

**COMBINED WATER SUPPLY SCHEME TO 134 RURAL HABITATIONS IN
KUMBAKONAM UNION IN THANJAVUR DISTRICT**

SALIENT DETAILS

- 1) **Population**
 - a) Present stage (2021) : 75886
 - b) Intermediate stage year (2036) : 86449
 - c) Ultimate stage year (2051) : 97012
- 2) **Per capita supply**

Kumbakonam Union : 55 LPCD
- 3) **Water supply service level**

Kumbakonam Union : 10 -15 LPCD
- 4) **Requirement (Total)**
 - a) Present stage (2021) : 4.27 MLD
 - b) Intermediate stage year (2036) : 4.85 MLD
 - c) Ultimate stage year (2051) : 5.45 MLD
- 5) **Hours of puming**

Head works & Booster sumps : 18 Hours

Group sumps : 12 Hours
- 6) **Rate of Discharge for 18 Hours**

Intermediate stage year (2036) : 4493 LPM

Ultimate stage year (2051) : 5045 LPM
- 7) **Head woks**

Infiltration Well : 6 Nos. near Melathukurichi

Dia : 4.50m

Depth : 8.00m to 10.00m
- 8) **Connecting Main, Pumping main ,Feeder mains and Branch mains to Group sumps**

Total length 67.880 Km.
(150mm CI D/F pipes, 400 mm DI K7pipes - 63 HDPE 6KSC pipes)
- 9) **Group Sump to OHT's Feeder mains and Branches**

160 HDPE to 50 HDPE 6KSC -
98.59 Km

10)	Collection Sump cum Pump house	1 No. at Headworks - 3.05 LL
11)	Group sumps	23 Nos. (25,000 lits. - 3,40,000 Ltrs.)
12)	Pumpsets	<p>1. At Head works - 6 Nos of Infiltration Wells Submersible Pumpsets - 2 Nos (100% standby)</p> <p>2. Collection Sump at Melathukurichi Vertical Turbine Pumpset. (100% standby) Duty 4493 LPM X 39 m head.</p> <p>GROUP SUMPS: 1. For 23 Group sumps . 23 x 2 Submersible pumpsets. (one as standby)</p>
13)	Service Reservoirs	<p>Existing SR - 138 Nos. Newly proposed Service Reservoirs .. 9 Nos</p> <p>10000 litres - 5 Nos 20000 litres - 1 Nos 30000 litres - 2 No. 60000 litres - 1 No.</p>
14)	Distribution System & PF	Proposed 5.500 KM, PF 53 Nos.
15)	Cost of Installation	: Rs. 91.13 crore
16)	Annual Maintenance cost	: Rs. 1.70 crore
17)	Per capita cost	: Rs. 12009/-
18)	Cost /1000 Litres	: Rs. 26.71/-
19)	Cost /1000 Litres (A.M. alone)	: Rs. 9.58/-