

**TWAD Board takes up SWOT analysis on all the 556 CWSS all over the state for timely delivery, assured quantity and defined quality of water**

**Dr.C.N.Mahesvaran.,I.A.S., Managing Director, TWAD Board has conducted Video conference meeting with all the Executive Engineers, Assistant Executive Engineers, Assistant Engineers of TWAD Board, Assistant Director (Panchayats) and Assistant Director (Town Panchayats) of the respective Districts on 07.06.2019 (Friday) and advised to effect water supply until tail end beneficiaries and clear all the hurdles on war footing efforts:**

TWAD Board is providing safe potable equitable drinking water to the tune of 4.23 crore people of Tamil Nadu except Chennai metropolitan area, with the present supply of 1,816 MLD against the designed quantity of 2,146 MLD of water, covering 8 Corporations, 67 Municipalities, 347 Town Panchayats and 48,948 Rural Habitations.

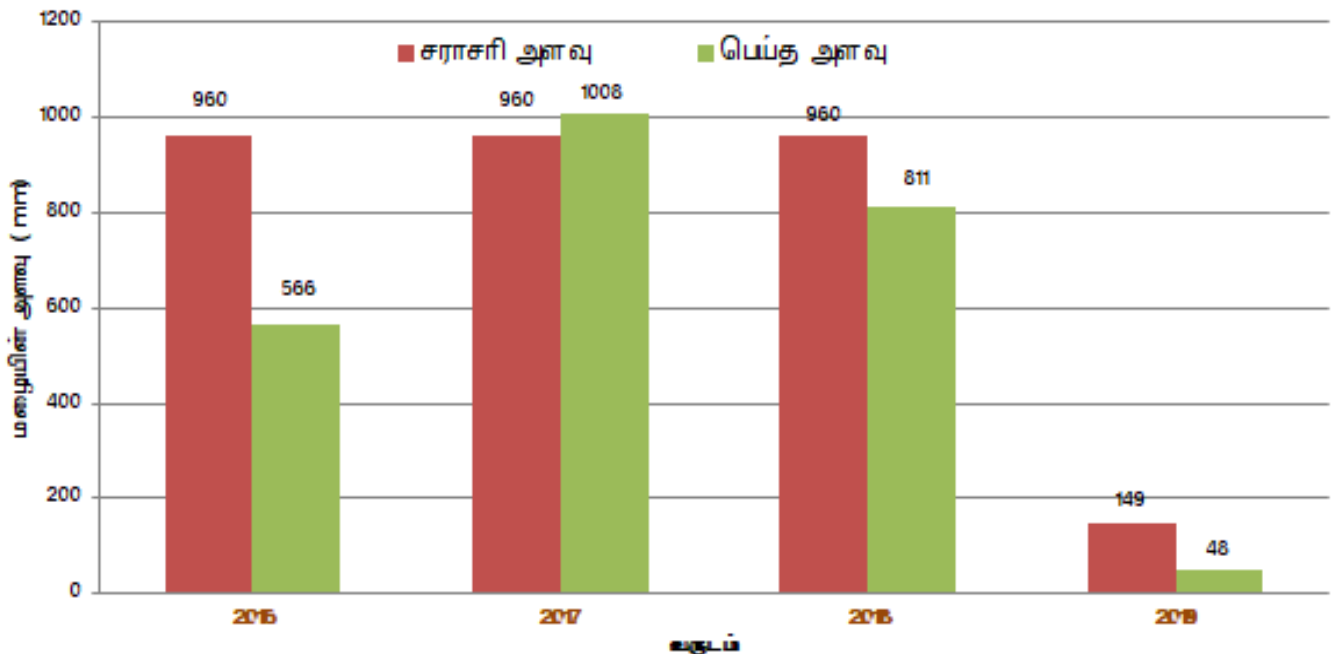
**The reasons for shortfall of water supply apart from the less rain fall is as follows:**

- a. Tamil Nadu has no perennial river source to increase the water table in the river basins as we find in the case of Northern states like Uttarpradesh, Uttarkand, Gujarat, West Bengal, Odhisha and Maharashtra.
- b. Tamil Nadu consists of 17 River Basins, which are Chennai Basin, Palar Basin, Thondiyar Basin, Pennaiyar Basin, Vellar Basin, Cauvery Basin, Aliyar Basin,

Agniyaru Basin, Vaigai Basin, Gundaru Basin, Pambar Basin, Kottakaraiar Basin, Vaippar Basin, Tamiraparani Basin, Kallar Basin, Kumari Basin and Nambiyar Basin which covers from Tiruvellore to Kanyakumari. No perennial river exists in the state of Tamil Nadu except Thamiraparani.

- c. Tamil Nadu falls in rain shadow region as it lies on the eastern (lea ward side) side of western Ghats, this hampers the rainfall pattern during South-west monsoon to benefit Tamil Nadu in the last two years.
- d. Tamil Nadu consists 73% of Hard rock, 27% are in soft rock. Due to over drawl and less percolation the Hard rock yields very less. Due to over drawl and sea water infiltration into land Soft rock yields salinity. Hence Water Resources of Tamil Nadu are limited and scarce.
- e. The total average rain fall received during the year 2018 is 811mm against the total normal rainfall of 960 mm. The Rainfall also vary from year to year. During 2018 actual rainfall is 811 mm against normal rainfall of 960 mm.

**தமிழ்நாட்டின் சராசரி மழை அளவு - மழை பெய்த அளவு - 2016-2019\***



இணைவி முத்தல் டிசம்பர் மாதம் வரை வருட மழை அளவு

which is set to contribute from South west monsoon and north east monsoon rainfall of 450 mm and 510 mm respectively as seen below.

- f. The normal rainfall is taken in to account of an average of 50 years actual rainfall. Departure is -15% nearly 18 districts have experienced normal rainfall deficit rainfall Departure is 20% to -59%.
- g. The Ground Water levels are being measured through the Assistant Hydrogeologist of TWAD Board who are measuring the water level with the help of electronic device namely water level indicator in 1286 Observation Wells across the state by TWAD Board both in pre monsoon and post monsoon. The water level is observed 16 Districts are greater than 15m Below Ground Level.
- h. The consistency in the construction and maintenance of Rain water harvesting structures by the people is very poor.

Hence, All the officials of TWAD Board including Engineering, Hydrogeology, Water quality wings have been directed to take up the SWOT analysis proactively to improve the service delivery of TWAD Board, in all the combined water supply schemes to effect and ensure the supply of water.

***What is included in SWOT (Strength, Weakness, Opportunity and Threat) Analysis?***

**SWOT analysis on Head Works:**

**The strength and weakness of the water source should be scientifically explored taking the following points into consideration:**

- a) Sustainability of the water in the storage reservoirs
- b) Money available to take up the supporting works – source augmentation,
- c) Flow diversion channels towards the Collector or infiltration well
- d) construction of baby wells
- e) drilling side bore
- f) flushing of wells
- g) deepening of open wells
- h) radial arms cleaning
- i) Public objection in putting new wells
- j) Availability of water in the reservoirs-wetting of river
- k) Power supply

### **SWOT analysis on Major Structures:**

#### **Major structure includes :**

- a) Sump,
- b) Master balancing reservoir,
- c) Brake pressure tanks
- d) Ground level service reservoirs,
- e) Over-head tanks.

### **SWOT analysis on Pipe lines:**

- a) The Pipe carrying capacity -Age, Class, material.
- b) Vulnerable reaches prone to breakages
- c) High way, Railway crossing and culvert crossings

- d) illegal tapping of water
- e) Un authorised drawl of water
- f) Damages due to cable laying, EB poles and other underground utilities

Water is essential for survival of all living things like plants, animals and mankind. Hence TWAD Board requests, instead of acquiring Property and any other assets or money, the Managing Director of TWAD Board appeals or requests to general public, Philanthropists, Non- Governmental Organisations (NGOs) ,Corporate Social Responsibility (CSR), Social Welfare Peoples to come forward to execute the Rain Water Harvesting structures in mission mode which is the lifesaving assets for the future generations and to the great nature. He also stated that TWAD Board has prepared a Block level Atlas (Hydro-geo-morphological maps) which shows the highly potential areas for construction of rain water harvesting structure and water available area for drilling of bore wells. The Atlas is available at all the Collectorates of the respective Districts, Project Director's office of DRDA and with the Executive Engineers, TWAD Board.

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