HISTORICAL ANALYSIS OF CHITTAR PATTANAMKAL PROJECT

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Abstract

Kanyakumari District was incorporated with the Madras State in 1956. Since then the Government of Madras has been concentrating its attention in implementing several development projects for the advancement of its farmers. The Chittar-Pattanamkal Project in Kanykumari District estimated to cost about Rs 680 lakhs and was expected to irrigate 15,000 acres of double crop lands in Kanyakumari District and 17,000 acres of single crop lands in Radhapuram sub Taluk area of Tirunelveli District.

Agriculture products paddy, banana and vegetables. **Keywords:**

1. Sources

The Research article is based on primary and secondary sources. The Report on Chittar Pattanamkal Scheme, Public work department report and Govt orders. The secondary sources of the information will included number of public books and news papers.

2. Introduction

Kanyakumari District, the southern most district of Indian peninsula, is famous for its vast green stretches of paddy fields, dense forests, coconut groves and rich mineral sands. Though it receives rainfall during both the monsoons, it would not be sufficient for its agricultural production. Therefore, when Kanyakumari district was under the control of Travancore-Cochin State, the rulers made steps to improve its irrigation. The Neyyar Irrigation Project of the erstwhile Travancore Cochin State was expected to benefit this area also. However no work had been commenced till the Madras Public Words Department took charge of the area. Since taking change, the department excavated the Kanyakumari Branch Canal and attended to the other allied works. The Kanyakumari Branch Canal was opened by K. Kamaraj, the then Chief Minister of Tamil Nadu on 25 Apr 1963. This project was irrigating an extent of about 7,000 acres in

Kanyakumari District. 1 'Even then, this Project did not satisfy the irrigational needs of the district. Therefore the Chittar-Pattanamkal Project was proposed. The foundation stone for the project was laid by K. Kamaraj, former Chief Minister, on 26 September 1963. The construction work of the dam was started in 1964 and was completed in 1970.²

2.1 Location

The dam of Chittar I is located inside the Ambadi Estate and is situated a mile above the confluence of the river Chittar I with the Kodayar river. It is 13 miles away from Kulasekharam and approachable by road.³ The dam site is located near about a mile upstream of the confluence of the river with Kodayar. It is a gorge above the Ampadi Estate factory. The rock out crops exists on the left flank of the river and along the surplus coursed. On the downstream of the dam site, costly rubber and coconut estates are available. The river Chittar is narrow at the dam site and it flows in a direction from North to North West and from South to South East at the dam site.⁴ River Chittar I has its source from the mountain in Kilamala reserve forest, near Ettukani and Vandiplakanin at an altitude of over 2000 ft above the sea level, in Vilavancode Taluk. It is of 11.2 km ling and joins the Kodayar at 4.8 km below the Pachipuri Dam. The first three kilometres length is rocky and the rest of the length is rather flat where it joins Kodayar. The catchment area is influenced by both South West and North East monsoons. The average annual rainfall is about 1,700 mm.⁵

2.3 History

When Kanyakuamri was in the Travancore -Cochin State a scheme was contemplated to construct a dam across Chittar I and Chittar II to conserve their water and to take a cannel from them to feed the Kodayar Left Bank Channel. At that stage the Kanyakumari district was transferred to Tamil Nadu under the State Re-organizations Act. Therefore representations were sent from the ryots of Vilavancode Taluk and Kalkulam Taluk for the opening of branch channels from Kodayar Left Bank Canal for the benefit of the agricultural lands in these two taluks. When the scheme was taken up for consideration at a meeting held at Nagercoil in 1957, there was vehement agitation against combining the water of the Chittar reservoirs with those of Pechiparai reservoirs. Consequently, the scheme was spilt of into two viz, Chittar and Pattanmkal Schemes.⁶

The former scheme provided for forming a reservoir on one of the Chittars and for extending the two channels taking off from the Thirupparappu weir to irrigate originally designed ayacut of 5,000 acres. The later scheme, which would depend only upon the water of Kodayar without the assistance from Chittar, provided for an excavation of a new channel from 10/400 of the left bank channel to irrigate 10,000 acres. Subsequently the Thirupparappu extension ayacut under Pattanamkal was arrived at 15,000 acres. The two reservoirs of Chittar were interlinked and feeder channel from Chittar I excavated to connect the Chittar water with the Kodayar left bank channel at 4.6 km and Pattanamkal main channel was branched off at km 10/400 of left bank channel water with the River Chittar I has its source from the mountain.⁷

2.4 Salient Features of Earth Dam

The site condition favoured the construction of an earth dam. The total length of the earth dam is 762m. Suitable earth was available for hearting and casing section of earth dam. The upstream slope is protected hand packed rip rap revetment over a gravel bed. The downstream is protected by turfing including all beams over a gravel bed. The downstream is protected by turfing including all beams over a layer of topsoil placed for that place. Even through the dam is in a high rainfall area, the turfing on the downstream slope has served its purpose. For the materials available in the dam site the following slopes for both upstream and downstream sides have been found to be stable under all conditions of loading and saturations.8

In the riverbed portions where the earth dam is founded on pervious soil to reduce seepage under the foundation clay blackets is provided on the upstream. The 762 meter long earth dam comprises of earth dam from chainage 0 to 496.50 meter in the left bank (2) a surplusing section from chainage 496.50m to 520.88 meters in the right bank. The river sluice of 1.22mx1.82 m with its sill +206.00 (62.79) is located in earth dam at change 584.91 meter while irrigation sluice of 1.22mx1.83m with its sill at +251.00 (76.51m) is located at chainage at 648.92m. The surplus arrangement consists of two vents of 12.19 x 4.57m with 22.86 c.m. thick intermediate piers. The maximum flood discharging capacity of the surplus bents with its sill at 77.42 meter is 14190 c/s (401.81cumecs).¹⁰

2.5 Conclusion

As the Chittar-Pattanamkal project irrigating an extent of about 7,000 acres in Kanyakumari District it is very useful for the advancement of farmers in Vilavancode and Kalkulam Taluks. The project served the irrigational needs of the farmers and their domestic purposes. Thus the lives of farmers are improved by the way of sustained productivity of paddy, banana and vegetables. Now a days, agriculture is neglected Crop production take particularly paddy production rate is declining steadily. further encroachments also became a major threat to agricultural production. The channels which are used to bring dam water is spoiled by filling with sand and waste materials. Channels are turned into roads. They are no proper storage facilities for cultivated products leading to destruction of the crops. The Government should appoint responsible vigilant teams to monitor and take needful action to prevent it.

2.6 I hereby declare that the research article entitled "Historical Analysis of Chittar Pattanmakal Project" is my original and Independent work.

2.7 **Notes and References**

- Report on Chittar Pattanamkal Scheme, 1957. 1.
- Madras Information. Vol XIX, February, 1964. 2.
- Engineer Report, Government, Chittar Pattanamkal Division, Kuzhithurai, 1999. 3.
- 4. Public Works Department, Irrigation Sources of Kanyakumari district, Nagercoil, 1977.
- Inscription at the Entrance of Chittar Dam. 5.
- G.O.M.S.No.194, Public Works Department, 11 February, 1980. 6.
- Watershed Management, first Capacity Survey of Chittar Dam 1, 1999. 7.
- G.O.M.S.No310, Public Works Department, 14 February 1968. 8.
- 9. G.O.M.S.No310, Public Works Department, 14 February 1968.
- 10. M. Gopala Krishna, Kanyakumari District Gazetteer, Madras, 1995.