CONTRIBUTION OF EARLY PANDYAS TO THE AGRICULTURAL FIELD IN VIRUDHUNAGAR DISTRICT – AN INSCRIPTIONAL STUDY

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ABSTRACT:
The inscriptions of Virudhunagar District mention a number of crops grown in the medieval period. As already noticed the lands were classified as wet, dry and garden. The dry crops grown were Varagu and Thinai. In the wet land paddy was cultivated. The tax panchupili shows that cotton was also grown in this dry belt. The pattern of growing puses, oil seeds and cotton are the same as that of the medieval period. Irrigation is the artificial application or process of supplying water to crops and regions where the rainfall is insufficient or comes in the wrong session.

KEYWORDS: medieval period, artificial application, pattern of growing puses.

INTRODUCTION
A good irrigation system was the basic requirement for agriculture. Virudhunagar District as the rest of Tamil Nadu depends upon monsoon. Virudhunagar District as a part of erstwhile Ramanathapuram District lies in a drought prone sector. Though rivers Vaippar, Arjuna and Gundar flow through the district, they are not perennial rivers. The inscriptions engraved on the tank bunds and sluicer throw light on the irrigation system of the period of study. The existence of various tanks, their location and their names can be noticed from the inscriptions while registering the donation of lands. Due to its topography, tank irrigation was given importance in medieval period.

CONSTRUCTION OF TANK SYSTEM
Construction of new tanks, expansion of agricultural farm lands and establishment of new settlements were carried out by the rulers from the Early Pandiyas onwards. The tanks have different components such as catchment area, diversion weir, feeder channel, tank bund, sluices, surplus weir, command area and field channels. The sluices are mentioned in the inscriptions as madai, kumili, madahu, tumbu and surungai. The irrigation tanks are also referred to as eri, endal, tankal and kanmai. The construction of tank is considered as one of the seven great meritorious acts of man. The rulers along with the Local Assemblies constructed and maintained the tank system in Virudhunagar District.

Tank System Under the Early Pandyas
The early pandyas rulers gave importance to irrigation system to development agriculture and
thereby filled their coffers through taxes and also to obtain religious merits. T.M. Srinivasan says that innumerable remains of ancient reservoirs are found in Madurai and Ramanathapuram District. Channels taking off from rivers and cut across rivers and streams helped to irrigate lands away from the course of the river systems. To conserve water during flood and monsoon, complementary tanks were also built wherever the gradient and levels of lands would permit. This should have called higher engineering skill and knowledge of the terrain. Thus the pandyas of the Early and Medieval period took keen interest in the promotion of irrigation facilities.

The chieftains of the Pandya country also took part in the endeavour of promoting agriculture by providing irrigation facilities. The unique example is the activities of Etti Sattan, a feudatory under the Pandya rulers Srivarasa Srivallabha and Varaguna II, He was also known as Iruppaikudi Kilavan. He was a feudatory under the Pandya rulers srivarasa srivallabha and varaguna II.

**Four inscriptions**
1. Irukkankudi Tank inscription
2. Irukkankudi Rock inscription
3. Nenmeni Tank inscription
4. Chinnakolapatti inscription

Provide details of his works in enhancing irrigation facilities in his area. His irrigation works are construction of new tanks, deepening of the old tanks, demolishing the earthen bunds in the existing tanks and strengthening them with stones besides renovating old sluices. The inscription mentions that he built a tank called Kilavaneri (perhaps named after him). He built a new tank at Kumanamangalam. At Srivallamangalam he constructed a tank and named it as Tirunarayaneri.

Like Iruppaikudi Kilavan other Pandyan chieftains and officers too engaged in construction of tanks and its components. Veppilaipatti pillar inscription mentions that Arayan Madurantakan of Karunilakudi who was a chieftain under the ruler Srivarasa Srivallabha constructed bunds of the tank in the village. The Chinnakolapatti inscription mention that Tirunedumaran constructed a sluice at Perungulam. Anmarnadu Chieftain Sankaran Arulakki (a chieftain of srivarasa srivallabha) constructed a sluice and a channel at Parankusapputtur perungulam. Hence these constructions were named after him by the mahasabha of srivilliputtur. It is to be noted that during the reign of srivarasa srivallabha his chieftains engaged in construction of tanks thereby improving the irrigation facility of the Pandya country in general. By his yeoman services, Etti Sattan towers among his contemporary chieftains.

The Irukkankudi rock inscription mentions that Etti Sattan dismantled old bunds of the tank, strengthened them with stone and renovated a specific length of the bund during the sixteenth regnal year of srivarasa srivallabha. He renovated and extended certain portion of the big tank in Nenmeni during the eighteenth regnal year of srivarasa srivallabha. Another inscription issued in the eighteenth regnal year of Sadaian Maran mentions many tanks benefitted from the same chieftain’s work. He dismantled the old earthen bunds and built instead a stone embankment, Maraneri, Vallikulam, Tirumalri, Nerimadaleri, Arasangulam, Sengulam and Alangudi water bodies were maintained by him.

**Special Contribution of the Early Pandyas in the Tank System**

The epigraphs point out few technical contribution of the Early Pandyas in the tank system. Usually when the dredging was carried out, the tank was used to strengthen the bund. But in the Early Pandya period, stones were used to dress the inner portion of the tank bund so that bunds were strengthened and it would prevent any breach due to heavy rain.

Another technique was that when dressed stones were laid down the masons followed string method. The Irukkankudi inscription refers it as nulititeru vittu (string line). By this method stones were slantingly placed in an uniform manner.

Earlier burnt clay pipes or holed Palmyra tree trunk were used for sluices. In the Early Pandya period stone sluices replaced the old one. Thereby sluices could withstand the water pressure and
endured for a long period. Artistic stone sluices of the later period are available in Tiruttangal and Paralachi.

Irrigation system Under Medieval Pandyas

The Medieval Pandyas were feudatories of the cholas but functioned independently. They took care of the irrigation system and the maintenance work. The Veppilaipatti inscription refers that during the third regnal year of Jatavarman Srivallabha i.e.1104 A.D. Urani Araiyan Madurantakan the chieftain of Karunilakkudi Nadu in irunjonadu division built the bund of Veppilaipatti tank. The granite pillar on which the inscription is inscribed was planted as a boundary stone. To protect the area of the tank, the Pandyas had the unique system of planting boundary stones.

An inscription on the stone boulder near Tiruttangal (the ruler's name is not mentioned) mentions that the stone boulder is the northern boundary stone of the four stones set up on the four sides of the big tank of Anaiyur in Karunilakkudi Aruppukottai inscription mentions that a tank in Sengattirukkai was constructed by Arular, Alagapperumal son of Tiruvalavay Udayian chologangan in saka 1115 (1193 A.D).

During the Medieval Pandyas period individuals too were engaged in construction of tanks. An interesting record from Tiruttangal issued during the reign of Jatavarman Kulasekhara (1070-1120) mentions that Tirumangai, wife of Uyyaninraduvan alias Udayan Kalingarayan of Andhanur muthurukkurram gave two ma of land for the expenses of those who renovated the tanks. Thus rich ladies too donated. But these donations were pertaining to the tanks of the temples alone.

Irrigation System Under the Second Pandyan Empire

The later Pandyas gave much importance to irrigation. Their constant war with the neighbouring kingdoms and their imperialistic invasions demanded more money. Hence they gave equal importance to agriculture which was the backbone of the revenue of the government. New tanks were carried out. Aruppukottai inscription records the construction of a tank in sengattirukkai idathuvali by Arular Alagapperumal, son of Tiruvalavay Udayian chologangan.

Individuals too excavated tanks. The Tiruttangal inscription mentions the big tank of Aviyur in Karunilakkudinadu was a property of Gurukulatharaiyan, an important officer under Maravarman Sundara Pandya I. Perhaps the tank might have been dug by him government officials too engaged in this great endeavour viluppanjur inscription mention a tank Puravuvari. The tank might have been excavated by the Puravuvari(Revenue) department of the Pandyas. Hence it had the name of them. Thus with one another the rulers, individuals and government officials constructed tanks which indirectly led to the economic prosperity of the country.

In describing the boundaries of the donated lands few tanks are mentioned. The Arjunapuram inscription refers two tanks named as Panikkkan kulam alias Alagiya Manavalapereri and Ulaikulam alias virapandyapereri. The second tank might have received the financial aid from Virapandya, the kings brother. The expansion of irrigation facilities coupled with the establishment of new settlements improved the economy of the second Pandyan empire.

Irrigation System and Its Administration

The king as head of the State had control over the irrigation system. He endowed for the maintenance of tanks. But the actual maintenance work was carried out by the Local Assemblies. During the time of natural calamities or during the monsoon failures, the king cancelled collection of taxes from the lands which were under the command area of a particular tank. The eleventh regnal year inscription
of Sundara Pandya from Aruppukottai mentions about it. Sola Ganga Devan an officer provided a land grant which was under the command area of the tank Bugalokaganda pereri for the worship of the temple. The karanmai (the right of cultivation) was given to an individual. He had to pay taxes accruing on them to the temple. The rate of taxes was fixed as three kalam of each ma of land or ½ of what prevailed among other Devadana lands. In this tax fixation, the crops of full yield alone were taken into consideration. But if the cultivated land had suffered damage or failed crop due to water scarcity, the land was excluded from the assessment of tax. Thus the land fully cultivated were taken into account as tax-payable lands. If the cultivation of paddy failed due to natural calamities it was considered as taxless land. Thus the Central Government had its hold mainly on taxation only. The day-to-day administration was left in the hands of Local Assemblies.

Though the King controlled all the lands of his kingdom, the irrigation system was under the administrative purview of the Loca Assemblies. The main responsibilities of the Local Assemblies were:

- Maintaining tank and tank components
- Ensuring the proper water supply to all the fields under the tank command
- Solving the irrigation disputes among the users
- Referring the unsolved disputes to the ruler

Hence the Sabha took the renovation and renewal of the earlier grants and gave the lands to the temples. Thus the Sabha played a vital role in administering the irrigation system. Sometimes the local Assembly sold the tanks along with the cultivated lands for varied reasons. At few instances they sold for a donation to the temple. In few instances when they could not maintain the tank with their resources for the betterment of the village they sold the waterbodies to wealthy persons. A record from Mangulam refers the first motive. An inscription of Jadavarman Kulasekara Pandya I (1190 A.D) mentions that the tank Tirumataipuram was sold to the temple of Ayiratonesvaramudaiyar at Mangalam which was on the southern side of Kulsekhara Chathurvedimangalam.

The kallumadai inscription records the sale of the tank along with the lands in the village Tiruvaiyara. 100 panam was fixed as the value of the tank.

During the 14 regnal year of Maravarman Sundara Pandya the temple authorities of Aruppukottai sold the lands of the temple along with the tank to an individual Vinayaka Pillaiyar alias Thathu Valiyapillayar. He was entitled to receive the payments in paddy and tiramam from the lands. The sale of the tank by the temple authorities shows that it was a common practice. When the lands were sold proper care taken to provide irrigation facilities to the sold lands by selling the water resources along with it.

For safeguarding and regular release of water supply to the fields, guards were appointed by the Local Assembly. The already referred Mudugudi inscription mentions about a tank guarded. Kundalakkuttu inscription refers a tax-free land gift to the person Muranan Sattan who repaired the sluice of the tanks in Alangudi and Iruppaikudi. According to R Tirumalai the Srivilliputture inscription refers that the Mahasabha of townsmithedt and resolved that every year all able bodied men excavated one big kuli and dig a small kuli in the feeding channel of the tank. It seems a kind of kudimaramathu prevailed in the maintenance work. Moreover Vettian the forced labour of the village was also used for maintenance work. Thus various persons were utilised by the Local Assemblies for the maintenance of tanks.

When individuals engaged in the maintenance work of the waterbodies. In appreciation of their services the Local Assemblies donated land to them. The kundalakittu inscription records that in recognition of the work of repairing the sluices of tanks in Alangudi and Iruppaikudi the Sabha gave one ma of land as tax-free to Muranan Sattan alias Karunilakkudi Nadalvan Perariyan.

The Local Assemblies had full control over the tanks in their villages. They clearly allot particular sluice water to particular lands and ensured proper water supply to donated lands. Above all they roped in help of individuals for the maintenance work. Thus the irrigation system of the medieval period had a well-knitted administrative set up that increased the agricultural production and ultimately enhanced the well being of the people and the State.
CONCLUSION

Thus, irrigation sources were provided to the donated land. For providing water to the bathing ceremony of the deity. Inscription states that a well was dug. It provided a water lift and stopping stone to the well since water lifting was the method used in the medieval period for well irrigation. The Agricultural field of Early Pandyas were widely in usage in agricultural products. In Virudhunagar District Muthupatti, Thiruttangal, Kallumadai, Srivilliputur, Aruppukottai and Mangulam, refer these terms during land donations. During the medieval period to take water from the well the used water lifting device known as tula.

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