

ABSTRACT

Water Resources Department – Announcement made by Hon'ble Minister (Water Resources) for 2021-2022 - 7 Nos. of Rehabilitation Works in Trichy Region at an estimated cost of Rs.23.31 Crore - Sanction accorded – Orders issued.

Water Resources (S2) Department

G.O. (4D) No.29

Dated 28.04.2022

சுபகிருது, சித்திரை 15 திருவள்ளுவர் ஆண்டு 2053 Read :

- 1. From the Chief Engineer, Plan Formulation, Water Resources Department, Letter No. F2 /Announcement 2021-22/207 Rehabilitation/ Trichy / 2021, dated:05.10.2021.
- 2. Government Letter No.59281 / (Finance Res-II) / 2021-1, Finance Department, dated 18.02.2022.

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ORDER:

During the Demand for Grants for Water Resources Department for the year 2021-2022 held on 23.8.2021, the Hon'ble Minister for Water Resources on the floor of the Assembly has announced that "Based on the types of rehabilitation works for irrigation structures and for new major schemes mentioned in the 'Vision document for a New Dawn' for State and Districts level programme, 207 Tanks, supply channels, ponds and their structures spread over 17 basins of 31 Districts will be rehabilitated in a phased manner under NABARD assistance"

- 2. Based on the above announcement, the Chief Engineer, Plan Formulation, Water Resources Department has sent a proposal for 7 Nos. of rehabilitation schemes in Trichy Region at estimated cost of Rs.211.65 Crore as detailed below:
- I. Rehabilitation of Popular Mudhaliar Channel in Pugalur and Manmangalam Taluks of Karur Districts at an estimated cost of Rs.70.00 Crore

The Popular Mudhaliyar Channel is a very old channel, off-takes on the right side of Pugalur channel at LS 28.80 km. This channel irrigates a total extent of about 1200 acres in the Karur Districts. The maximum designed discharge at the head of Popular Mudhaliyar Channel is 48 cusecs. The total length of Popular Mudhaliyar channel is 14.30 km. Since it is a contour channel, it has its command area on its left side. The command area is getting water supply through

10 nos. of sluices. The Popular Mudhaliyar Channel is an earthen channels having trapezoidal shape. All of the structures in those channels were built in with Brick/RR Masonry and Brick Jelly Concrete. Because of the age, they have lost their strength and binding action. Similarly, the channel bunds have also been eroded considerably and lost their strength. Due to the importance of the channels in the irrigation system and ensuring the equitable quantity of water for tail end users, it is absolutely necessary to reconstruct the age old structures. The following works have been proposed in the estimate.

- i) Reconstruction to Sluices.
- ii) Construction of protection wall on both sides in weaker portion of the channel.
- iii) Reconstruction of cross masonry works.
- iv) Reconstruction of cross drainage works.
- v) Strengthening the bank of Popular Mudhaliyar channel.

Rehabilitation works proposed under this irrigation system will ensure adequate supply of water to the tail end farmers. By implementing this scheme, an extent of 1200 acres (486 Ha) of ayacuts will be benefitted.

The following tangible benefits are likely to be achieved in post modernization period.

- i) There will be saving in total quantum of water utilizable by implementing the above works.
- ii) Unwarranted leakage in this system can be arrested.
- iii) The tail end farmers will get their due share of water for irrigation.
- II. Strengthening the bund and Concrete Lining both banks of Pugalur Channel from LS 0 Km to 33.90 Km in Kodumudi Taluk of Erode District and Pugalur Taluk of Karur District at an estimated cost of Rs.130.00 Crore

The Pugalur channel is a contour channel off takes on the right bank of River Cauvery on the upstream side of Jeddarpalayam Bed Regulator (JBR) and runs for a length of 33.60 km. It has two branches viz. Popular Mudhaliyar channel and Pugalur Low level channel (Pallavaikkal). The Pugalur channel runs idle for about 14.40km from head works at JBR. In this portion, it runs parallel and closer to River Cauvery. In this extent, it functions as a flood carrier, carrying a part of Cauvery flood water during floods. The common bund between River Cauvery and Pugalur channel in this portion gets affected during heavy flood in Cauvery. The Pugalur channel bund has also been eroded and weakened in many places.

The water distribution system is very old and needs repair and replacement of its many age old structures. The present condition of the water conveying arrangement and structures are in bad condition.

Due to the dilapidated condition of structures, shutters in sluices, etc. the equitable distribution of water to tail end is not met with. This reduces irrigation efficiency which is a matter of great concern due to limited availability of water and subsequent low productivity. Due to the importance of the channels in the irrigation system and ensuring the equitable quantity of water for tail end users, it is absolutely necessary to rehabilitate and improve by executing the following works. By implementing this scheme, an extent of 8504 acres (3442 Ha) of ayacuts will be benefitted.

- i) Repairs to Pugalur Voikkal Head works.
- ii) Reconstruction of Sluices.
- iii) Construction of protection wall on both sides in weaker portion of the channel.
- iv) Reconstruction of Pallavaikal Head Sluice
- v) Repairs and Reconstruction of cross masonry works.
- vi) Repairs and Reconstruction of cross drainage works.
- vii) Strengthening the bank of Pugalur channel.
- viii) Rehabilitation works proposed under this irrigation system will be ensuring supply of required quantum of water to the tail end farmers.

III. Rehabilitation of Enathi Kanmoi in Varpattu Village of Ponnamaravathy Taluk in Pudukkottai District at an estimated cost of Rs.1.10 Crore

The Enathi kanmoi is located at Varpattu Village of Ponnamaravathy block in Pudukkottai Districts. It lies in Manimuthar sub basin of Kottakaraiyar Basin and the registered ayacuts of this Tank is 74.51.0 Ha. This Tank has 6 sluices, two supply channels and a surplus course. At present, all the sluices are in damaged condition causing heavy leakage and loss of water. The supply channel, surplus course and the field channels are heavily silted and obstruct the free flow of water. Due to this sufficient water could not be stored and supplied to the ayacuts and hence there is a reduction in crop production. Due to the above reasons, this work is proposed to reconstruct the damaged sluices and the field channels, to desilt the supply channels and surplus course by deploying Machineries. All the required provisions are included to carry out full-fledged repairs to this Tank so as to protect the Tank during Monsoon period. The following provisions are made in this estimate.

- i) Reconstruction of Sluices Nos. 1, 2, 3, 4, 5 & 6
- ii) Reconstruction of Field Channels
- iii) Desilting the Supply Channels
- iv) Desilting the Surplus Course

IV. Reclamation of the Satturutti Channel in Mannarkudi Town area of Mannarkudi Taluk in Thiruvarur District at an estimated cost of Rs.5.00 Crore

The collective drainage of Mannargudi town and its surrounding areas of Melavasal and Neduvakottai are in falls into the nearby Pond situated

in the northern side of Mannargudi town. From this pond the Satturity Voikkal starts and it runs in the middle of Mannargudi town and finally in falls into Paminiyar River. The total length of the drain is 3.20 Km and having an ayacuts of 189.00 Ha. At present, the entire drain is heavily silted up and filled with lot of vegetation. Due to the deposition of silt and presence of shoal, this drain lost its carrying capacity and during the rainy season the entire town has been inundated by the drainage water. So the habitants are heavily affected and suffered a lot. Hence, it is necessary to rehabilitate the Satturutti channel. so as to avoid water stagnation in the Mannargudi Municipality area.

Proposal under this estimate are:

- 1) Construction of retaining wall from L.S.1.15 km to 1.90 km.
- 2) Desilting of Satturutti channel
- 3) Strengthening of bund from LS 0.00 km to 1.15 km on both sides
- V. <u>Rehabilitation of Perambur Periyakulam in Perambur Village of Viralimalai Taluk of Pudukottai District at an estimated cost of Rs.2.30 Crore.</u>

Perambur Periyakulam is located in Perambur Village of viralimalai block in Pudukkottai District. This Tank lies in Ponnaniyar sub basin of Cauvery Basin. The Ayacuts of this Tank is 163.43.0 Ha. This Tank has 3 sluices, three surplus weir out of which the surplus weir with shuttering arrangement is found in highly damaged condition. This weir is a very old built with brick masonry in lime mortar and was built during the British regime and has not been renovated since then. The masonry of the weir including abutments, Body wall and return walls have witnessed severe cracks and the aprons are also in a very dilapidated condition. During the recent rainfall the weir has witnessed heavy leaking at several points in the masonry and there is an imminent of danger of the entire structure in case of heavy flood. The shuttering arrangements has also worn out due to wear and tear and has lost its functional efficiency. All the three sluices are in badly damaged condition which has drastically reduced the supply of water for agriculture. During the previous rainy season there was heavy leaking and piping action in and near the sluices and the ayacuts was heavily flooded which resulted in huge loss of precious irrigation water and as a result there were heavy losses to the farmers. These sluices were temporarily restored using sand bags and casuarinas poles. The field channels of all the sluices are in heavily dilapidated condition and hence they are not able to supply water to the fields.

Due to the above reasons the farmer's dependent on this Tank are facing serious difficulties in carrying out agricultural activities which has resulted in reduction in agricultural production and increase in unemployment. There has been continuous request from the Ayacutdars to completely dismantle this weir and to reconstruct it with provision of new shuttering arrangements and reconstruct all the sluices of this Tank. Also the Ayacutdars of this Kanmoi has made

requests to the Districts Collector and Revenue Divisional Officer, to rehabilitate this weir through Grievance Day Petition. Hence it has become necessary to carry out extensive rehabilitation of this Tank to restore the Tank's original capacity.

The following provisions are made in the estimate,

- a. Reconstruction of Weir with shuttering arrangements
- b. Reconstruction of Sluices Nos. 1, 2 & 3
- c. Reconstruction of Field Channels Nos. 1, 2 & 3.

By implementing this work, the Ayacuts of 163.43.0 Ha will be stabilized and also improve the economic status of the Village

VI. Renovation of Panchathy Anicut in Panchathy Village of Aranthangi Taluk in Pudukkottai District at an estimated cost of Rs.1.50 Crore.

The Panchathy Anicut is located at Panchathy Village of Aranthangi Taluk in Pudukkottai Districts. It lies in South Vellar Basin. The total length of Anicut is 180 m. This Anicut feeds 23 Tanks having an irrigated ayacuts of 735.92 Ha. In this Anicut downstream and upstream apron portions were damaged. The existing abutment, body wall portions are in damaged condition. The existing retaining wall is in dilapidated condition. The shutters of scouring sluice, Head sluice, screw and head set assembly shutters were jammed and finding it difficult for operating during rainy season. The Anicut renovation work has not been taken up for the past 15 years. The flood bank levels are below the standard and in weak condition.

Due to the above reasons, this work is proposed to reconstruct the damaged Anicut portions, to desilt the supply channel and surplus course by deploying machineries, formation of flood bank in both U/S and D/S, protection wall arrangements of the breached portion and also repair works to be carried out in abutment.

The following provisions are made in the estimate,

- a. Formation of flood bank in both downstream and upstream side of Anicut.
- b. Desilting of Supply channel for a length of 1000m.
- c. Reconstruction of Downstream Retaining wall on left bank.
- d. Fabricating, supplying and fixing of Top Beam [ISMB 200] to suit the Head set.
- e. Reconstruction of downstream apron.
- VII. <u>Rehabilitation of Pinnangudy Anicut in Pinnangudy Village of Iluppur</u> Taluk of Pudukkottai District at an estimated cost of Rs.1.75 Crore

Pinnangudy Anicut is constructed across South Vellar River in Pinnangudy Village of Annavasal block of Iluppur Taluk in Pudukkottai District. This Anicut lies in South Vellar sub basin of Agniar Basin and this Right side Head sluice feeds Seranur Kanmoi and Memana Kanmoi and the left side Head sluice feeds Pinnangudy Kanmoi which has combined ayacuts of 659.85.0 Ha. No major rehabilitation work has

been done in the recent past in this Anicut and hence all the major components of the Anicut are in damaged condition and require immediate attention.

The operating platform of both the left and right side sand vents and Head sluices are in damaged condition due to which operation of shutters during the flood season has become difficult. The shutters of the Head sluices as well as Scour vents of this Anicut are in damaged condition which leads to loss of precious water available for irrigation. There is only one apron in the downstream and the surplus water has to fall for a height 1.5 m to reach the bed and this has led to heavy scouring action in the past and has damaged the apron portion. The launching apron of the left and right scour vents have been completely washed away in the recent flood. The existing protection wall in the left bank adjacent to the left scour vent portion has been damaged in the recent floods. The Wearing coat of U/S apron in the Head sluice and scour vent portion and in the Serani Kanmoi supply channel portion is completely worn out. The supply channel of Right bank of the River shares the common bank with the Serani Kanmoi supply channel for nearly 2.5 kms and a stretch of 220 m of bund portion has been completely washed away in the recent flood and the entire supply of water which is meant for Serani Kanmoi escaped into the River.

Due to the above reasons the farmers dependent on Pinnangudy Kanmoi and Serani Kanmoi and Memana Kanmoi that are fed by this Anicut are facing serious difficulties in carrying out agricultural activities which has resulted in reduction in agricultural production and increase in unemployment. The farmers of these Tanks and Villagers have been making continuous requests to carry out extensive rehabilitation work in this Anicut so as to restore it to its original capacity. This Anicut was investigated with the farmers of these Tanks by walk through survey and this estimate is prepared including the suggestion of farmers. Hence it has become necessary to carry out extensive rehabilitation in the Anicut portion to restore the original standards of the Anicut. By implementing this work, the Ayacuts of 659.85 Ha will be stabilized which will also improve the agricultural production and economic status of the Ayacutdars. The following provisions are made in the estimate,

- a. Renewing the shuttering arrangements of Right and Left Head sluices and Scour vents.
- b. Reconstruction of Platform walls and parapet walls of the Right and Left Head sluices and Scour vents.
- c. Repairing the solid apron in the Downstream.
- d. Providing a new launching apron in the Downstream
- e. Reconstruction of the damaged portion of the left bank protection wall.
- f. Providing a new protection wall in the common bund portion of River's Right bank with Serani Kanmoi supply channel.

- g. Renewing the wearing coat of U/S right scour vent and Head sluice portion and Serani Kanmoi supply channel portion.
- 3. The Chief Engineer, Plan Formulation, Water Resources Department has stated that no land acquisition is involved in these Schemes and the estimates have been prepared based on the Schedule of Rates for 2021- 2022 and requested for administrative sanction for 7 Nos. of rehabilitation schemes in Trichy Region at estimated cost of Rs.211.65 Crore.
- 4. In the letter second read above, the proposal of the Chief Engineer, Plan Formulation, Water Resources Department for the above Rehabilitation works has been forwarded to NABARD for loan assistance under RIDF XXVII for the year 2021-2022 at a restricted cost of Rs.23.31 Crore.
- 5. The Government, after careful examination, have decided to accept the proposal of the Chief Engineer, Plan Formulation, Water Resources Department in anticipation of loan assistance from NABARD under RIDF. Accordingly, administrative sanction is accorded for 7 Nos. of rehabilitation works in Trichy Region at an estimated cost of Rs.23,31,00,000/- (Rupees Twenty three crore and thirty one lakh only) in anticipation of NABARD loan assistance under RIDF XXVII for 2021-2022 as follows:

SI. No.	Name of the Work	Sanctioned amount (Rupees in Crore)
1	Rehabilitation of Popular Mudhaliyar Channel in Pugalur and Manmangalam Taluks Of Karur District without protection wall / side wall lining.	5.74
2	Strengthening the bund and Concrete Lining of both banks of Pugalur Channel from LS 0Km to 33.90Km in Kodumudi Taluk of Erode District and Pugalur Taluk of Karur District without protection wall / side wall lining.	5.92
3	Rehabilitation of Enathi Kanmoi in Varpattu Village of Ponnamaravathy Taluk in Pudukkottai District.	1.10
4	Reclamation of the Satturutti Channel in Mannarkudi Town area of Mannarkudi Taluk in Thiruvarur District.	5.00
5	Rehabilitation of Perambur Periyakulam in Perambur Village of Viralimalai Taluk in Pudukkottai District.	2.30
6	Rehabilitation of Panchathy Anicut in Panchathy Village of Aranthangi Taluk in Pudukkottai District	1.50
7.	Rehabilitation of Pinnangudy Anicut in Pinnangudy Village of Illuppur Taluk in Pudukkottai District.	1.75
	Total	23.31

- 6. The Engineer-in-Chief and Chief Engineer (General), Water Resources Department, Chennai and the District Collectors shall involve the farmers in the rehabilitation Works and ensure that proper documentation is done in all the above Works to avoid complaints and pilferage.
- 7. 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.
- 8. This order issues with the concurrence of Finance Department vide its U.O. No.18193/PW-II/2022, dated.26.04.2022.

(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, Trichy Region, Trichy-15.

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

The Chief General Manager, NABARD, 48, Mahatma Gandhi Road, Post Box No.6074, Nungambakkam, Chennai -34.

The District Collector, Karur.

The District Collector, Erode.

The District Collector, Thiruvarur.

The District Collector, Pudukkottai.

The District Treasury Officers, Karur / Erode / Thiruvarur / Pudukottai.

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

The Water Resources (OP-II) / ISpl.I) Department, Secretariat, Chennai-9. Stock File / Spare Copy.

// Forwarded by Order //

Section Officer