

# **South Pennai River: The Life Line of Tamil Nadu**

**Mr. Veera, Ph.D.,**

**Research Scholar, Department of History, Thiruvalluvar University, Serkadu-632 115.**

**Dr. B.Karthikeyan, Assistant professor,**

**Department of History, Arignar Anna Government Arts College, Villupuram-605 602**

## **Abstract**

*Tamil Nadu constitutes 4 percent of India's land area and is inhabited by 6 percent of India's population, but has only 2.5 percent of India's water resources. More than 95 percent of the surface water and 80 percent of the ground water have already been put into use. Major uses of water include human/animal consumption, irrigation and industrial use. Pennai River is playing a prominent role in Agricultural sector in the Tamil Nadu state is due to mostly of its irrigational facilities. This river has a unique element of the cultural, religious and historical significance attached to it. The competing roles of the river basin economic development, livelihood resource generation, energy supply and bio diversity conservation, necessitate well researched trade-offs and synergistic alliances. It flows several districts from Tamil Nadu viz., Krishnagiri, Dharmapuri, Tiruvannamalai, Villupuram and Cuddalore district. These districts agriculture mainly depend on this river ever, developed high esteem. However Karnataka state built across the dam on the Pennai River reflected Tamil Nadu agriculture and irrigation. However, sand mining and industrial wastage reduced the water sources of Pennai River which reflected the agriculture ever. Thus government of India and Tamil take initiatives implementing good programmes only the solution of the development of river basin into high esteem.*

**Keywords:** Lifeline, river basin, South pennai River, agriculture and irrigation

## **Introduction**

Tamil Nadu is one of such state in India which is bestowed with good number of rivers and tributaries, which are helpful not only in the field of agricultural but also in inland transport system of the country. Tamil Nadu constitutes 4 percent of India's land area and is inhabited by 6 percent of India's population, but has only 2.5 percent of India's water resources. More than 95 percent of the surface water and 80 percent of the ground water have already been put into use. Major uses of water include human/animal consumption, irrigation and industrial use. Perhaps, Tamil Nadu has 17 river basins, Cauvery are medium and 3 are minor river bastions. Rivers also from the basic for domestic and industrial water supply, generation of hydro-

electricity, inland fishing is responsible for deposition of fertile soil in the plains as well as formation of deltas. On the great consequences South Pennai river flows from Karnataka, Andhra Pradesh and Tamil Nadu. Next to Kaveri River, south pennai river has given several benefits to the people, agriculture, irrigation and drinking purpose ever. But some of the few issues defect the river, especially sand mining in the Pennai River. This study mainly focused on how Pennai River became the life line of Tamil Nadu ever.

### **Geographical setting**

The Pennaiyar or the Pennar River(South pennai) reckoned to be the most important river in India which enlisted the second largest river in Tamil Nadu after Kaveri River. Finding its geographically, originated from the Chenna kesava hill, east of Nandidurg in Mysore, there it has been called as the southern pinakini. In Karnataka and Andhra Pradesh it has been named as Ultra pinakini( North pennai river) which covered the catchment area in 6937 sq.km<sup>i</sup>. The name pinakini is said to have been derived from 'Pinaka' the bow of Siva and as the curve of the two rivers resembles that of a bow, the name is said to have been given to the two rivers. The name Pennaiyar, by which the southern Pinkini is usually known in the madras state is said to be a corruption of the word Pennaiyar, but it is not known why the river was called as Pennai, which means a palmyra tree. South Pennai River takes its source in Channaranpetta, north east of Nandidurg in the kolar district.<sup>ii</sup>

The pennaiyar flows southward for the most part of its course in Mysore and turning then slightly to the east makes its way through the Eastern Ghats and enters the Hosure taluk of the Krishnagiri district. After the traversing that district Dharmapuri district, it enters the south west corner of the Thiruvannamalai, where it makes its way through the Chengam pass between the Kalyaran hills and the Tenmali and flows through the jungles of the Chengam taluk and through the Tiruvannamalai taluk. It comes to the boundary of the Villupuram district near Mungilthuraipattu in the north of the Kallakurichi taluk, runs along the boundary of the Tiruvannamali and Tirukovilura taluks with the Kallakurichi taluk, flows past poraspattu and receives on the right a small stream called Musukundandi near Sripadanallur. It then enters the Tirukkoyilur taluk, flows past Tirukkoyilura on its right and Arakananallur on its left and receives on its left the Tiunji river from the Tiruvannamali taluk just below Tirukkoyilur above the anicut. In this part of its course, it shows an irresistible tendency to flow, especially when it is in high flood into the Malattar "Barren river" which takes off from it on the right, it next flows along the boundary of the Villupuram taluk with the Tirukkovilur and Cuddalore taluks. After it has leaves the Tirukkovilur taluk branch. also known as the Mallattar and sometimes called the viruka Binasini, takes off from its left and this branch enclaves in those taluks and falls into the sea at Mandalapattu, some miles north of Cuddalore. The main river flows for a short distance in the northern part of the Cuddalore taluk and finally into the sea, about 5 km north of Cuddalore<sup>iii</sup>.

**Malattar**

The Malattar , as has already been stated , takes off from the right of the Pennaiyar in the Tirukkivilur taluk, divides itself into two branches just as it, is about to leave that taluk. Its southern and major branch flows through the eastern corner of the Cuddalore taluk and joins the Gadilam.<sup>iv</sup>

**Tributaries of Penniyar**

The tributary Markandandadi, otherwise known as Chinnaru, flows due south from the mysore from the Mysore plateau through the valley of tirtam and veppanapalli and joins into the river Pennaiyar after draining a major portion of Dharmapurti taluk. The Pambar, the third tributary rises on the Javadis and Elagiris of Tiruppattu taluk and flows through Uttangari to the Pennaiyar, the fourth tributary vaniyar rises in the Shevaroy's near Yercard and reaches the plains at Venkatasamudram. It passes through Harur and joins the Pennaiyar just below its confluence with the Pambar. The Pambar river, the only tributary in this region, rises in the hillock near Tanipadi and joins with Pennaiyar near Thiruvadanur.

**Soils and Minerals**

The soils of the district were classified into three groups namely black or regular, red ferruginous and erinaceous. Those are again sub-divided into clays, loams and sands. The most fertile of them are the black earths (especially the black loam) the next best the red kinds and worst the sands. It will be seen that sands last occupy a very small portion of the total area and about a third of the district is covered with black land and about two-third with red. The district cannot say to be for its minerals, magnetic ore occurs in many locations on the kalvarayan hills in kallakurichi taluk in 1855, iron smelting was in operation at seventy villages in this taluk. The ancient iron –smelting furnace was noticed recently at Mel siruvalur.<sup>v</sup> And laterite this occupies the eastern products of higher ground, and forms low escarpments in the neighbourhood of Pondichery and Cuddalore.

**Flora and Fauna**

The principle forest trees of this region are the accha(*Hardwickia binata*), azhinjil(*Alangwn lamarkii*), alli (*Meneeylon pincatria*), bomboo blackwood(*Dalbergia latafolia*), billu (*Chloroxylon*), buraga (bombak malabaricum), chandanam oria panic red sanders(*Ptersari(dalbegocartus santalium)*), cherunji (*buchanania latifolia*), gotte( *zizplus xylopyra*), uluppai(*bassia latifo lia*) jambu (*prosopisscigerta*), karu-vel(*Albizzia stiputala*), mango (*Mangifera Indica*), mailam (*Vitex altissima*), mushti (*styclinus nuxoomia*), mallamaddi(*terminalia tomentosa*), namma (*conocorpus latifolia*), neem (*Melia azedarach*), palai(*Mimusop hexandra*), pagoda (*Minusops elengi*), panasa (*Butea frondosa*),

paddari(*Sterea per mum chelonoids*), patsari(*Dalbergia panucolata*), pungam(*Pongamia glabra*), Chandra(*Acacia catechu*), satinwood, soap-mut(*Sapindus emarginatus*), tella-maddi(*Terminalia arjuna*), turinji (*Albizia amara*), tandra(*Terminalia valericia*), tamarind tukki(*Diospyros melanoxylon*), uinda (*Diospyros capiteilata valericia*), tamarind tukki(*Diospyros melanoxylon*), ulinda(*Diospyros capitelata*), yellituru(*Dichrostchys cineria*), vodisha(*Cluytia collina*), vagai(*Alapizzia lebbek*), vel-vagi(*Acacia leucophlea*), vengai(*Pterocarpus marsupium*) and wood-apples(*Feronia elephantum*).

There is nothing of special interest in connection with the fauna of this region except that the bison (*Gavaneus gaurus*) is found on the Javadi hills. The other ferae nature much the same as those met with in the eastern districts generally. The tiger(*Felis tigris*) is only occasionally found, but the panther(*Felis pardus*) is common throughout the rocky hills of the district. The ordinary Indian bear (*Ursus labiatus*), the hyaena(*Hyaena striata*), the sambar(*Rusa aristotelis*), the spotted deer (*Axis maculatus*), the jungle sheep or barking deer(*Cervulus aureus*), the antelope (*Antelope bezoartica*), the wild pig (*Sus indicus*), the wild dog(*Cercon rutilans*), the jackal(*Canis aureus*) and the common monkey(*Macacus radiates*) are found to a greater or less extent in different parts of the district. The elephant, it is said, was met with on the Javadi hills up to comparatively recent times, but there are none now.<sup>vi</sup>

### **Agriculture**

The Pennai river occupies a pre-dominant place in sugarcane and groundnut cultivation and by no means an inconspicuous place in paddy cultivation in this state. It ranks first in sugarcane, second in groundnut and fourth in paddy cultivation. This area has larger area under sugarcane, only north area has a larger area under groundnut. The chief food crops grown in the district are paddy, varagu, cholam, cumbji, ragi, korra, red-gram, black-gram, horse-gram, and green gram. The chief cash crops grown are sugarcane, groundnut, gingelly, and cotton. The chief plantain crops raised are cashewnuts, coconuts and chilies, and the chief green-manure and dacha. Other crops grown include tobacco, plantains, mangoes and citrus fruits. Paddy is largely raised in the south arcot district, where it occupies about 70 percent of the area. This is because this river enjoys excellent irrigation facilities. Paddy occupies about 25 to 30 percent of the extent cultivated in the Villupuram, Tindivanam, Tirukkivilur and Cuddalore taluks.<sup>vii</sup>

In the wet lands, the earlier crop, called the kar crop, is usually sown in seed-beds from June onwards and transplanted with the early showers of the south west monsoon, and sometimes, up to as late as August, if the rains are delayed. This crop remains from three to five months on the ground. The later and more important crop called the samba crop, is sown from July onwards and transplanted between August and September and it takes about five to six months to mature.<sup>viii</sup>

### **Irrigation**

Irrigation has to play in the region was recognized and as a result a number of projects were taken up for execution. The importance of irrigation from river has considerably been increased after the execution of various to the maximum for purposes for irrigation, the importance irrigation projects of the district were the tirukovilur anicut. The important irrigation projects undertaken during plan periods were the shatanur and the vidur reservoir projects across varahanathi.<sup>ix</sup> Tirukovilur anicut built across river Ponnaiyar 1497 feet long. Five channels namely the panbai channel, the raghavaiyan channel, the vedamarudur channel, the shattalingamadam channel and the Malattar channel take off from the reservoir here and help to irrigate a considerable area in the district.<sup>x</sup> This system irrigates 27,331 acres under the first crop and about 5,278 acres under the second crop.

There is an old anicut across the Ponnaiyar, four miles below Tirukovilur called the tirukkovilur anicut. It was built in 1863-1864 to increase the supply in the then existing channels which at that time received water only when the river was in high fresh. It was originally, 1,200 feet long, but owing to the damages made by a flood in 1874, it was extended in 1875 to its present's length, 1,497 feet excluding sand vents. Five channels take off from it and irrigate the lands in the villupuram, tirukkovilur and cuddalore taluks. As the river gets silted up, it is proposed to replace the top two feet of masonry with two feet falling shutters to allow silt to pass during floods. Of its five channels, one called the pambai channel, formed by utilizing the course of the pambai, a jungle stream which falls into the Varahanadhi river, takes off in the north, it is 22 miles 78 chains long and it irrigates 7,272 acres in the villupuram taluk. The other four channels known as the Raghavaiyan, vaamarudur, shattalingamadam and malattar channels take off from the south of the anicut. They fall into chains of tanks and irrigate 15,000 acres in the Tirukkovilur and Cuddalore taluks. The malattar river, after irrigating 4,400 acres in the first 10 miles, serves as a drain and falls into the Gadilam.<sup>xi</sup>

## Rainfall

The annual rainfall varies between 54 and 40 inches depending upon the locality. There are heavy rains during October and November. By June the south west winds begin to carry up the southwest winds begin to carry up the southwest monsoon with occasional showers up to August.<sup>xii</sup> the average fall is 46.40 inches and the amount received is heaviest on the coast, lighter in the central tract and least inland.<sup>xiii</sup>

## Conclusion

Pennai River is playing a prominent role in the Agricultural sector in the Tamil Nadu state is due to mostly of its irrigational facilities. This river has a unique element of the cultural, religious and historical significance attached to it. The competing roles of the river basin economic development, livelihood resource generation, energy supply and bio diversity conservation, necessitate well researched trade-offs and synergistic alliances. It flows several districts from

Tamil Nadu Viz., Krishnagiri, Dharmapuri, Tiruvannamalai, Villupuram and Cuddalore district. These districts agriculture mainly depend on this river ever, developed high esteem. However Karnataka state built across the dam on the pennai river reflected Tamil Nadu agriculture and irrigation. However, sand mining and industrial wastage reduced the water sources of Pennai river which reflected the agriculture ever. Thus government of India and Tamil take initiatives implementing good programmes only the solution of the development of river basin into high esteem.

---

<sup>i</sup> Pennai river basin status report, 2014

<sup>iii</sup> Book Lic, Rivers in Tamil Nadu, General books, Chennai, p.383

<sup>iii</sup> Kumar rakesh, " water resources of india", Current science, Bangalore, pp.794-811

<sup>iv</sup> W.Francis, Gazetteer of the South Arcot District, Vol.I, Madra, pp.135-136

<sup>v</sup> Rajan, k, Archeological explorations in south arcot, report submitted to Tamil University, Thanjavur, p.6

<sup>vi</sup> Rajan, k., Archaeological Gazetteer of Tamil Nadu, Manoo pathipakam, Thanjavur, pp.9-10

<sup>vii</sup> Season and crops report of the Madras state for 1953-54, pp.38-42

<sup>viii</sup> Notes on irrigation, south arcot district, dated let july 1953 by V.N.Kudve.

<sup>ix</sup> Census of India 1961, Vol.I, Madras part XIII, District census Hand book , south arcot district, Vol.I, Madras, p.48

<sup>x</sup> W.Francis, Op.cit.,

<sup>xi</sup> W.Francis, Op.cit.,

<sup>xii</sup> Rajan,K., Op.cit.,

<sup>xiii</sup> W.Francis, Op.cit.,pp.5-6