

ASSESSMENT OF HYDROLOGICAL AND PHYSICAL STATUS OF TRADITIONAL WATER HARVESTING SYSTEMS IN KARNATAKA STATE USING GEO-SPATIAL TECHNOLOGIES AND MEASURES FOR RESTORATION AND REJUVENATION

Project Investigator	:	Dr. U. T. Vijay, Chief Scientific Officer
Budget	:	Rs. 48.29 lakhs
Funding Agency	:	DST, GoI
Duration	:	April 2017 – October 2019

Background:

Traditional Water Harvesting Systems (TWHS) were constructed to store water for various needs of communities such as drinking, washing, cattle drinking, irrigation and temple purposes including recharging of ground water. Keeping this importance in view, KSCST took up this project to assess the hydrological and physical status of ancient water harvesting structure such as Kalyanis, Pushkaranis/Temple tanks, Gokatte and Kunte etc., of the state for suggesting scientific interventions for rejuvenation & restoration of these structures.

Activities:

- Field survey for data base creation of around 13,500 TWHS of all districts of the state as shown in table no.1.
- Technical reports on the status of TWHS along with measures for rejuvenation of all districts have been submitted to all the concerned Zilla Panchayaths, DC's office and RDPR Department, GoK.
- Zilla Panchayaths and RDPR department under JALAMRUTHA, MGNREGA and Jalashakti Mission programmes incorporated the outputs of this project for restoration and rejuvenation.
- Technical Reports provide to DST, GOI for circulation among other state S & T Councils as per the recommendations of PAMC Review committee of DST, GoI for large scale replication.

District wise the status of Field study of TWHS completed:

No	District Name	Kalyani	Kunte	Gokatte	Katte	Total
1	Bagalkote	38	-	-	-	38
2	Ballari	131	21	175	102	429
3	Belagavi	09	57	108	174	348
4	Bengaluru Rural	87	146	82	36	351
5	Bengaluru Urban	43	75	34	19	171
6	Bidar	36	41	108	15	200
7	Chamarajanagar	107	173	10	237	527
8	Chikkaballapura	284	403	451	27	1165
9	Chikkamagaluru	51	07	85	17	160
10	Chitradurga	126	72	209	283	690
11	Davanagere	28	32	194	36	290
12	Dakshina Kannada	131	01	01	02	135
13	Dharwad	-	01	30	305	336
14	Gadag	15	18	04	125	162
15	Kalaburagi	138	07	132	06	283
16	Kodagu	9	9	6	21	45
17	Kolar	339	136	171	27	673
18	Koppal	48	68	85	37	238
19	Hassan	239	-	-	-	239
20	Haveri	11	109	231	273	624
21	Mandya	288	42	110	449	887
22	Mysuru	186	36	89	296	638
23	Raichur	125	92	32	19	268
24	Ramanagar	118	462	469	879	1928
25	Shivamogga	60	230	212	337	839

26	Tumakuru	383	-	-	-	383
27	Udupi	175	61	82	37	355
28	Uttara Kannada	128	54	195	307	684
29	Vijayapura	129	03	08	03	143
30	Yadgir	56	04	03	02	65
	Total	3,518	2,360	3,316	4,071	13,294

Glimpses of Photographs on Traditional Water Harvesting Systems



Kalyani in Rangasthala, Chikkaballapura taluk & District before Rejuvenation



Kalyani in Bidarahalli, Bengaluru east taluk, Bengaluru Urban District before and after Rejuvenation



Submission of Scientific report on TWHS in Shivamogga district to the Chief Executive Officer, Zilla Panchayath, Shivamogga by KSCST team