



<b>CRITERION7</b> <b>Institutional Values and Best Practices</b>	<b>7.1 Institutional Values and Social Responsibilities</b>
<b><i>7.1.4 Water Conservation Facilities Available In The Institution</i></b>	

## **1. RAINWATER HARVESTING**

Rain water harvesting work is carried out in all the buildings, a network of pipes linked through inspection chambers constructed at periodical interval is used to collect the surface runoff to recharge the High-Capacity Wells (refer Table 1). Layer of coarse aggregate metals in layers are filled inside the recharge well to ensure proper filtrations of harvested water. There are 15 bore wells inside the campus catering to the water needs of the college (refer Table 2). The demand meted out by the RWH recharged bore wells is around 2.60 Lakhs Litres per Day.

### **a. Rain Water Harvesting Structures**

In Sethu Institute of Technology campus, all the buildings are installed with rainwater harvesting structures to recharge either the bore wells or high-capacity wells. The RWH structure was installed to collect the rainwater and to recharge the tube / bore wells in various blocks such as Main block, Mechanical block, Mechanical annexure block, Principal office, ECE block, EEE block, Civil block, CSE block, Chemistry lab, Common computer centre, Carpenter workshop, Canteen block, Transport section, Boy's hostel, Ladies hostel, Security wing, Mechanical dept., Thermal lab, Stores, PG block, First year block and New canteen. The Photographs of RWH locations are presented in the following pages.

Around 19.17 million litres of rainwater is expected to be collected through the RWH installed (taking Average annual rainfall as 503.2mm and used to recharge the bore wells and tube wells in the campus (refer Table 1).

**Table 1 Water Collected through Rainwater Harvesting**

Sl. No.	Name of the block	Area	Area	Annual average rainfall	Expected Collection (100%)	Actual Collection (85%)	Amount of rain water collected
		Sq. Ft.	Sq. M.	M	Cu. M.	Cu. M.	Million Litres
1	Main block	48094	4328	0.5032	2178	1851	1.851
2	Mechanical block	18741	1687	0.5032	849	722	0.722
3	Mechanical annexure block	23583	2122	0.5032	1068	908	0.908
4	Principal office	15244	1372	0.5032	690	587	0.587
5	ECE block	55606	5005	0.5032	2519	2141	2.141
6	EEE block	30309	2728	0.5032	1373	1167	1.167
7	Civil block	24507	2206	0.5032	1110	944	0.944
8	CSE block	29438	2649	0.5032	1333	1133	1.133
9	Chemistry lab	12536	1128	0.5032	568	482	0.482
10	Common computer centre	8724	785	0.5032	395	336	0.336
11	Carpenter workshop	3822	344	0.5032	173	147	0.147
12	Canteen block	18210	1639	0.5032	825	701	0.701
13	Transport	9172	825	0.5032	415	353	0.353
14	Boys hostel	48982	4408	0.5032	2218	1885	1.885
15	Ladies hostel	32181	2896	0.5032	1457	1239	1.239
16	Security wing	1952	176	0.5032	89	75	0.075
17	Mechanical lab	7428	669	0.5032	337	286	0.286
18	Thermal lab	2831	255	0.5032	128	109	0.109
19	Store	3150	284	0.5032	143	121	0.121
20	PG block	43808	3943	0.5032	1984	1686	1.686
21	First year block	46562	4191	0.5032	2109	1793	1.793
22	New canteen	13122	1181	0.5032	594	505	0.505
<b>Total water collected in Million Litres</b>							<b>19.17 ML</b>

## 2. BORE WELLS & OPEN WELL RECHARGE

In addition to this, there are 15 bore wells inside the campus catering to the water needs of the college. The demand meted out by the bore well is around 2.60 Lakhs Litres per day (Table 2) .

**Table 2 Details of the Bore wells in the Campus**

Sl. No.	Location	Pump ratings	Water pumped Litres per day
1	Sports Village	5HP (3 Pump)	51670
2	Ladies Hostel	3HP (3 Pump)	20125
3	Power House	3HP (3 Pump)	20125
4	Main Block	41.5 HP (1 Pump)	-
5	Exam cell	1HP (1 Pump)	6710
6	CC Lab	3HP (3 Pump)	20125
7	Chemistry Block	3HP (3 Pump)	20125
8	Mechanical Block	3HP (3 Pump)	20125
9	Civil Block	3HP (3 Pump)	20125
10	ICE Block	3HP (3 Pump)	20125
11	CSE Block	3HP (3 Pump)	19700
12	Non-teaching Block	3HP (3 Pump)	12000
13	Boys Hostel	3HP (3 Pump)	15000
14	Guvava Garden	3HP (3 Pump)	15000
<b>Total Yield:</b>			<b>260955 Litres</b>

### Open Wells Recharge

SIT campus houses three high capacity recharge wells of Gross capacity of 1.7 Million litres. These wells are cleaned and recharged to store the runoff due to rainfall (refer Table 3).

**Table 3 Detail about the High Capacity Wells inside the SIT Campus**

Sl. No.	Location	Size of the well (m)	Depth (m)	Capacity (m <sup>3</sup> )
1	Near ECE Block	6.4m diameter	11.58	207 m <sup>3</sup>
2	Near Civil Block	6.7m x 6.7m	18.29	700 m <sup>3</sup>
3	Near Boys Hostel	8.23m x 8.23m	16.76	800 m <sup>3</sup>
<b>Total yield</b>				<b>1.707 Million litres</b>

### 3. CONSTRUCTION OF TANKS AND BUNDS

Efforts were taken to Clean and deepen the Water Bodies Irrigation Lake at Pulloor and Percolation Ponds to augment the storage capacity of water bodies.

### 4. WASTE WATER RECYCLING

#### Using the Effluent of STP for Gardening

A fully automatic sewage treatment plant using Fluidized Bed Bio Reactor (FBBR) technology with 4,Lakhs Litres capacity was established with an investment of Rs.22.70 Lakhs in the year 2016. The effluent from the STP is used for gardening the SIT campus gardens throughout the year saving around 1.5 Lakhs Liters. The capacity of the sewage treatment plant is around 4,00,000 Litres capacity per day.

### 5. MAINTENANCE OF WATER BODIES AND DISTRIBUTION SYSTEM IN THE CAMPUS

#### a) Maintenance of water bodies and distribution

The following locations were chosen for cleaning the water bodies

- Irrigation tank at Pulloor

The institution takes efforts to maintain water in the irrigation tank located at pulloor. Periodically it was monitored and well maintained.

- Percolation Ponds

The institution takes efforts to maintain water in the percolation ponds in order to increase the water level in that area.

#### b) Water supply and distribution system using RO Plant

A fully automatic RO water treatment plant with 1 Lakh Litres per day capacity is functioning in the Campus. Each Building blocks in the campus is having 3 water supply tanks (500 litres capacity) amounts to 1500 litres /day. Total of 45,200 litres per day is distributed through Tractor cum Tractor unit to all the blocks of the SIT campus and is given in the Table 4 . The excess water from the RO water treatment plant is used for washing and other utility purposes.

**Table 4. Daily Water demand of the Campus**

<b>Sl. No.</b>	<b>Location</b>	<b>Capacity of tanks</b>	<b>Water pumped Litres per day</b>
1	Boys Hostel	3 * 500 litres	1500
2	Ladies Hostel	3 * 500 litres	1500
4	Main Block	3 * 500 litres	1500
7	Chemistry Block	3 * 500 litres	1500
8	First year block	3 * 500 litres	1500
9	Mechanical Block	3 * 500 litres	1500
10	Civil Block	3 * 500 litres	1500
11	ICE Block	3 * 500 litres	1500
12	CSE Block	3 * 500 litres	1500
13	CC Lab	2*500 litres	1000
14	Non-teaching Block	1*500 litres	500
15	Drinking water outlet at Principal office	1* 100 litres	100
16	Drinking water outlet at Exam cell	1*100 litres	100
		<b>Total (1 time filling)</b>	<b>15200 Litres</b>
		<b>Caacity per day ( 3 times fillings)</b>	<b>45,600 Litres</b>



**Taro Pumps**

**SUKUMAR MOTORS & PIPES**  
 7/2, A1, SIVAGANGAI MAIN ROAD,  
 MADURAI - 625020  
 STATE Tamil Nadu CODE: 33  
 GSTIN: 33EAXPS2842M1ZU

T: 9843564260  
 sukusachin@gmail.com  
 www.taropumps.com

**Tax Invoice**

**Buyer**  
 Mohammed Jalil  
 Devipattanam  
 Devipattanam  
 626106  
 TN  
 9789425259

**Scan & Pay**



**Invoice No.**  
 INV-S0552022156

**Dated**  
 26/4/2022

**Payment Method**  
 Cash

DESCRIPTION	GST RATE	SKU ID	QTY	DISCOUNT	RATE	AMOUNT
<b>HSN/SAC: 84137093</b>						
Self Priming Monobloc - TSP 3	12%	MBH002	1	₹0.00	₹12,339.29	₹12,339.29
0.75 kw, 1 HP, Single Phase						
SN: 67101031940						
Warranty expires on: 26/4/2024						
<b>TAXABLE VALUE</b>						₹12,339.29
<b>CGST</b>						₹740.36
<b>SGST</b>						₹740.36
<b>TOTAL</b>						₹13,820.00

**Amount in words**  
 THIRTEEN THOUSAND EIGHT HUNDRED AND TWENTY RUPEES ONLY

**CUSTOMER SIGNATURE**

**DEALER SIGNATURE**



On behalf of SUKUMAR MOTORS & PIPES

**DECLARATION**

We declare that this invoice shows the actual price for the goods described and that all particulars are true and correct. GOODS ONCE SOLD WILL NOT BE TAKEN BACK. Subject to local district jurisdiction.

Texmo Industries  
 Customer Care 1800-102-8888  
 www.taropumps.com  
 customersupport@taropumps.com

PB No. 5303  
 Mettupalayam Road,  
 Coimbatore - 641 029, India

**Texmo Industries**  
 Est. 1956

***Purchase Bill for Submersible Motor***

Sethu Institute of Technology, Pulloor, Kariapatti – 626 115. Tamil Nadu.

GSTIN : 33DIZPS3603H1ZU

Cell : 98941 61502

**R.S. CYCLE MART**  
DEALERS IN  
Cycle, Electricals PVC Pipes & Fittings, CPVC Pipes & Fittings,  
GI Pipes & Fittings.  
Suction Hose, Hardwares, Paints, Motor Starters & Spares etc.,  
6/677, THIRUMANGALAM ROAD, CHECKANURANI - 625 514.

Bill No. **125** **CASH BILL** Date **9/10/2021**

M/s. **Mr. M. Senu ABUL HASSAN - DEVI PATTANAM**

Qty.	Particulars	Rate	Rs.	Ps.
30m	2 1/2 bh. Re Dend —	95	2850	—
10m	2 1/2 Saval elbow —	95	950	—
4m	1/2 lit 3dwest —	190	760	—
52l	2 1/2 bh. Pipe —	849	44148	
	Hardware —		500	
			49208	—
	547 97.		4428.72	
	457 97.		4428.72	
			58065.44	
	(-12.00)		.44	
			<u>58065</u>	

**₹ 58065**

E&O.E.,

For **R.S. CYCLE MART**

*Purchase Bill for Fitting pipes utilized in Rain Water Harvesting*