



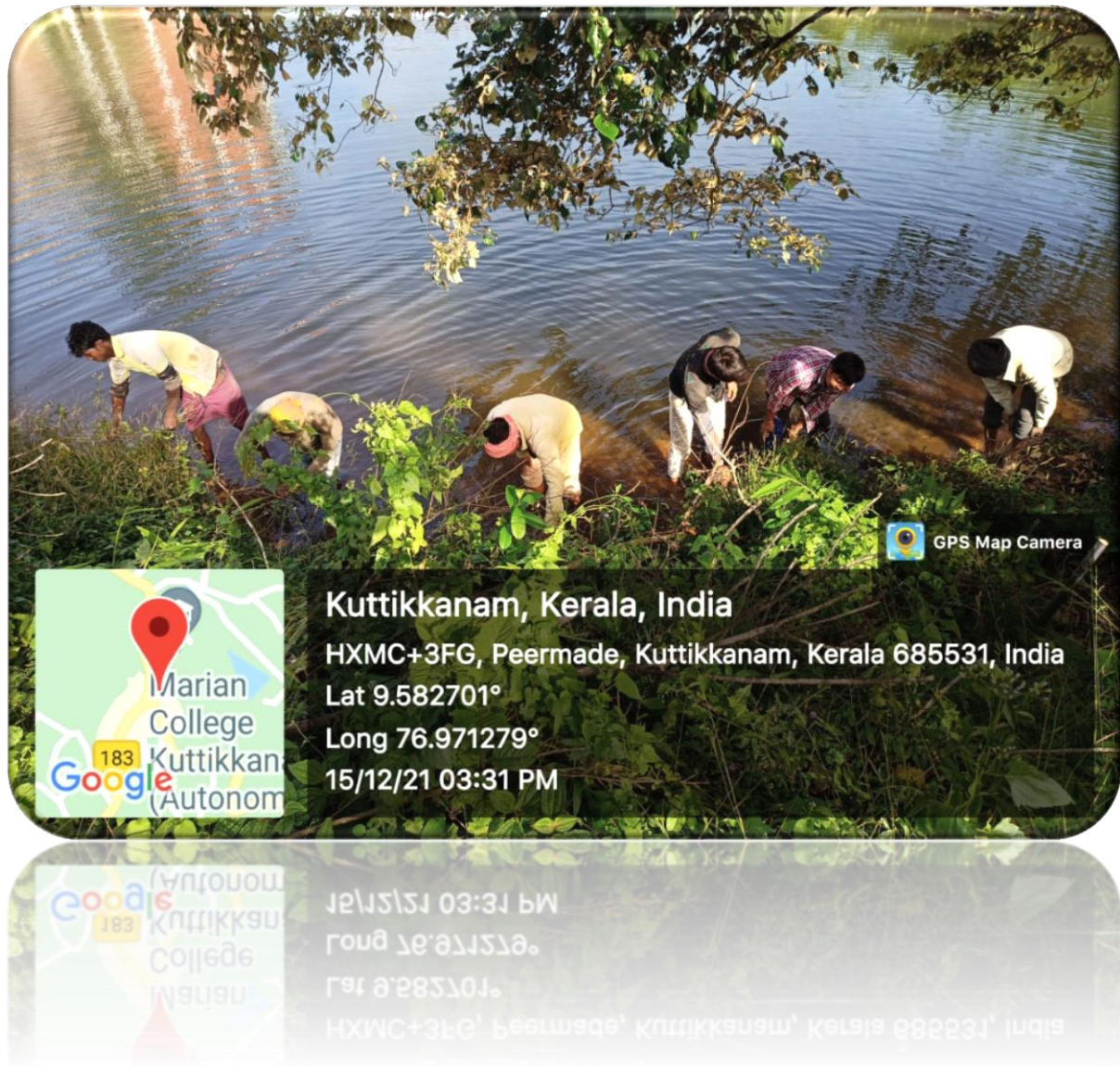
MARIAN COLLEGE KUTTIKKANAM
(AUTONOMOUS)

Maintenance of water bodies and distribution system in the campus

Submitted to
THE NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC)
FOURTH CYCLE OF ASSESSMENT

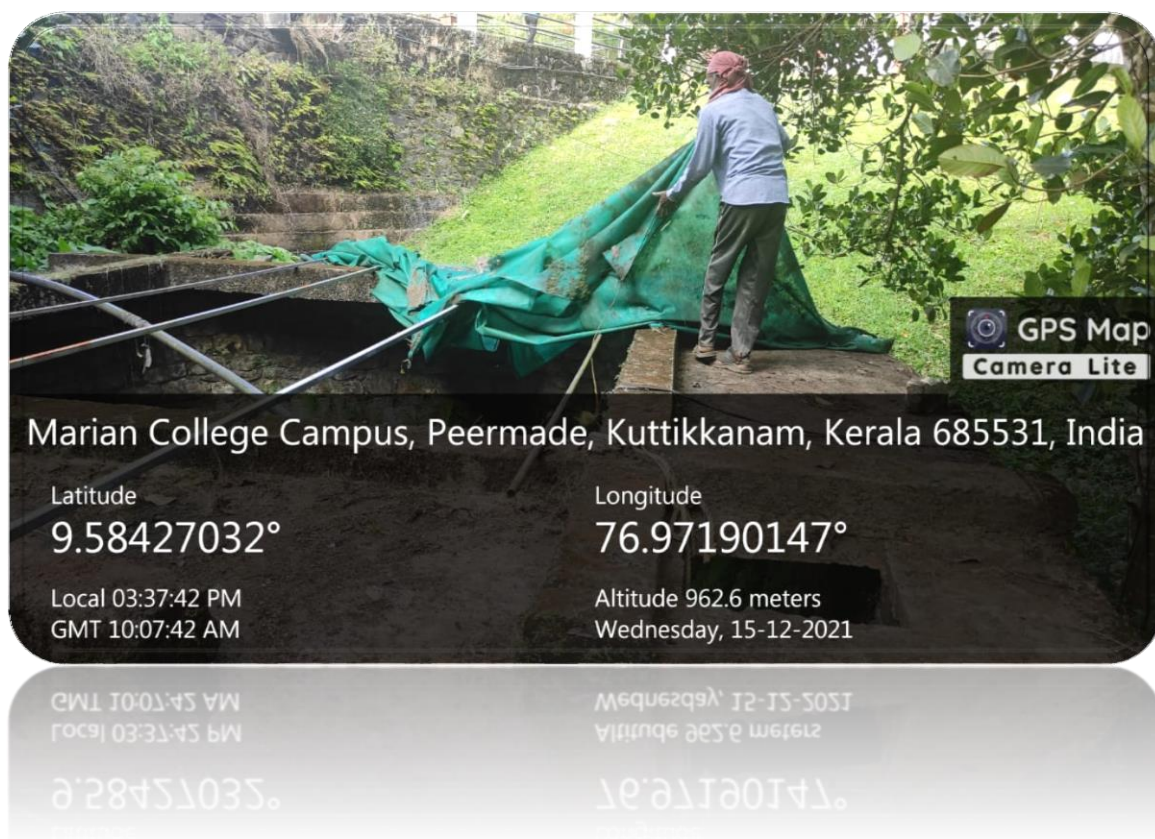
7.1.4.5 Maintenance of water bodies and distribution system in the campus

The water bodies undergo frequent maintenance work such as cleaning containers, reservoirs, and filters with pro-active participation from students and staff. The timely and regular maintenance of water bodies and the purification systems ensure healthy drinking water in the campus.



Workers engaged in the maintenance work of reservoir





Cleaning of the open -well behind the old academic building





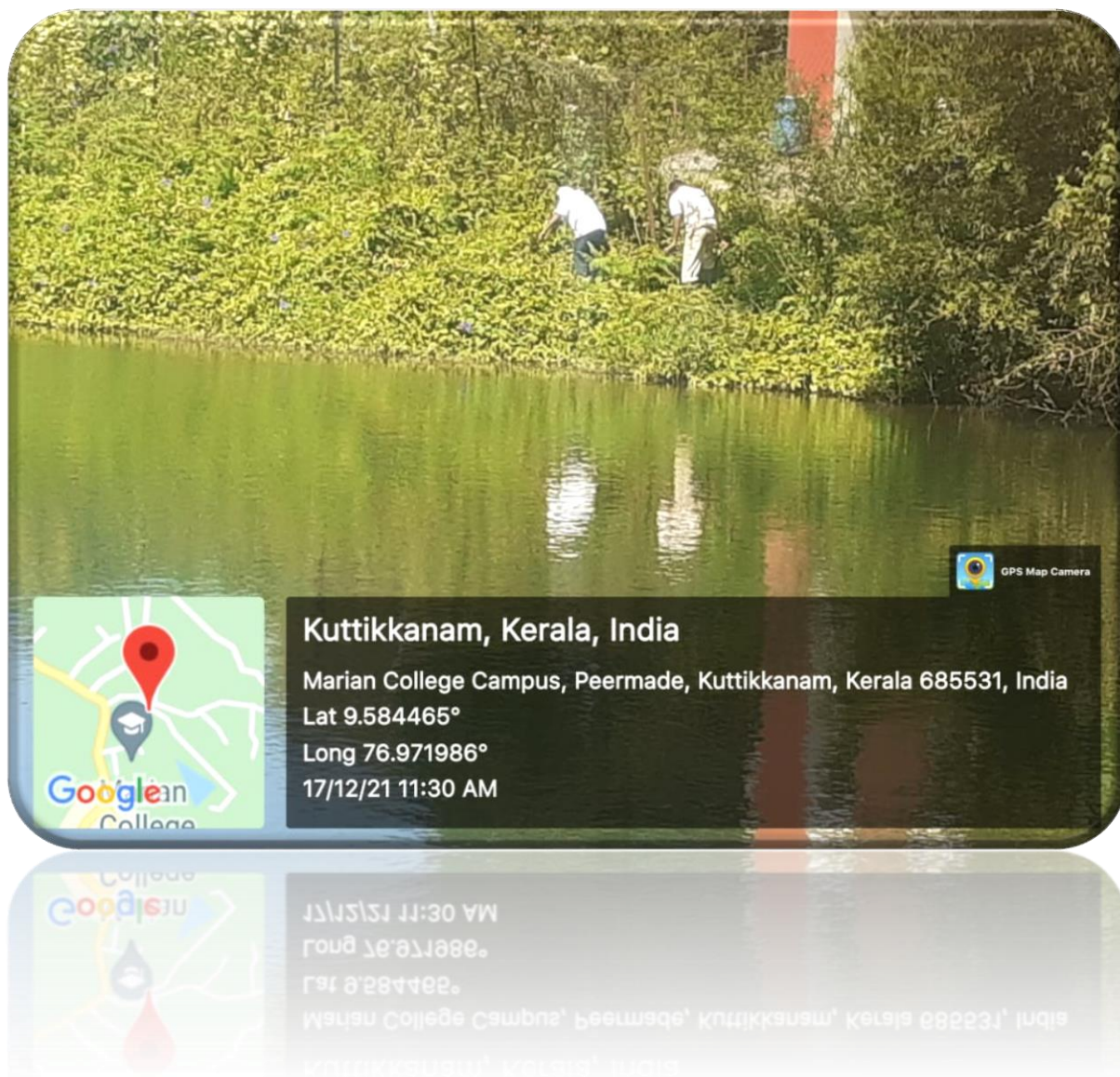
Maintenance of the reservoir 2 near the guest house





Cleaning of the open-well behind the old academic building





Workers engaged in the cleaning of reservoir banks





The water containers and the distribution pipes on the top of staff quarters





The water containers and the distribution pipes on the top of Marian Hostel





The solar panel, water container and its distribution system for hot water in the hostels





Water filtration unit and its distribution system near the reservoir 2

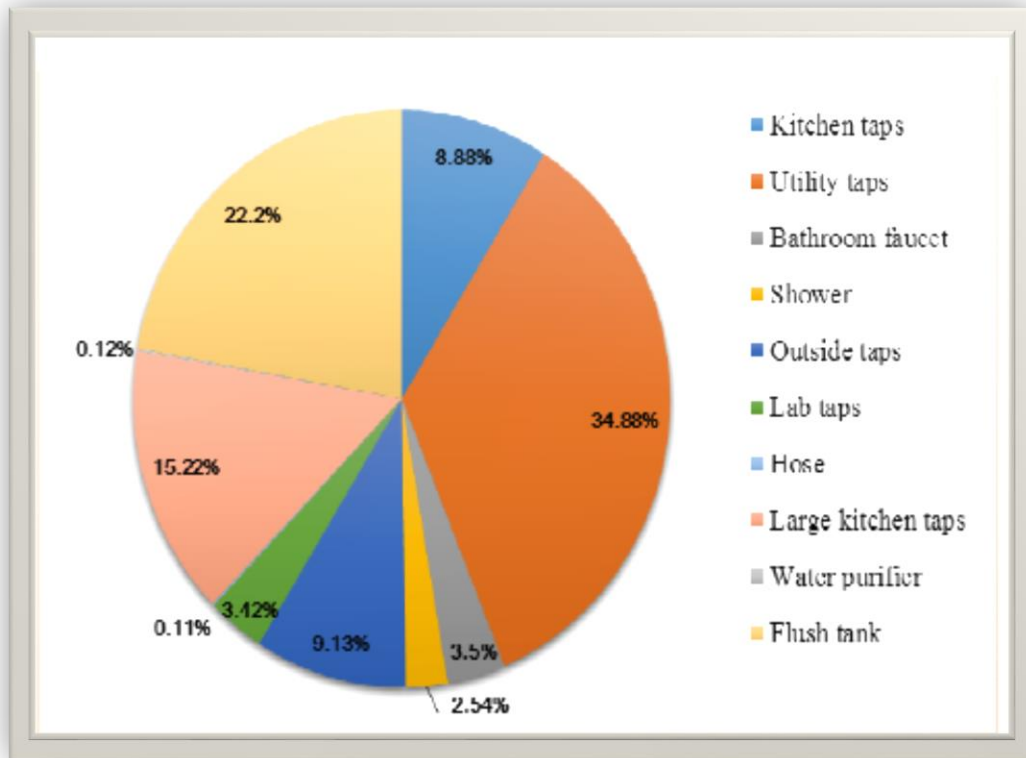


Total water usage through the distribution system in the campus

Sl No.	Fixtures	Total daily use (L)	Total yearly use (L)	Per capita use (L)	%
1	Kitchen taps	2800	677600	258.63	8.88
2	Utility taps	11000	2662000	1016.03	34.88
3	Bathroom faucet	1104	267168	101.97	3.50
4	Shower	800	193600	73.89	2.54
5	Outside taps	2880	696960	266.02	9.13
6	Lab taps	1080	261360	99.76	3.42
7	Hose	35	8470	3.23	0.11
8	Large kitchen taps	4800	1161600	443.36	15.22
9	Water purifier	39	9438	3.60	0.12
10	Flush tank	7000	1694000	646.56	22.20
Total		31,538	76,32,196	2,913	100

Source: Water Audit Report 2021





Proportion of Water Usage in the Campus



Physico-chemical parameters	WHO Standards	S1	S2	S3	S4
TDS (ppm)	500	96.3	251	106	85.5
EC ($\mu\text{s}/\text{cm}$)	--	135.8	354	149.7	119.4
pH	6.5-8.5	7.71	7.84	7.68	7.33
Salinity (ppm)	500	67.6	170	73.9	60.7
Chloride (mg/L)	250	14.9	12.9	10.4	16.7
Hardness (mg/L)	300	12	6.6	2	18
Nitrate (mg/L)	45	4.2	4.5	0.1	8.2

Status of physico-chemical parameters from the water samples of four different sources (S1 - S4) in the campus.

