

## **Water Governance through Lakes in Medieval Tamilnadu - A Study**

**Dr. B. Perundevi**

Assistant Professor, Department of History, Arignar Anna Govt, Arts College, Musiri

### **ABSTRACT**

*In India Water Management has been practised since time immemorial. References of this practice are found in ancient religions texts and history. Water management system of ancient lakes through inscriptions and ancient texts which may be helpful for future planning of revival of our ancient lakes for better storage of excess flood water and rainwater management for irrigation and drinking water purpose. Hence, protection and preservation of water bodies especially the village tanks is need of hour, other wise the human beings would be banished. The medieval monarchs of Tamil Nadu kept a system of constituting of a village tank committee in each village. Each committee involved in maintaining of tanks, digging of new one, desilting, preventing of negligence by Government authorities, planting of trees on the banks of the tank, repairing of embankments, generating revenue by taxing users, making aware of people about the draught and saving of rain water etc. The committee resorted to arrange for establishment of private trusts in the name of tanks. In those days establishing of private trust especially for the upkeep of the tanks was considered as a social responsibility. Such an innovative system must be retrieved and practiced at this moment. In this paper an attempt is made to throw light on the Water Management of Tamil Rulers and also describes the Water Management through lakes in medieval tamilnadu. Descriptive methodology is followed in this study.*

In all the cultures of the world, water is given a high prominence. Similarly, in respect of the socio-religious-cultural tradition of India, water is accorded a very high and unique status. This can be observed during religious/social customs and practices, festivals and so on. Water is the most important requirement for performing religious rituals and social ceremonies as it is considered the basic means for purification of body and soul in Indian culture since ancient times. On auspicious occasions like marriage and other religious functions, metallic pitchers, symbolizing rivers, are used. Water and fire are considered as the divine witnesses to all human deeds; hence all rituals and rites are performed in their presence.<sup>1</sup> Several beliefs and practices are observed.

South India was well known for tank irrigation system and there are a number of lakes, many of which might go well back to the beginning of Iron Age. It has been noticed that the Megalithic sites and burials are found clustering around the ancient villages near about the lakes ( Sanur near Madurantakam lake and Kunrattur lake near Sembarambakkam lake). According to some scholars, tank irrigation system was started by the Megalithic people in South India.

Total quality management system of ancient lakes through inscriptions and ancient texts which may be helpful for future planning of revival of our ancient lakes for better storage of excess flood water and rainwater management for irrigation and drinking water purpose. As for the study says there are lot of evidences and informations from medieval inscriptions and ancient text mentioned about planning, implementation, restoration, conservations, preservation, management and distribution of water through ancient lakes. The essence can be taken from the above subject for better planning of storage of water under our National Lake Conservation Plan under Ministry of Environment. Already 62 lakes selected from the 1800 water bodies in India for revival of lakes.

In Tamilnadu, more than 200 ancient manmade lakes developed under various Chola, Pandiva and Pallava kings. When it comes to effective conservation, distribution and management of water, one cannot dispense the role of King Karikal Chola, who built the Grand Anicut across River Cauvery. There are several historical evidences to prove that ancient Tamil rulers had effective water management systems in place in their respective kingdoms.<sup>2</sup> Even Chola kings restored 8 th century lakes during 10th to 14th century through Lakes Board ( *Yeri Variyum*) and also donated lands for self sustainable of maintenance of particular lakes and also levied taxes for managing the lakes. Further research on this subject can highlight more for resolving the crisis which, we are facing for the past years. Linking of lakes and inlet for excess flood water will give a solution for future as mentioned by our ancient text and inscriptions.<sup>3</sup> India stands as an agrarian country from the 6th-7th century onwards. The Pallavas and the Pandyas were the early dynasties deeply involved in the promotion of agriculture; there by the developed number of water sources. The rivers were

intercepted by constructing the dams in between and many sluices, creating the water sources and also assured the supply of water according to the needs of the area and crop. Pallavas were popular for their developing lakes in remote areas and called as '*Kaduvettis*'. Even some of the lakes were named after the kings and persons who initiated the work like Magendra thadagam lake constructed at Mamandur by Magendrarvarman, a famous Pallava king. Boats were used for removing sediments and silts from the lakes. Revenue from the villager and donation of lands by the kings also helped in managing the lakes by the lake board (*Yeri varyiam*). Additional revenue was generated from the tendering of fishing rights to the local communities. The efficient design of lake also mentioned in the ancient text Purananuru (puram 118) by Kapilar. It says that for storing of more water the lake should be constructed as 8th day's moon. Such lake design is common in many lakes of Thirunelveli district.

The Pandiya kings constructed check dams across River Vaigai. King Maravarman Arikesari, also known as Koon Pandiyan, who ruled Madurai during Seventh century built a check dam across Vaigai and named it after himself. It is near the Kuruvikaran Salai road and archaeologists have found a stone inscription there. Likewise, King Parakrama Pandiyan constructed a check dam Sitranai in Kuruvithurai near Madurai. He also extracted granite from the nearby hill Kuruvikal and built a stone quarry. Stone inscriptions in Kuruvithurai Perumal Temple record this.<sup>4</sup>

During medieval period, the following boards were fixed for better management of water bodies with local participation. Yeri Variyam (lake board), thotta varyiam (horticultural board), panchavara varyiam (removing sediment from lakes), Kalani varyiam (related to paddy field), Kanaku varyiam (accounting for financial management of lakes) and Kalingu varyiam (for sluice management).<sup>5</sup> The rulers did not end with that. They appointed guards to stop people from polluting and created a corpus fund for the maintenance of the water body. The board used the money to desilt the lake and to distribute food and clothes for victims of floods. They also let the lake on contract for fishing and for ferrying people on coracles to generate funds. For effective distribution there are different types of sluice gates like *Pulikan madai* (which has three outlets). Depending upon the storage the water is released through these outlets. The one with seven outlets is located near Srivilliputhur. It is constructed by the Koon Pandiyan and to control the flow a pillar is erected at the centre of the main sluice gate.

### **WATER MANAGEMENT DURING CHOLA PERIOD**

Agriculture was the mainstay of the people of the Chola country. The Chola country was noted for its fertility because of the flow of the Kaveri, its tributaries and branches. The lands of the region were broadly classified into wet-land (*nirnilam*), dry land (*kollai*), and the housing lands (*thottam*).<sup>6</sup> Though rain was the chief source of irrigation, rivers, canals and artificial reservoirs were also formed to ensure regular supply of water to fields. There was remarkable agrarian expansion during the rule of the imperial Chola Dynasty all over Tamil Nadu and particularly in the Kaveri Basin. Most of the canals of the Kaveri River belongs to this period e.g., Uyyakondan canal, Rajendran vaykkal, Sembian Mahadegvivyaykkal.<sup>7</sup> There was a well-developed and highly efficient system of water management from the village level upwards. The increase in the royal patronage and also the number of *Devadana* and *Brahmadheya* lands which increased the role of the temples and village assemblies in the field. Committees like *eri-varyiam* (tank-committee) and *tottavariyam* (garden committees) were active as also the temples with their vast resources in land, men and money. Considerable water bodies and tanks were built during the Chola period. But some few outstanding may be briefly mentioned. Rajendra Chola built a huge tank named Solagangam in his capital city Gangaikonda Solapuram and was described as the liquid pillar of victory. About 16 miles long, it was provided with sluices and canals for irrigating the lands in the neighbouring areas. Gangaikondacholapuram, now an insignificant village, is in the Udayarpalayam Taluk in Ariyalur District, 245 km from Chennai and 51 km from Chidambaram. It is also 61km northeast of Thanjavur and 34km northeast of Kumbakonam. It is connected to all other important cities like Trichy, Kumbakonam, Thanjavur, Chidambaram, Cuddalore, and Puducherry through bus routes. It is bound by the celebrated Chozhagangam Lake, in the west and by the River Vadavaru in the east. Gangaikondacholapuram owed its origin to Rajendra Chola-I who constructed the city to commemorate his conquest of the kingdoms lying on the banks of the Ganges. The name of the town means, "The town of the Chola who conquered the Ganga". Rajendra I, during one of his campaigns to the north, brought water from the river Ganges in a golden pot, and sanctified the reservoir *Ponneri* or *Cholagangam*. The notable lake caused to be dug by Rajendra Chola I was the *Chozhagangam* at Gangaikondacholapuram. After defeating the ruler of Bengal, the holy water of Ganges was brought and

Rajendra erected a liquid pillar of victory in the newly built capital.<sup>7</sup> The *Chozhagam* lake is now known as Ponneri. It has a bund of considerable height and a length of more than 5 km. At full water level, it has a water spread of nearly 130 square kilometers.<sup>8</sup> Once it had surplus water and input channels from the Kollidam river and other sources must have been connected to the palace moat.<sup>9</sup> The lake itself is now divided into two parts by a road running across Gangaikondacholapuram with Jayamkondacholapuram in the west.<sup>10</sup> The construction of the tank, its maintenance, and its contribution to the agricultural fields go a long way in the history of irrigation works in Tamilnadu. The care showed by the king and the local authorities in this regard is worth mentioning. It was the duty of the local authorities to maintain the lakes properly. They had to get the silt removed every year, before the rain set in. They had to secure the proper depth needed to store the full supply for the next year. Special grants were made for the same. A special cess called *eriyam* was levied for the repair of the tank.<sup>11</sup> The sabha of *Nelmali Chalukkulakala chaturvedimangalam* set apart certain income as *eriyam* for the maintenance of the local tank.<sup>12</sup> It means that they had the responsibility of looking after the irrigation tanks (particularly *Chozhagam*), the water sluices and channels. They showed also over-see planting of useful trees and fruit bearing trees like coconut, mango and plantain. The committee supervised garden lands for proper upkeep of groves and cultivation of sweet smelling flower plants and shrubs like *maruvu*, *damanaka*, *iruvelli*, *senbagam* and *sengalunir*, digging of big wells, providing mills for pressing oil, and protecting coconut and palmyra trees by forbidding toddy-tapping. The responsibilities which were usually borne by the state devolved on the Temple Committee. It was concerned about the prosperity and well being of the village.

Another very large lake of this period, which even today seems an important source of irrigation, was the Viranameri (Veeranarayanapuram Lake) near Kattumannarkoil in Cuddalore district founded by ParantakaChola. Veeranam Lake is located 235 km from Chennai, is one of the water reservoirs from where water is planned to be supplied to Chennai. The Veeranam project, to supply water to Chennai, was conceived in 1967 by the then Chief Minister of Tamil Nadu, C. N. Annadurai, and executed under his successor, M. Karunanidhi. The project's completion in 2004 by J.Jayalalitha. As the length is 14 km this is the longest man made lake in the world. The credit goes to ancient people who have done this job with ordinary hand made tools. Veeranam Lake was built in the Tenth Century during the time of Greater Cholas, from 907–955 AD and is an 16-kilometre long dam in northern Tamil Nadu. It was created by Rajaditya Chola. he named it after a title of his father Parantaka I Chola. This veeranam lake gets water from Kollidam via Vadavaru River.

Other famous lakes of this period are Madurantakam, Sundra-cholapereri, Kundavai-Pereri<sup>13</sup>. As Cholas set up many lakes during their time, the land was prosperous throughout the year. They saved rainy water and used it in a proper way without wasting it. Due to this, the ground water level never decreases. In the administrative set up, water board had an important place. Throughout the year for maintaining the lakes and such other water bodies, land was donate in the name of *kulapatti* and from the income derived from it attempts were made to save the lakes. In those days whoever engaged in the cause of saving the banks of lakes and rivers died while attending duty were worshipped in the place where they gave their life or in Ayyan or Pidari temple. In those places hero stones were laid. It is pertinent to note that such worship continues till date. In the inscriptions of Cholas and Pandyas, there were references about the gifts of lands, known as *uthirapatti*, to those who gave their life for the cause of saving water bodies. In order to save others these great men gave their lives and they are worshipped, which is proved from the herostones.

Lakes were given much importance in those days. Predominantly an agrarian community dependent on water source, our ancestors knew the importance of conserving water. They were farsighted, sensitive to environmental issues and better equipped than the current times.

#### FOOTNOTES

1. Sharma K.N, Environmental Protection and Water Reverence in Ancient Indian Culture Nyaya Marg, Chanakyapuri, New Delhi, 2000. p.156.
2. Vaidyanathan, A (ed), 'Tanks of South India', Centre for Science and Environment, New Delhi, 2001, p.54.
3. S.I. I. Vol. III, Pt. III, P. 386.
4. A.R.E. Ep. No. 304 of 1908.

5. A.R.E. Ep. No. 1918 , p.49
6. V.Balambal, *Studies in Chola History*,: Kalinga Publications, New Delhi 1998, p.183.
7. F. R.Hemingway, *Tanjore Gazzeter*, Vo-I, Cosmo Publication, 2000.
8. S.I.I., Vol., III, No.205, Tiruvalangadu Copper Plates of Rajendra I.
9. T.K.Venkatasubramanian, *Chiefdom of State: Reflection on Kaveri Delta Social formations*, Proceedings of the Indian History Congress, University of Madras, 57<sup>th</sup> Session, 1996.
10. S.R.Balasubramanian, *Middle Chola Temples*, Thomson Press (India) Limited, Faridabad: 1975, p.254.
11. R.Nagasamy *Gangaikondacholapuram*, State Department of Archaeology, Chennai,1970, p.42.
12. S.I.I., Vol.Vii, No.805.
13. A.R.E., 156 of 1942- 43.
14. Lallanji Gopal, *History of Agriculture in India, Up to c. 1200 A.D.*, *Concept Publishing Company*, p.501.