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Poondi Reservoir- From Nook to the Corner

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Abstract

A reservoir is an enlarged lake behind a dam, it may be naturally formed or artificially built. The water stored in reservoirs are supplied to the urban areas, used for irrigation, generation of hydroelectric power and increases the groundwater level in huge manner. The sathyamoorthy reservoir or the poondi reservoir in Tiruvallur district is known for its importance in quenching the thirst of Chennai people during the drought period and today it is one of the major tourist attractions in the Tiruvallur district.

Keywords: Sathyamoorthy Reservoir, Tiruvallur, Groundwater, Irrigation

Introduction

Tiruvallur, a fast developing district in the southern state of Tamil Nadu. Existence of many academic institutions, production units, religious monuments enhances the strategic importance of the district. sathyamoorthy reservoir also popularly known as the **Poondi reservoir** across the kotralai river with a capacity of 2573Mcft serves as the strong identity and a well known tourist spot in the district.

An Historical View

The poondi reservoir in Tiruvallur district near Chennai was built during the British period. This has been quenching Chennai's thirst for last 80 years. There are four lakes such as Poondi, cholavaram, puzhal and sembarambakkam for the drinking needs of Chennai. In this, poondi reservoir was the first reservoir constructed for the drinking water in Chennai. There were many disputes with Karnataka for Cauvery water, while the poondi reservoir has been getting water for 40 years through an agreement with Andhra Pradesh in a smooth manner. In 1939, During the period of second world war, there was a severe water shortage in chennai due to the failure of Northeast monsoon. Sathyamoorthy Iyer was the mayor of Chennai at that time and Anantha rao being the municipal Engineer, together they prepared a report to construct a reservoir in poondi village to quench the thirst of Chennai people. At the time of world war, the British government scrutinized the report on detail and approved the project report. The British government allocated Rs.61.04 Lakhs for the construction of reservoir, giving 2 shares as loan and 1 share as grant to Chennai corporation. On August 8 1940 Arthur Hope, Mayor of Chennai province laid the foundation for poondi reservoir.

Poondi Reservoir is situated in the central part of Kotralai River. More than 10 villages were removed for the construction of this reservoir. Also, the historic Oondreeswarar temple in the middle of the reservoir has also been removed and consecrated on the banks. When the water dries up in this reservoir, you can see the ancient Oondreeswarar temple. It was planned to construct the reservoir within 2 years, but due to practical difficulties at the time of world war it took 4 years to complete the project with the

expenditure of Rs.65 lakhs. When the construction works were completed, sathyamoorthy Iyer who was responsible for it was not alive. Poondi reservoir was inaugurated by Arthur Hope in June 1944. The British government did not accept the demand of his supporters to name the Poondi reservoir after Sathyamoorthy. After the independence of the country, the resolution was passed in the corporation meeting held in 1948, poondi Reservoir, the first to be built for drinking water in Chennai, was named after sathyamoorthy.



Poondi reservoir, Poondi, Tiruvallur district

The Telugu –Ganga Project

During the Northeast Monsoon, the lakes that supply drinking water to Chennai will overflow due to rainfall. At the initial period the water was sufficient, as the population of Chennai increases day after, an accord between Andhra Pradesh government and Tamil Nadu government was signed for Telugu- Ganga project on 18th April 1983, for drawing 15 TMC of water to Chennai city from Srisaillam reservoir through somaseela and kandaleru reservoirs. Ultimately Chennai city received 12 TMC of water, after the Loss of 3TMC through evaporation and seepage.

From September 1996, water is received at Poondi Reservoir from Kandaleru Reservoir in Andhra Pradesh through 152 km. long open canal up to Tamil Nadu Border near Uthukottai. Then, the water is conveyed through 25 km long open canal to Poondi Reservoir. From Poondi Reservoir, water is transferred to Redhills and Chembarambakkam Lakes through Link/Feeder canals and supplied to city after treatment. Key point to note is Somaseela reservoir reaches 22TMC in capacity and Kandaleru capacity exceeds 8TMC before water can flow in the lined canal to "zero point" i.e. Tamil Nadu border point.

Zero point – the point where the water is transferred from Andhra Pradesh (i.e., from Srisaillam reservoir) to Tamil Nadu via Krishna canal.



Zero point uthukottai, bridge, pedukuppam, Andhra Pradesh- 602026

Construction of Pump Houses

The Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB) supplies around 650 MLD of water everyday, and the Poondi reservoir is one of the major sources of water. Currently, water from Poondi is being carried by means of an open canal to Cholavaram and from there to Red Hills. Nearly 35 MLD of water is wasted due to evaporation. With CMWSSB transferring the water directly from the Poondi reservoir to Red Hills through a closed pipeline running to about 47 km, there will be no wastage of water. The pumping station was constructed to increase the force of water sent through the canal. There are five sumps with a total storage of 3 million litres. The investment for the facility is Rs 9.11 crore ; it has been carried out under JNNURM. One major advantage of the facility is that we can draw water even if the storage level in Poondi is very low. The 45-km line was earlier used to transfer water pumped from agricultural wells to Red Hills and later distributed to the city

Capacity of Poondi Reservoir

Poondi Dam is 770 feet long and 18 feet wide. With a water level of 35 feet, this dam can store 3,231 million cubic feet of water. 1 lakh 20 thousand cubic feet of water per second can be released from this dam with 16 sluices during monsoon. Initially 2,750 TMC . Water was stored. After that, it was planned to store additional water in the lake and work was carried out from 1990 to 1996. After this, at present 3.231 TMC. Water is stored. During the rainy season, when the lake is full, the excess water is released into the sea through the Kosasthalai River.



Hydraulic particulars at poondi reservoir, poondi , Tiruvallur district.

Conclusion

Poondi reservoir, which is rich in historical importance , is also a major tourist attraction for the people of Tiruvallur district. Currently it is found in a damaged condition without adequate maintenance. Steps are being taken to improve it as a tourist destination.

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