



## **ABSTRACT**

Water Resources Department - Announcement made by the Hon'ble Minister for Water Resources for 2022-2023 - Construction of 2 Tail End Structures across Nambiyar and Hanumanathi Rivers in Radhapuram Taluk of Tirunelveli District to arrest intrusion of sea water - Administrative and Financial sanction for Rs.46.96 lakh for getting Coastal Regulation Zone and Environmental Clearances - accorded - Orders issued

### **Water Resources (S2) Department**

**G.O (Ms) No.58**

**Dated 07.07.2022**

சுபகிருது, ஆணி 23

திருவள்ளூர் ஆண்டு 2053

Read:

1. From the Chief Engineer, Plan Formulation, Water Resources Department, Letter No. B4 / 0604 / Anno 22-23 / Tail End Structure / AE4 / OT2 / 2022, dated.12.04.2022.
2. From the Chief Engineer, Plan Formulation, Water Resources Department, Letter No.B / AE3 / AEE3 / 22-23 / TES/2022, dated. 06.06.2022.

\* \* \*

### **ORDER:**

During the Demand for Grants for Water Resources Department for the year 2022-2023 held on 06.04.2022, the Hon'ble Minister for Water Resources on the floor of the Assembly has announced that 2 Tail End structures will be constructed in Tirunelveli District to prevent intrusion of sea water" at an estimated cost of Rs.35.00 crore.

2. Based on the above announcement, the Chief Engineer, Plan Formulation, Water Resources Department has sent a proposal for construction of Tail End Structures at 2 places in Tirunelveli District to prevent intrusion of sea water at an estimated cost of Rs.35.00 crore with the following details :

**1. Construction of Tail end Check Dam across Nambiyar river to arrest sea water intrusion in Thiruvambalapuram Village in Radhapuram Taluk of Tirunelveli District - Estimate Amount of Rs.30.00 Crore**

- (i) The Nambiyar river originates in the eastern slope of the Western Ghats at an altitude of about 1500 m above MSL in Nambi Hills located in Thirukurungudi Village of Nanguneri Taluk. This river traverses a length of 45 Km and ends at the Gulf of Mannar near Thiruvambalapuram Village of Radhapuram Taluk in Tirunelveli District.
- (ii) The Nambiyar confluences with the sea at 1.80 km downstream of Thottavilai Highway bridge, which lies in Thiruvambalapuram Village and Karaichuthupudur Village.
- (iii) The above said villages near the confluence point are facing surface sea water intrusion during high tide times. During high tide times, sea water enters towards landside, mingles with the standing good water making it saline. It takes weeks or months to regain the original quality depending upon the flow condition of the river as well as movement of seawater.
- (iv) The people living along the coastal area near the confluence point of the Nambiyar river with sea, face problem of sea water intrusion. This causes salinity in good drinking water in the surrounding areas which has to be prevented permanently.
- (v) Hence, as a permanent measure to prevent seawater intrusion and safeguard the groundwater quality, this Scheme is proposed across Nambiyar river in Thiruvambalapuram Village in Radhapuram Taluk of Tirunelveli District. The proposed structure lies at 0.5 Km upstream of the confluence point.
- (vi) Salient features of the Tail End Check dam are ,

Location	:	Latitude-8°14'29.85"N Longitude-77°48'3.68"E.
Maximum Flood Discharge	:	26717 Cusecs
Length of the Check dam	:	265.00 m
Height of Check dam	:	3.40 m.
Firkha and Category	:	Radhapuram Firka / Critical
Zone of recharge	:	Highly Favourable

Length of flood banks	:	1500 m on both sides of upstream.
		200 m on both sides of downstream.
Ayacut benefitted	:	472 acres
No. of wells benefitted	:	5
U/S structure	:	Thottavilai Check dam at 1500 m U/S.
D/S Structure	:	Confluence with sea at 500 m D/S.

**2. Construction of Checkdam across Hanumanadhi River at downstream side of Srenganarayanapuram bridge to arrest sea water intrusion in Chettikulam Village of Radhapuram Taluk in Tirunelveli District - Estimate amount of Rs.5.00 Crore**

- (i) The Hanumanadhi river originates from the eastern slope of Western Ghats at an altitude of 1100 m in the Mahendragiri hills, north west of Panakudi Village in Radhapuram Taluk of Tirunelveli District. It flows in hill ranges for about 5.6 km, reaches the west of Panakudi Village, then flows for a total distance of 32 km and confluences with the Gulf of Mannar.
- (ii) The Chettikulam Village being very near i.e, 520 m from sea, sea water enters the village, mingles with the standing good water making it saline. It takes weeks or months to regain original quality depending upon the flow condition of the river as well as movement of seawater.
- (iii) Hence, it has been proposed to construct a Check Dam across the Hanumanadhi River, downstream side of Srenganarayanapuram bridge to maintain a balance between fresh water and sea water in the ground water table. The proposed structure lies 0.5 km upstream of the confluence point. This also aids to arrest sea water intrusion in the river and control salinity in the nearby surrounding areas and domestic wells.
- (iv) Salient features of the Check dam are ,

Location	:	Latitude-8°09'46"N Longitude-77°38'54"E.
Maximum Flood Discharge	:	8072.15 Cusecs
Length of the Check Dam	:	50.00 m
Height of Check Dam	:	2.60 m.



Firkha and Category	:	Levinjipiram Firka/ Semi - Critical
Zone of recharge	:	Highly Favourable
Length of flood banks	:	1100 m on both sides of upstream. 200 m on both sides of downstream.
Ayacut benefitted	:	145 acres
No. of wells benefitted	:	21
U/S structure	:	Existing Check Dam at 1200 m U/S.
D/S Structure	:	Confluence with sea at 520 m D/S.

3. The Chief Engineer, Plan Formulation, Water Resources Department has further stated that all the above estimates have been prepared based on the schedule of rates for the year 2022 - 2023 and mandatory lump sum provisions have been made in all the detailed estimates. No land acquisition is involved in these Schemes. The Chief Engineer, Plan Formulation, Water Resources Department has requested to accord Administrative Sanction for the above 2 Schemes.

4. The Government have examined the proposals and decided to give in-principle approval only and financial sanction will be provided after:

- (i) Necessary environmental clearances are obtained
- (ii) The funding of the said projects is approved and tied up with external funding agencies.
- (iii) Under no circumstances will this project be undertaken from State Funds, if the external assistance is not provided.

5. In the letter 2<sup>nd</sup> read above, the Chief Engineer, Plan Formulation, Water Resources Department, has furnished the approved design and drawings for the above Works and has stated that a sum of Rs.46.96 lakh is required for obtaining Coastal Regulation Zone and Environmental clearances. The Chief Engineer, Plan Formulation, Water Resources Department has therefore requested to release the above fund for obtaining clearances, since there is no fund provision.

6. The Government, after careful examination, have decided to accept the above proposal of the Chief Engineer, Plan Formulation, Water Resources Department. Accordingly, In-principle approval is accorded for construction of 2 Tail End Structures across Nambiyar and Hanumanadhi

Rivers in Radhapuram Taluk in Tirunelveli District. Administrative and financial sanctions are accorded for Rs 46,96,000/- (Rupees Forty six lakh and ninety six thousand only) for getting Coastal Regulation Zone and Environmental clearances, subject to deduction of this amount from this above original estimates for following two Works.

Sl. No.	Name of Work	Estimate (Rs.in lakh)
1.	<b>Coastal Regulation Zone and Environmental clearance</b> for construction of Tail end Check Dam across Nambiyar river to arrest sea water intrusion in Thiruvambalapuram Village in Radhapuram Taluk in Tirunelveli District.	23.48
2.	<b>Coastal Regulation Zone and Environmental clearance</b> for construction of Check dam across Hanumanadhi River, downstream of Srirenganarayanapuram bridge to arrest sea water intrusion in Chettikulam Village of Radhapuram Taluk in Tirunelveli District	23.48
<b>Total</b>		<b>46.96</b>

7. The expenditure sanctioned in para 6 above shall be debited to the following head of account:-

2701 - Medium Irrigation - 80 - General -  
001 - Direction and Administration - State's Expenditure -  
JI - Investigation of Projects on Surveying and Levelling  
Operations etc., - 317 Minor Works - 01 Minor Works.  
(IFHRMS DPC 2701 - 80 - 001 - JI - 31701)

8. The Chief Engineer, Plan Formulation, Water Resources Department, Chennai is directed to take necessary action to obtain statutory clearances for the Works as ordered in para 4 above and prepare Detailed Project Report and send to the Government for further consideration.

9. The expenditure sanctioned in para 6 above shall constitute an item of "New Instrument of Services" and the approval of the Legislature will be obtained in due course. Pending approval of the Legislature, the expenditure initially will be met by drawal of an advance from the Contingency Fund, orders regarding which will be issued by Finance (BG-I) Department separately. The Engineer-in-Chief and Chief Engineer (General), Water Resources Department, Chennai is directed to send necessary proposal to Government in Finance (BG-I) Department directly in Form "A" appended to the Tamil Nadu Contingency Fund Rules, 1963 along with a copy of this order for sanction of an advance from the Contingency Fund. He is also directed to send necessary Explanatory

Notes for inclusion of the above expenditure in the Supplementary Estimate 2022-2023 to Finance (PW-II / BG-I) Department at an appropriate time without fail.

10. It is also directed that the details of works executed must be uploaded in the Tamil Nadu Water Resources Information and Management Systems Portal under the Control of Chief Engineer, Institute of Water Studies, Hydrology and Quality Control to ensure effective data base in the Water Resources Department.

11. This order issues with the concurrence of Finance Department vide its U.O. No.33267/PW-II/2022, dated.05.07.2022 and Additional Sanction Ledger No.589 (Five hundred and eighty nine) (IFHRMS ASL No.2022070589)

**(BY ORDER OF THE GOVERNOR)**

**SANDEEP SAXENA,  
ADDITIONAL CHIEF SECRETARY TO GOVERNMENT.**

To

The Engineer-in-Chief and Chief Engineer (General), Water Resources Department, Chennai-5.

The Chief Engineer, Plan Formulation, Water Resources Department, Chennai-5.

The Chief Engineer, Water Resources Department, Madurai Region, Madurai.

The Chief Engineer, Institute of Water Studies, Hydrology and Quality Control, Taramani, Chennai-113.

The District Collector, Tirunelveli

The District Treasury Officer, Tirunelveli.

The Pay and Accounts Officer, Madurai.

The Pay and Accounts Officer, (East), Chennai-8.

The Principal Accountant General (A&E), Chennai-18.

The Principal Accountant General, (Economic and Revenue Sector Audit), Chennai-18.

The Resident Audit Officer, Secretariat, Chennai-9.

**Copy to**

The Secretary-II to the Hon'ble Chief Minister, Secretariat, Chennai-9.

The Special Personal Assistant to Hon'ble Minister (Water Resources), Secretariat, Chennai-9.

The Finance (P.W.II / B.G.I / BG II / W&M-I) Department, Secretariat, Chennai-9.

The Water Resources (OP-II / ISpl.I) Department, Secretariat, Chennai-9.  
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**// Forwarded by Order //**

*S. Mani Chand*  
07/07/2022  
**Section Officer**  
7/7/2022