

Water Supply

The source of water supply to Sivakasi Municipality is the Vaipar River developed in 1960's which is the subsurface source in the form of infiltration gallery and wells at Vembakottai about 14 KM from Sivakasi town . The water supply headworks of this scheme – I was constructed to tap 3.10 MLD of water to supply to a population of 50,000 expected in 1991 at Lpcd . This water is collected in a collection cum suction well of 3.6 m in diameter situated on the bank of river and pumped to the town through 300 mm dia C.I main with centrifugal pumps of duty 2160 Lpm against 60m head . At Sivakasi town this quantity of water is received in an overhead tank of 9 lakhs liters capacity and distributed through a water distribution network of about 30 Km length with CI pipes of sizes ranging from 300mm to 8 mm.

In 1990 the water supply improvement scheme to Sivakasi Town was implemented with abstraction of surface water from Vembakottai dam of 398.7 Mcft capacity and 7 m storage depth constructed across the Vaipar river by Public Works Department

The dam is situated at about 1 K M from upstream of the existing water supply headworks . The quantity of water allotted from the dam to water supply to Sivakasi Town is 50 Mcft which is equal to 3.15 Mld . The raw water from the dam is drawn through an intake well of 3.6m in dia with three intake pipes at different levels. The bottom most intake pipe is extended well in to the deepest portion of the dam . The pump sets 2 Nos. (1 No. standby) of duty 3587 Lpm. Against a head of 15m and conveyed through a raw water transmission main of 1 k.m. length 315mm outer dia PVC pipe to the water treatment plant (WTP) . The WTP is situated in a site adjacent to site where the suction well and pump house of Scheme – I.

There are 11666 water supply House Service Connection to supply water to the consumers and 147 Public Fountains on to serve the population below poverty line . The population of the town as per the 2001 census is 72170 with recommended per capita water supply rate of 90 lpcd the total daily water demand is in the order of 6.5 Mld. But the present water supply is 4.5 MLD during the normal season with good rain fall , 1.8 MLD during the worst season with inadequate rainfall.

Today with meager water potential supply to the public is effected once in 5 days for 2 Hours only (once in 3 days for 2 Hours in normal season) . Further the Municipality is possessing the Five numbers mobile water tanker for supplying water to the public who are not afforded with Water Supply House service connections and not served with Public Fountains and slum area throughout the year . To mitigate the water scarcity situation 206 bore wells of 30 m to 125m depth drilled and fitted with India mark II hand pump but water from these borewells are Brackish and the public is using this only for non – portable purposes. Affluent people are managing with their own arrangements. Private tanker operations are also selling water in small quantities of tanker.

It is proposed to supply bulk quantity of 5.0 MLD water from the combined water supply scheme from MANNUR and few other habitation with an estimated cost of Rs. 13.85 Crores . For which Council has passed the resolution to implement the scheme through TWAD Board. If the above scheme is implemented , the water problem in Sivakasi Municipal area can be solved .

There are 6 water supply zones in this town. They are in the west of Railway line. Zone-I and Zone-II are covered with the wards 25, 30, 29, 31 and Zone III to the east of the Sattur Road and Southern wards like 22, 2, 1 etc. Zone IV covers the wards to the west of the Srivilliputtur road and those towards the North like 3, 4, 5 etc., Zone 5 covers east of the Thiruthangal Road which covers the wards 10, 11, 12 and 13.

Ward 3, 20, 21, 27 and 28 which are to the east of the railway line towards the hills are yet to be provided. Water is supplied to these wards are through water tankers.

Local water supply Sources

- Name of the River : Vaipar River
- Location of the River : Vembakottai village
- Name of the Dam : Vembakottai Dam
- Date of Commencement : 30.12.1986
- Irrigation area : 8100 Sq.km
- Production of food : 6273 Tonnes
- Full water level : 87.50 mts
- Sea level : 80.500 mts
- Full depth of water : 7.00 mts

Transmission Main

Two transmission mains , 300mm CI and 400 mm AC for scheme- I and scheme-II respectively has been installed to pump the water to Sivakasi Municipality from the water supply headworks .

Scheme Raw water transmission main Clear water transmission Main

I	150 mm CI / 250 m	300 CI / 14,360 m
II	315 mm PVC / 1000 m	400 AC / 14, 360 m

Feeder Main

Sl.No	Location of OHT	Capacity (LL)	Booster station	Feeding from	Pumping HP	Detail Duty
1	Kamarajar Road	9.00	I		50 HP	2160 lpm X60m head
2	Gandhi Nagar	3.00	I	Direct	7.5 HP	450lpmX29 m
3	Kamarajar Road	12.00	I	Booster	15 HP	1980 lpm X 22 m
4	M.G.R. Thidal	3.00	II	Booster	20 HP	1956 lpmX22 m
5	Coronation colony	3.00	I	Booster	20 HP	1956 lpmX22 m
6	Palaniandavar colony	3.00	I	Booster	10 HP	738 lpm X 26 m

Details of Existing service reservoirs :

Details of reservoirs and its capacity , year of construction , staging height , average ground level , lowest water level (LWL) and maximum water level (MWL) are furnished below :

Sl.No	Location of Service reservoir	Capacity (LL)	Year of Construction	Aug	LWL	MWL	Staging Height
1	Gandhi Nagar	3.00	1990	108.23	119.23	123.23	11.00
2	KamarajarRoad	12.00	1990	102.70	115.00	118.00	12.30
3	Kamarajar Road	9.00	1960	102.45	108.30	110.80	5.85
4	MGR Thidal Road	3.00	2001	102.85	114.85	118.00	12.00
5	Coronation Colony	3.00	2001	104.29	116.29	119.44	12.00
6	Palaniyandavar Colony	5.00	1990	102.93	113.93	117.93	11.00
7	Cattle Shed	3.00	2001	101.43	113.43	116.58	12.00

Details of distribution and transmission system

Sivakasi Municipality maintains mobile water tankers for supplying water to unserved and slum areas year round. Details of water supply facility provided by this Municipality to various areas which is furnished below :

Type of Carrier	Capacity (Litres)	Units	Trips per day	Water supply/ day
Lorry	9,000	2	6	108,000
Lorry	6,000	1	6	36,000
Tractor with trailer	5,000	2	6	60,000
Power Tiller	1,000	2	10	20,000

House Service connections

A total of 11290 House Service Connections have been provided of which 8348 connections are domestic and remaining are commercial / industrial. All non-domestic connections are metered . Details of existing water supply connection are furnished in the following table :

Details	Water supply connection	Tarrif rate Rs. / Month
Total HSC's	11666	--
Domestic	10510	61.00
Commercial	292	301.00
Industrial	588	301.00