

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION
LOK SABHA

UNSTARRED QUESTION NO. 2462

ANSWERED ON 03.08.2023

SALT WATER INTRUSION

2462. SHRI RAMALINGAM S.

Will the Minister of **JAL SHAKTI** be pleased to state:

- (a) the steps taken by the Government to prevent the salt Water intrusions in the Coastal district of the Tamil Nadu and tail end of the Cauvery river system especially in the places of Sirkali, Nagapattinam, Alakuddy, Mayiladuthurai, Pazhaya Agraharam, Kaveripoompattinam;
- (b) whether the Government has given any financial assistance to the tail end regulator project (bed Dams) in Cauvery basin for reversing soil salinity caused by ingress of sea water at times of high tide and if so, the details thereof and if not, the reasons therefor;
- (c) whether the Government has sanctioned the proposal of Cauvery River Basin Modernization Scheme as proposed by the State of Tamil Nadu and if so, the details thereof; and
- (d) the financial assistance sanctioned and disbursed under the scheme to Tamil Nadu during the last five years?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI BISHWESWAR TUDU)

(a) A number of steps have been taken by the Central Government and State of Tamil Nadu to prevent saltwater intrusion in coastal districts of Tamil Nadu including Cavery river system. Some of the steps in this regard are given as under.

Central Ground Water Board (CGWB) generates ground water quality data of the country including Tamil Nadu on a regional scale as part of its ground water quality monitoring program and various scientific studies. These studies indicate the occurrence of Salinity (EC: Electrical Conductivity more than 3000 micro mhos/ cm) in isolated pockets and in parts of coastal areas in Tamil Nadu. The water quality data is shared with States for suitable interventions.

Further, CGWB has constructed 60 piezometers of different depths and installed Digital Water Level Recorders (DWLRs) all along the coast of Tamil Nadu & Puducherry starting from Tiruvallur District in the North to Tirunelveli District in the South for real time monitoring of Ground water levels, Water Quality (Salinity) and Temperature.

Out of the 60 locations, 08 DWLRs (Mayiladuthurai – 01; Nagapattinam – 01; Thanjavur -04; Pudukottai – 01; Tiruvavur – 01) have been installed in the Cauvery delta. The Groundwater Salinity,

Temperature and groundwater level data are being monitored and transmitted every six hours to the State and National Water Informatics Centre (NWIC).

A draft guideline for Preparation of Detailed Project Report (DPR) for Salinity Ingress Management Projects in Coastal Areas has been prepared by Central Water Commission (CWC) to facilitate planning and execution of any salinity ingress management projects.

In addition, as per the information received from the State Government of Tamil Nadu, the Water Resources Department of Tamil Nadu (including CSIR-NGRI) and the Danish Environmental Protection Agency (DEPA) (involving Geological Survey of Denmark and Greenland (GEUS), and leading experts from the University of Aarhus) have entered into an MoU for study on the matter.

Further, some of the steps taken by the Government of Tamil Nadu in the coastal districts of Tamil Nadu to prevent saltwater intrusion is given at **Annexure I**.

(b) A number of works have been taken by the Government of Tamil Nadu with the financial assistance from NABARD, ADB and their own funds to create Tail end regulators in Cauvery basin system. Details of such projects are given at **Annexure II**.

(c) & (d) As per available information 'Cauvery River Basin Modernization Scheme' has not been proposed.

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2462 TO BE ANSWERED IN LOK SABHA ON 03.08.2023 REGARDING “SALT WATER INTRUSION”

Lower Cauvery Basin Circle, Thanjavur

1. Detailed project report and estimate for the work of construction of a Tailend Structures across Coleroon River to Prevent salt water intrusion between Cuddalore District, Chidambaram Taluk ,Thirukkazhipalai Village and Mayiladuthurai District, Sirkazhi Taluk, Alakudi Villages to a value of Rs.702.40 crores have been prepared.
2. The estimate for the work of construction of new tailend regulator across Vettar River at mile 92/0 in Uthamacholapuram Village of Nagapattinam Taluk and District to a value of Rs.46.70 crores has been prepared.
3. The work of construction of new tailend regulator across Cauvery River at LS 152.300 km in Dharmakulam Village of Sirkali Taluk in Nagapattinam (Now Mayiladuthurai) District to a value of Rs.7.87 crores under NABARD loan assistance has been taken up and completed

Special Project Circle, Trichy

1. Construction of a Barrage with head sluices across the river coleroon at RD 74/3 miles in Adhanur and Kumaramangalam Villages in Cuddalore and Nagapattinam District for an estimate amount of Rs.463.25 Crore.
2. This barrage is being constructed for a length of 1064.40m with steel shutters in 84 vents (12 vents of 3.55m height with +9.50m sill and 72 vents of 3.05m height with +10.00m sill) to store 0.334 TMC.

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 2462 TO BE ANSWERED IN LOK SABHA ON 03.08.2023 REGARDING “SALT WATER INTRUSION”

Lower Cauvery Basin Circle, Thanjavur

The following works were taken up under NABARD loan assistance:

1. Construction of Tail end Regulator across Kittianai Uppanar at LS 7.100 km in Pudupattinam village (nearby Thargas Anjaneyar Temple back side) of Sirkali Taluk of Nagapattinam District with a value of Rs.11.37 crores has been taken up and completed.
2. Construction of tail end regulator below the confluence of thirunagiri channel of thiruvai tank with Nattu kannimanniyar to arrest sea water intrusion in thennampattinam village at sirkali taluk in Nagapattinam district with a value of Rs.9.76 crores has been taken up and completed
3. Construction of Tail End Regulator across Manjalar river @ LS 146.500 km in Kalamanallur village of Tharangambadi Taluk in Nagapattinam District with a value of Rs.7.90 crores has been taken up and completed
4. The work of construction of new tail end regulator across Cauvery River at LS 152.300 km in Dharmakulam Village of Sirkali Taluk in Nagapattinam (Now Mayiladuthurai) District with a value of Rs.7.87 crores has been taken up and completed.
5. Construction of tail end regulator across Kaduvaiyar river at LS 156.130 km in Setticheri Village of Vedaranyam Taluk of Nagapattinam District to a value of Rs.16.2734 crore has been taken up and completed.
6. Construction of Tailend Regulator across VellapalamUppanar @ L.S.21.200 km in Thirunagiri Village Sirkali Taluk in Nagapattinam District with a value of Rs.30.96 crores has been taken up.
7. Construction tailend regulator across Devanathi (Uppanar drain) in Jaganathapuram village of Nagapattinam and Thiruvarur District to a value of Rs.18.61 crore has been taken up.

The following work was taken up under State Fund Scheme:

Construction of tailend regulator across SakkiliyanVoikkar at LS11.50 km in Egarajapuram village of Vedaranyam Taluk in Nagapattinam District to a value of Rs.4.8192 crore has been taken up and completed.

The following works were taken up under CAVSCDP with a loan assistance of ADB:

1. Construction of tail end regulator across Vellaiyar river at LS 153.65 km in Mahizhi Village of Keelvelur Taluk of Nagapattinam District to a value of Rs.4.50 crore have been taken up and completed.
2. Construction of tail end regulator across Valavanar river at LS 19.30 km in Thondiyakkadu Village of Thiruthuraiipoondi Taluk in Thiruvarur District to a value of Rs.12.00 crore have been taken up and completed.
3. Construction of tail end regulator across Harichandranathi at LS 160.20 km in VettaikkaranIrruppu Village of Keelvelur Taluk of Nagapattinam District to a value of Rs.4.00 crore have been taken up and completed.
4. Construction of tail end regulator across Adappar river at LS 168.65 km in Kallimedu Village of Vedaranyam Taluk of Nagapattinam District to a value of Rs.20.00 crore have been taken up and completed.

The following works are in progress under Cauvery ERM Project:

1. Construction of tail end regulator across Veeracholan river at LS 146.500 km in Poraiyar Village of Tharangampadi Taluk of Nagapattinam District (Now Mayiladuthurai District) to a value of Rs.3.89 crore has been taken up.
2. Construction of tail end regulator across Mahimazhaiyar river in Perumalpettai Village of Sirkali Taluk in Nagapattinam District (Now Mayiladuthurai District) to a value of Rs.0.52 crore has been taken up.
3. Construction of tail end regulator across Uppan river at LS 3.55 km in Sathankudy Village of Tharangampadi Taluk of Nagapattinam District (Now Mayiladuthurai District) to a value of Rs.9.73 crore has been taken up.
4. Construction of tail end regulator across Neythavasal channel at LS 7.00 km in Neythavasal Village of Sirkali Taluk in Nagapattinam District (Now Mayiladuthurai District) to a value of Rs.0.35 crore has been taken up.
