water stress conditions in many regions of the world. Since there is a declining availability of freshwater and increasing demand, the need has arisen to conserve and effectively manage this precious life giving resource for sustainable development. There is need to encourage watershed development, rainwater harvesting, water recycling and reuse, and conjunctive use of water for sustaining water supplying in long run.

Kerala is blessed with abundant rainfall. The average annual rainfall of the state is 3000 mm. About 90% of annual rainfall is during the monsoon months of June to August and from October to November. The hydrological characteristic of the monsoon along with topography necessitated the protection of existing water bodies. Since major source of water in the state is very much depended on monsoon, it is very much essential to construct new water retaining structure to be utilized during lean seasons. Kerala is ranked 12th overall in the number of water bodies and 3rd in number in urban location as per the census report on water bodies in the country released by the Union Jal Shakti Ministry.

Definition of a Water body

All natural or man-made units bounded on all sides with some or no masonry work used for storing water for irrigation or other purposes (e.g. industrial, pisciculture, domestic/ drinking, recreation, religious, ground water recharge etc.) will be treated as water bodies in this Census. These are usually of

various types known by different names like tank, reservoirs, ponds and bundies etc. A structure where water from ice- melt, streams, springs, rain or drainage of water from residential or other areas is accumulated or water is stored by diversion from a stream, nala or river will also be treated as water body.

Types of Water Bodies

Following type of water bodies are included. (The list is indicative but not exhaustive)

Pond: A small body of water usually earthen though masonry dykes are also included and shallow made through excavations which represent a restricted environment. Ponds usually describe small bodies of water generally no one would require a boat to cross.

Lake: A lake is large area filled with water that is surrounded by land. Lakes lie on land and are not part of the ocean and therefore are distinct from lagoons, and are also larger and deeper than ponds.

Tank: A shallow water unit usually larger than a pond created by constructing earthen or masonry barricades which receives water either from tube wells or rains.

Reservoirs: A large man made impoundment of varying magnitude created by erecting, bunds, dams, barrages or other hydraulic structures across streams or rivers serving one or more purposes such as irrigation, power generation, flood control or other water resource development projects.

Water conservation schemes: Water conservation schemes are aimed at improving moisture regime of the adjoining fields downstairs for raising of post monsoon crops without irrigation.

This may include percolation tanks and check dams. Both result in increased percolation of water in sub-soil with consequent increase of the ground water supply.

Following type of water bodies are excluded:

- Ocean, lagoons.
- River, stream, spring, waterfalls, canals etc. which are free flowing without any bounded storage of water.

- Swimming Pool.
- Covered Water Tank created for specific purpose by any individual family or household for their sole consumption.
- Water tank constructed by any factory owner for consumption of water as raw material or consumable.
- Temporary water bodies created by digging for mining, brick kilns and construction activities. These may get filled up during rainy season.
- Pucca open water tank created only for drinking for cattle.

Need for Water Bodies Census

The need for conducting a separate census of water bodies was pointed out by the Parliamentary Standing Committee on Water Resources on the subject "Repair, Renovation and Restoration of Water Bodies – Encroachment on water bodies and steps required to remove the encroachment and restore the water bodies". Department of Water Resources (DoWR), Ministry of Jal-Shakti had maintained database of only those water bodies which were being provided Central assistance under the Scheme of Repair, Renovation and Restoration (RRR) of water bodies, thus confining its monitoring role to only such water bodies. The Committee recommended that in order to enable an objective assessment of water bodies and their condition, there should be separate census of water bodies and thereby creating a Central database on water bodies. As recommended by the Standing Committee, the first Census of Water bodies was launched by Department of Water Resources, River Development & Ganga Rejuvenation in 2018-19 in convergence with the 6th Minor Irrigation census.

The Department of Water Resources, River Development and Ganga Rejuvenation (DoWR, RD&GR), Ministry of Jal Shakti (MoJS), Government of India (GoI) has been conducting census of minor irrigation structures, quinquennially under the Centrally Sponsored Scheme "Irrigation Census" with 100%central assistance to States. The scope of Irrigation Census Scheme has been enhanced by launching the Census of Water Bodies in convergence with Sixth Minor Irrigation Census which covers all types of water bodies in both rural and urban areas and aims to collect all the important parameters of the water body like type of use, status (whether defunct or in-use), storage etc.

Mechanism of Conduct of Water Bodies Census

The First Census of Water Bodies was conducted along with the census of 6th Minor Irrigation structures. The Water Body schedule was filled in both rural as well as urban areas.

Firstly, all water bodies in the villages as well as towns were listed by ensuring that no water body is left out. If any water body spreads in more than one village, it was treated as one water body and only one schedule was canvassed for it. All Water bodies, as explained in definition of Water bodies, were covered in this Census irrespective of their uses, whether for irrigation or other purposes (e.g. industrial, pisciculture, domestic/ drinking, recreation, religious, ground water recharge etc.).

The Department had finalized the statistical instruments for conducting the Census like questionnaire, guidelines, etc. in consultation with the stakeholders. The software for data entry and the mobile app for capturing latitude, longitude and photograph of the water bodies were developed by National Informatics Centre (NIC) in consultation with the Department. Thereafter, regional trainings and data processing workshops were conducted to train the trainers in State for familiarizing them with the process of conducting the Census along with hands on the data entry software and mobile app.

Methodology of data collection

For the census of water bodies, traditional methodology i.e, paper based schedules were canvassed both for rural and urban areas. Three schedules namely Village schedule, 'Urban schedule' and 'Water Body schedule' were canvassed in the census. A smart phone to capture latitude, longitude and photo graph of water bodies was used in the Census of Water Bodies.

The Water body's census data was collected through canvassing different enumeration schedules preferably, canvassed by same enumerator who is canvassing schedules for the village and Minor Irrigation schemes or other persons as decided by State Nodal office in Villages. For urban areas, enumerators for water body were identified for one town or group of town.

While the field work is going on, supervision and checking was done by:-

- Enumerator's supervisor,
- Block level officers
- District level officers
- State level officers as per the norms prescribed.

In Census of Water bodies, the captured photograph along with the latitude and longitude of the water body were uploaded on the online portal with the schedule of the concerned water body. For easy identification of photograph, the name of photograph file was kept 21 Digit Unique Identification numbers of the water body and its latitude and longitude.

Coordination Mechanism

A Steering Committee was constituted at the State level vide GO (Rt) No.337/218/WRD dated 04/05/2018 with Secretary, Water Resources Department as Chairman and Senior Officers from State Departments of Revenue, Irrigation, Water Resources, Panchayath, State Planning Board, Economics and Statistics, Rural Development, Ground Water and State Heads of National Sample Survey Organization (NSSO), Regional Chief Engineer of Central Water Commission and Regional Director of the Central Ground Water Board are members. Further, a Technical Sub Committee was formed under the Chairmanship of Regional Chief Engineer of Central Water Commission to provide technical inputs and guide the State Nodal Statistical Cell during the census operations.

Training Programmes

The All India training-cum-workshop for the Trainers was conducted on 16 March 2018 in New Delhi in which Chief Engineers (I&A) as Census Commissioner and Joint Director of Statistics Cell as State Nodal Officer were participated. A regional training for the census was conducted at Hyderabad on 28 & 29 June 2018 in which Joint Director & State Nodal Officer Census along with the staff of RMIS cell have participated. The State level training have been conducted at Govt. Guest House, Thiruvananthapuram on 25/02/2019 which was inaugurated by Hon'ble Minister for Water Resources. Followed by this, district level trainings were conducted from March to May at various district headquarters.

Fieldwork, Supervision, Inspection & Scrutiny

The first Census of Water bodies was conducted under the overall charge of Chief Engineer (I&A), being the Census Commissioner and Joint Director of Statistics Cell as Nodal Officer. The technical staff of irrigation department viz; Overseers and Draftsmen have been appointed as enumerators for field work. They were engaged for the census works in addition to their normal duties. Assistant Engineers were appointed as block level supervisors and Executive Engineers Minor Irrigation divisions were assigned to coordinate the census operation in their districts concerned. In order to ensure quality of data, inspections have been carried out by Joint Director and his team of RMIS Cell in all the districts, on sample basis. 35% of schedules have been scrutinized by RMIS cell. The data for water body census, conducted for the first time in the State, were canvased through mobile handsets using the mobile application developed by National Informatics Center (NIC).

Financial Aspects

An amount of Rs.6621925/- had been spent exclusively for Water Body Census so far. This expenditure included printing of schedules, data entry and validation and contingency.

The unprecedented pandemic COVID-19 and the pandemic induced Lock Down caused delay in each stage of the census operation. The flood followed by the heavy rain during 2018 & 2019 also reasoned for delay in completing the census works in time.

Results and Salient Findings

First Census of Water Bodies was conducted with reference year 2017-18 across the State in 14 districts. This Census covered 55734 water bodies in the State and was completed by primary workers in the districts under the overall supervision of State Nodal Officer and Census Commissioner under 'Irrigation census scheme.

Key Findings: - Key findings of this Census and parameter wise analysis are presented in the following paragraphs:-

During 1st census of water bodies, 55734 water bodies have been enumerated in

the State, out of which 91.50% (51007) are ponds, 1.50% (848) are tanks, 0.10% (63) are reservoirs, 6% (3349) are water conservation schemes/check dams/percolation tanks, 0.83% (463) other water bodies and negligible number of lakes (4) are there, one at Kollam and Thiruvananthapuram each and two in Wayanad respectively. Top five districts in number of water bodies are shown below

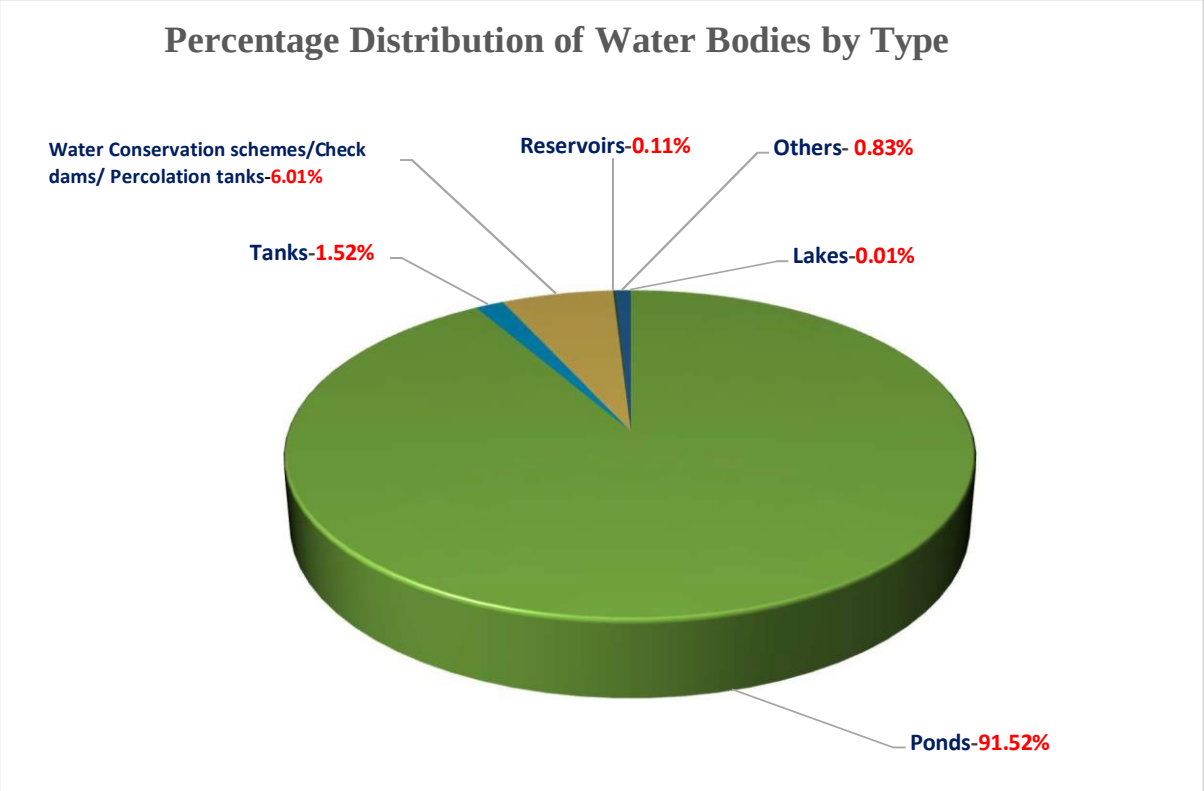
KOZHIKODE	**11.10% (6192)**
PALAKKAD	**10.74%(5988)**
MALAPPURAM	**10.73% (5983)**
KANNUR	**9.53 %(5314)**
THRISSUR	**9.01%(5023)**

- Out of the enumerated 55734 water bodies, 89.2% (49725)are in rural areas while 10.8% (6009) are in urban areas. Among these water bodies, 83.52% (46550) are 'in use' where as the remaining 16.48% (9184) are not in use/ non-functional on account of drying up, construction, siltation, destroyed beyond repair, salinity, industrial effluents etc. Out of all 'in use' water bodies, major water bodies are reported to be used in Irrigation followed by domestic/drinking purpose and Ground water recharge purpose.
- 70.67% (39389) water bodies are owned by private entities where as 29.33% (16345)are under public ownership.
- Among all water bodies, 2.64% (1470) are located in Tribal areas, 1.9% (1098) in Flood prone areas, 0.64 % (356) under Drought Prone Area Programme (DPAP), 0.74% (414) in Naxal affected areas and remaining 94.01%(52396) water bodies are located in other areas. In Kerala contest no water bodies are located in the area under Desert Development Programme (DDP).
- 59.07% are man-made water bodies whereas 40.93% are natural water bodies. Majority of man-made water bodies are earthen in nature and have original cost of construction up to Rs.50, 000/-.
- 93.34% of the 'in use' water bodies are benefitting one city/town/village. It is observed that almost half of the water bodies have storage capacity between 100 to 1000 cubic meters.

- Among all 55734 water bodies, 0.2% (111) water bodies are reported to be encroached. Majority of encroached water bodies are ponds followed by Water Conservation Schemes/ percolation tanks/ check dams. Out of all those water bodies whose encroachment areas can be assessed (i.e.47 water bodies), 61.70% (29) water bodies are found to have less than 25% area encroached.
- Water User Association (WUA) has helped to a large extent in preventing encroachments as they are vigilant and alert so that benefits from the water body would not get affected by illegal encroachments. Out of the 24519 water bodies, WUA has been formed in case of 1.03% (252) water bodies only.

Analysis of Water Bodies by type:

Major chunk of water bodies is ponds (91.52%). Tanks account for 1.52% of the water bodies whereas 0.11% and 6.01% water bodies are reservoirs and water conservation schemes/ check dams/ percolation tanks respectively as shown in the pie-chart given below.



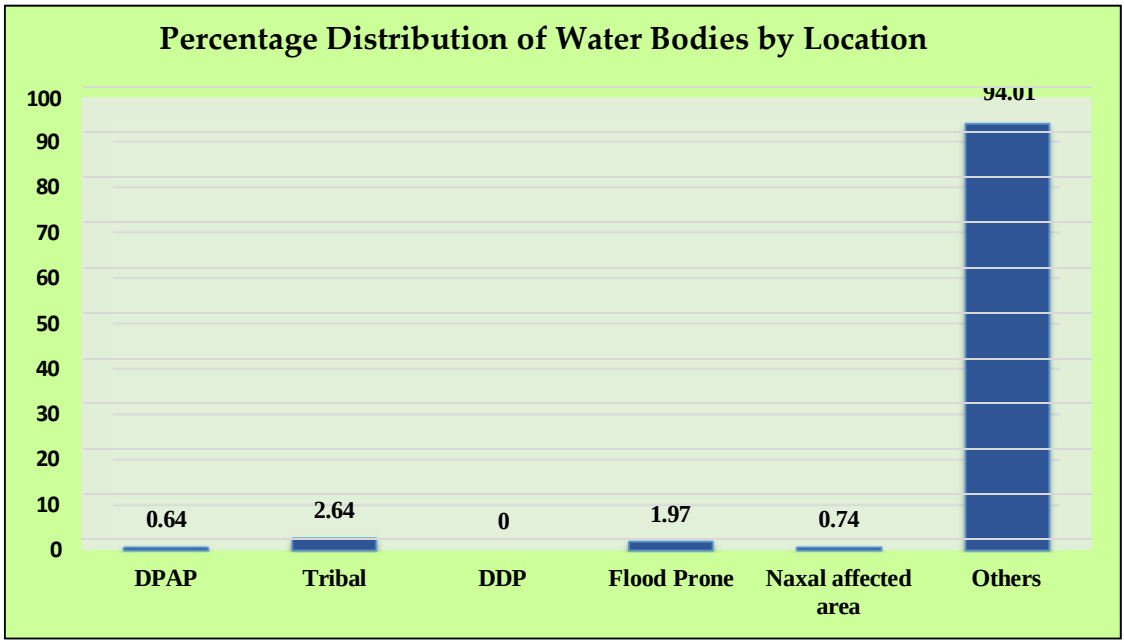
5 leading districts with maximum number of ponds, reservoirs and water conservation schemes/ percolation tanks/check dams and Tanks are given below.

PONDS	Water Conservation Schemes	Tanks
PALAKKAD	MALAPPURAM	ERNAKULAM
KOZHIKODE	KANNUR	IDUKKI
MALAPPURAM	WAYANAD	KANNUR
THRISSUR	KASARAGOD	MALAPPURAM
KANNUR	KOTTAYAM	WAYANAD

Leading districts in respect of various types of water bodies are different which may be attributed to varying topography of different districts. Palakkad has highest number of ponds, whereas Malappuram, Kannur & Wayanad are leading districts for water conservation schemes, respectively.

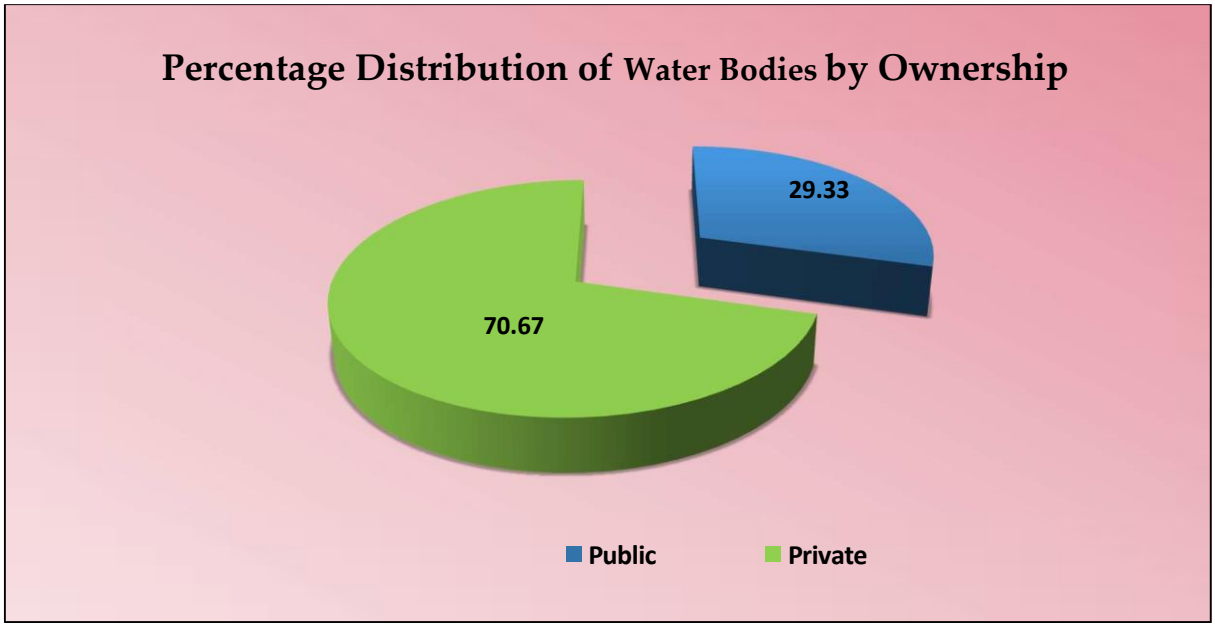
Analysis of Water Bodies by location:

By location, 2.64 water bodies are in tribal areas1.97% under flood prone areas, 0.64% under "Drought Prone Areas Programme"and0.74%water bodies are located in naxal affected area, where as the remaining 94.01% water bodies located in other areas. This fact is illustrated by the diagram given below. Similar pattern of distribution has been observed in rural and urban areas also.

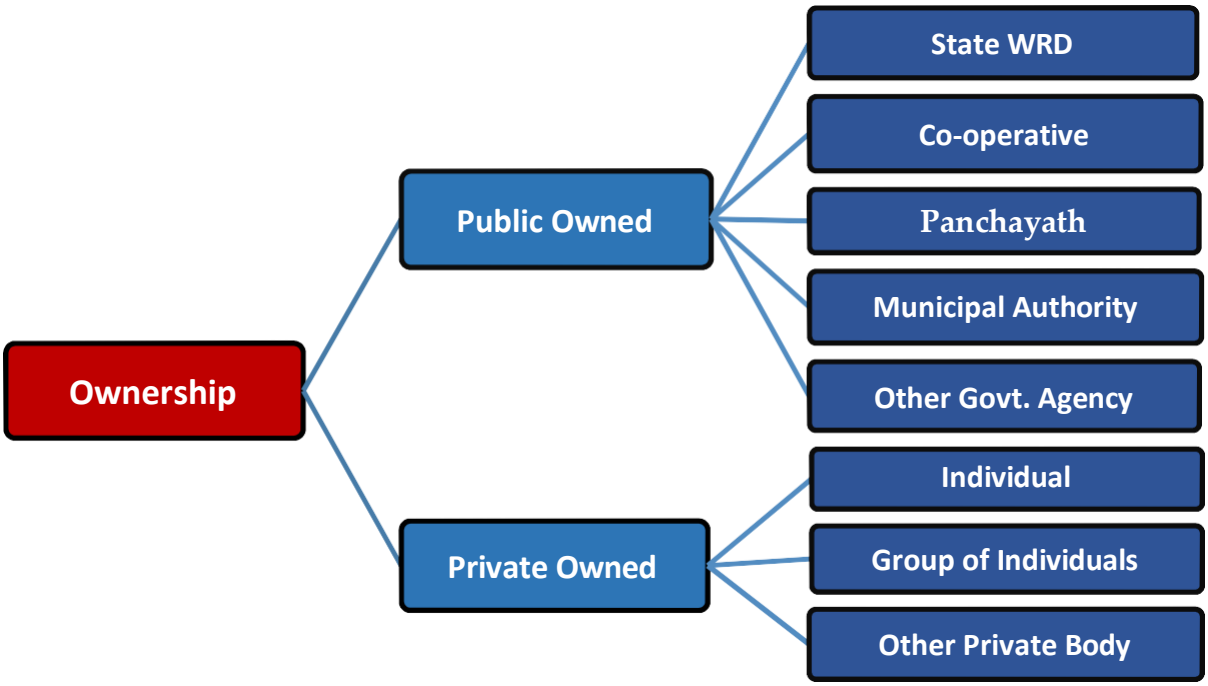


Analysis of Water Bodies by Ownership:

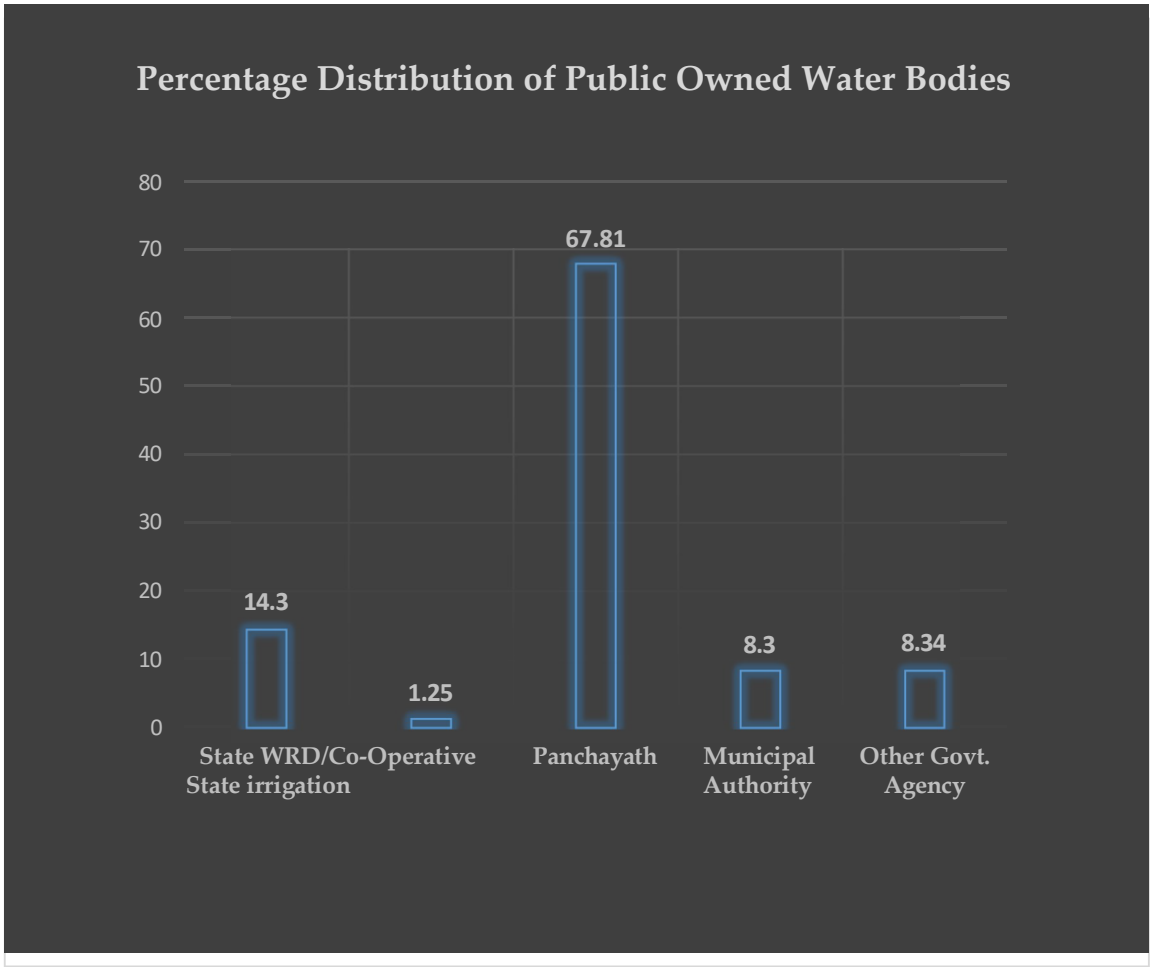
70.67% (39389) water bodies are under private ownership where as 29.33% (16345) water bodies are in the public domain which is also depicted from pie chart given below.



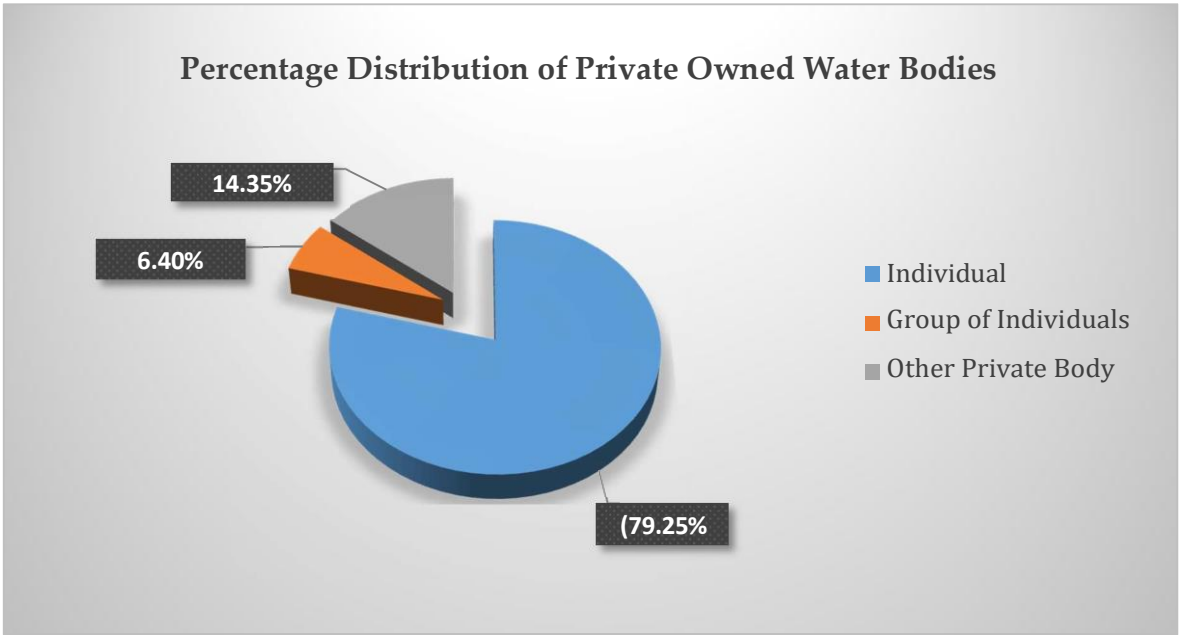
Public & Private Ownership are further classified in to following categories:



Out of all Public owned water bodies (16345), 67.81% (11083) water bodies are owned by Panchayath, 14.30% (2338) by State Water Resource Department (WRD)/ State Irrigation, 1.25% (205) by Co-operative and 8.30% (1357) water bodies are in hands of Municipal Authority whereas remaining 8.34% (1362) are with other Government agencies. Strategies can be adopted by the districts to bring the public water bodies to productive uses by placing under control of Panchayath, Municipal Bodies, and Co-operative Societies.

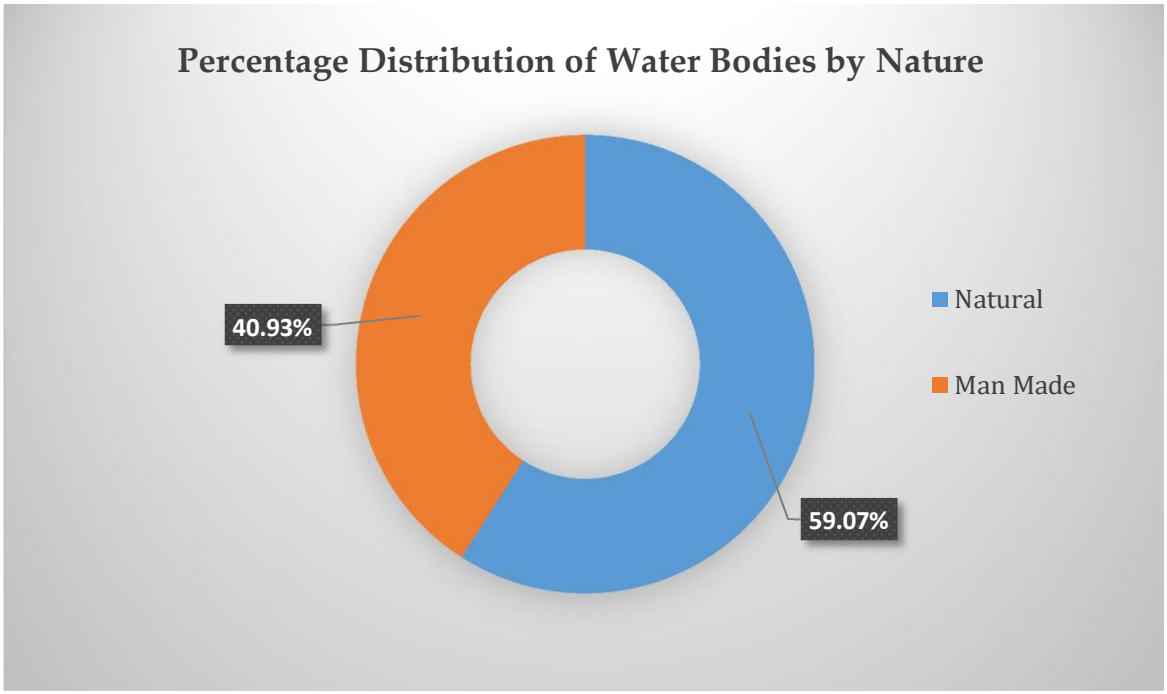


Out of all privately owned water bodies, 79.25% (31215) water bodies are in hands of individual owner, 6.40% (2520) are with Group of farmers and remaining 14.35% (5654) are owned by other private bodies which are depicted in the chart given below.

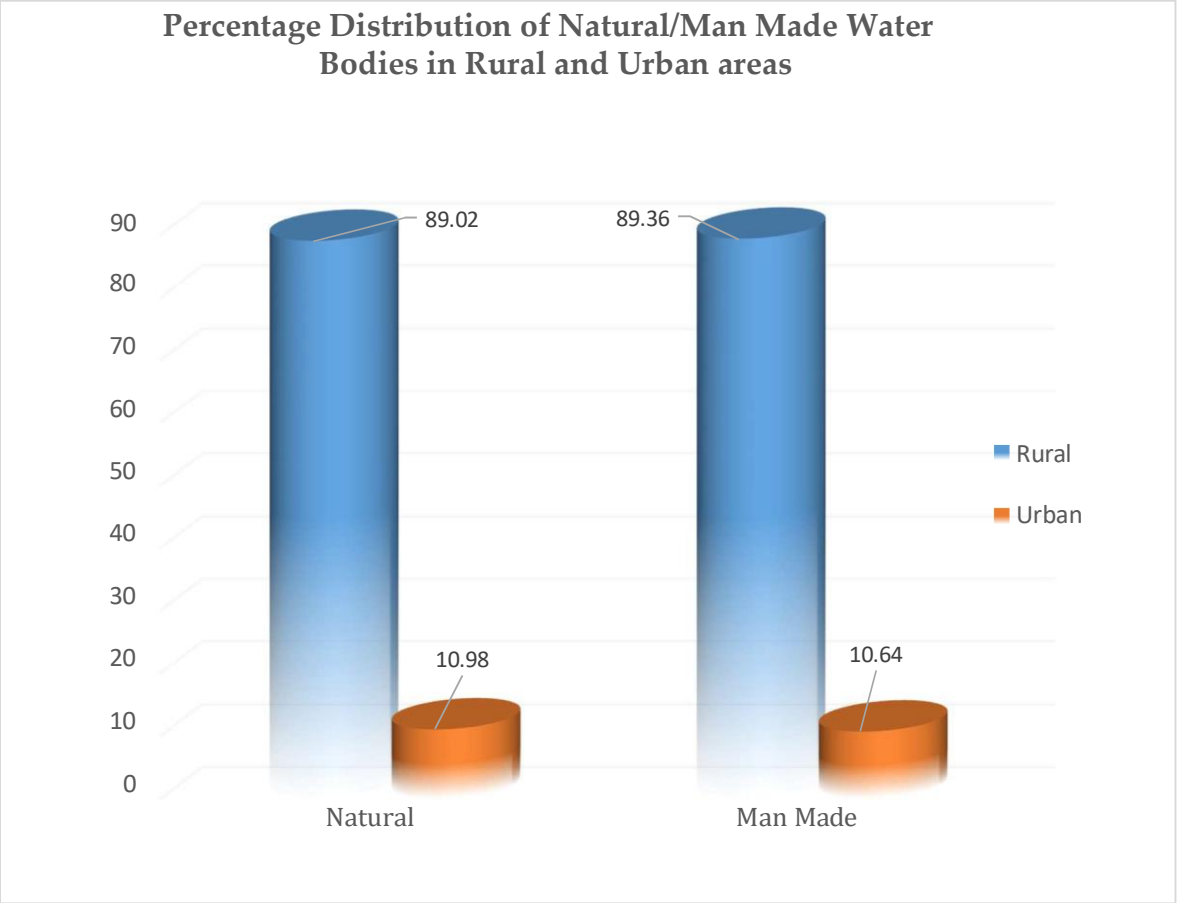


Analysis of Water Bodies by Nature:

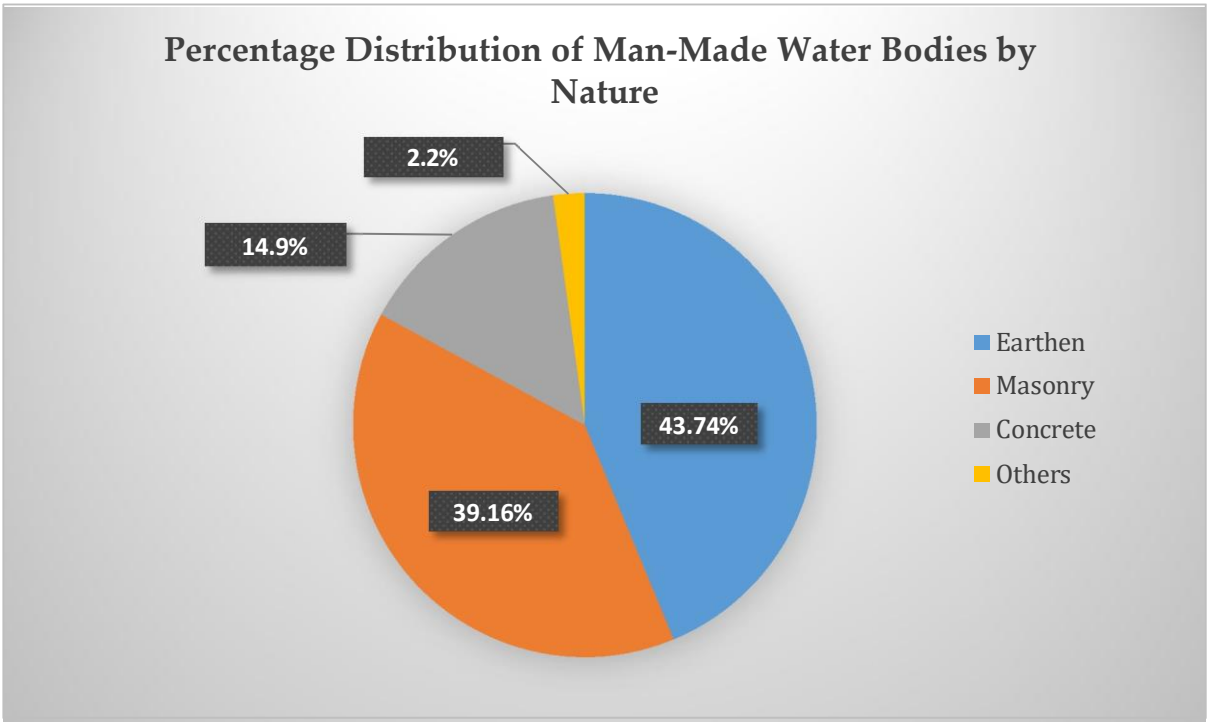
Among all 55734 water bodies, 59.07% (32923) water bodies are man-made and remaining 40.93% (22811) are natural water bodies.



Out of 22811 natural water bodies, 89.02% (20306) are in rural areas and only 10.98% (2505) are in urban areas which might have happened due to urbanization. Similarly, out of 32923 man-made water bodies, 89.36% (29419) water bodies are in rural areas, and 10.64% (3504) water bodies are in urban areas. Percentage distribution of natural/man-made water bodies in rural/urban sector is given in the bar charts given below.

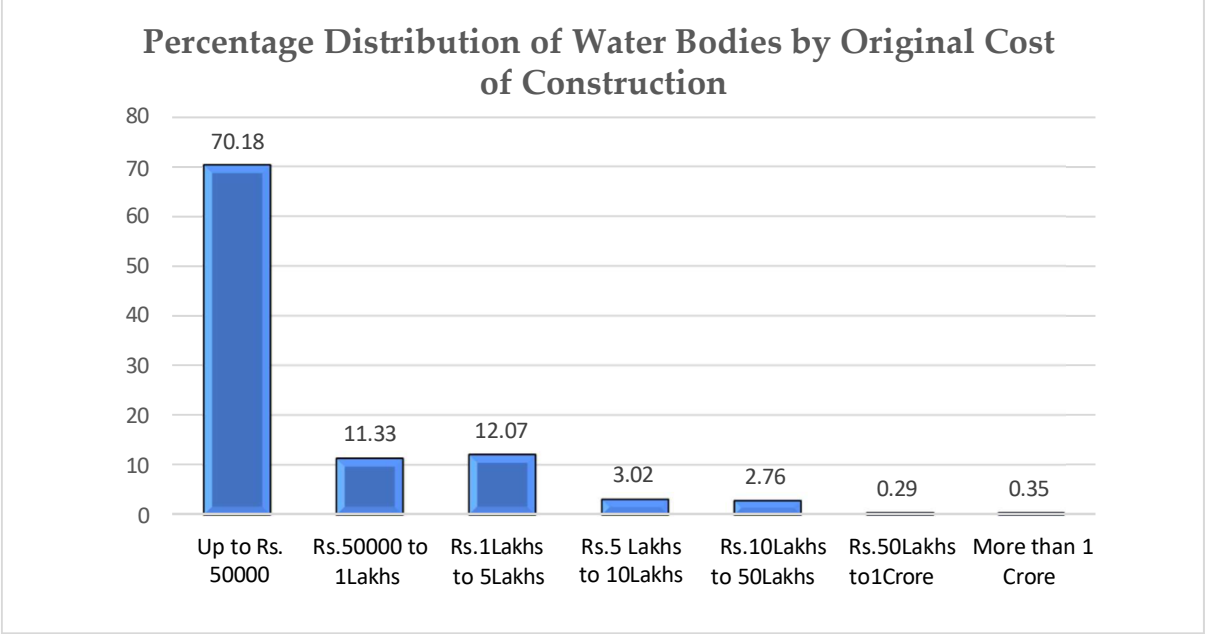


Out of 32923 man-made water bodies, 43.74% (14401) water bodies are earthen, 14.90% (4907) are concrete, 39.16% (12892) are masonry and remaining 2.2% (723) are other water bodies which are shown in the chart given below.



Analysis of Man-Made Water Bodies by Original Cost:

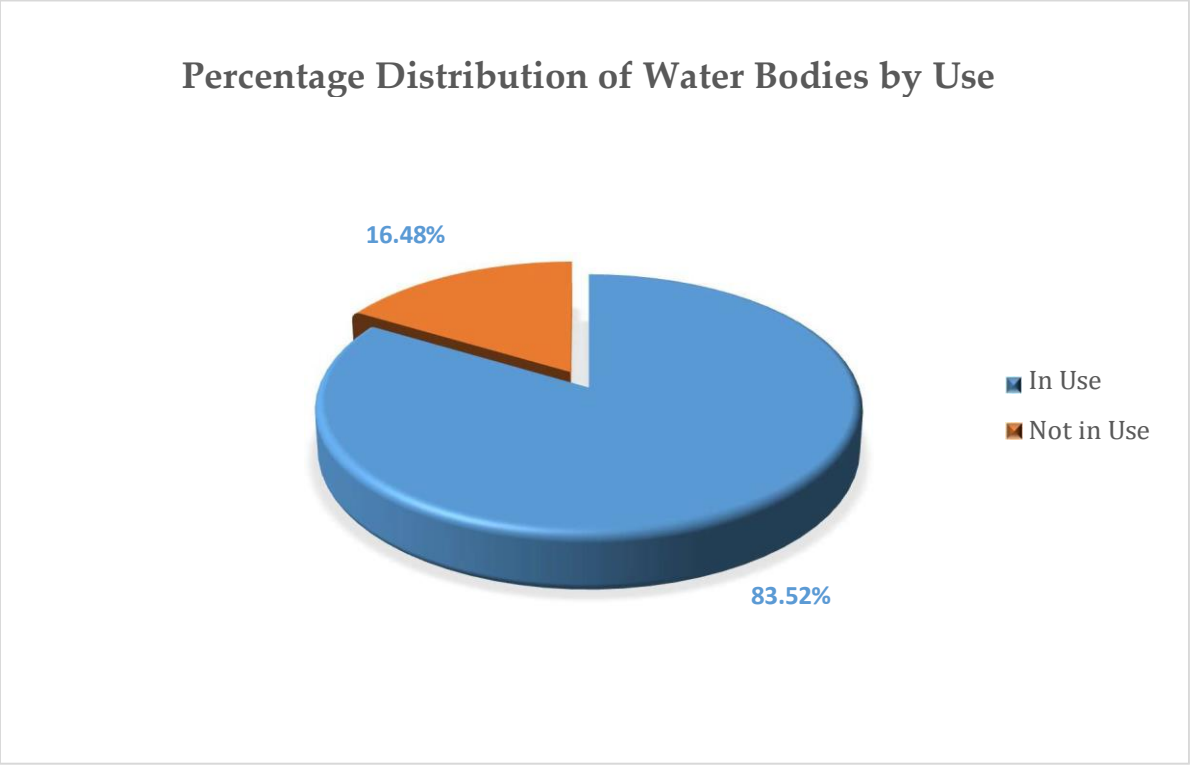
Out of total man-made water bodies, 70.18% have original cost of construction up to Rs. 50,000 as depicted in chart given below.



In both rural and urban areas, more than45% of man-made water bodies have their original cost of construction up to Rs.50,000. Number of water bodies under each cost class of construction is almost same for both rural and urban areas and the water bodies having cost of construction exceeding Rs. 50 Lakhs are almost negligible.

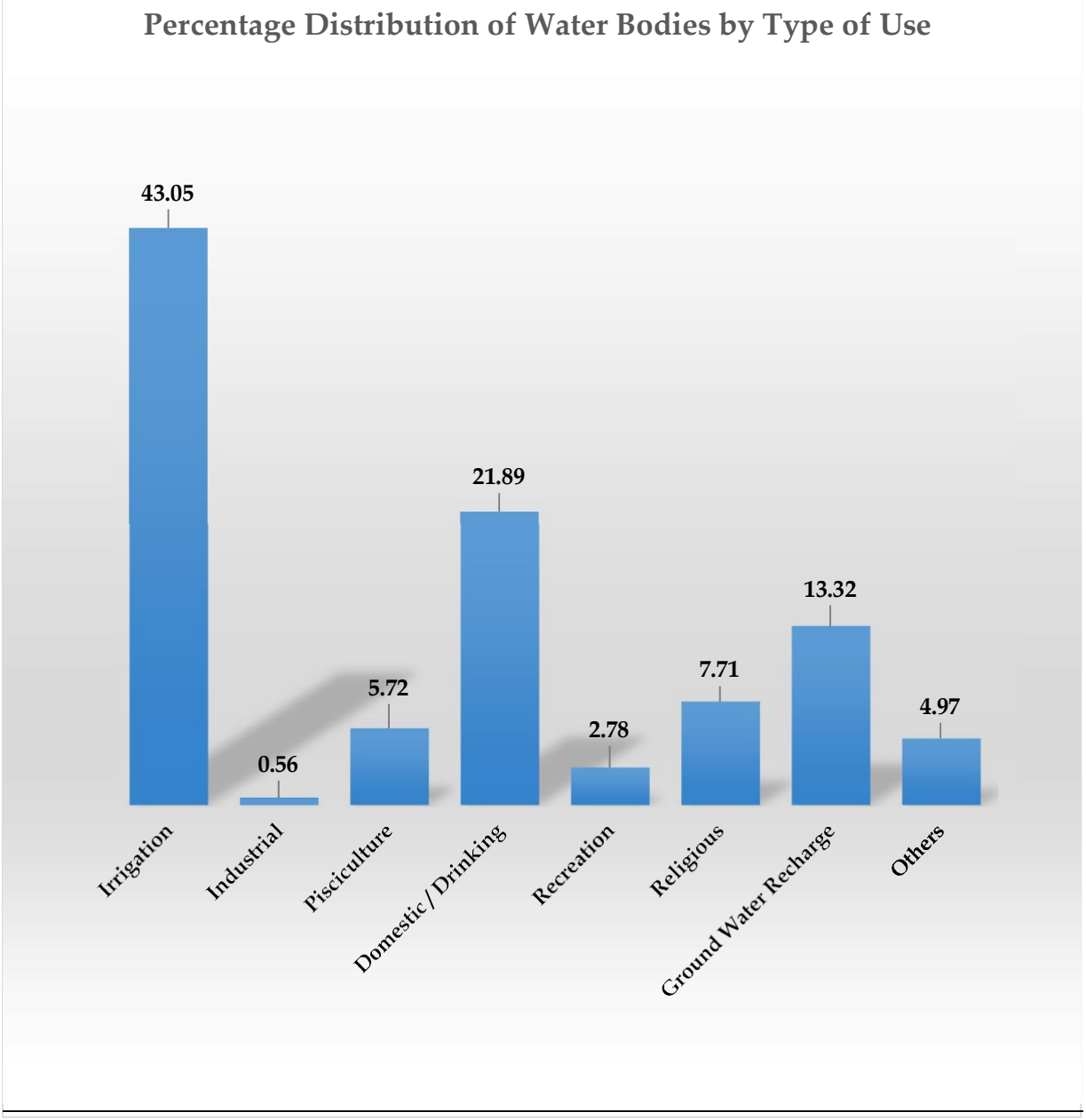
Analysis of Water Bodies by Use

Out of 55734 water bodies 83.52% (46550) water bodies are in use and remaining 16.48% (9184) water bodies are not in use as shown in the chart given below. 16.48% water bodies are not in use due to being dried up, construction and siltation, destroyed beyond repair, due to industrial effluents, Salinity and some other reasons.

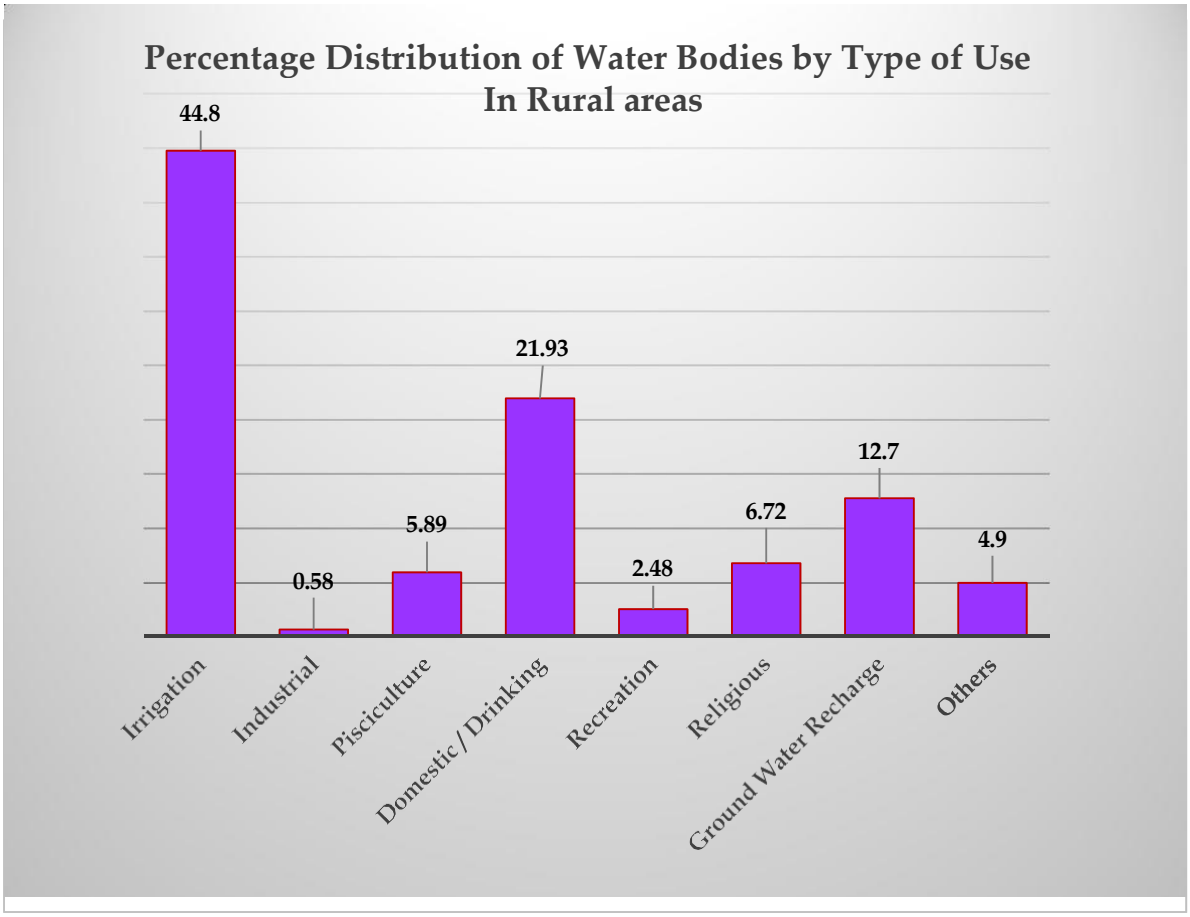


Among 'in use' water bodies, 91.81%(42739) are ponds, 1.65%(767) are tanks,0.13%(61) are reservoirs, 5.65%(2628) are water conservation schemes/ check dams/ percolation tanks, 0.01%(4) are lakes and 0.75%(351)are other water bodies.

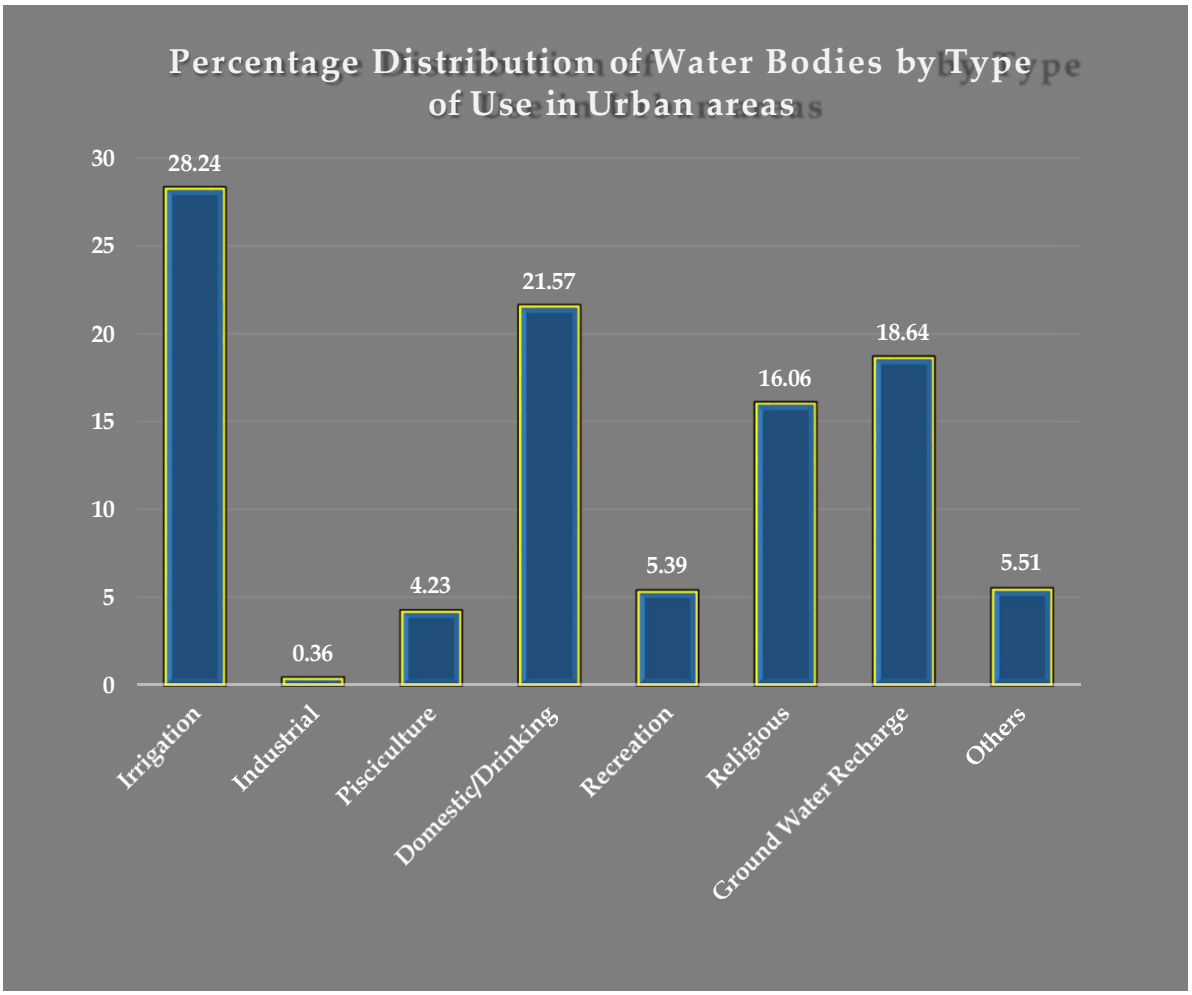
Out of all 46550 'in use' water bodies, 43.05%(20038) water bodies are used for irrigation, 21.89% (10192) are used for domestic/drinking, 13.32% (6199) are used for ground water recharge, 5.72% (2663) water bodies are used for Pisciculture and remaining 7.71%, 0.56%, 2.78%, 4.97% of water bodies are used for religious, industrial, recreation and other purposes respectively. Percentage distribution of the same is shown in the bar-graph given below.



Out of 41636 'in use' water bodies located in rural areas, 44.8% (18650)are used for purpose of Irrigation, 21.93% (9132) are used for domestic/drinking, 12.7% (5283) are used for ground water recharge, 5.89% (2455) water bodies are used for pisciculture and remaining 6.72%, 0.58%, 2.48%, 4.90% of water bodies are used for religious, industrial, recreation and other purposes respectively. Percentage distribution of the same is shown in the bar-graph given below.

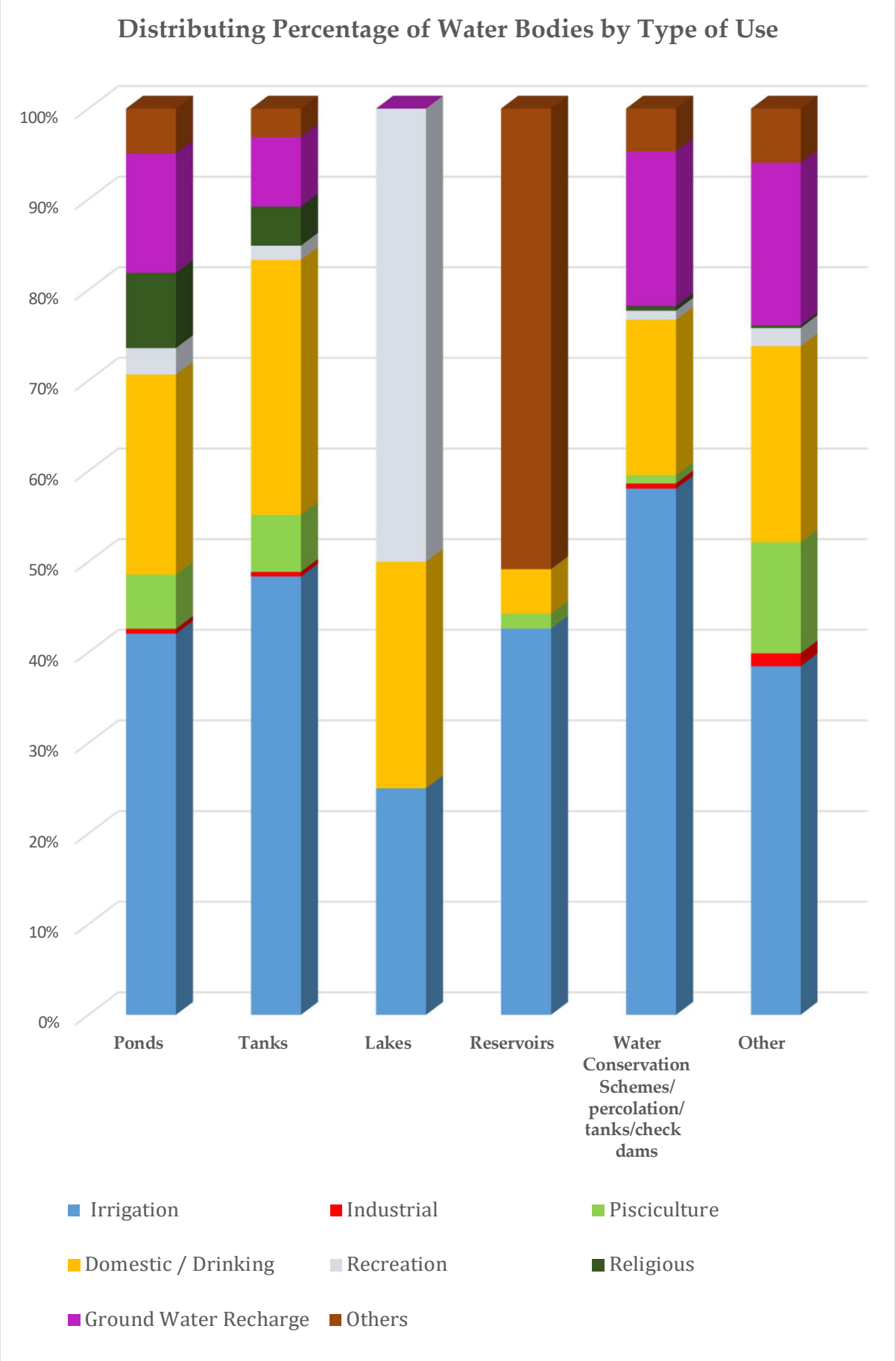


Out of 4914 'in use' water bodies located in urban areas, 4.23%(208) water bodies are used for pisciculture, 21.57%(1060) are used for purpose of domestic/ drinking, 0.36%(17) are used for industrial purpose, 18.64%(916) are used for ground water recharge and remaining 28.24% (1388), 16.06%(789), 5.39% (265), 5.51% (271) for irrigation, religious, recreation and other purposes. Percentage distribution of the same is shown in the bar-graph given below.



Analysis of Water Bodies by Type of Use

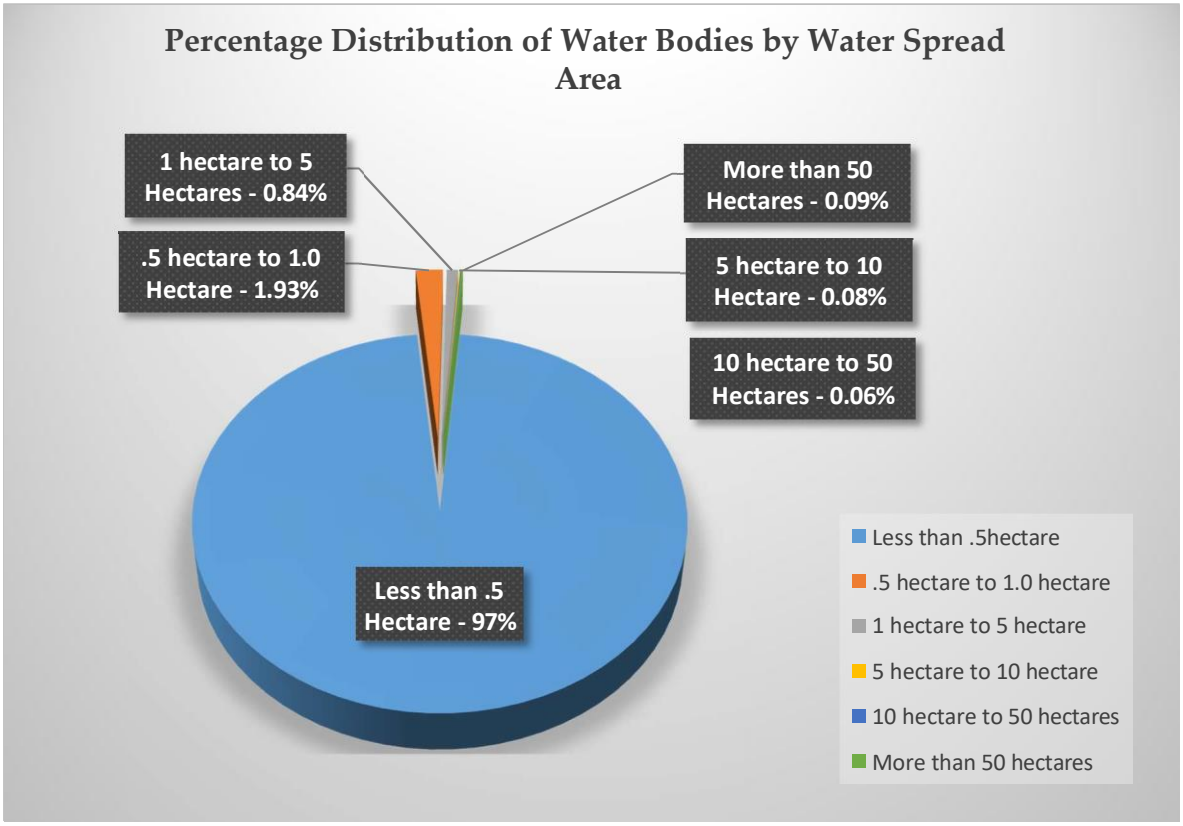
Type	Percentage of Water Bodies by Type of Use							
	Irrigation	Industrial	Pisciculture	Domestic/ Drinking	Recreation	Religious	Ground Water Recharge	Others
Ponds	42.07%	0.55%	5.96%	22.10%	2.92%	8.29%	13.2%	4.94%
Tanks	48.37%	0.52%	6.26%	28.16%	1.57%	4.3%	7.69%	3.13%
Lakes	25%	0	0	25%	50%	0	0	
Reservoirs	42.62%	0	1.64%	4.92%	0	0	0	50.82%
Water Conservation Schemes/ percolation /tanks/check dams	58.07%	0.57%	0.91%	17.16%	0.99%	0.53%	17.05%	4.72%
Others	38.46%	1.43%	12.25%	21.65%	2%	0.28%	17.95%	5.98%


Distributing Percentage of Water Bodies by Type of Use
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Ponds
Tanks
Lakes
Reservoirs
Water Conservation Schemes/ percolation/ tanks/check dams
Other
Irrigation
Industrial
Pisciculture
Domestic / Drinking
Recreation
Religious
Ground Water Recharge
Others

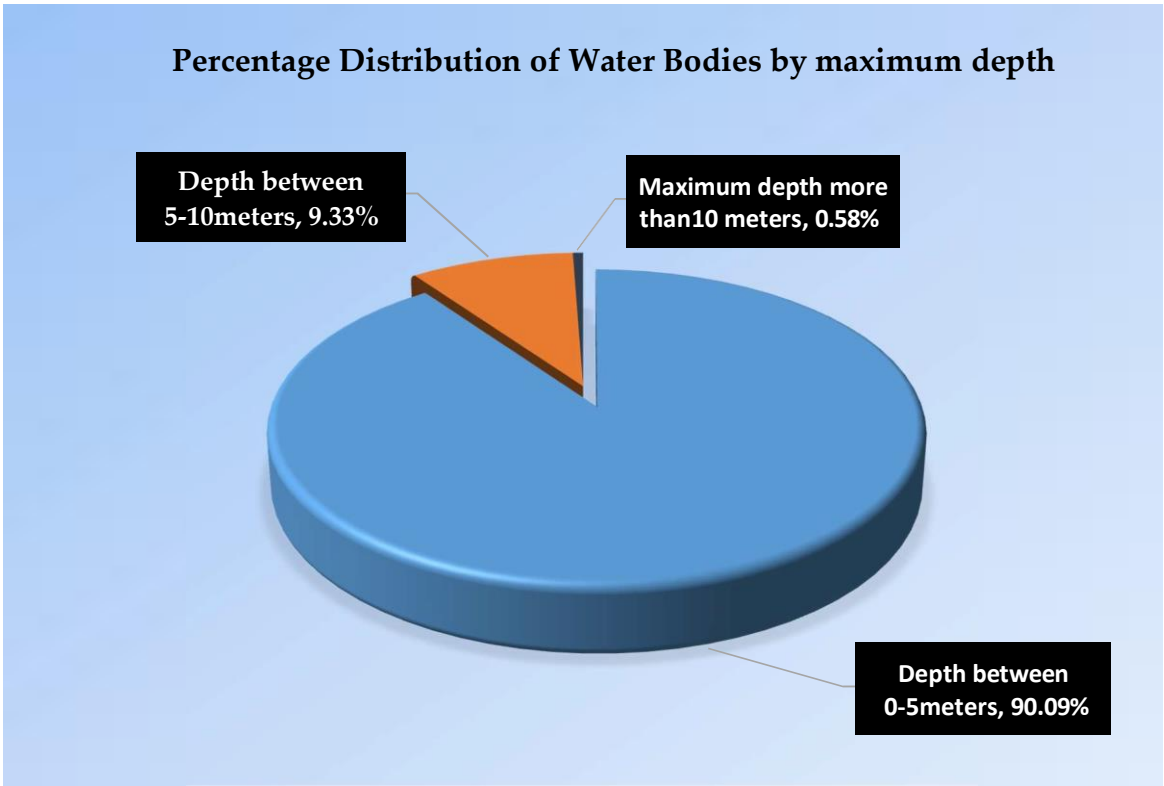
Out of total water bodies, ponds, tanks, lakes, reservoirs, water conservation schemes &other purposes are mainly used for irrigation, followed by ground water, religious, pisciculture & domestic/ drinking purposes. Majority of lakes are used for purpose of recreation, irrigation and domestic drinking. Water conservation schemes/ percolation tanks/ check dams are mainly used for irrigation followed by ground water & domestic/drinking purposes.

Analysis of Water Bodies by water spread area and depth

The information on water spread area was reported in respect of 55723 water bodies. Out of these water bodies, 97% (54052) have water spread area less than 0.5 hectare, 1.93% (1077) have water spread area between 0.5-1.0 hectare, 0.84%(466) have water spread area between 1-5 hectares, 0.08%(45) have water spread area between 5-10 hectares, 0.06% (32) have water spread area between 10-50 hectares, and remaining 0.09%(51) of water bodies have water spread area more than 50 hectares. Similar distribution of water bodies according to 'water spread area' has been observed in the urban and rural areas.

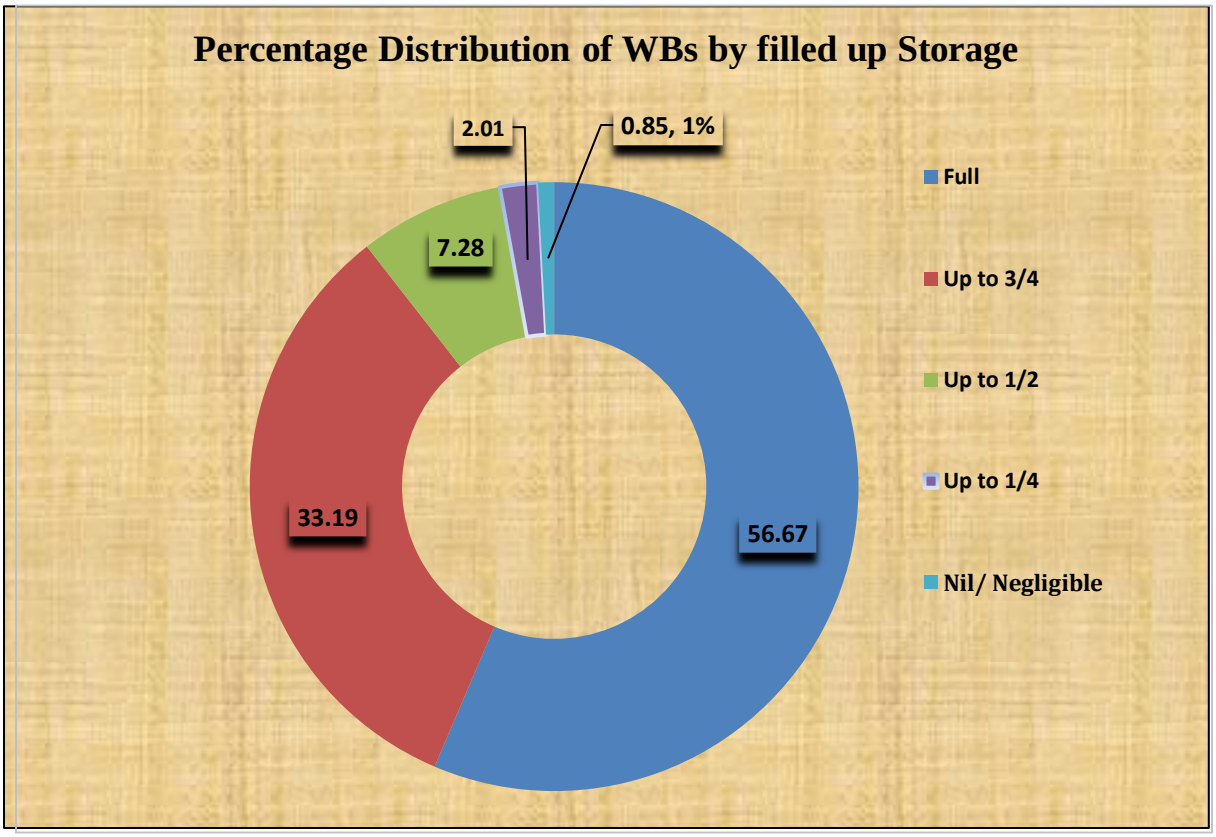


In terms of maximum depth 90.09% (50195) water bodies having depth between 0-5meters, 9.33% (5197) have depth between 5-10meters. Remaining 0.58% (325) of water bodies are having maximum depth more than 10meters. The distribution of water bodies according to 'maximum depth' is shown below.

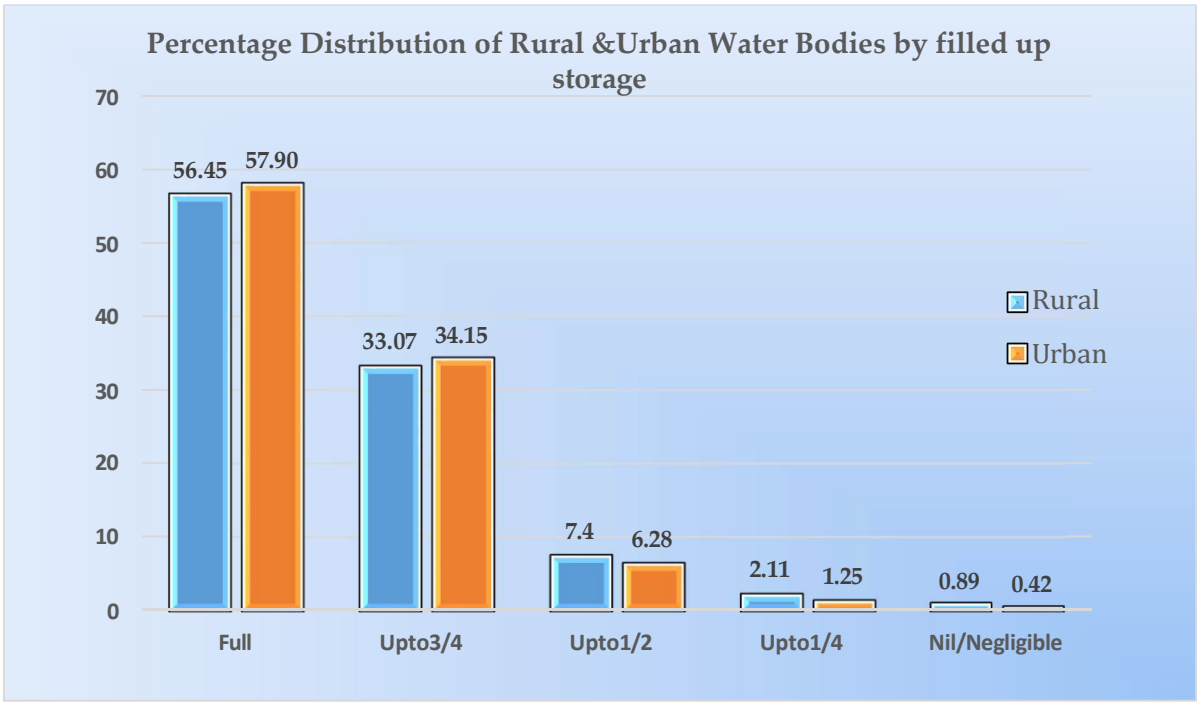


Analysis of Water Bodies by' filled up storage capacity' and 'status of filling':

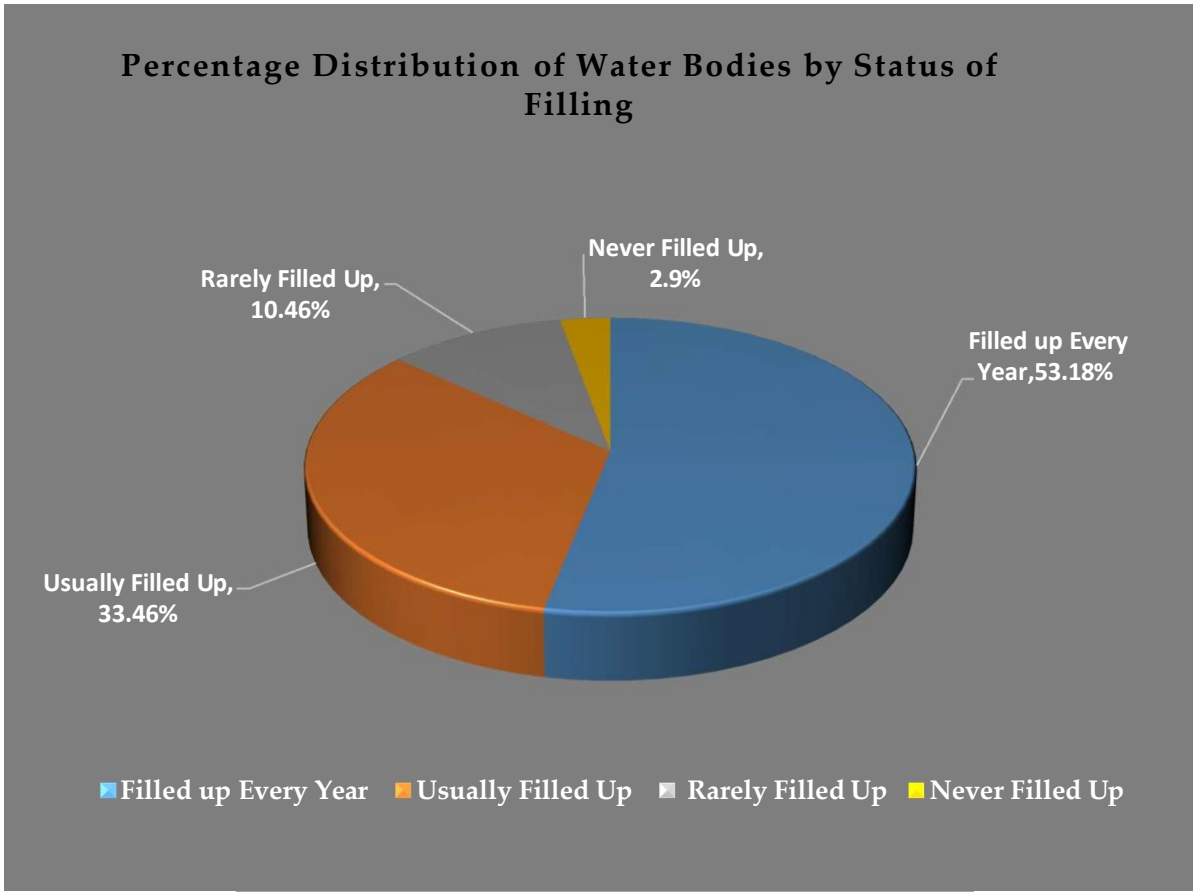
The information on ‘filled up storage capacity' & 'status of filling' was collected only for 51922 water bodies which are ponds/ tanks/ lakes/ reservoirs. Out of these water bodies 56.67% (29424) had fully filled up storage capacity, 33.19% (17233) water bodies had storage capacity filled up to three fourth level, 7.28% (3781) water bodies had storage capacity filled up to half level where as rest 2.01% (1045) water bodies had lesser (up to one fourth) and 0.85% (439) water bodies are no storage capacity as shown in the pie-chart given below.



In both rural and urban areas major proportion of water bodies had fully filled up storage capacity. Distribution of water bodies according to filled up storage capacity in rural & urban areas are given below.

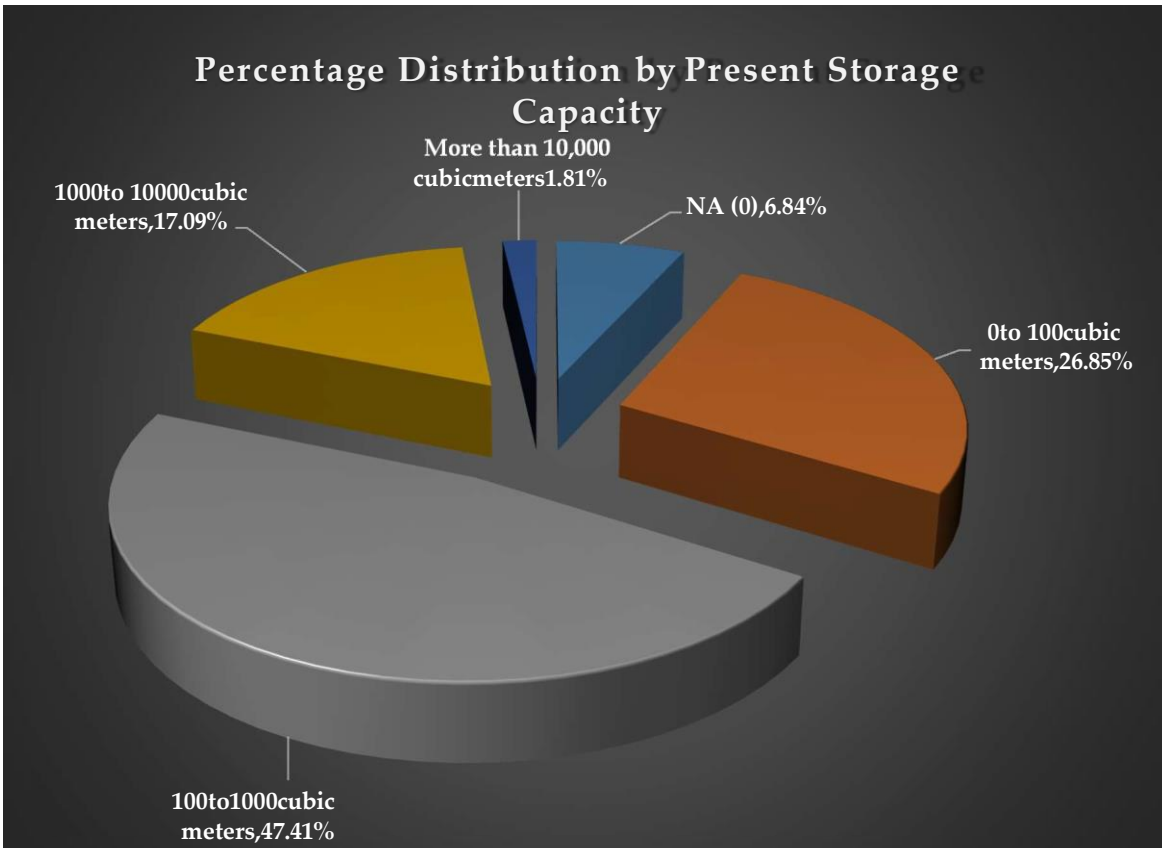


Based on around 50% filling up of storage during last five years, 53.18% (27612) water bodies are found to be filled up every year, 33.46%(17373) water bodies are usually filled up, 10.46%(5431) are rarely filled up, and 2.9% (1506) water bodies are never filled up.



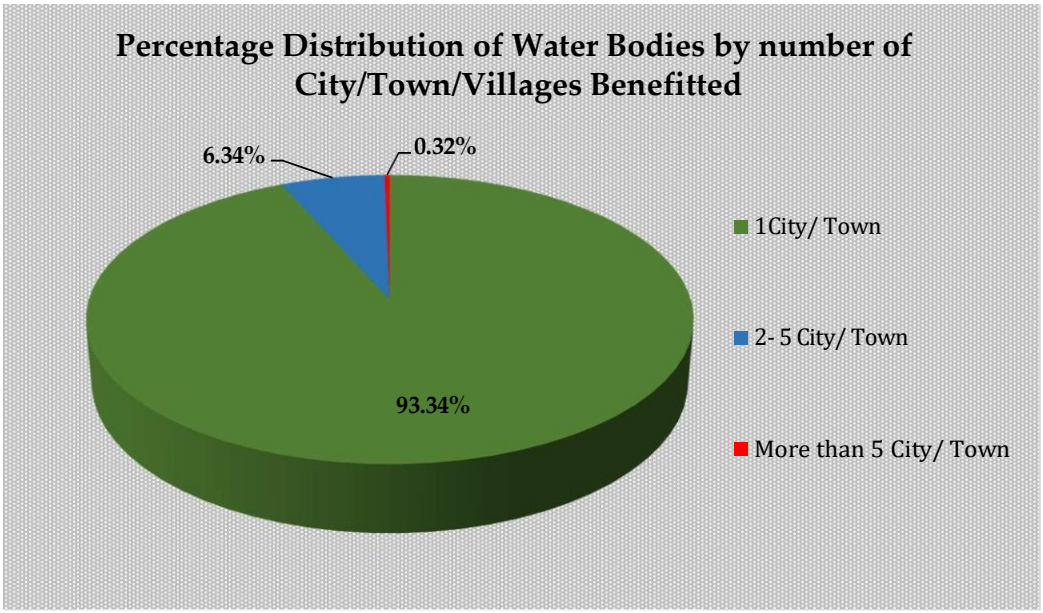
Analysis of Water Bodies by present storage capacity:

The information on storage capacity of water bodies was collected in 55734 water bodies. Among these, 26.85%(14962) Water bodies have storage capacity 0 to 100 cubic meters,17.09%(9524)water bodies have storage capacity between 1,000 to 10,000 cubic meters, 47.41% (26426) water bodies have storage capacity between100 to 1000 cubic meters, 1.81% (1010) Water bodies have storage capacity more than 10,000 cubic meters. It is worth observing that almost half of the total water bodies have their storage capacity between 100 to 1000 cubic meters.

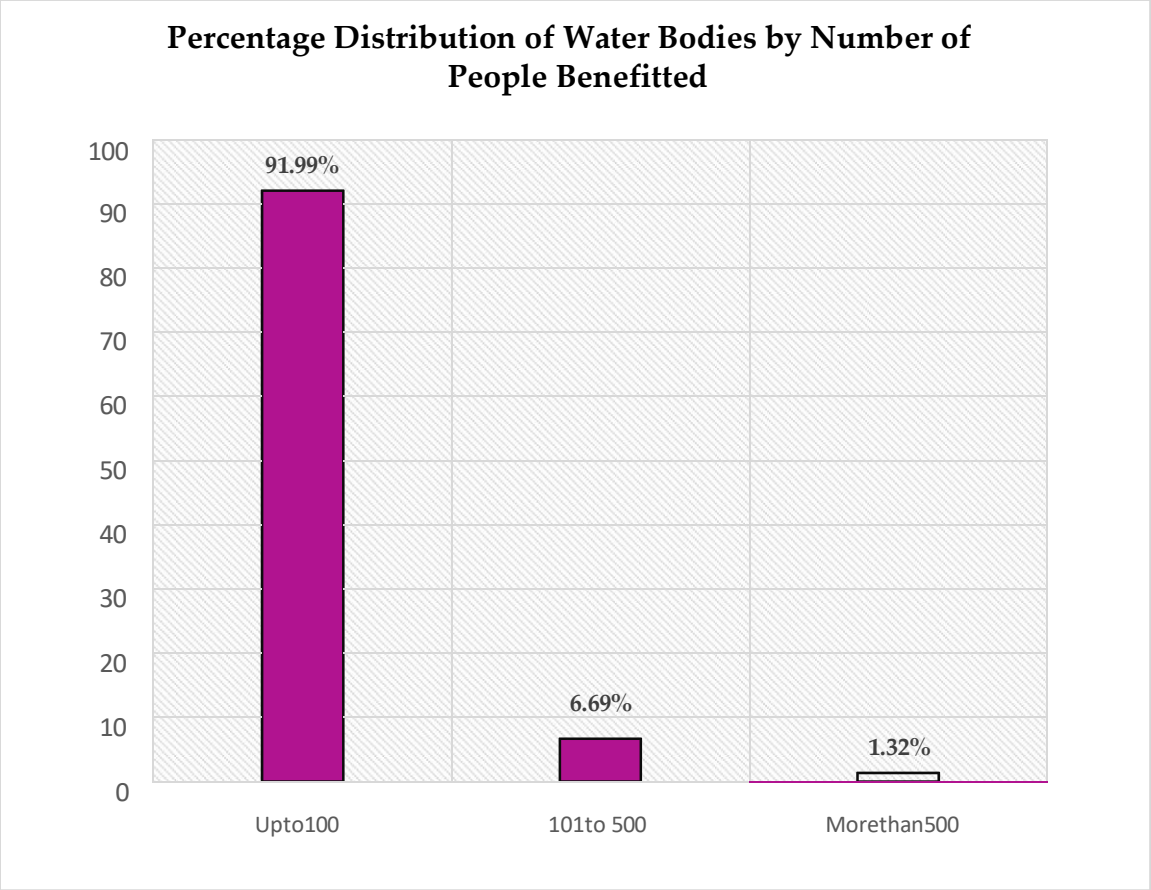


Analysis of Water Bodies by number of city benefitted:

Out of all in use water bodies, 93.34% (43452) water bodies are benefitting one city/ town/ village and 6.34%(2952) water bodies are benefitting 2 to 5 cities/ towns/ villages whereas remaining 0.32%(146) water bodies are benefitting more than 5 cities/ towns/ villages.

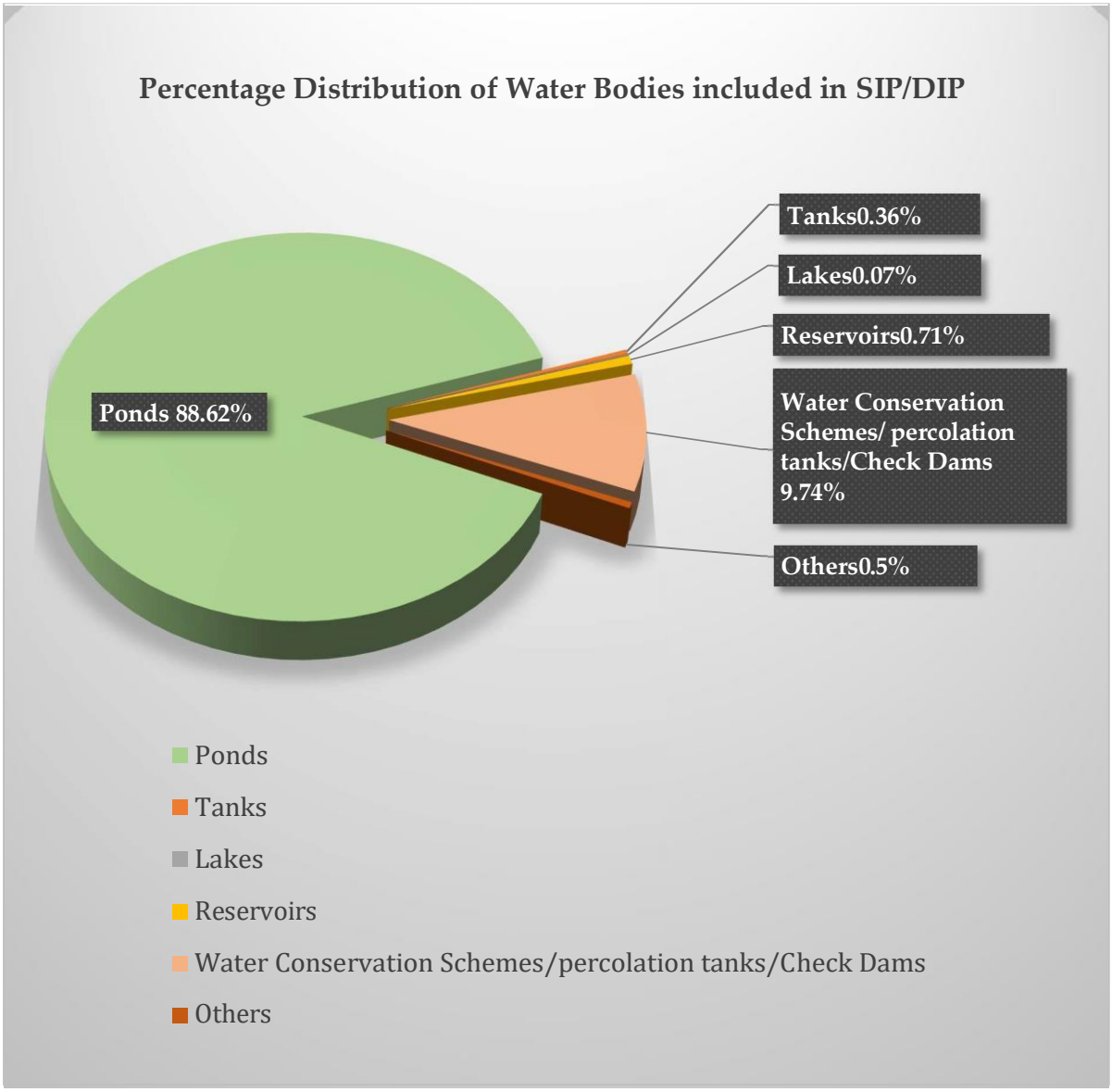


91.99% (42822) water bodies are fulfilling the requirements of 100 people, 6.69% (3116) are benefitting 101 to 500 people and rest 1.32% (612) water bodies are fulfilling the requirement of more than 500 people which is also shown in the chart given below.



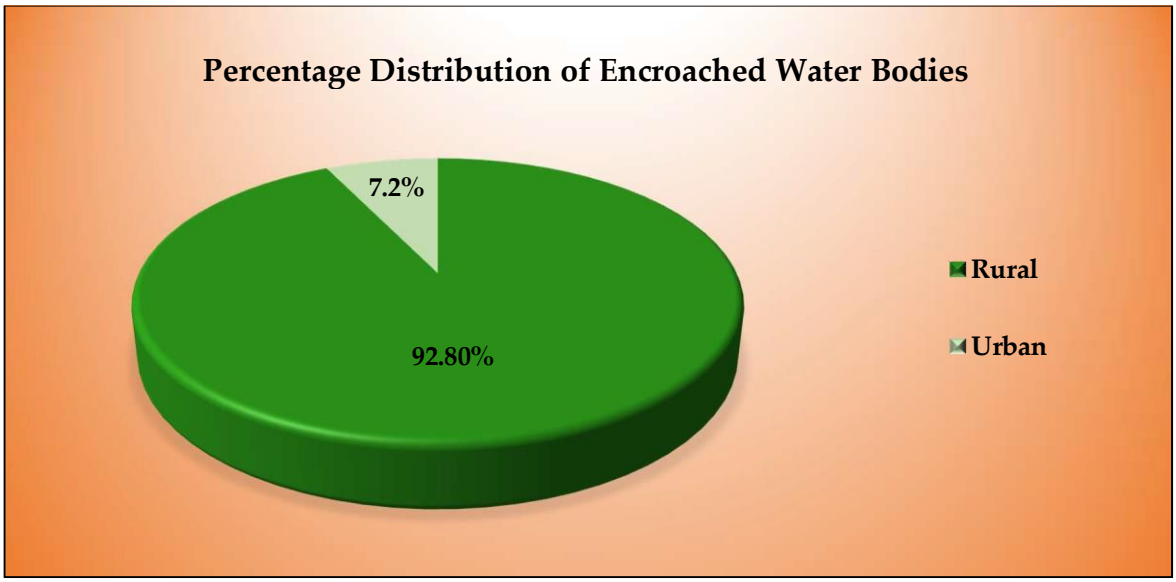
Analysis of Water Bodies included in State Irrigation Plan:

2.5% (1397) water bodies are included in State Irrigation Plan (SIP)/ District Irrigation Plan (DIP). Out of these water bodies, share of ponds (88.62%) is maximum followed by water conservation schemes/check dams(9.74%) reservoirs (0.71%) and the remaining categories tanks, lakes and others contributes 0.93% as depicted from chart given below.

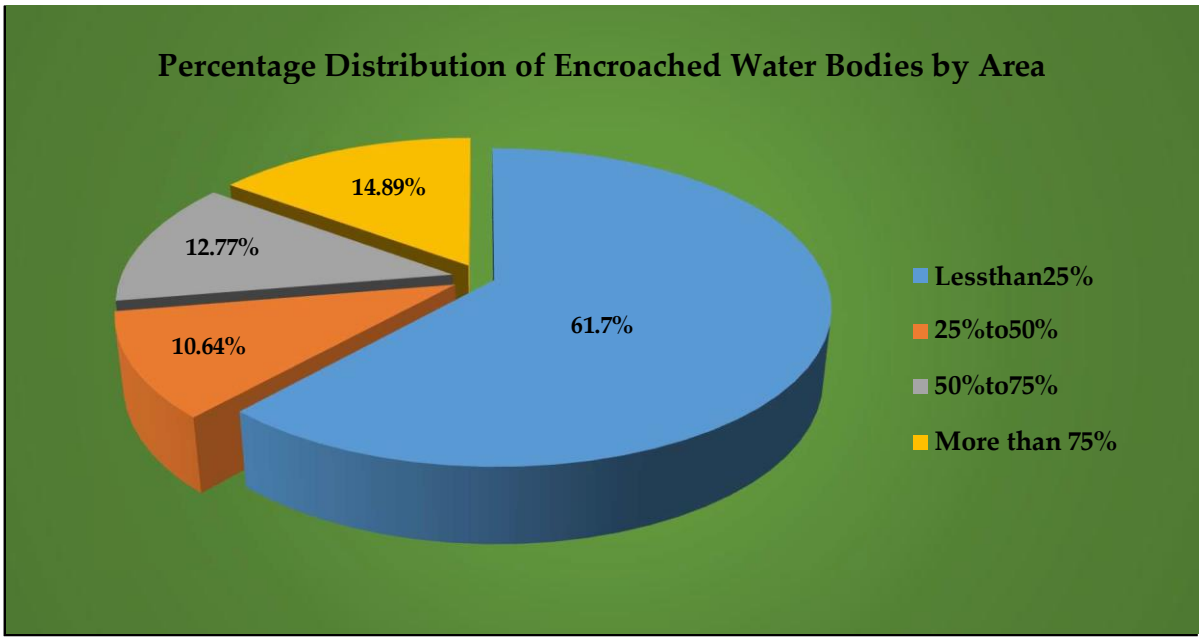


Analysis of encroached Water Bodies:

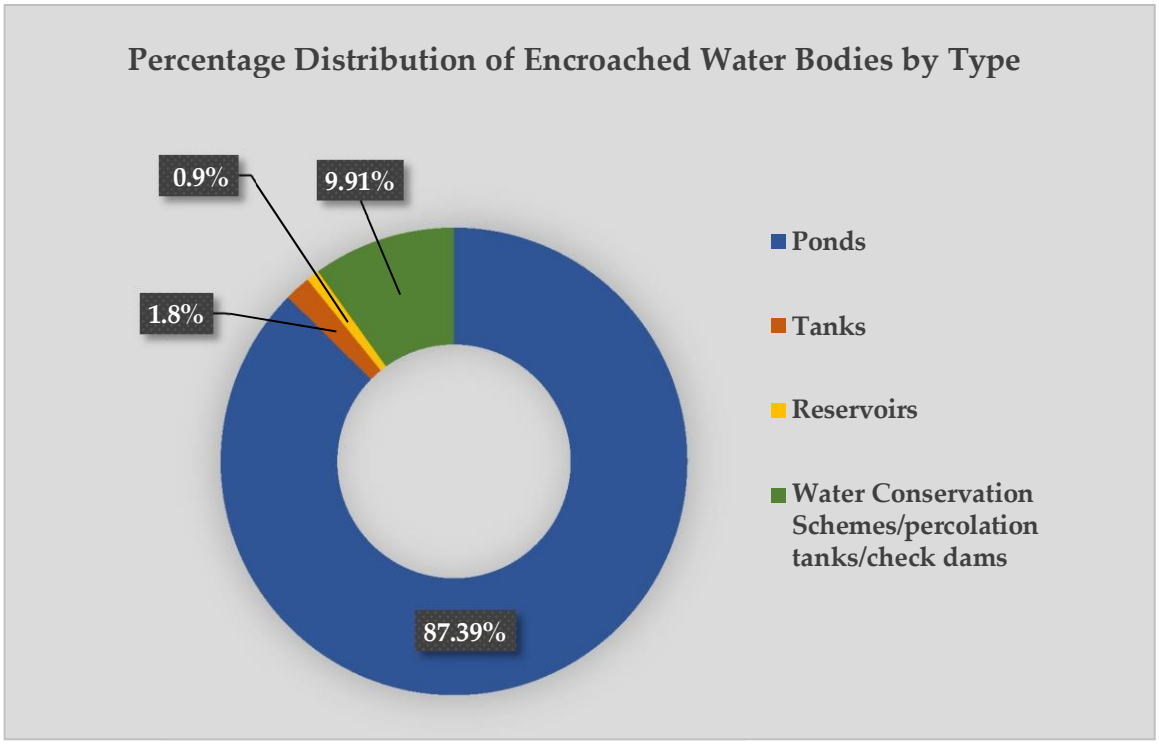
Illegal entry into the defined boundary of the water body for various human activities like construction, agriculture etc. has been termed as "encroachment of water bodies". Out of all water bodies, 111 water bodies are reported as encroached. Majority i.e. 92.8% of the encroached water bodies are in rural areas whereas remaining 7.2% water bodies are in urban areas.



Out of the encroached, 47 water bodies whose area could be assessed of which 45 are in rural areas and 2 in urban areas. 61.70%(29) encroached water bodies have less than 25% area under encroachment, 10.64% (5) have encroachment area ranging between 25% to 50%, 12.77% (6) have encroachment area ranging between 50% to 75% and 14.89% (7) water bodies have more than 75% area under encroachment.

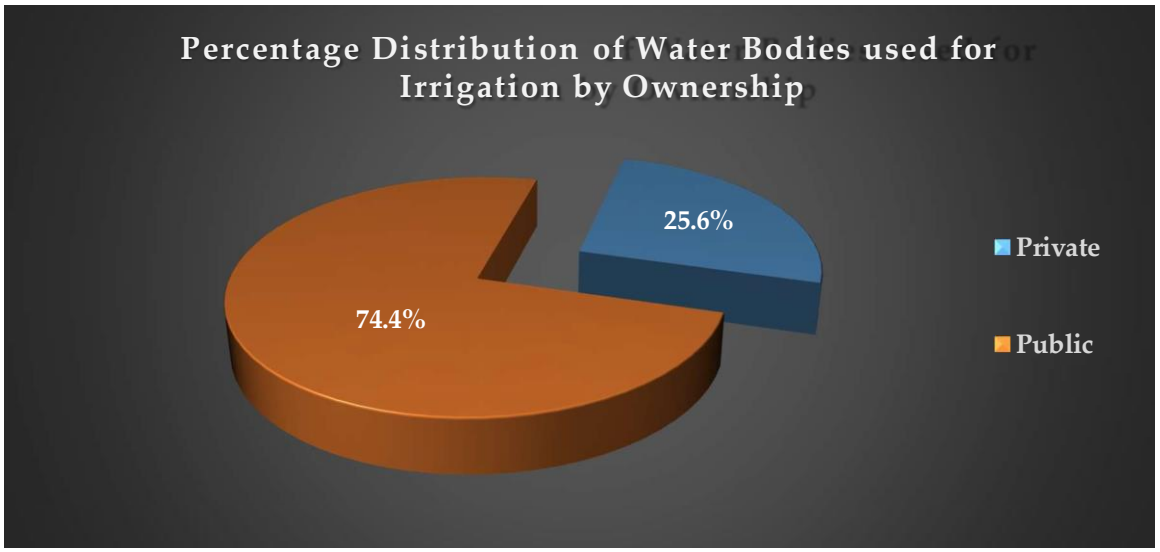


Out of all encroached water bodies, 87.39 %(97) are ponds, 9.91%(11) are water conservation schemes/ check dams/ percolation tanks 1.8%(2) are tanks and 0.9%(1) water bodies are reservoirs.

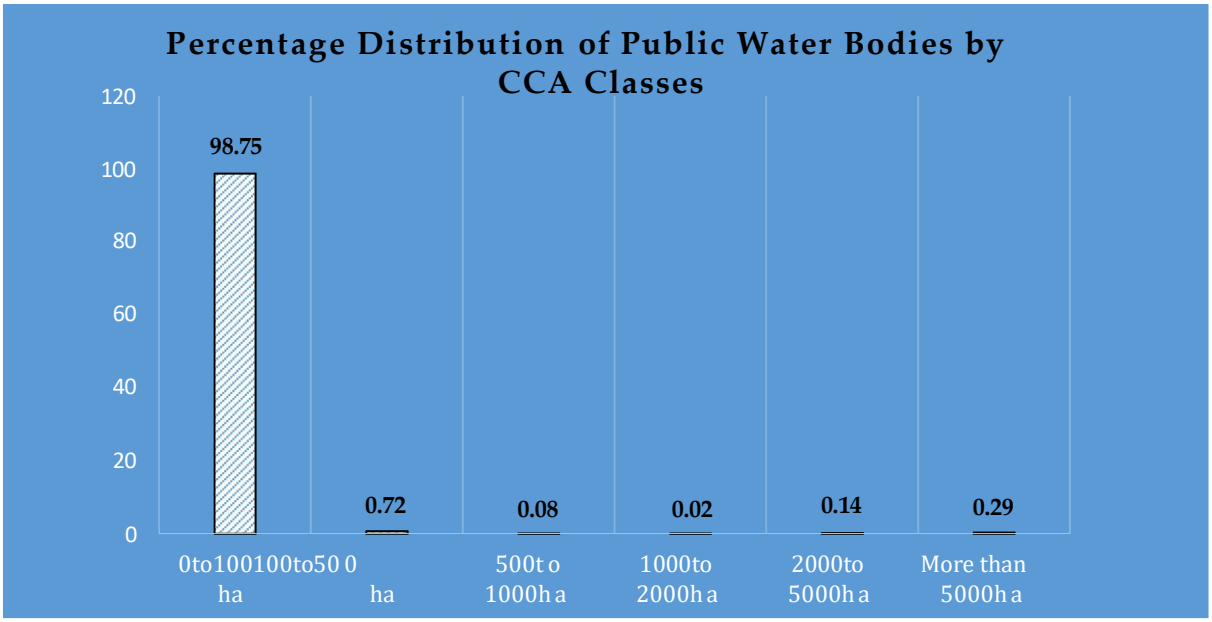


Analysis of Water Bodies Used for Irrigation by CCA classes:

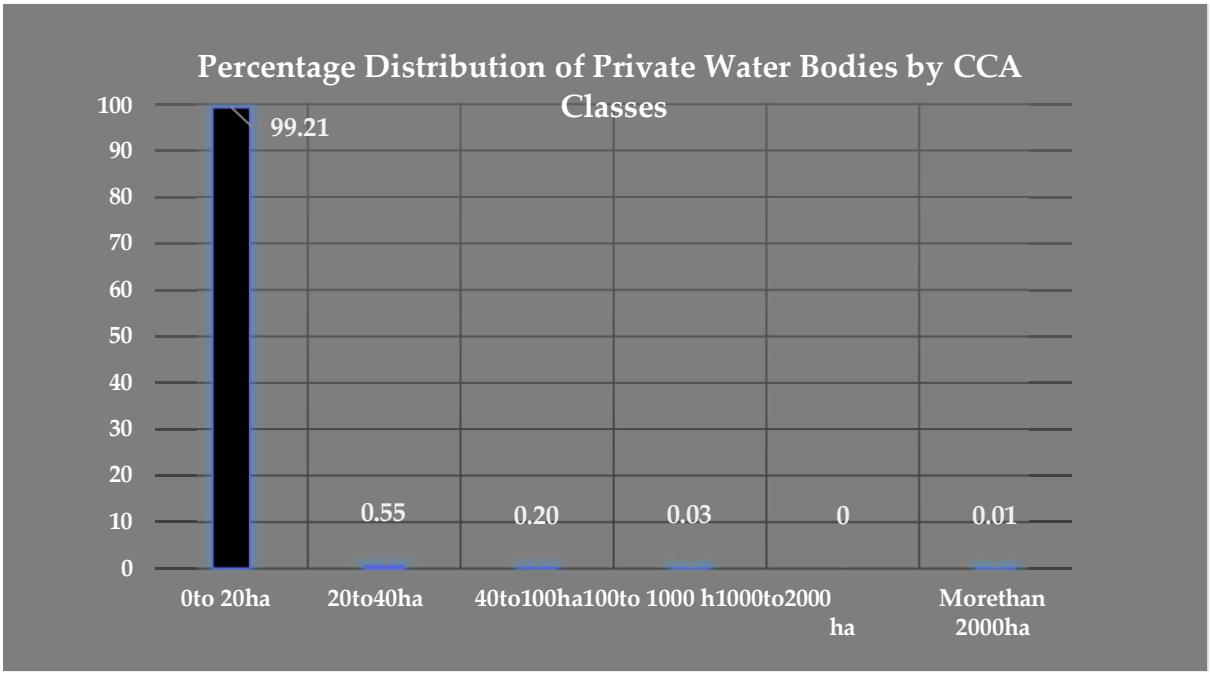
Out of 20038 water bodies which are used for Irrigation, 25.60% (5122) are public owned and 74.40% (14916) are privately owned water bodies.



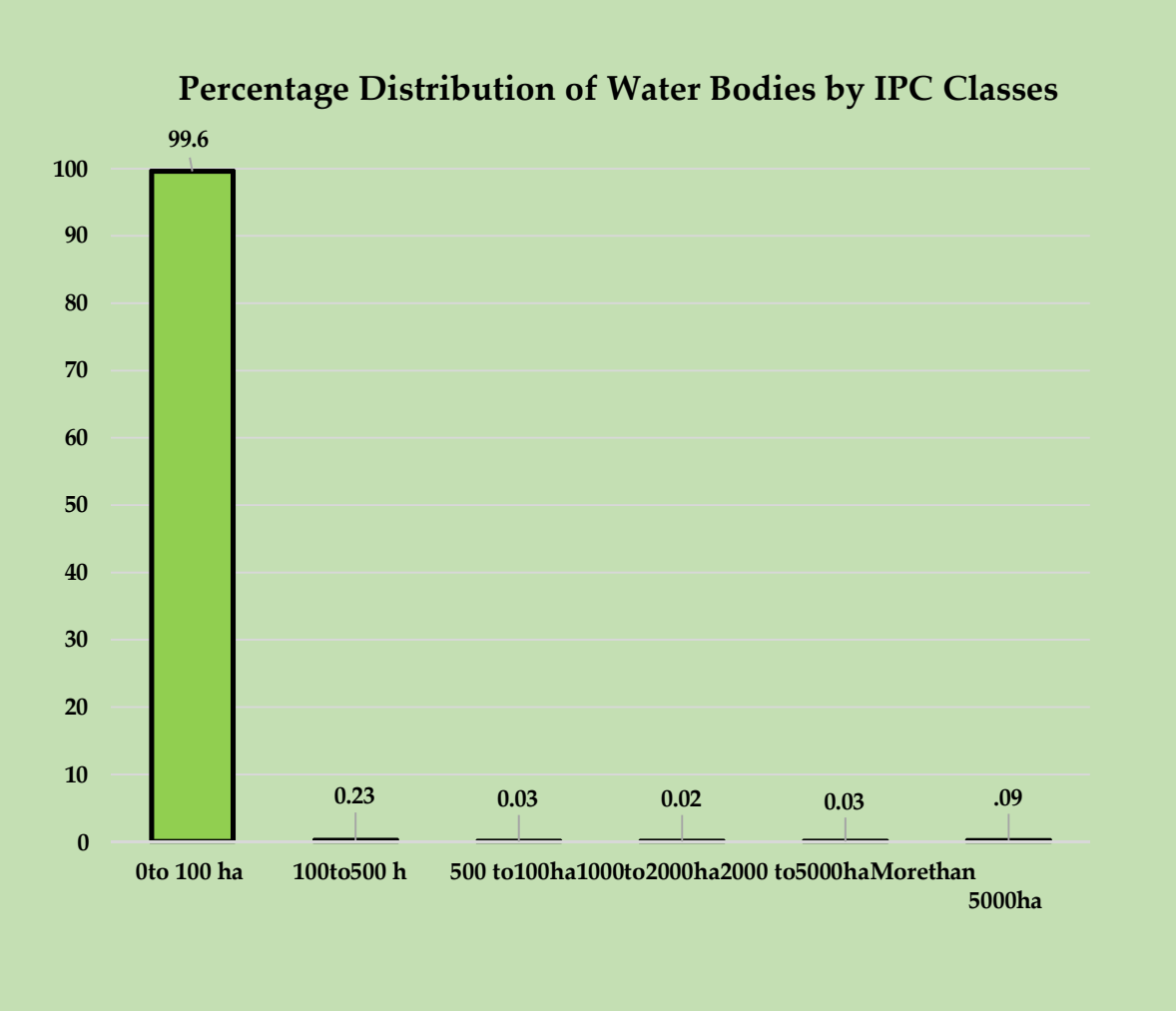
Out of 5122 public owned water bodies used for irrigation, majority of water bodies 98.75% (5058) are having Cultivable Command Area (CCA) between 0-100 hectare and 0.722%(37) water bodies are having CCA between 100 to 500 hectares.



Out of 14916 private owned water bodies used for irrigation, majority of water bodies 99.21% (14798) are having cultivable Command Area (CCA) between 0 to 20 hectare, and only 0.55% (82) water bodies are having CCA between 20 to 40 hectare.

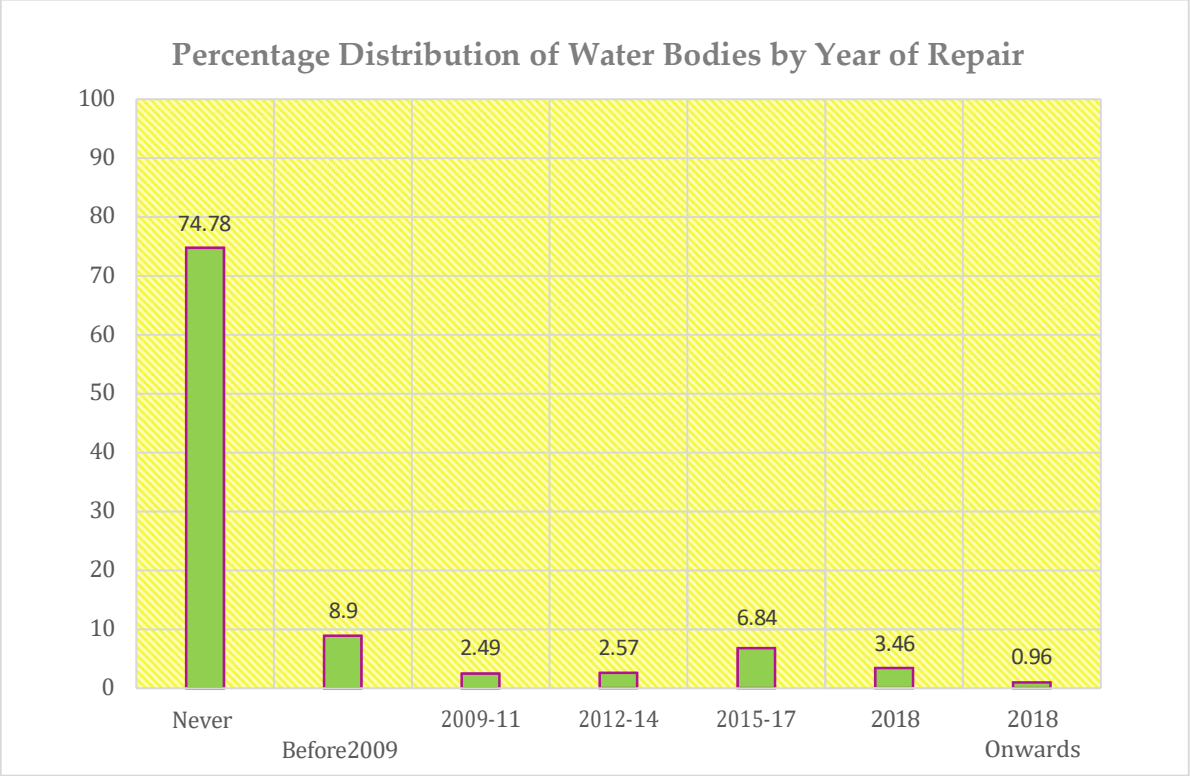


In terms of Irrigation Potential Created (IPC), out of the 20038 Water bodies used for irrigation 99.60% (19957) water bodies are between 0to100 hectares. 0.23% (46), 0.03% (6), 0.02% (4), 0.03% (7), 0.09% (18) water bodies are between100 to 500, 500 to 1000, 1000 to 2000, 2000 to 5000 and more than 5000 hectare respectively.

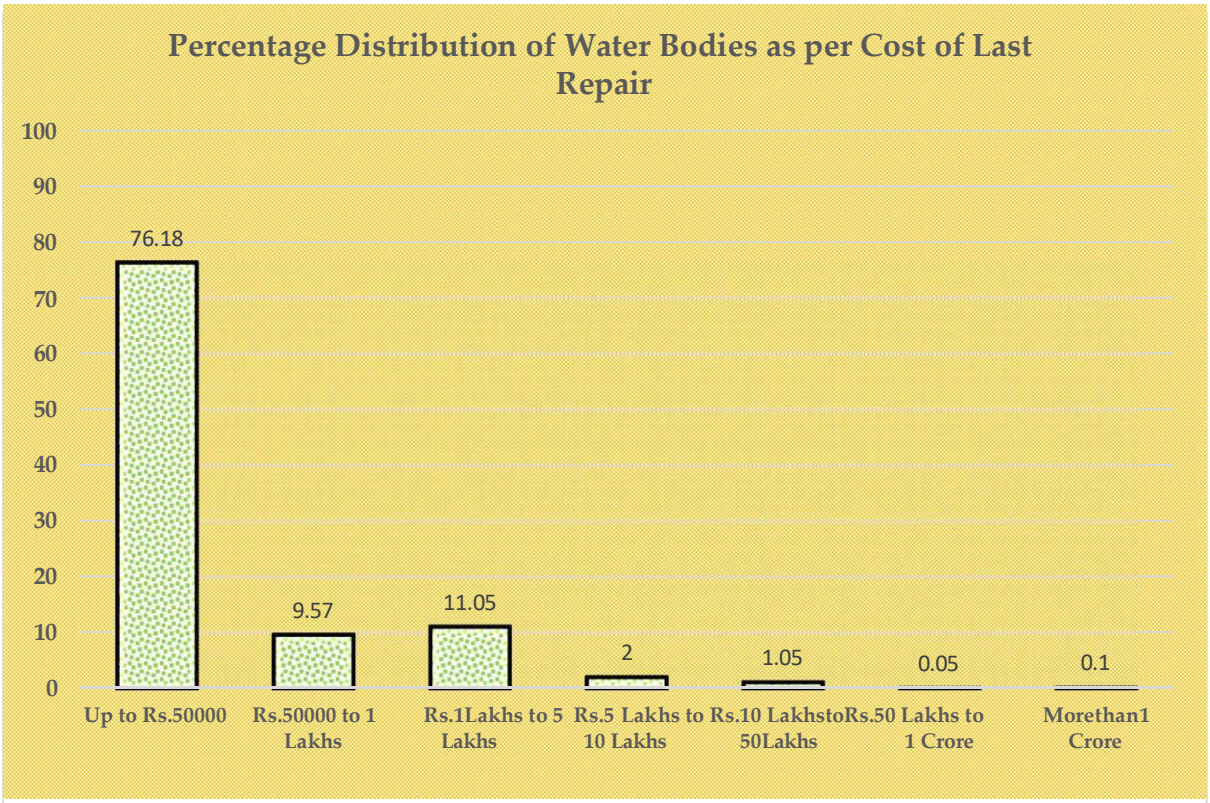


Analysis of Water Bodies by year and cost of renovation:

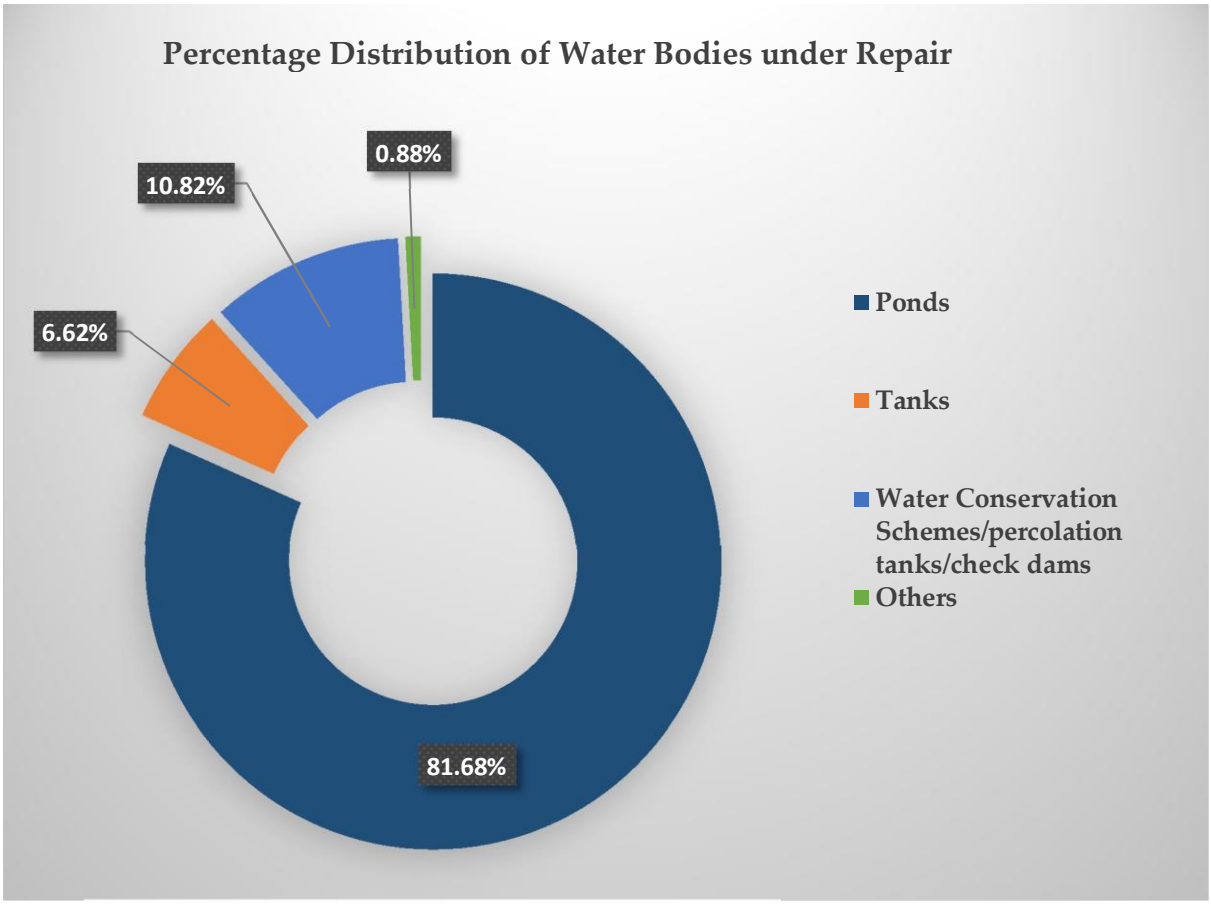
Majority of water bodies, i.e. 74.78% have never been repaired, 8.90% water bodies were repaired before 2009 and 0.96% were repaired after 2018.The proper repair and up keep of water bodies is required in order to have their optimum utilization.



Among all water bodies which underwent repair, 76.18% water bodies had cost of last repair/renovation up to Rs. 50,000 and 9.57% water bodies had cost of last repair between Rs. 50,000 to 1 lakh which is shown in the chart given below.



453 water bodies were under repair/ renovation during the reference year of census. Out of all these, 81.68% (370) are ponds, 6.62% (30) are tanks, 10.82% (49) are water conservation schemes/ check dams/ percolation tanks, and rest 0.88% are other water bodies.



STATISTICAL TABLES

TABLE index

Sl. No.	Table No.	Particulars	Page No.
1	Table1(A)	District Wise Distribution of Water Bodies - Rural	45
2	Table1(B)	District Wise Distribution of Water Bodies - Urban	46
3	Table1(C)	District Wise Distribution of Water Bodies - All	47
4	Table1(D)	District Wise Distribution of' In Use Water Bodies- All	48
5	Table1(E)	District Wise Distribution of' Not In Use Water Bodies-All	49
6	Table2	Basin Wise Distribution of Water Bodies	50
7	Table3	District Wise Distribution of Water Bodies by Location	51
8	Table4	District Wise Distribution of Water Bodies by Ownership	52
9	Table5	District Wise Distribution of Water Bodies- In Use/ Not In Use	53
10	Table6(A)	Number of "In Use" Water Bodies by Type of Use-Rural	54
11	Table6(B)	Number of "In Use "Water Bodies by Type of Use-Urban	55
12	Table6(C)	Number of "In Use" Water Bodies by Type of Use-All	56
13	Table7(A)	Number of "In Use" Ponds by Type of Use	57
14	Table7(B)	Number of "In Use" Tanks by Type of Use	58
15	Table7(C)	Number of "In Use" Lakes by Type of Use	59
16	Table7(D)	Number of "In Use" Reservoirs by Type of Use -All	60
17	Table7(E)	Number of "In Use" Water Conservation Schemes/Percolation Tanks/Check Dams by Type of Use-All	61
18	Table7(F)	Number of "In Use" Water Bodies in the Category of "Others" by Type Of Use-All	62
19	Table8(A)	Number of "Not In Use" Water Bodies by Reasons–Rural	63
20	Table8(B)	Number of "Not In Use" Water Bodies by Reasons-Urban	64
21	Table8(C)	Number of "Not In Use" Water Bodies by Reasons–All	65
22	Table9(A)	Number of "Not In Use" Ponds by Reasons	66
23	Table9(B)	Number of "Not In Use" Tanks by Reasons	67
24	Table9(D)	Number of "Not In Use" Reservoirs by Reasons	68
25	Table9(E)	Number of "Not In Use" Water Conservation Schemes/ Percolation Tanks/Check Dams by Reasons	69
26	Table9(F)	Number of "Not In Use" Water Bodies in the Category "Others" by Reasons	70
27	Table10(A)	Distribution of Water Bodies Used for Irrigation by CCA Classes	71

Sl. No.	Table No.	Particulars	Page No.
28	Table10(B)	Distribution of Water Bodies Used for Irrigation by IPC Classes	72
29	Table11(A)	Distribution of Water Bodies Natural/Man Made	73
30	Table11(B)	Distribution of Man Made Water Bodies by Type	74
31	Table12	Distribution of Water Bodies by Original Cost(Only For Man Made)	75
32	Table13(A)	Distribution of Water Bodies by Year of Renovation as per Last Repair	76
33	Table13(B)	Distribution of Water Bodies as per Cost of Last Repair	77
34	Table14(A)	Distribution of Water Bodies under Repair/Renovation	78
35	Table14(B)	Distribution of Water Bodies under Repair/Renovation as per Estimated Cost of Repair	79
36	Table14(C)	Distribution of Water Bodies under Repair/Renovation by Target of Irrigation Potential Revival	80
37	Table14(D)	Distribution of Water Bodies under Repair/Renovation by Irrigation Potential Revived	81
38	Table15(A)	Distribution of Water Bodies by Water Spread Area-Rural	82
39	Table15(B)	Distribution of Water Bodies by Water Spread Area-Urban	83
40	Table15(C)	Distribution of Water Bodies by Water Spread Area-All	84
41	Table16(A)	Distribution of Water Bodies according to its Maximum Depth-Rural	85
42	Table16(B)	Distribution of Water Bodies according to its Maximum Depth-Urban	86
43	Table16(C)	Distribution of Water Bodies according to its Maximum Depth -All	87
44	Table17(A)	Distribution of Water Bodies by Present Storage Capacity-Rural	88
45	Table17(B)	Distribution of Water Bodies by Present Storage Capacity-Urban	89
46	Table17(C)	Distribution of Water Bodies by Present Storage Capacity-All	90
47	Table17(D)	Distribution of “In Use” Water Bodies with Present Storage Capacity	91
48	Table17(E)	Distribution of Not In Use Reservoirs/Tanks/Ponds/”Other” with Present Storage Capacity	92
49	Table18(A)	Distribution of Water Bodies according to Filled Up Storage During2017-2018 - Rural	93
50	Table18(B)	Distribution of Water Bodies according to Filled Up Storage During2017-2018 - Urban	94

Sl. No.	Table No.	Particulars	Page No
51	Table18(C)	Distribution of Water Bodies according to Filled Up Storage During 2017-2018 - All	95
52	Table18(D)	Distribution of Water Bodies according to Status of Filling Up of Storage Space - Rural	96
53	Table18(E)	Distribution of Water Bodies according to Status of Filling Up of Storage Space - Urban	97
54	Table18(F)	Distribution of Water Bodies according to Status of Filling Up of Storage Space - All	98
55	Table19(A)	Distribution of Water Bodies by Number of City/Town/ Village Benefitted	99
56	Table19(B)	Distribution of Water Bodies by Number of People Directly Benefitted- Rural	100
57	Table19(C)	Distribution of Water Bodies by Number of People Directly Benefitted-Urban	101
58	Table19(D)	Distribution of Water Bodies by Number of People Directly Benefitted - All	102
59	Table20(A)	Status of Formation of Water Users Association (WUA) for Water Bodies(Except Individual Ownership)	103
60	Table20(B)	Distribution of Number of Water Bodies for which Water Users Association has been formed	104
61	Table21	Distribution of Water Bodies included in District Irrigation Plan/State Irrigation Plan	105
62	Table22(A)	Number of Water Bodies Encroached	106
63	Table22(B)	Distribution of Water Bodies Encroached by Percentage of Area Encroached	107
64	Table22(C)	Distribution of Encroached Water Bodies by Type	108

TABLE1(A) DISTRICT WISE DISTRIBUTION OFWATER BODIES -RURAL

Sl. No.	District	No. of Villages	Number of Water Bodies						
			Ponds	Tanks	Lakes	Reservoirs	Water Conservation Schemes/percolation tanks/check dams	Others	TOTAL
1	2		3	4	5	6	7	8	9
1	ALAPPUZHA	71	3894	17	0	0	0	3	3914
2	ERNAKULAM	82	3440	174	0	2	84	67	3767
3	IDUKKI	51	3162	106	0	13	331	22	3634
4	KANNUR	71	3906	106	0	0	399	32	4443
5	KASARGOD	38	2346	32	0	0	375	24	2777
6	KOLLAM	68	2093	37	1	1	14	20	2166
7	KOTTAYAM	71	2823	13	0	0	370	65	3271
8	KOZHIKODE	70	5006	27	0	2	316	68	5419
9	MALAPPURAM	91	4542	70	0	1	599	16	5228
10	PALAKKAD	88	5459	58	0	12	64	43	5636
11	PATHANAMTHITTA	51	1302	14	0	16	15	30	1377
12	THIRUVANANTHAPURAM	72	2050	19	1	4	58	12	2144
13	THRISSUR	87	4179	27	0	9	40	16	4271
14	WAYANAD	23	1217	71	2	2	368	18	1678
TOTAL		**934**	**45419**	**771**	**4**	**62**	**3033**	**436**	**49725**

TABLE1 (B) DISTRICT WISE DISTRIBUTION OF WATER BODIES -URBAN

Sl. No.	District	No. of Villages	No. of Towns	Number of Water Bodies						
				Ponds	Tanks	Lakes	Reservoirs	Water Conservation Schemes/percolation tanks/check dams	Others	TOTAL
1	2	3	4	5	6	7	8	9	10	11
1	ALAPPUZHA	6	87	325	0	0	0	0	0	325
2	ERNAKULAM	13	223	602	30	0	0	11	6	649
3	IDUKKI	2	53	145	6	0	0	7	0	158
4	KANNUR	10	270	793	6	0	1	71	0	871
5	KASARGOD	3	45	85	1	0	0	17	0	103
6	KOLLAM	5	91	185	0	0	0	1	0	186
7	KOTTAYAM	6	91	229	0	0	0	6	0	235
8	KOZHIKODE	8	237	705	10	0	0	55	3	773
9	MALAPPURAM	12	296	643	8	0	0	98	6	755
10	PALAKKAD	7	91	336	5	0	0	7	4	352
11	PATHANAMTHITTA	4	36	78	0	0	0	2	0	80
12	THIRUVANANTHAPURAM	5	173	498	4	0	0	0	3	505
13	THRISSUR	8	201	747	5	0	0	0	0	752
14	WAYANAD	3	47	217	2	0	0	41	5	265
TOTAL		92	1941	5588	77	0	1	316	27	6009

TABLE 1(C) DISTRICT WISE DISTRIBUTION OF WATER BODIES –ALL

Sl. No.	District	Number of Water Bodies						
		Ponds	Tanks	Lakes	Reservoirs	Water Conservation Schemes/percolation tanks/check dams	Others	TOTAL
1	2	3	4	5	6	7	8	9
1	ALAPPUZHA	4219	17	**0**	**0**	**0**	**3**	4239
2	ERNAKULAM	4042	204	**0**	**2**	95	73	4416
3	IDUKKI	3307	112	**0**	13	338	22	3792
4	KANNUR	4699	112	**0**	**1**	470	32	5314
5	KASARGOD	2431	33	**0**	**0**	392	24	2880
6	KOLLAM	2278	37	**1**	**1**	15	20	2352
7	KOTTAYAM	3052	13	**0**	**0**	376	65	3506
8	KOZHIKODE	5711	37	**0**	**2**	371	71	6192
9	MALAPPURAM	5185	78	**0**	**1**	697	22	5983
10	PALAKKAD	5795	63	**0**	12	71	47	5988
11	PATHANAMTHITTA	1380	14	**0**	16	17	30	1457
12	THIRUVANANTHAPURAM	2548	23	**1**	**4**	58	15	2649
13	THRISSUR	4926	32	**0**	**9**	40	16	5023
14	WAYANAD	1434	73	**2**	**2**	409	23	1943
TOTAL		51007	848	**4**	63	3349	463	55734

TABLE 1(D) DISTRICT WISE DISTRIBUTION OF 'INUSE' WATER BODIES -ALL

Sl. No.	District	Number of Water Bodies						
		Ponds	Tanks	Lakes	Reservoirs	Water Conservation Schemes/percolation tanks/check dams	Others	TOTAL
1	2	3	4	5	6	7	8	9
1	ALAPPUZHA	3053	10	0	0	0	0	3063
2	ERNAKULAM	3387	185	0	2	85	58	3717
3	IDUKKI	3139	102	0	13	279	22	3555
4	KANNUR	4045	106	0	1	373	21	4546
5	KASARGOD	2142	28	0	0	234	13	2417
6	KOLLAM	1787	31	1	1	9	15	1844
7	KOTTAYAM	2402	12	0	0	333	57	2804
8	KOZHIKODE	4551	36	0	2	271	60	4920
9	MALAPPURAM	4406	69	0	0	589	16	5080
10	PALAKKAD	4851	55	0	12	52	33	5003
11	PATHANAMTHITTA	1218	14	0	15	13	17	1277
12	THIRUVANANTHAPURAM	2155	20	1	4	58	11	2249
13	THRISSUR	4269	31	0	9	33	13	4355
14	WAYANAD	1334	68	2	2	299	15	1720
TOTAL		42739	767	4	61	2628	351	46550

TABLE 1(E) DISTRICT WISE DISTRIBUTION OF 'NOT IN USE' WATER BODIES -ALL

Sl. No.	District	Number of Water Bodies						
		Ponds	Tanks	Lakes	Reservoirs	Water Conservation Schemes/percolation tanks/check dams	Others	TOTAL
1	2	3	4	5	6	7	8	9
1	ALAPPUZHA	1166	7	0	0	0	3	1176
2	ERNAKULAM	655	19	0	0	10	15	699
3	IDUKKI	168	10	0	0	59	0	237
4	KANNUR	654	6	0	0	97	11	768
5	KASARGOD	289	5	0	0	158	11	463
6	KOLLAM	491	6	0	0	6	5	508
7	KOTTAYAM	650	1	0	0	43	8	702
8	KOZHIKODE	1160	1	0	0	100	11	1272
9	MALAPPURAM	779	9	0	1	108	6	903
10	PALAKKAD	944	8	0	0	19	14	985
11	PATHANAMTHITTA	162	0	0	1	4	13	180
12	THIRUVANANTHAPURAM	393	3	0	0	0	4	400
13	THRISSUR	657	1	0	0	7	3	668
14	WAYANAD	100	5	0	0	110	8	223
TOTAL		8268	81	0	2	721	112	9184

TABLE 2 BASIN WISE DISTRIBUTION OF WATER BODIES

Sl. No.	Base Name	Number of Water Bodies						
		Ponds	Tanks	Lakes	Reservoirs	Water Conservation Schemes/percolation tanks/check dams	Others	TOTAL
1	2	3	4	5	6	7	8	9
1	**Cauvery Basin**	**2210**	**96**	**2**	**2**	**497**	**32**	**2839**
2	**East flowing rivers South of Cauvery Basin**	**1335**	**79**	**0**	**7**	**176**	**8**	**1605**
3	**West flowing rivers South of Tapi Basin**	**47462**	**673**	**2**	**54**	**2676**	**423**	**51290**
TOTAL		**51007**	**848**	**4**	**63**	**3349**	**463**	**55734**

TABLE 3 DISTRICT WISE DISTRIBUTION OFWATER BODIES BY LOCATION

1	District	Number of Water Bodies						
		DPAP	Tribal	DDP	Flood prone	Naxal affected area	Others	TOTAL
1	2	3	4	5	6	7	8	9
1	ALAPPUZHA	0	0	0	190	0	4049	4239
2	ERNAKULAM	0	53	0	192	0	4171	4416
3	IDUKKI	0	61	0	0	0	3731	3792
4	KANNUR	0	14	0	0	0	5300	5314
5	KASARGOD	18	5	0	6	3	2848	2880
6	KOLLAM	0	20	0	75	0	2257	2352
7	KOTTAYAM	0	6	0	0	0	3500	3506
8	KOZHIKODE	0	0	0	4	0	6188	6192
9	MALAPPURAM	0	8	0	231	288	5456	5983
10	PALAKKAD	325	34	0	380	57	5192	5988
11	PATHANAMTHITTA	0	17	0	17	0	1423	1457
12	THIRUVANANTHAPURAM	0	0	0	0	0	2649	2649
13	THRISSUR	13	33	0	3	2	4972	5023
14	WAYANAD	0	1219	0	0	64	660	1943
TOTAL		356	1470	0	1098	414	52396	55734

TABLE 4 DISRICT WISE DISTRIBUTION OF WATER BODIES BY OWNERSHIP

Sl. No.	District	Public owned					Private owned			
		State WRD/ State Irrigation	Co-operative	Panchayat	Municipal Authority	Other Govt. Agency	Individual	Group of Individuals	Other private body	TOTAL
1	2	3	4	5	6	7	8	9	10	11
1	ALAPPUZHA	**6**	87	325	**0**	**0**	**0**	**0**	**0**	325
2	ERNAKULAM	13	223	602	30	**0**	**0**	11	**6**	649
3	IDUKKI	**2**	53	145	**6**	**0**	**0**	**7**	**0**	158
4	KANNUR	10	270	793	**6**	**0**	**1**	71	**0**	871
5	KASARGOD	**3**	45	85	**1**	**0**	**0**	17	**0**	103
6	KOLLAM	**5**	91	185	**0**	**0**	**0**	**1**	**0**	186
7	KOTTAYAM	**6**	91	229	**0**	**0**	**0**	**6**	**0**	235
8	KOZHIKODE	**8**	237	705	10	**0**	**0**	55	**3**	773
9	MALAPPURAM	12	296	643	**8**	**0**	**0**	98	**6**	755
10	PALAKKAD	**7**	91	336	**5**	**0**	**0**	**7**	**4**	352
11	PATHANAMTHITTA	**4**	36	78	**0**	**0**	**0**	**2**	**0**	80
12	THIRUVANANTHAPURAM	**5**	173	498	**4**	**0**	**0**	**0**	**3**	505
13	THRISSUR	**8**	201	747	**5**	**0**	**0**	**0**	**0**	752
14	WAYANAD	**3**	47	217	**2**	**0**	**0**	41	**5**	265
TOTAL		**2338**	**205**	**11083**	**1357**	**1362**	**31215**	**2520**	**5654**	**55734**

TABLE 5 DISTRICT WISE DISTRIBUTION OF WATER BODIES IN USE/NOT IN USE

Sl. No.	District	Public owned			Private owned					
		Rural	Urban	TOTAL	Rural	Urban	TOTAL	Rural	Urban	TOTAL
1	2	3	4	5	6	7	8	9	10	11
1	ALAPPUZHA	2823	240	3063	1091	85	1176	3914	325	4239
2	ERNAKULAM	3156	561	3717	611	88	699	3767	649	4416
3	IDUKKI	3408	147	3555	226	11	237	3634	158	3792
4	KANNUR	3849	697	4546	594	174	768	4443	871	5314
5	KASARGOD	2344	73	2417	433	30	463	2777	103	2880
6	KOLLAM	1715	129	1844	451	57	508	2166	186	2352
7	KOTTAYAM	2588	216	2804	683	19	702	3271	235	3506
8	KOZHIKODE	4262	658	4920	1157	115	1272	5419	773	6192
9	MALAPPURAM	4436	644	5080	792	111	903	5228	755	5983
10	PALAKKAD	4700	303	5003	936	49	985	5636	352	5988
11	PATHANAMTHITTA	1200	77	1277	177	**3**	180	1377	80	1457
12	THIRUVANANTHAPURAM	1896	353	2249	248	152	400	2144	505	2649
13	THRISSUR	3794	561	4355	477	191	668	4271	752	5023
14	WAYANAD	1465	255	1720	213	10	223	1678	265	1943
TOTAL		41636	4914	46550	8089	1095	9184	49725	6009	55734

TABLE6(A) NUMBER OF "IN USE" WATER BODIES BY TYPE OF USE-RURAL

Sl. No.	District	Number of in use Water Bodies in the State/ UT	Type of use								
			Irrigation	Industrial	Pisciculture	Domestic/ Drinking	Recreation	Religious	Ground water Recharge	Others	TOTAL
1	2	3	4	5	6	7	8	9	10	11	12
1	ALAPPUZHA	2823	592	33	509	800	10	309	493	77	2823
2	ERNAKULAM	3156	1535	28	97	627	38	200	531	100	3156
3	IDUKKI	3408	2145	14	159	925	18	15	49	83	3408
4	KANNUR	3849	1941	19	46	617	174	467	469	116	3849
5	KASARGOD	2344	1999	**3**	**2**	58	**4**	72	172	34	2344
6	KOLLAM	1715	379	10	186	456	40	188	350	106	1715
7	KOTTAYAM	2588	1030	25	273	599	21	175	291	174	2588
8	KOZHIKODE	4262	831	18	150	1582	484	517	534	146	4262
9	MALAPPURAM	4436	2151	10	83	1187	111	251	398	245	4436
10	PALAKKAD	4700	2497	24	211	543	74	227	462	662	4700
11	PATHANAMTHITTA	1200	274	**9**	239	382	**3**	68	164	61	1200
12	THIRUVANANTHAPURAM	1896	952	18	177	317	10	88	245	89	1896
13	THRISSUR	3794	1538	15	171	870	41	217	840	102	3794
14	WAYANAD	1465	786	17	152	169	**2**	**8**	285	46	1465
TOTAL		41636	18650	243	2455	9132	1030	2802	5283	2041	41636

TABLE6(B) NUMBER OF "IN USE" WATER BODIES BY TYPE OF USE-URBAN

Sl. No.	District	Number of in use Water Bodies in the State/ UT	Type of use								
			Irrigation	Industrial	Pisciculture	Domestic/ Drinking	Recreation	Religious	Ground water Recharge	Others	TOTAL
1	2	3	4	5	6	7	8	9	10	11	12
1	ALAPPUZHA	240	18	2	0	83	0	65	45	27	240
2	ERNAKULAM	561	198	1	28	38	4	29	145	18	561
3	IDUKKI	147	64	2	18	55	2	2	3	1	147
4	KANNUR	697	190	0	6	126	45	220	107	3	697
5	KASARGOD	73	44	0	0	4	4	9	12	0	73
6	KOLLAM	129	9	1	11	22	3	58	15	10	129
7	KOTTAYAM	216	65	0	8	69	3	57	5	9	216
8	KOZHIKODE	658	48	0	9	155	96	156	164	30	658
9	MALAPPURAM	644	270	1	16	151	29	74	96	7	644
10	PALAKKAD	303	133	2	6	40	8	8	69	37	303
11	PATHANAMTHITTA	77	27	2	7	27	4	4	5	1	77
12	THIRUVANANTHAPURAM	353	34	0	37	82	31	40	73	56	353
13	THRISSUR	561	137	3	7	97	35	67	154	61	561
14	WAYANAD	255	151	3	55	11	1	0	23	11	255
TOTAL		4914	1388	17	208	1060	265	789	916	271	4914

TABLE6(C) NUMBER OF"IN USE"WATER BODIES BY TYPE OF USE-ALL

Sl. No.	District	Number of in use Water Bodies in the State/ UT	Type of use								
			Irrigation	Industrial	Pisciculture	Domestic/ Drinking	Recreation	Religious	Ground water Recharge	Others	TOTAL
1	2	3	4	5	6	7	8	9	10	11	12
1	ALAPPUZHA	3063	610	35	509	883	10	374	538	104	3063
2	ERNAKULAM	3717	1733	29	125	765	42	229	676	118	3717
3	IDUKKI	3555	2209	16	177	980	20	17	52	84	3555
4	KANNUR	4546	2131	19	52	743	219	687	576	119	4546
5	KASARGOD	2417	2043	**3**	**2**	62	**8**	81	184	34	2417
6	KOLLAM	1844	388	11	197	478	43	246	365	116	1844
7	KOTTAYAM	2804	1095	25	281	668	24	232	296	183	2804
8	KOZHIKODE	4920	879	18	159	1737	580	673	698	176	4920
9	MALAPPURAM	5080	2421	11	99	1338	140	325	494	252	5080
10	PALAKKAD	5003	2630	26	217	583	82	235	531	699	5003
11	PATHANAMTHITTA	1277	301	11	246	409	**7**	72	169	62	1277
12	THIRUVANANTHAPURAM	2249	986	18	214	399	41	128	318	145	2249
13	THRISSUR	4355	1675	18	178	967	76	284	994	163	4355
14	WAYANAD	1720	937	20	207	180	**3**	**8**	308	57	1720
TOTAL		**46550**	**20038**	**260**	**2663**	**10192**	**1295**	**3591**	**6199**	**2312**	**46550**

TABLE 7 (A) NUMBER OF IN USE PONDS BY TYPE OF USE

Sl. No.	District	Type of use								
		Irrigation	Industrial	Pisciculture	Domestic/ Drinking	Recreation	Religious	Ground water Recharge	Others	Total (3+10)
1	2	3	4	5	6	7	8	9	10	11
1	ALAPPUZHA	608	35	508	877	10	373	538	104	3053
2	ERNAKULAM	1536	26	111	709	40	223	634	108	3387
3	IDUKKI	2029	14	166	810	16	17	32	55	3139
4	KANNUR	1771	17	50	686	209	673	540	99	4045
5	KASARGOD	1848	**1**	**2**	56	**8**	79	127	21	2142
6	KOLLAM	381	10	193	446	39	246	359	113	1787
7	KOTTAYAM	934	22	258	569	20	228	193	178	2402
8	KOZHIKODE	790	15	131	1647	566	671	580	151	4551
9	MALAPPURAM	1979	10	96	1219	135	315	421	231	4406
10	PALAKKAD	2547	23	213	566	81	231	509	681	4851
11	PATHANAMTHITTA	293	11	235	394	**7**	72	159	47	1218
12	THIRUVANANTHAPURAM	932	18	213	381	41	126	301	143	2155
13	THRISSUR	1623	18	172	956	76	281	986	157	4269
14	WAYANAD	708	16	199	129	**0**	**8**	250	24	1334
TOTAL		17979	236	2547	9445	1248	3543	5629	2112	42739

TABLE7(B) NUMBER OF IN USE TANKS BY TYPE OF USE

Sl. No.	District	Type of use								
		Irrigation	Industrial	Pisciculture	Domestic/ Drinking	Recreation	Religious	Ground water Recharge	Others	Total (3+10)
1	2	3	4	5	6	7	8	9	10	11
1	ALAPPUZHA	2	0	1	6	0	1	0	0	10
2	ERNAKULAM	134	1	1	26	0	4	16	3	185
3	IDUKKI	28	1	6	65	0	0	1	1	102
4	KANNUR	50	0	2	31	1	12	8	2	106
5	KASARGOD	18	1	0	1	0	1	6	1	28
6	KOLLAM	4	1	0	17	4	0	4	1	31
7	KOTTAYAM	1	0	10	1	0	0	0	0	12
8	KOZHIKODE	3	0	7	20	1	2	2	1	36
9	MALAPPURAM	32	0	3	17	5	8	3	1	69
10	PALAKKAD	31	0	2	7	1	0	7	7	55
11	PATHANAMTHITTA	2	0	7	4	0	0	1	0	14
12	THIRUVANANTHAPURAM	9	0	1	4	0	2	4	0	20
13	THRISSUR	10	0	6	6	0	3	5	1	31
14	WAYANAD	47	0	2	11	0	0	2	6	68
TOTAL		371	4	48	216	12	33	59	24	767

TABLE7(C) NUMBER OF IN USE LAKES BY TYPE OF USE

Sl. No.	District	Type of use								
		Irrigation	Industrial	Pisciculture	Domestic/ Drinking	Recreation	Religious	Ground water Recharge	Others	Total (3+10)
1	2	3	4	5	6	7	8	9	10	11
1	KOLLAM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**
2	THIRUVANANTHAPURAM	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
3	WAYANAD	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**
TOTAL		**1**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**4**

TABLE7(D) NUMBER OF IN USE RESERVOIRS BY TYPE OF USE

Sl. No.	District	Type of use								
		Irrigation	Industrial	Pisciculture	Domestic/ Drinking	Recreation	Religious	Ground water Recharge	Others	Total (3+10)
1	2	3	4	5	6	7	8	9	10	11
1	ERNAKULAM	1	0	0	0	0	0	0	1	2
2	IDUKKI	1	0	1	0	0	0	0	11	13
3	KANNUR	1	0	0	0	0	0	0	0	1
4	KOLLAM	1	0	0	0	0	0	0	0	1
5	KOZHIKODE	1	0	0	0	0	0	0	1	2
6	PALAKKAD	11	0	0	1	0	0	0	0	12
7	PATHANAMTHITTA	1	0	0	0	0	0	0	14	15
8	THIRUVANANTHAPURAM	1	0	0	2	0	0	0	1	4
9	THRISSUR	7	0	0	0	0	0	0	2	9
10	WAYANAD	1	0	0	0	0	0	0	1	2
TOTAL		26	0	1	3	0	0	0	31	61

TABLE 7(E) NUMBER OF IN USE WATER CONSERVATION SCHEMES/PERCOLATION TANKS/CHECK DAMS BY TYPE OF USE

Sl. No.	District	Type of use								
		Irrigation	Industrial	Pisciculture	Domestic/ Drinking	Recreation	Religious	Ground water Recharge	Others	Total (3+10)
1	2	3	4	5	6	7	8	9	10	11
1	ERNAKULAM	48	2	0	21	0	2	12	0	85
2	IDUKKI	132	1	2	104	4	0	19	17	279
3	KANNUR	297	2	0	20	9	2	26	17	373
4	KASARGOD	171	1	0	3	0	0	47	12	234
5	KOLLAM	2	0	0	4	0	0	2	1	9
6	KOTTAYAM	138	1	0	87	4	4	95	4	333
7	KOZHIKODE	69	1	17	60	8	0	97	19	271
8	MALAPPURAM	401	1	0	96	0	2	70	19	589
9	PALAKKAD	22	2	0	2	0	4	13	9	52
10	PATHANAMTHITTA	5	0	1	5	0	0	1	1	13
11	THIRUVANANTHAPURAM	41	0	0	6	0	0	10	1	58
12	THRISSUR	23	0	0	5	0	0	3	2	33
13	WAYANAD	177	4	4	38	1	0	53	22	299
TOTAL		1526	15	24	451	26	14	448	124	2628

TABLE 7(F) NUMBER OF IN USE WATER BODIES IN THE CATEGORY OF"OTHERS" BY TYPE OF USE

Sl. No.	District	Type of use								
		Irrigation	Industrial	Pisciculture	Domestic/ Drinking	Recreation	Religious	Ground water Recharge	Others	Total (3+10)
1	2	3	4	5	6	7	8	9	10	11
1	ERNAKULAM	14	0	13	9	2	0	14	6	58
2	IDUKKI	19	0	2	1	0	0	0	0	22
3	KANNUR	12	0	0	6	0	0	2	1	21
4	KASARGOD	6	0	0	2	0	1	4	0	13
5	KOLLAM	0	0	4	10	0	0	0	1	15
6	KOTTAYAM	22	2	13	11	0	0	8	1	57
7	KOZHIKODE	16	2	4	10	5	0	19	4	60
8	MALAPPURAM	9	0	0	6	0	0	0	1	16
9	PALAKKAD	19	1	2	7	0	0	2	2	33
10	PATHANAMTHITTA	0	0	3	6	0	0	8	0	17
11	THIRUVANANTHAPURAM	2	0	0	6	0	0	3	0	11
12	THRISSUR	12	0	0	0	0	0	0	1	13
13	WAYANAD	4	0	2	2	0	0	3	4	15
TOTAL		135	5	43	76	7	1	63	21	351

TABLE 8(A) NUMBER OF NOT IN USE WATER BODIES BY REASONS–RURAL

Sl. No.	District	REASONS FOR NOT IN USE							
		Dried up	Construction	Siltation	Destroyed beyond repair	Salinity	Due to industrial Effluents	Others	TOTAL
1	2	3	4	5	6	7	8	9	10
1	ALAPPUZHA	17	5	468	154	10	2	435	1091
2	ERNAKULAM	39	23	89	62	49	5	344	611
3	IDUKKI	14	6	61	54	9	1	81	226
4	KANNUR	11	2	78	82	10	4	407	594
5	KASARGOD	36	9	22	78	5	0	283	433
6	KOLLAM	3	10	156	56	23	6	197	451
7	KOTTAYAM	87	3	54	20	11	2	506	683
8	KOZHIKODE	43	12	256	257	59	2	528	1157
9	MALAPPURAM	37	13	208	144	14	1	375	792
10	PALAKKAD	220	25	239	47	16	4	385	936
11	PATHANAMTHITTA	15	1	36	24	2	3	96	177
12	THIRUVANANTHAPURAM	14	5	82	31	8	2	106	248
13	THRISSUR	42	16	81	41	38	7	252	477
14	WAYANAD	14	28	56	37	2	1	75	213
TOTAL		592	158	1886	1087	256	40	4070	8089

TABLE8(B) NUMBER OF NOT IN USE WATER BODIES BY REASONS–URBAN

Sl. No.	District	REASONS FOR NOT IN USE							
		Dried up	Construction	Siltation	Destroyed beyond repair	Salinity	Due to industrial Effluents	Others	TOTAL
1	2	3	4	5	6	7	8	9	10
1	ALAPPUZHA	0	0	8	5	0	0	72	85
2	ERNAKULAM	1	0	25	5	1	1	55	88
3	IDUKKI	0	0	3	4	0	0	4	11
4	KANNUR	16	3	24	22	1	0	108	174
5	KASARGOD	4	0	7	1	0	0	18	30
6	KOLLAM	1	0	10	5	1	0	40	57
7	KOTTAYAM	1	0	0	2	0	0	16	19
8	KOZHIKODE	2	13	28	26	15	0	31	115
9	MALAPPURAM	2	4	51	22	1	1	30	111
10	PALAKKAD	10	0	18	0	0	0	21	49
11	PATHANAMTHITTA	0	0	1	1	0	0	1	3
12	THIRUVANANTHAPURAM	1	1	60	12	2	0	76	152
13	THRISSUR	11	2	3	134	10	1	30	191
14	WAYANAD	1	2	2	0	0	0	5	10
TOTAL		50	25	240	239	31	3	507	1095

TABLE 8(C) NUMBER OF NOT IN USE WATER BODIES BY REASONS–ALL

Sl. No.	District	REASONS FOR NOT IN USE							
		Dried up	Construction	Siltation	Destroyed beyond repair	Salinity	Due to industrial Effluents	Others	TOTAL
1	2	3	4	5	6	7	8	9	10
1	ALAPPUZHA	17	**5**	476	159	10	**2**	507	1176
2	ERNAKULAM	40	23	114	67	50	**6**	399	699
3	IDUKKI	14	**6**	64	58	**9**	**1**	85	237
4	KANNUR	27	**5**	102	104	11	**4**	515	768
5	KASARGOD	40	**9**	29	79	**5**	**0**	301	463
6	KOLLAM	**4**	10	166	61	24	**6**	237	508
7	KOTTAYAM	88	**3**	54	22	11	**2**	522	702
8	KOZHIKODE	45	25	284	283	74	**2**	559	1272
9	MALAPPURAM	39	17	259	166	15	**2**	405	903
10	PALAKKAD	230	25	257	47	16	**4**	406	985
11	PATHANAMTHITTA	15	**1**	37	25	**2**	**3**	97	180
12	THIRUVANANTHAPURAM	15	**6**	142	43	10	**2**	182	400
13	THRISSUR	53	18	84	175	48	**8**	282	668
14	WAYANAD	15	30	58	37	**2**	**1**	80	223
TOTAL		642	183	2126	1326	287	43	4577	9184

TABLE 9(A) NUMBER OF NOT IN USE PONDS BY REASONS

Sl. No.	District	REASONS FOR NOT IN USE							
		Dried up	Construction	Siltation	Destroyed beyond repair	Salinity	Due to industrial Effluents	Others	TOTAL
1	2	3	4	5	6	7	8	9	10
1	ALAPPUZHA	11	5	475	159	10	2	504	1166
2	ERNAKULAM	40	22	109	62	49	5	368	655
3	IDUKKI	9	2	47	35	8	1	66	168
4	KANNUR	27	4	98	81	3	4	437	654
5	KASARGOD	31	6	24	18	3	0	207	289
6	KOLLAM	4	10	163	56	24	4	230	491
7	KOTTAYAM	86	1	52	13	11	2	485	650
8	KOZHIKODE	39	22	270	234	73	2	520	1160
9	MALAPPURAM	27	16	243	126	11	2	354	779
10	PALAKKAD	228	24	245	45	16	4	382	944
11	PATHANAMTHITTA	15	1	31	18	1	3	93	162
12	THIRUVANANTHAPURAM	15	6	141	41	10	2	178	393
13	THRISSUR	52	18	84	171	47	8	277	657
14	WAYANAD	12	9	30	14	1	0	34	100
TOTAL		596	146	2012	1073	267	39	4135	8268

TABLE 9(B) NUMBER OF NOT IN USE TANKS BY REASONS

Sl. No.	District	REASONS FOR NOT IN USE							
		Dried up	Construction	Siltation	Destroyed beyond repair	Salinity	Due to industrial Effluents	Others	TOTAL
1	2	3	4	5	6	7	8	9	10
1	ALAPPUZHA	6	0	1	0	0	0	0	7
2	ERNAKULAM	0	0	2	1	1	1	14	19
3	IDUKKI	0	1	1	2	1	0	5	10
4	KANNUR	0	0	3	1	0	0	2	6
5	KASARGOD	0	0	0	0	0	0	5	5
6	KOLLAM	0	0	2	2	0	1	1	6
7	KOTTAYAM	0	0	0	0	0	0	1	1
8	KOZHIKODE	0	1	0	0	0	0	0	1
9	MALAPPURAM	0	0	1	6	0	0	2	9
10	PALAKKAD	0	1	3	0	0	0	4	8
11	THIRUVANANTHAPURAM	0	0	0	1	0	0	2	3
12	THRISSUR	0	0	0	1	0	0	0	1
13	WAYANAD	2	0	0	0	0	0	3	5
TOTAL		**8**	**3**	**13**	**14**	**2**	**2**	**39**	**81**

TABLE 9(D) NUMBER OF NOT IN USE RESERVOIRS BY REASONS

Sl. No.	District	REASONS FOR NOTI N USE							
		Dried up	Construction	Siltation	Destroyed beyond repair	Salinity	Due to industrial Effluents	Others	TOTAL
1	2	3	4	5	6	7	8	9	10
1	MALAPPURAM	0	0	0	0	0	0	1	1
2	PATHANAMTHITTA	0	0	0	0	0	0	1	1
TOTAL		0	0	0	0	0	0	2	2

TABLE 9(E) NUMBER OFNOT IN USE WATER CONSERVATION SCHEMES/PERCOLATION TANKS/CHECKDAMS BY REASONS

Sl. No.	District	REASONS FOR NOT IN USE							
		Dried up	Construction	Siltation	Destroyed beyond repair	Salinity	Due to industrial Effluents	Others	TOTAL
1	2	3	4	5	6	7	8	9	10
1	ERNAKULAM	0	1	0	3	0	0	6	10
2	IDUKKI	5	3	16	21	0	0	14	59
3	KANNUR	0	0	0	20	8	0	69	97
4	KASARGOD	9	3	5	61	2	0	78	158
5	KOLLAM	0	0	1	3	0	0	2	6
6	KOTTAYAM	1	2	1	9	0	0	30	43
7	KOZHIKODE	2	2	11	48	1	0	36	100
8	MALAPPURAM	12	1	15	33	4	0	43	108
9	PALAKKAD	1	0	1	1	0	0	16	19
10	PATHANAMTHITTA	0	0	0	4	0	0	0	4
11	THRISSUR	1	0	0	2	1	0	3	7
12	WAYANAD	1	21	28	22	1	1	36	110
TOTAL		32	33	78	227	17	1	333	721

TABLE 9(F) NUMBER OF NOT IN USE WATER BODIES IN THE CATEGORY "OTHERS" BY REASONS

Sl. No.	District	REASONS FOR NOT IN USE							
		Dried up	Construction	Siltation	Destroyed beyond repair	Salinity	Due to industrial Effluents	Others	TOTAL
1	2	3	4	5	6	7	8	9	10
1	ALAPPUZHA	0	0	0	0	0	0	3	3
2	ERNAKULAM	0	0	3	1	0	0	11	15
3	KANNUR	0	1	1	2	0	0	7	11
4	KASARGOD	0	0	0	0	0	0	11	11
5	KOLLAM	0	0	0	0	0	1	4	5
6	KOTTAYAM	1	0	1	0	0	0	6	8
7	KOZHIKODE	4	0	3	1	0	0	3	11
8	MALAPPURAM	0	0	0	1	0	0	5	6
9	PALAKKAD	1	0	8	1	0	0	4	14
10	PATHANAMTHITTA	0	0	6	3	1	0	3	13
11	THIRUVANANTHAPURAM	0	0	1	1	0	0	2	4
12	THRISSUR	0	0	0	1	0	0	2	3
13	WAYANAD	0	0	0	1	0	0	7	8
TOTAL		6	1	23	12	1	1	68	112

TABLE 10(A) DISTRIBUTION OF WATER BODIES USED FOR IRRIGATION BY CCA CLASSES

Sl. No.	District	No. of Public Water bodies by CCA classes							No. of Private Water bodies by CCA classes						
		0to100ha	100to 500 ha	500 to 1000ha	1000to 2000ha	2000to 5000ha	More than 5000 ha	TOTAL	0to100ha	100to 500 ha	500 to 1000ha	1000to 2000ha	2000to 5000ha	More than 5000 ha	TOTAL
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ALAPPUZHA	117	4	0	0	1	0	122	483	2	3	0	0	0	488
2	ERNAKULAM	342	1	0	0	0	1	344	1378	6	5	0	0	0	1389
3	IDUKKI	398	4	0	0	0	1	403	1785	16	5	0	0	0	1806
4	KANNUR	505	2	0	0	0	1	508	1622	1	0	0	0	0	1623
5	KASARGOD	391	3	0	0	0	1	395	1644	2	1	0	0	1	1648
6	KOLLAM	111	1	0	0	0	1	113	273	2	0	0	0	0	275
7	KOTTAYAM	221	2	0	0	0	0	223	862	7	3	0	0	0	872
8	KOZHIKODE	125	0	0	0	0	1	126	750	2	1	0	0	0	753
9	MALAPPURAM	788	7	3	0	0	0	798	1603	14	2	4	0	0	1623
10	PALAKKAD	427	1	0	1	5	4	438	2181	6	3	1	0	1	2192
11	PATHANAMTHITTA	174	0	0	0	0	1	175	126	0	0	0	0	0	126
12	THIRUVANANTHAPURAM	685	1	0	0	0	1	687	288	9	2	0	0	0	299
13	THRISSUR	400	7	1	0	1	2	411	1247	13	4	0	0	0	1264
14	WAYANAD	374	4	0	0	0	1	379	556	2	0	0	0	0	558
TOTAL		5058	37	4	1	7	15	5122	14798	82	29	5	0	2	14916

TABLE10 (B) DISTRIBUTION OF WATER BODIES USED FOR IRRIGATION BY IPC CLASSES

Sl. No.	District	No. of water bodies by IPC Classes													*(in hectares)*
		0 to 100ha		100 to500 ha		500 to 1000 ha		1000 to 2000 ha		2000 to 5000 ha		More than 5000ha		TOTAL	
		No.	IPC	No.	IPC	No.	IPC	No.	IPC	No.	IPC	No.	IPC	No.	IPC
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ALAPPUZHA	605	1771.2	4	785.00	0	0.00	0	0.00	1	2596.2	0	0.00	610	5152.50
2	ERNAKULAM	1729	4579.2	1	120.00	1	550.00	1	1040.00	0	0.00	1	48800.00	1733	55089.28
3	IDUKKI	2204	7045.2	4	690.81	0	0.00	0	0.00	0	0.00	1	33905.00	2209	41641.03
4	KANNUR	2126	4206.4	4	703.00	0	0.00	0	0.00	0	0.00	1	236250.00	2131	241159.44
5	KASARGOD	2037	4612.6	3	720.44	0	0.00	0	0.00	2	5296.0	1	6075.00	2043	16704.07
6	KOLLAM	386	709.48	1	372.00	0	0.00	0	0.00	0	0.00	1	61167.00	388	62248.48
7	KOTTAYAM	1093	2363.3	2	264.30	0	0.00	0	0.00	0	0.00	0	0.00	1095	2627.63
8	KOZHIKODE	878	1164.5	0	0.00	0	0.00	0	0.00	0	0.00	1	14568.70	879	15733.28
9	MALAPPURAM	2406	9944.3	11	1934.7	3	1993.59	1	1020.00	0	0.00	0	0.00	2421	14892.70
10	PALAKKAD	2615	6771.9	4	642.00	0	0.00	1	1579.80	3	12297.	7	114196.62	2630	135487.40
11	PATHANAMTHITTA	300	1045.5	0	0.00	0	0.00	0	0.00	0	0.00	1	21135.00	301	22180.56
12	THIRUVANANTHAPURAM	984	5771.8	1	320.00	0	0.00	0	0.00	0	0.00	1	14570.00	986	20661.84
13	THRISSUR	1664	5826.1	7	1303.9	1	987.00	0	0.00	1	4313.0	2	30555.00	1675	42985.15
14	WAYANAD	930	4698.6	4	606.37	1	650.00	1	1306.00	0	0.00	1	5600.00	937	12861.02
TOTAL		19957	60510.	46	8462.6	6	4180.59	4	4945.80	7	24502.	18	586822.32	20038	689424.38

TABLE 11(A) DISTRIBUTION OF WATER BODIES - NATURAL/MAN MADE

Sl. No.	District	Natural			Man Made			Total		
		Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
1	2	3	4	5	6	7	8	9	10	11
1	ALAPPUZHA	2224	149	2373	1690	176	1866	3914	325	4239
2	ERNAKULAM	1115	250	1365	2652	399	3051	3767	649	4416
3	IDUKKI	870	6	876	2764	152	2916	3634	158	3792
4	KANNUR	746	126	872	3697	745	4442	4443	871	5314
5	KASARGOD	204	4	208	2573	99	2672	2777	103	2880
6	KOLLAM	868	111	979	1298	75	1373	2166	186	2352
7	KOTTAYAM	812	94	906	2459	141	2600	3271	235	3506
8	KOZHIKODE	2666	466	3132	2753	307	3060	5419	773	6192
9	MALAPPURAM	1255	205	1460	3973	550	4523	5228	755	5983
10	PALAKKAD	4359	255	4614	1277	97	1374	5636	352	5988
11	PATHANAMTHITTA	611	31	642	766	49	815	1377	80	1457
12	THIRUVANANTHAPURAM	1332	215	1547	812	290	1102	2144	505	2649
13	THRISSUR	3150	591	3741	1121	161	1282	4271	752	5023
14	WAYANAD	94	2	96	1584	263	1847	1678	265	1943
TOTAL		20306	2505	22811	29419	3504	32923	49725	6009	55734

TABLE 11(B) DISTRBUTION OF MAN MADE WATER BODIES BY TYPE

Sl. No.	District	Rural					Urban				
		Earthen	Concrete	Masonry	Others	TOTAL	Earthen	Concrete	Masonry	Others	TOTAL
1	2	3	4	5	6	7	8	9	10	11	12
1	ALAPPUZHA	1418	86	176	10	1690	138	**9**	28	**1**	176
2	ERNAKULAM	1296	214	1092	50	2652	204	30	152	13	399
3	IDUKKI	593	754	1365	52	2764	31	72	48	**1**	152
4	KANNUR	1309	466	1815	107	3697	191	63	482	**9**	745
5	KASARGOD	1583	439	511	40	2573	21	18	57	**3**	99
6	KOLLAM	636	94	546	22	1298	35	10	30	**0**	75
7	KOTTAYAM	950	544	908	57	2459	74	33	33	**1**	141
8	KOZHIKODE	1063	357	1235	98	2753	45	46	213	**3**	307
9	MALAPPURAM	1273	660	1938	102	3973	189	118	231	12	550
10	PALAKKAD	724	96	434	23	1277	25	11	61	**0**	97
11	PATHANAMTHITTA	384	67	258	57	766	15	**1**	26	**7**	49
12	THIRUVANANTHAPURAM	408	93	298	13	812	83	13	186	**8**	290
13	THRISSUR	730	125	243	23	1121	126	**5**	30	**0**	161
14	WAYANAD	695	428	452	**9**	1584	162	55	44	**2**	263
TOTAL		**13062**	**4423**	**11271**	**663**	**29419**	**1339**	**484**	**1621**	**60**	**3504**

TABLE 12 DISTRIBUTION OF WATER BODIES BY ORIGINAL COST (ONLY FOR MAN MADE)

Sl. No.	District	Number of Water Bodies							
		Cost Classes							
		Up to Rs. 50000	Rs.50000to 1 Lakhs	Rs.1 Lakh To 5Lakhs	Rs.5lakhs to10lakhs	Rs.10Lakhs to50Lakhs	Rs.50Lakhs to1 Crore	More than 1 crore	TOTAL
1	2	3	4	5	6	7	8	9	10
1	ALAPPUZHA	1319	407	112	21	**6**	**1**	**0**	1866
2	ERNAKULAM	2647	160	188	29	22	**2**	**3**	3051
3	IDUKKI	1304	564	714	186	116	21	11	2916
4	KANNUR	3347	453	450	94	87	**6**	**5**	4442
5	KASARGOD	2166	192	150	60	88	**5**	11	2672
6	KOLLAM	1067	91	146	39	25	**4**	**1**	1373
7	KOTTAYAM	1732	272	360	114	100	13	**9**	2600
8	KOZHIKODE	2229	308	355	78	72	**8**	10	3060
9	MALAPPURAM	3323	341	498	147	182	18	14	4523
10	PALAKKAD	1099	130	111	10	**9**	**3**	12	1374
11	PATHANAMTHITTA	376	167	206	32	15	**1**	18	815
12	THIRUVANANTHAPURAM	622	135	206	53	68	**7**	11	1102
13	THRISSUR	1127	79	43	12	12	**4**	**5**	1282
14	WAYANAD	748	430	435	119	105	**5**	**5**	1847
TOTAL		**23106**	**3729**	**3974**	**994**	**907**	**98**	**115**	**32923**

TABLE 13(A) DISTRIBUTION OF WATER BODIES BY YEAR OF RENOVATION AS PER LAST REPAIR

Sl. No.	District	Number of Water Bodies repaired in the Calendar years													
		Never repaired	After 2018	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	Before 2009	TOTAL
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ALAPPUZHA	2292	97	345	266	150	173	62	19	30	18	163	20	604	4239
2	ERNAKULAM	3115	74	241	178	146	139	49	37	54	13	67	18	285	4416
3	IDUKKI	2925	15	90	93	55	81	68	61	33	26	39	40	266	3792
4	KANNUR	4006	46	83	64	74	114	40	26	44	11	95	34	677	5314
5	KASARGOD	1817	41	83	81	95	52	61	17	56	12	43	24	498	2880
6	KOLLAM	1649	75	151	75	73	53	22	**4**	**4**	**3**	15	**7**	221	2352
7	KOTTAYAM	2523	29	285	89	117	105	22	29	17	25	52	18	195	3506
8	KOZHIKODE	4552	24	98	125	151	198	59	41	75	28	134	46	661	6192
9	MALAPPURAM	4945	26	138	100	68	67	33	16	27	13	50	19	481	5983
10	PALAKKAD	4914	19	25	39	65	189	78	48	99	18	63	**8**	423	5988
11	PATHANAMTHITTA	1234	14	25	**9**	16	39	11	**2**	13	**2**	14	**2**	76	1457
12	THIRUVANANTHAPURAM	2155	33	74	50	23	44	21	16	10	**4**	30	**7**	182	2649
13	THRISSUR	3745	36	247	89	80	135	45	22	51	23	146	27	377	5023
14	WAYANAD	1810	**4**	41	26	19	**8**	**3**	**3**	**2**	**1**	10	**0**	16	1943
TOTAL		**41682**	**533**	**1926**	**1284**	**1132**	**1397**	**574**	**341**	**515**	**197**	**921**	**270**	**4962**	**55734**

TABLE 13(B) DISTRIBUTION OF WATER BODIES AS PER COSTOF LAST REPAIR

Sl. No.	District	Number of Water Bodies							
		Classes of cost of repair							
		Up to Rs. 50000	Rs.50000to 1 Lakhs	Rs.1 Lakh to5Lakhs	Rs.5lakhs to10lakhs	Rs.10Lakhs to50Lakhs	Rs.50Lakhs to1 Crore	More than 1 crore	TOTAL
1	2	3	4	5	6	7	8	9	10
1	ALAPPUZHA	1798	79	58	**8**	**3**	**1**	**0**	1947
2	ERNAKULAM	1064	89	101	20	26	**0**	**1**	1301
3	IDUKKI	415	144	247	46	12	**1**	**2**	867
4	KANNUR	977	122	162	32	11	**1**	**3**	1308
5	KASARGOD	964	49	40	**4**	**5**	**0**	**1**	1063
6	KOLLAM	558	56	55	21	10	**2**	**1**	703
7	KOTTAYAM	811	75	79	10	**8**	**0**	**0**	983
8	KOZHIKODE	1149	189	255	37	10	**0**	**0**	1640
9	MALAPPURAM	701	130	157	28	21	**0**	**1**	1038
10	PALAKKAD	820	198	46	**6**	**2**	**0**	**2**	1074
11	PATHANAMTHITTA	119	23	69	10	**1**	**0**	**1**	223
12	THIRUVANANTHAPURAM	247	63	113	41	27	**2**	**1**	494
13	THRISSUR	998	109	149	15	**6**	**0**	**1**	1278
14	WAYANAD	84	18	21	**4**	**6**	**0**	**0**	133
TOTAL		**10705**	**1344**	**1552**	**282**	**148**	**7**	**14**	**14052**

TABLE 14(A) DISTRIBUTION OF WATER BODIES UNDER REPAIR/RENOVATION

Sl. No.	District	Number						
		Ponds	Tanks	Lakes	Reservoirs	Water Conservation Schemes/percolation tanks/check dams	Others	TOTAL
1	2	3	4	5	6	7	8	9
1	ALAPPUZHA	28	0	0	0	0	0	28
2	ERNAKULAM	18	0	0	0	0	0	18
3	IDUKKI	13	0	0	0	0	4	17
4	KANNUR	7	1	0	0	5	0	13
5	KASARGOD	0	0	0	0	4	0	4
6	KOLLAM	5	0	0	0	0	0	5
7	KOTTAYAM	5	0	0	0	0	0	5
8	KOZHIKODE	6	0	0	0	4	0	10
9	MALAPPURAM	3	0	0	0	1	0	4
10	PALAKKAD	63	0	0	0	0	0	63
11	PATHANAMTHITTA	0	0	0	0	1	0	1
12	THIRUVANANTHAPURAM	65	0	0	0	0	0	65
13	WAYANAD	157	29	0	0	34	0	220
TOTAL		370	30	0	0	49	4	453

TABLE 14(B) DISTRIBUTION OF WATER BODIES UNDER REPAIR/RENOVATION AS PER ESTIMATED COST OF REPAIR

Sl. No.	District	Number of Water Bodies							
		Classes of repair/renovation cost							
		Up to Rs. 50000	Rs.50000to 1 Lakhs	Rs.1 Lakh to5Lakhs	Rs.5lakhs to10lakhs	Rs.10Lakhs to50Lakhs	Rs.50Lakhs to1 Crore	More than 1 crore	TOTAL
1	2	3	4	5	6	7	8	9	10
1	ALAPPUZHA	19	0	8	1	0	0	0	28
2	ERNAKULAM	5	5	6	0	1	0	1	18
3	IDUKKI	0	6	8	3	0	0	0	17
4	KANNUR	2	0	7	4	0	0	0	13
5	KASARGOD	1	0	1	1	0	1	0	4
6	KOLLAM	2	0	1	1	0	1	0	5
7	KOTTAYAM	0	2	2	1	0	0	0	5
8	KOZHIKODE	0	0	3	1	5	1	0	10
9	MALAPPURAM	0	0	0	0	4	0	0	4
10	PALAKKAD	3	4	41	8	4	2	1	63
11	PATHANAMTHITTA	0	0	0	0	1	0	0	1
12	THIRUVANANTHAPURAM	3	7	19	20	16	0	0	65
13	WAYANAD	13	82	78	31	16	0	0	220
TOTAL		48	106	174	71	47	5	2	453

TABLE 14(C) DISTRIBUTION OF WATER BODIES UNDE RREPAIR/RENOVATION BY TARGETOF IRRIGATION POTENTIAL REVIVAL

Sl. No.	District	Irrigation potential Revival classes (in Hectares)								
		0-50	50-100	100-500	500-1000	1000-10000	10000-50000	50000to 1Lakh	More than1 lakh	TOTAL
1	2	3	4	5	6	7	8	9	10	11
1	ALAPPUZHA	27	0	1	0	0	0	0	0	28
2	ERNAKULAM	17	0	1	0	0	0	0	0	18
3	IDUKKI	1	0	4	12	0	0	0	0	17
4	KANNUR	10	0	2	0	0	1	0	0	13
5	KASARGOD	3	0	0	0	1	0	0	0	4
6	KOLLAM	5	0	0	0	0	0	0	0	5
7	KOTTAYAM	5	0	0	0	0	0	0	0	5
8	KOZHIKODE	9	1	0	0	0	0	0	0	10
9	MALAPPURAM	4	0	0	0	0	0	0	0	4
10	PALAKKAD	62	0	0	1	0	0	0	0	63
11	PATHANAMTHITTA	0	1	0	0	0	0	0	0	1
12	THIRUVANANTHAPURAM	61	2	2	0	0	0	0	0	65
13	WAYANAD	218	1	1	0	0	0	0	0	220
TOTAL		422	5	11	13	1	1	0	0	453

TABLE 14(D) DISTRIBUTION OF WATER BODIES UNDER REPAIR/RENOVATION BY IRRIGATION POTENTIAL REVIVED

Sl. No.	District	Irrigation potential Revived classes(in Hectares)								
		0-50	50-100	100-500	500-1000	1000-10000	10000-50000	50000to 1Lakh	More than1 lakh	TOTAL
1	2	3	4	5	6	7	8	9	10	11
1	ALAPPUZHA	27	1	0	0	0	0	0	0	28
2	ERNAKULAM	17	0	1	0	0	0	0	0	18
3	IDUKKI	1	1	12	3	0	0	0	0	17
4	KANNUR	10	0	2	0	0	1	0	0	13
5	KASARGOD	3	0	0	0	1	0	0	0	4
6	KOLLAM	5	0	0	0	0	0	0	0	5
7	KOTTAYAM	4	1	0	0	0	0	0	0	5
8	KOZHIKODE	10	0	0	0	0	0	0	0	10
9	MALAPPURAM	4	0	0	0	0	0	0	0	4
10	PALAKKAD	61	0	1	1	0	0	0	0	63
11	PATHANAMTHITTA	1	0	0	0	0	0	0	0	1
12	THIRUVANANTHAPURAM	61	3	1	0	0	0	0	0	65
13	WAYANAD	219	1	0	0	0	0	0	0	220
TOTAL		423	7	17	4	1	1	0	0	453

TABLE 15(A) DISTRIBUTION OF WATER BODIES BY WATER SPREAD AREA-RURAL

Sl. No.	District	Water Spread area classes						
		Less than 0.5hectare	0.5hectare to 1.0hectare	1hectare to 5hectares	5hectare to 10hectares	10 hectares to 50 hectares	More than 50hectares	TOTAL
1	2	3	4	5	6	7	8	9
1	ALAPPUZHA	3881	19	14	0	0	0	3914
2	ERNAKULAM	3687	39	34	4	1	2	3767
3	IDUKKI	3572	33	14	2	3	10	3634
4	KANNUR	4360	41	38	3	1	0	4443
5	KASARGOD	2686	44	29	6	7	3	2775
6	KOLLAM	2115	21	25	3	0	2	2166
7	KOTTAYAM	3105	119	43	4	0	0	3271
8	KOZHIKODE	5355	35	23	2	2	2	5419
9	MALAPPURAM	5073	85	52	7	4	1	5222
10	PALAKKAD	5195	360	69	0	1	11	5636
11	PATHANAMTHITTA	1313	28	21	3	6	6	1377
12	THIRUVANANTHAPURAM	2057	50	31	1	2	3	2144
13	THRISSUR	4185	62	13	2	3	6	4271
14	WAYANAD	1605	39	23	5	1	2	1675
TOTAL		48189	975	429	42	31	48	49714

TABLE 15(B) DISTRIBUTION OF WATER BODIES BY WATER SPREAD AREA -URBAN

Sl. No.	District	Water Spread area classes						
		Less than 0.5hectare	0.5hectare to 1.0hectare	1hectare to 5hectares	5hectare to 10hectares	10hectares to 50hectares	More than 50hectares	TOTAL
1	2	3	4	5	6	7	8	9
1	ALAPPUZHA	322	3	0	0	0	0	325
2	ERNAKULAM	637	7	5	0	0	0	649
3	IDUKKI	156	2	0	0	0	0	158
4	KANNUR	849	10	11	0	0	1	871
5	KASARGOD	101	0	1	0	0	1	103
6	KOLLAM	181	4	1	0	0	0	186
7	KOTTAYAM	222	8	4	1	0	0	235
8	KOZHIKODE	756	16	1	0	0	0	773
9	MALAPPURAM	730	19	5	1	0	0	755
10	PALAKKAD	341	10	1	0	0	0	352
11	PATHANAMTHITTA	76	1	3	0	0	0	80
12	THIRUVANANTHAPURAM	490	11	4	0	0	0	505
13	THRISSUR	740	10	1	0	0	1	752
14	WAYANAD	262	1	0	1	1	0	265
TOTAL		5863	102	37	3	1	3	6009

TABLE 15(C) DISTRIBUTION OF WATER BODIES BY WATER SPREAD AREA -ALL

Sl. No.	District	Water Spread area classes						
		Less than 0.5hectare	0.5hectare to 1.0hectare	1 hectare to 5 hectares	5 hectare to 10 hectares	10 hectares to 50 hectares	More than 50hectares	TOTAL
1	2	3	4	5	6	7	8	9
1	ALAPPUZHA	4203	22	14	0	0	0	4239
2	ERNAKULAM	4324	46	39	4	1	2	4416
3	IDUKKI	3728	35	14	2	3	10	3792
4	KANNUR	5209	51	49	3	1	1	5314
5	KASARGOD	2787	44	30	6	7	4	2878
6	KOLLAM	2296	25	26	3	0	2	2352
7	KOTTAYAM	3327	127	47	5	0	0	3506
8	KOZHIKODE	6111	51	24	2	2	2	6192
9	MALAPPURAM	5803	104	57	8	4	1	5977
10	PALAKKAD	5536	370	70	0	1	11	5988
11	PATHANAMTHITTA	1389	29	24	3	6	6	1457
12	THIRUVANANTHAPURAM	2547	61	35	1	2	3	2649
13	THRISSUR	4925	72	14	2	3	7	5023
14	WAYANAD	1867	40	23	6	2	2	1940
TOTAL		54052	1077	466	45	32	51	55723

TABLE 16(A) DISTRIBUTION OF WATER BODIES ACCORDING TO ITS MAXIMUM DEPTH - RURAL

Sl. No.	District	Depth classes (in Meters)								
		0-5	5-10	10-15	15-20	20-25	25-50	50to 100	More than 100	TOTAL
1	2	3	4	5	6	7	8	9	10	11
1	ALAPPUZHA	3791	120	0	1	0	1	1	0	3914
2	ERNAKULAM	3435	328	2	0	0	1	1	0	3767
3	IDUKKI	2951	644	16	7	3	9	4	0	3634
4	KANNUR	3690	712	22	13	5	1	0	0	4443
5	KASARGOD	1812	901	30	11	6	4	8	0	2772
6	KOLLAM	2049	107	2	1	1	2	4	0	2166
7	KOTTAYAM	2984	271	8	5	1	1	0	0	3270
8	KOZHIKODE	5195	214	2	1	2	3	1	0	5418
9	MALAPPURAM	4573	633	12	2	2	4	0	0	5226
10	PALAKKAD	5354	255	3	4	6	9	1	0	5632
11	PATHANAMTHITTA	1259	85	18	8	2	2	3	0	1377
12	THIRUVANANTHAPURAM	2006	104	20	5	2	5	2	0	2144
13	THRISSUR	3933	324	4	0	2	5	3	0	4271
14	WAYANAD	1631	39	3	0	1	2	0	0	1676
TOTAL		44663	4737	142	58	33	49	28	0	49710

TABLE 16(B) DISTRIBUTION OF WATER BODIES ACCORDING TO ITS MAXIMUM DEPTH-URBAN

Sl. No.	District	Depth classes (in Meters)								
		0-5	5-10	10-15	15-20	20-25	25-50	50to 100	More than 100	TOTAL
1	2	3	4	5	6	7	8	9	10	11
1	ALAPPUZHA	322	1	2	0	0	0	0	0	325
2	ERNAKULAM	615	31	1	0	0	0	0	0	647
3	IDUKKI	135	23	0	0	0	0	0	0	158
4	KANNUR	726	137	7	1	0	0	0	0	871
5	KASARGOD	93	10	0	0	0	0	0	0	103
6	KOLLAM	185	0	0	1	0	0	0	0	186
7	KOTTAYAM	224	11	0	0	0	0	0	0	235
8	KOZHIKODE	750	23	0	0	0	0	0	0	773
9	MALAPPURAM	638	117	0	0	0	0	0	0	755
10	PALAKKAD	337	15	0	0	0	0	0	0	352
11	PATHANAMTHITTA	79	1	0	0	0	0	0	0	80
12	THIRUVANANTHAPURAM	454	48	2	1	0	0	0	0	505
13	THRISSUR	715	37	0	0	0	0	0	0	752
14	WAYANAD	259	6	0	0	0	0	0	0	265
TOTAL		5532	460	12	3	0	0	0	0	6007

TABLE 16(C) DISTRIBUTION OF WATER BODIES ACCORDING TO IT SMAXIMUM DEPTH-ALL

Sl. No.	District	Depth classes (in Meters)								
		0-5	5-10	10-15	15-20	20-25	25-50	50to 100	More than 100	TOTAL
1	2	3	4	5	6	7	8	9	10	11
1	ALAPPUZHA	4113	121	2	1	0	1	1	0	4239
2	ERNAKULAM	4050	359	3	0	0	1	1	0	4414
3	IDUKKI	3086	667	16	7	3	9	4	0	3792
4	KANNUR	4416	849	29	14	5	1	0	0	5314
5	KASARGOD	1905	911	30	11	6	4	8	0	2875
6	KOLLAM	2234	107	2	2	1	2	4	0	2352
7	KOTTAYAM	3208	282	8	5	1	1	0	0	3505
8	KOZHIKODE	5945	237	2	1	2	3	1	0	6191
9	MALAPPURAM	5211	750	12	2	2	4	0	0	5981
10	PALAKKAD	5691	270	3	4	6	9	1	0	5984
11	PATHANAMTHITTA	1338	86	18	8	2	2	3	0	1457
12	THIRUVANANTHAPURAM	2460	152	22	6	2	5	2	0	2649
13	THRISSUR	4648	361	4	0	2	5	3	0	5023
14	WAYANAD	1890	45	3	0	1	2	0	0	1941
TOTAL		50195	5197	154	61	33	49	28	0	55717

TABLE 17(A) DISTRIBUTION OF WATER BODIES BY PRESENT STORAGE CAPACITY-RURAL

Sl. No.	District	Storage Capacity classes					
		NA(0)	0to100cubicmts	100to1000 Cubic mts	1000 to 10000 Cubic mts	More than 10000cubic mts	TOTAL
1	2	3	4	5	6	7	8
1	ALAPPUZHA	3	888	2430	564	29	3914
2	ERNAKULAM	151	1440	1568	557	51	3767
3	IDUKKI	353	1398	1613	233	37	3634
4	KANNUR	431	1713	1869	396	34	4443
5	KASARGOD	399	635	1435	291	17	2777
6	KOLLAM	34	794	989	332	17	2166
7	KOTTAYAM	435	927	1510	365	34	3271
8	KOZHIKODE	384	1858	2737	430	10	5419
9	MALAPPURAM	615	1238	2642	694	39	5228
10	PALAKKAD	107	753	2290	2115	371	5636
11	PATHANAMTHITTA	45	468	579	215	70	1377
12	THIRUVANANTHAPURAM	70	517	745	724	88	2144
13	THRISSUR	56	540	2403	1166	106	4271
14	WAYANAD	386	526	641	115	10	1678
TOTAL		3469	13695	23451	8197	913	49725

TABLE 17(B) DISTRIBUTION OF WATER BODIES BY PRESENT STORAGE CAPACITY-URBAN

Sl. No.	District	Storage Capacity classes					
		NA(0)	0to100cubicmts	100to1000 Cubic mts	1000to10000 Cubic mts	More than 10000cubic mts	TOTAL
1	2	3	4	5	6	7	8
1	ALAPPUZHA	**0**	44	240	39	**2**	325
2	ERNAKULAM	17	177	327	120	**8**	649
3	IDUKKI	**7**	88	57	**6**	**0**	158
4	KANNUR	71	252	395	143	10	871
5	KASARGOD	17	36	42	**7**	**1**	103
6	KOLLAM	**1**	51	98	33	**3**	186
7	KOTTAYAM	**6**	54	133	38	**4**	235
8	KOZHIKODE	58	152	412	142	**9**	773
9	MALAPPURAM	104	125	371	145	10	755
10	PALAKKAD	11	62	154	110	15	352
11	PATHANAMTHITTA	**2**	**9**	52	12	**5**	80
12	THIRUVANANTHAPURAM	**3**	67	197	221	17	505
13	THRISSUR	**0**	72	373	294	13	752
14	WAYANAD	46	78	124	17	**0**	265
TOTAL		343	1267	2975	1327	97	6009

TABLE 17(C) DISTRIBUTION OF WATER BODIES BY PRESENT STORAGE CAPACITY-ALL

Sl. No.	District	Storage Capacity classes					
		NA(0)	0to100cubicmts	100to1000 Cubic mts	1000to10000 Cubic mts	More than 10000cubic mts	TOTAL
1	2	3	4	5	6	7	8
1	ALAPPUZHA	**3**	932	2670	603	31	4239
2	ERNAKULAM	168	1617	1895	677	59	4416
3	IDUKKI	360	1486	1670	239	37	3792
4	KANNUR	502	1965	2264	539	44	5314
5	KASARGOD	416	671	1477	298	18	2880
6	KOLLAM	35	845	1087	365	20	2352
7	KOTTAYAM	441	981	1643	403	38	3506
8	KOZHIKODE	442	2010	3149	572	19	6192
9	MALAPPURAM	719	1363	3013	839	49	5983
10	PALAKKAD	118	815	2444	2225	386	5988
11	PATHANAMTHITTA	47	477	631	227	75	1457
12	THIRUVANANTHAPURAM	73	584	942	945	105	2649
13	THRISSUR	56	612	2776	1460	119	5023
14	WAYANAD	432	604	765	132	10	1943
TOTAL		3812	14962	26426	9524	1010	55734

TABLE 17(D) DISTRIBUTION OF IN USE RESERVOIRS/TANKS/PONDS/"OTHERS" WITH PRESENT STORAGE CAPACITY

Sl. No.	District	Ponds/Tanks		Lakes		Reservoirs		Others		TOTAL	
		No.	Storage capacity	No.	Storage capacity	No.	Storage capacity	No.	Storage capacity	No.	Storage capacity
1	2	3	4	5	6	7	8	9	10	11	12
1	ALAPPUZHA	3063	2723507	0	0	0	0	0	0	3063	2723507
2	ERNAKULAM	3572	3472596	0	0	2	2761950000	143	0	3717	2765422596
3	IDUKKI	3241	1701834	0	0	13	865012000	301	0	3555	866713834
4	KANNUR	4151	3267253	0	0	1	44167000	394	0	4546	47434253
5	KASARGOD	2170	1734752	0	0	0	0	247	0	2417	1734752
6	KOLLAM	1818	1937652	1	60650000	1	476160000	24	0	1844	538747652
7	KOTTAYAM	2414	1921405	0	0	0	0	390	0	2804	1921405
8	KOZHIKODE	4587	2279688	0	0	2	121400000	331	0	4920	123679688
9	MALAPPURAM	4475	3901168	0	0	0	0	605	0	5080	3901168
10	PALAKKAD	4906	14696579	0	0	12	468389000	85	0	5003	483085579
11	PATHANAMTHITTA	1232	3810383	0	0	15	605094700	30	0	1277	608905083
12	THIRUVANANTHAPURAM	2175	6751257	1	2500000	4	117719000	69	0	2249	126970257
13	THRISSUR	4300	1411047284	0	0	9	230731200	46	0	4355	1641778484
14	WAYANAD	1402	699232	2	228450	2	200692700	314	0	1720	201620382
TOTAL		43506	1459944590	4	63378450	61	5891315600	2979	0	46550	7414638640

TABLE 17(E) DISTRIBUTION OF NOT IN USE RESERVOIRS/TANKS/PONDS/"OTHER" WITH PRESENT STORAGE CAPACITY

Sl. No.	District	Ponds/Tanks		Lakes		Reservoirs		Others		TOTAL	
		No.	Storage capacity	No.	Storage capacity	No.	Storage capacity	No.	Storage capacity	No.	Storage capacity
1	2	3	4	5	6	7	8	9	10	11	12
1	ALAPPUZHA	1173	533343	0	0	0	0	3	0	1176	533343
2	ERNAKULAM	674	483267	0	0	0	0	25	0	699	483267
3	IDUKKI	178	89554	0	0	0	0	59	0	237	89554
4	KANNUR	660	281217	0	0	0	0	108	0	768	281217
5	KASARGOD	294	317312	0	0	0	0	169	0	463	317312
6	KOLLAM	497	436468	0	0	0	0	11	0	508	436468
7	KOTTAYAM	651	563757	0	0	0	0	51	0	702	563757
8	KOZHIKODE	1161	401270	0	0	0	0	111	0	1272	401270
9	MALAPPURAM	788	511351	0	0	1	28800	114	0	903	540151
10	PALAKKAD	952	1203536	0	0	0	0	33	0	985	1203536
11	PATHANAMTHITTA	162	176602	0	0	1	120000	17	0	180	296602
12	THIRUVANANTHAPURAM	396	465394	0	0	0	0	4	0	400	465394
13	THRISSUR	658	534422	0	0	0	0	10	0	668	534422
14	WAYANAD	105	40305	0	0	0	0	118	0	223	40305
TOTAL		8349	6037798	0	0	2	148800	833	0	9184	6186598

TABLE 18(A) DISTRIBUTION OF WATER BODIES ACCORDING TO FILLED UP STORAGE DURING 2017-2018-RURAL

Sl. No.	District	Filled up storage during 2017-2018					
		Full	Upto3/4	Upto1/2	Upto1/4	Nil/Negligible	TOTAL
1	2	3	4	5	6	7	8
1	ALAPPUZHA	2743	717	366	78	**7**	3911
2	ERNAKULAM	2062	1145	285	78	46	3616
3	IDUKKI	1384	1445	342	86	24	3281
4	KANNUR	3187	618	103	86	18	4012
5	KASARGOD	1413	729	164	39	33	2378
6	KOLLAM	939	836	266	67	24	2132
7	KOTTAYAM	2233	460	88	46	**9**	2836
8	KOZHIKODE	2887	1874	181	44	49	5035
9	MALAPPURAM	2872	1339	335	48	19	4613
10	PALAKKAD	2181	2829	322	163	34	5529
11	PATHANAMTHITTA	583	464	216	56	13	1332
12	THIRUVANANTHAPURAM	511	1022	422	83	36	2074
13	THRISSUR	2163	1589	301	77	85	4215
14	WAYANAD	986	231	34	23	18	1292
TOTAL		26144	15298	3425	974	415	46256

TABLE 18(B) DISTRIBUTION OFWATER BODIES ACCORDING TO FILLED UP STORAGE DURING 2017-2018-URBAN

Sl. No.	District	Filled up storage during 2017-2018					
		Full	Upto3/4	Upto1/2	Upto1/4	Nil/Negligible	TOTAL
1	2	3	4	5	6	7	8
1	ALAPPUZHA	283	22	20	**0**	**0**	325
2	ERNAKULAM	477	113	35	**5**	**2**	632
3	IDUKKI	36	109	**5**	**1**	**0**	151
4	KANNUR	563	215	17	**3**	**2**	800
5	KASARGOD	53	28	**3**	**2**	**0**	86
6	KOLLAM	39	130	15	**1**	**0**	185
7	KOTTAYAM	202	24	**2**	**0**	**1**	229
8	KOZHIKODE	254	406	47	**6**	**2**	715
9	MALAPPURAM	288	316	42	**4**	**1**	651
10	PALAKKAD	134	140	39	26	**2**	341
11	PATHANAMTHITTA	46	24	**6**	**1**	**1**	78
12	THIRUVANANTHAPURAM	97	257	114	21	13	502
13	THRISSUR	597	147	**8**	**0**	**0**	752
14	WAYANAD	211	**4**	**3**	**1**	**0**	219
TOTAL		**3280**	**1935**	**356**	**71**	**24**	**5666**

TABLE 18(C) DISTRIBUTION OFWATER BODIES ACCORDING TO FILLED UP STORAGE DURING 2017-2018- ALL

Sl. No.	District	Filled up storage during 2017-2018					
		Full	Upto3/4	Upto1/2	Upto1/4	Nil/Negligible	TOTAL
1	2	3	4	5	6	7	8
1	ALAPPUZHA	3026	739	386	78	**7**	4236
2	ERNAKULAM	2539	1258	320	83	48	4248
3	IDUKKI	1420	1554	347	87	24	3432
4	KANNUR	3750	833	120	89	20	4812
5	KASARGOD	1466	757	167	41	33	2464
6	KOLLAM	978	966	281	68	24	2317
7	KOTTAYAM	2435	484	90	46	10	3065
8	KOZHIKODE	3141	2280	228	50	51	5750
9	MALAPPURAM	3160	1655	377	52	20	5264
10	PALAKKAD	2315	2969	361	189	36	5870
11	PATHANAMTHITTA	629	488	222	57	14	1410
12	THIRUVANANTHAPURAM	608	1279	536	104	49	2576
13	THRISSUR	2760	1736	309	77	85	4967
14	WAYANAD	1197	235	37	24	18	1511
TOTAL		29424	17233	3781	1045	439	51922

TABLE 18(D) DISTRIBUTION OF WATER BODIES ACCORDING TO STATUS OF FILLING UP OF STORAGE SPACE (IN NUMBER)-RURAL

Sl. No.	District	Filling up storage (Based on 50% filling up of storage during last 5 years)				
		Filled up every year	Usually filled up	Rarely filled up	Never Filled up	TOTAL
1	2	3	4	5	6	7
1	ALAPPUZHA	2232	1058	574	47	3911
2	ERNAKULAM	2098	1130	311	77	3616
3	IDUKKI	1163	1489	341	288	3281
4	KANNUR	2957	833	157	65	4012
5	KASARGOD	1483	505	335	55	2378
6	KOLLAM	915	830	278	109	2132
7	KOTTAYAM	2209	385	165	77	2836
8	KOZHIKODE	2897	1701	336	101	5035
9	MALAPPURAM	2458	1629	428	98	4613
10	PALAKKAD	1918	3033	459	119	5529
11	PATHANAMTHITTA	382	546	347	57	1332
12	THIRUVANANTHAPURAM	601	855	538	80	2074
13	THRISSUR	2277	1344	419	175	4215
14	WAYANAD	1050	146	55	41	1292
TOTAL		24640	15484	4743	1389	46256

TABLE 18(E) DISTRIBUTION OF WATER BODIES ACCORDING TO STATUS OF FILLING UP OF STORAGE SPACE (IN NUMBER)-URBAN

Sl. No.	District	Filling up storage(Based on 50% filling up of storage during last 5 years)				
		Filled up every year	Usually filled up	Rarely filled up	Never Filled up	TOTAL
1	2	3	4	5	6	7
1	ALAPPUZHA	257	47	21	**0**	325
2	ERNAKULAM	433	164	32	**3**	632
3	IDUKKI	47	98	**6**	**0**	151
4	KANNUR	485	227	83	**5**	800
5	KASARGOD	36	26	23	**1**	86
6	KOLLAM	40	115	28	**2**	185
7	KOTTAYAM	157	64	**6**	**2**	229
8	KOZHIKODE	214	350	142	**9**	715
9	MALAPPURAM	421	109	117	**4**	651
10	PALAKKAD	142	170	26	**3**	341
11	PATHANAMTHITTA	33	42	**2**	**1**	78
12	THIRUVANANTHAPURAM	140	158	123	81	502
13	THRISSUR	352	315	79	**6**	752
14	WAYANAD	215	**4**	**0**	**0**	219
TOTAL		2972	1889	688	117	5666

TABLE 18(F) DISTRIBUTION OF WATER BODIES ACCORDING TO STATUS OF FILLING UP OF STORAGE SPACE (IN NUMBER)-ALL

Sl. No.	District	Filling up storage (Based on 50% filling up of storage during last 5 years)				
		Filled up every year	Usually filled up	Rarely filled up	Never Filled up	TOTAL
1	2	3	4	5	6	7
1	ALAPPUZHA	2489	1105	595	47	4236
2	ERNAKULAM	2531	1294	343	80	4248
3	IDUKKI	1210	1587	347	288	3432
4	KANNUR	3442	1060	240	70	4812
5	KASARGOD	1519	531	358	56	2464
6	KOLLAM	955	945	306	111	2317
7	KOTTAYAM	2366	449	171	79	3065
8	KOZHIKODE	3111	2051	478	110	5750
9	MALAPPURAM	2879	1738	545	102	5264
10	PALAKKAD	2060	3203	485	122	5870
11	PATHANAMTHITTA	415	588	349	58	1410
12	THIRUVANANTHAPURAM	741	1013	661	161	2576
13	THRISSUR	2629	1659	498	181	4967
14	WAYANAD	1265	150	55	41	1511
TOTAL		27612	17373	5431	1506	51922

TABLE 19(A) DISTRIBUTION OF WATER BODIES BY NUMBER OF CITY/TOWN/VILLAGE BENEFITTED

Sl. No.	District	Size class by number of Towns/Cities/Villages								
		1	2to5	6to10	11to20	21to50	51to100	101 to 500	More than 500	TOTAL
1	2	3	4	5	6	7	8	9	10	11
1	ALAPPUZHA	2794	244	4	15	3	1	1	1	3063
2	ERNAKULAM	2716	988	3	5	2	1	1	1	3717
3	IDUKKI	3260	280	2	0	7	4	2	0	3555
4	KANNUR	4342	200	0	2	1	0	1	0	4546
5	KASARGOD	2304	98	4	8	0	3	0	0	2417
6	KOLLAM	1627	210	0	6	0	1	0	0	1844
7	KOTTAYAM	2788	16	0	0	0	0	0	0	2804
8	KOZHIKODE	4901	15	0	1	3	0	0	0	4920
9	MALAPPURAM	4600	472	1	6	0	0	1	0	5080
10	PALAKKAD	4844	139	6	13	1	0	0	0	5003
11	PATHANAMTHITTA	1137	127	3	4	5	1	0	0	1277
12	THIRUVANANTHAPURAM	2162	82	2	2	1	0	0	0	2249
13	THRISSUR	4266	75	4	6	3	0	0	1	4355
14	WAYANAD	1711	6	0	3	0	0	0	0	1720
TOTAL		43452	2952	29	71	26	11	6	3	46550

TABLE 19(B) DISTRIBUTION OFWATER BODIES BYN UMBER OF PEOPLE DIRECTLY BENEFITTED-RURAL

Sl. No.	District	Size class of number of people								
		Upto100	101 to 500	501 to 1000	1001to 5000	5001to 10000	10001to 25000	25001to 50000	More than 50000	TOTAL
1	2	3	4	5	6	7	8	9	10	11
1	ALAPPUZHA	2695	108	12	6	1	1	0	0	2823
2	ERNAKULAM	2876	206	48	20	2	1	0	3	3156
3	IDUKKI	3144	212	32	7	0	0	0	13	3408
4	KANNUR	3603	219	20	7	0	0	0	0	3849
5	KASARGOD	2300	38	2	4	0	0	0	0	2344
6	KOLLAM	1563	130	18	1	0	0	0	3	1715
7	KOTTAYAM	2376	207	3	2	0	0	0	0	2588
8	KOZHIKODE	4053	193	12	2	0	0	0	2	4262
9	MALAPPURAM	4113	254	43	25	1	0	0	0	4436
10	PALAKKAD	4406	274	3	4	1	1	0	11	4700
11	PATHANAMTHITTA	1022	125	35	3	0	1	2	12	1200
12	THIRUVANANTHAPURAM	1391	420	67	13	0	0	0	5	1896
13	THRISSUR	3565	195	18	6	1	0	1	8	3794
14	WAYANAD	1424	32	3	3	0	1	1	1	1465
TOTAL		38531	2613	316	103	6	5	4	58	41636

TABLE 19(C) DISTRIBUTION OFWATER BODIES BY NUMBEROF PEOPLE DIRECTLY BENEFITTED-URBAN

Sl. No.	District	Size class of number of people								
		Upto100	101 to 500	501 to 1000	1001to 5000	5001to 10000	10001to 25000	25001to 50000	More than 50000	TOTAL
1	2	3	4	5	6	7	8	9	10	11
1	ALAPPUZHA	239	1	0	0	0	0	0	0	240
2	ERNAKULAM	504	40	10	6	0	0	0	1	561
3	IDUKKI	144	3	0	0	0	0	0	0	147
4	KANNUR	627	47	13	9	0	0	1	0	697
5	KASARGOD	68	3	0	1	1	0	0	0	73
6	KOLLAM	120	2	5	1	1	0	0	0	129
7	KOTTAYAM	195	19	2	0	0	0	0	0	216
8	KOZHIKODE	534	110	11	1	0	1	1	0	658
9	MALAPPURAM	563	77	4	0	0	0	0	0	644
10	PALAKKAD	249	33	9	11	1	0	0	0	303
11	PATHANAMTHITTA	58	17	1	1	0	0	0	0	77
12	THIRUVANANTHAPURAM	236	90	22	5	0	0	0	0	353
13	THRISSUR	510	50	1	0	0	0	0	0	561
14	WAYANAD	244	11	0	0	0	0	0	0	255
TOTAL		4291	503	78	35	3	1	2	1	4914

TABLE 19(D) DISTRIBUTION OFWATER BODIES BY NUMBER OF PEOPLE DIRECTLY BENEFITTED-ALL

Sl. No.	District	Size class of number of people								
		Upto100	101 to 500	501 to 1000	1001to 5000	5001to 10000	10001to 25000	25001to 50000	More than 50000	TOTAL
1	2	3	4	5	6	7	8	9	10	11
1	ALAPPUZHA	2934	109	12	6	1	1	0	0	3063
2	ERNAKULAM	3380	246	58	26	2	1	0	4	3717
3	IDUKKI	3288	215	32	7	0	0	0	13	3555
4	KANNUR	4230	266	33	16	0	0	1	0	4546
5	KASARGOD	2368	41	2	5	1	0	0	0	2417
6	KOLLAM	1683	132	23	2	1	0	0	3	1844
7	KOTTAYAM	2571	226	5	2	0	0	0	0	2804
8	KOZHIKODE	4587	303	23	3	0	1	1	2	4920
9	MALAPPURAM	4676	331	47	25	1	0	0	0	5080
10	PALAKKAD	4655	307	12	15	2	1	0	11	5003
11	PATHANAMTHITTA	1080	142	36	4	0	1	2	12	1277
12	THIRUVANANTHAPURAM	1627	510	89	18	0	0	0	5	2249
13	THRISSUR	4075	245	19	6	1	0	1	8	4355
14	WAYANAD	1668	43	3	3	0	1	1	1	1720
TOTAL		42822	3116	394	138	9	6	6	59	46550

TABLE 20(A) STATUS OF FORMATION OF WATER USERS ASSOCIATION (WUA) FOR WATER BODIES (EXCEPT INDIVIDUAL OWNERSHIP)

Sl. No.	District	WUA formed			WUA not formed			Status not known		
		RURAL	URBAN	TOTAL	RURAL	URBAN	TOTAL	RURAL	URBAN	TOTAL
1	2	3	4	5	6	7	8	9	10	11
1	ALAPPUZHA	20	**0**	20	783	128	911	152	**3**	155
2	ERNAKULAM	10	**2**	12	1545	284	1829	281	78	359
3	IDUKKI	**3**	**0**	**3**	968	107	1075	463	**1**	464
4	KANNUR	18	**2**	20	1690	373	2063	143	94	237
5	KASARGOD	48	**2**	50	816	64	880	278	12	290
6	KOLLAM	**8**	**0**	**8**	1077	111	1188	232	36	268
7	KOTTAYAM	29	**9**	38	758	46	804	477	10	487
8	KOZHIKODE	**5**	**0**	**5**	1044	280	1324	750	179	929
9	MALAPPURAM	25	**4**	29	1655	288	1943	556	76	632
10	PALAKKAD	10	**7**	17	1359	34	1393	1119	128	1247
11	PATHANAMTHITTA	**0**	**0**	**0**	406	26	432	315	36	351
12	THIRUVANANTHAPURAM	**1**	**0**	**1**	1093	269	1362	459	171	630
13	THRISSUR	**6**	**0**	**6**	1152	240	1392	394	291	685
14	WAYANAD	31	12	43	530	41	571	334	32	366
TOTAL		214	38	252	14876	2291	17167	5953	1147	7100

TABLE 20(B) DISTRIBUTION OF NUMBER OF WATER BODIES FOR WHICHWATER USERS ASSOCIATION HASB EEN FORMED

Sl. No.	District	Size classes of number of Water Users Associations formed											
		RURAL				URBAN				ALL			
		1	2 to5	5 to10	More than10	1	2 to5	5 to10	More than10	1	2 to5	5 to10	More than10
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	ALAPPUZHA	16	4	0	0	0	0	0	0	16	4	0	0
2	ERNAKULAM	8	1	0	1	1	1	0	0	9	2	0	1
3	IDUKKI	3	0	0	0	0	0	0	0	3	0	0	0
4	KANNUR	16	1	0	1	1	1	0	0	17	2	0	1
5	KASARGOD	12	4	1	31	2	0	0	0	14	4	1	31
6	KOLLAM	4	0	0	4	0	0	0	0	4	0	0	4
7	KOTTAYAM	28	0	0	1	4	5	0	0	32	5	0	1
8	KOZHIKODE	5	0	0	0	0	0	0	0	5	0	0	0
9	MALAPPURAM	14	9	0	2	4	0	0	0	18	9	0	2
10	PALAKKAD	7	2	0	1	7	0	0	0	14	2	0	1
11	PATHANAMTHITTA	1	0	0	0	0	0	0	0	1	0	0	0
12	THIRUVANANTHAPURAM	5	1	0	0	0	0	0	0	5	1	0	0
13	THRISSUR	17	11	1	2	12	0	0	0	29	11	1	2
14	WAYANAD	16	4	0	0	0	0	0	0	16	4	0	0
TOTAL		136	33	2	43	31	7	0	0	167	40	2	23

TABLE 21 DISTRIBUTION OF WATER BODIES INCLUDED IN DISTRICT IRRIGATION PLAN/STATE IRRIGATION PLAN

Sl. No.	District	Water Spread area classes						
		Ponds	Tanks	Lakes	Reservoirs	Water Conservation Schemes/percolation tanks /check dams	Others	TOTAL
1	2	3	4	5	6	7	8	9
1	ALAPPUZHA	34	0	0	0	0	0	34
2	ERNAKULAM	41	1	0	0	3	0	45
3	IDUKKI	31	0	0	1	2	0	34
4	KANNUR	11	0	0	0	1	0	12
5	KASARGOD	36	1	0	0	51	0	88
6	KOLLAM	5	0	0	0	0	0	5
7	KOTTAYAM	37	0	0	0	36	0	73
8	KOZHIKODE	86	0	0	0	5	2	93
9	MALAPPURAM	10	0	0	0	4	1	15
10	PALAKKAD	813	0	0	8	13	3	837
11	PATHANAMTHITTA	67	0	0	0	6	0	73
12	THIRUVANANTHAPURAM	46	0	1	0	6	0	53
13	THRISSUR	18	1	0	1	0	1	21
14	WAYANAD	3	2	0	0	9	0	14
TOTAL		1238	5	1	10	136	7	1397

TABLE 22(A) NUMBER OF WATER BODIES ENCROACHED

Sl. No.	District	Total Water Bodies			Encroached			Out of Encroached, number of Water Bodies whose Encroached area can be assessed		
		RURAL	URBAN	TOTAL	RURAL	URBAN	TOTAL	RURAL	URBAN	TOTAL
1	2	3	4	5	6	7	8	9	10	11
1	ALAPPUZHA	3914	325	4239	**2**	**0**	**2**	**0**	**0**	**0**
2	ERNAKULAM	3767	649	4416	17	**0**	17	10	**0**	10
3	IDUKKI	3634	158	3792	**3**	**0**	**3**	**0**	**0**	**0**
4	KANNUR	4443	871	5314	**4**	**0**	**4**	**0**	**0**	**0**
5	KASARGOD	2777	103	2880	**3**	**0**	**3**	**0**	**0**	**0**
6	KOLLAM	2166	186	2352	**0**	**0**	**0**	**0**	**0**	**0**
7	KOTTAYAM	3271	235	3506	**3**	**0**	**3**	**0**	**0**	**0**
8	KOZHIKODE	5419	773	6192	11	**0**	11	**0**	**0**	**0**
9	MALAPPURAM	5228	755	5983	**1**	**5**	**6**	**1**	**2**	**3**
10	PALAKKAD	5636	352	5988	10	**1**	11	**4**	**0**	**4**
11	PATHANAMTHITTA	1377	80	1457	10	**0**	10	**9**	**0**	**9**
12	THIRUVANANTHAPURAM	2144	505	2649	35	**0**	35	21	**0**	21
13	THRISSUR	4271	752	5023	**0**	**1**	**1**	**0**	**0**	**0**
14	WAYANAD	1678	265	1943	**4**	**1**	**5**	**0**	**0**	**0**
TOTAL		49725	6009	55734	103	**8**	111	45	**2**	47

TABLE 22(B) DISTRIBUTION OF WATER BODIES ENCROACHED BY PERCENTAGE OF AREA ENCROACHED

Sl. No.	District	Size classes by percentage of area encroached											
		RURAL				URBAN				ALL			
		Less than 25%	25% to 50%	50% to 75%	More than 75%	Less than 25%	25% to 50%	50% to 75%	More than 75%	Less than 25%	25% to 50%	50% to 75%	More than 75%
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	ERNAKULAM	5	0	3	2	0	0	0	0	5	0	3	2
2	MALAPPURAM	0	0	1	0	0	1	1	0	0	1	2	0
3	PALAKKAD	4	0	0	0	0	0	0	0	4	0	0	0
4	PATHANAMTHITTA	1	3	1	4	0	0	0	0	1	3	1	4
5	THIRUVANANTHAPURAM	19	1	0	1	0	0	0	0	19	1	0	1
TOTAL		29	4	5	7	0	1	1	0	29	5	6	7

TABLE 22(C) DISTRIBUTION OF ENCROACHED WATER BODIES[BY TYPE]

Sl. No.	District	Ponds		tanks		Lakes		Reservoirs		Water Conservation Schemes/ percolation tanks/check dams		Others		Total	
		Total	Encroached	Total	Encroached	Total	Encroached	Total	Encroached	Total	Encroached	Total	Encroached	Total	Encroached
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ALAPPUZHA	4219	**2**	17	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	4239	**2**
2	ERNAKULAM	4042	17	204	**0**	**0**	**0**	**2**	**0**	95	**0**	73	**0**	4416	17
3	IDUKKI	3307	**2**	112	**0**	**0**	**0**	13	**0**	338	**1**	2	**0**	3792	**3**
4	KANNUR	4699	**3**	112	**0**	**0**	**0**	**1**	**0**	470	**1**	32	**0**	5314	**4**
5	KASARGOD	2431	**1**	33	**1**	**0**	**0**	**0**	**0**	392	**1**	24	**0**	2880	**3**
6	KOLLAM	2278	**0**	37	**0**	**1**	**0**	**1**	**0**	15	**0**	20	**0**	2352	**0**
7	KOTTAYAM	3052	**3**	13	**0**	**0**	**0**	**0**	**0**	376	**0**	65	**0**	3506	**3**
8	KOZHIKODE	5711	10	37	**0**	**0**	**0**	**2**	**0**	371	**1**	71	**0**	6192	11
9	MALAPPURAM	5185	**5**	78	**0**	**0**	**0**	**1**	**0**	697	**1**	22	**0**	5983	**6**
10	PALAKKAD	5795	**9**	3	**0**	**0**	**0**	12	**1**	71	**1**	47	**0**	5988	11
11	PATHANAMTHITTA	1380	10	14	**0**	**0**	**0**	16	**0**	17	**0**	30	**0**	1457	10
12	THIRUVANANTHAPURAM	2548	34	23	**1**	**1**	**0**	**4**	**0**	58	**0**	15	**0**	2649	35
13	THRISSUR	4926	**1**	32	**0**	**0**	**0**	**9**	**0**	40	**0**	16	**0**	5023	**1**
14	WAYANAD	1434	**0**	73	**0**	**2**	**0**	**2**	**0**	409	**5**	23	**0**	1943	**5**
TOTAL		**51007**	**97**	**848**	**2**	**4**	**0**	**63**	**1**	**3349**	**11**	**463**	**0**	**55734**	**111**