

ABSTRACT

Water Resources Department – Announcement made by Hon'ble Minister (Water Resources) for the year 2021-2022 – 9 Nos. of Rehabilitation Works in Trichy Region at an estimated cost of Rs.39.65 Crore - Sanction accorded – Orders issued.

Water Resources (S2) Department

G.O. (4D) No.35

Dated 02.05.2022

சுபகிருது, சித்திரை 19 திருவள்ளுவர் ஆண்டு 2053 Read :

- 1. From the Chief Engineer, Plan Formulation, Water Resources Department, Letter No. F2 / Announcement 2021-22 / 207 Rehabilitation 3 / Tri Reg / 2021, dated: 13.10.2021.
- 2. Government Letter No.59278 / (Fin(Res.II) / 2021-1, Finance Department, dated 17.02.2022.

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 District 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 9 Nos. of rehabilitation works in Trichy Region at an estimated cost of Rs.493.37 Crore as detailed below:

I. Rehabilitation of Ariyavur Tank in Ariyavur Village, Inamkulathur big Tank in Inamkulathur Village of Srirangam Taluk and Kumbakkudi Anicut, Narkadalkudi Anicut in Suriyur Village of Thiruverambur Taluk in Trichy District at an estimated cost of Rs.1.70 Crore

Ariyavur Tank is located in Ariyavur Village of Srirangam Taluk in Trichy District. The total length of Tank bund is 1366m. The registered Ayacuts of this Tank is 42.59 Ha. The downstream apron portion of the surplus weir has got damaged and caused seepage of water, which has to be attended immediately to avoid damage to the entire structure. Also the Tank bund has got slides at many places and it is not up to its standard. The supply channel to the Tank is filled with silt and vegetation which affects the free flow of supply water. Hence it is proposed to rehabilitate the Tank with the following components.

- i) Rehabilitation of d/s apron of the surplus weir
- ii) Strengthening of bund with side slopes of 2:1
- iii) Desilting of supply channel to the Tank for a length of 2000m

Inamkulathur big Tank is located in Inamkulathur Village of Srirangam Taluk in Trichy District. The total length of Tank bund is 2410m. The registered Ayacuts of this Tank is 137.560 Ha. The downstream apron portion of the surplus weir has got damaged and caused seepage of water which has to be attended immediately to avoid damage to the entire structure. The Tank bund has got slides at many places and it is not up to its standard. The supply channel to this Tank is also filled with silt and vegetation which affects the free flow of water to the Tank. Hence it is proposed to rehabilitate the Tank with the following components

- i) Rehabilitation of d/s apron of the surplus weir
- ii) Strengthening of bund with side slopes of 2:1
- iii) Desilting of supply channel to the Tank to a length of 6100m

Kumbakkudi Anicut is constructed across Kattaru River. It is located in Suriyur Village of Thiruverumbur Taluk in Trichy District to feed Kumbakkudi Tank.

At present the Anicut is leaky in some places and in the downstream portion of the Anicut has got damaged due to age and caused seepage of water which has to be attended immediately to avoid damage to the entire structure. Also the bed of the river on the upstream and downstream of the Anicut has silted up and filled with shoal. Hence it is necessary to regrade the river and rehabilitate the downstream apron portion of the Anicut

The following components are made in the estimate

- i) Providing skin wall and apron wearing coat for Anicut.
- ii) Providing protection wall.
- iii) Bund protection with necessary toe wall and PCC block revetment.
- iv) Regrading the river for a length of 230 m on upstream side and 100 m on downstream side.

By implementing the scheme an extent of 70.095 Ha of Ayacuts will be benefitted

Narkkadalkudi Anicut is constructed across Kattaru River. It is located in Suriyur Village of Thiruverumbur Taluk in Trichy District to feed Narkkadalkudi Tank

At present, the earth from the bund slides into the river bed and not up to its standard. The supply channel to the Narkkadalkudi Tank has also got silted up which affects the supply of water to the Tank. Plastering on the wall of scour sluice and head sluice has also deteriorated at many places. Hence it is necessary to rehabilitate the Anicut with the following provisions

- i) Bund protection with necessary toe wall and PCC block revetment.
- ii) Regrading the river for a length of 500m.
- iii) Desilting of supply channel to a length of 300m.
- iv) Replastering the damaged portion of the scour sluice and head sluice.
- v) Renewal of damaged shutter and the guide channel for head sluice.

By implementing the scheme an extent of 44.070 Ha of Ayacuts will be benefitted.

II. Rehabilitation of Koneri River originating from Pachamalai hills and it's connecting Tanks in Perambalur Taluk and District at an estimated cost of Rs.13.32 Crore

Koneri River originates from south eastern slope of Pachaimalai hills and flows through Ladapuram, Kurumbalur and Chinnaru Villages. It joins with river Vellar and finally confluence into sea. By the rain water from the Pachaimalai hills, the irrigation Tanks which are at the foot of the hills viz Kalarampatti Tank, Ladapuram big Tank, Ladapuram Small Tank and Melapuliyur Tank are being filled upto its full capacity.

The Surplus water from the above Tanks joins with Koneri and the water is supplied to the 7 Nos. of chain of Tanks viz Kurumbalur Tank, Senjeri Tank, Aranarai Tank, Perambalur Mela Eri, Perambalur Keela Eri, Thuraimangalam Big and Small Tanks through supply channels. The total

catchment area is about 1302.33 acres and the river course from the Pachaimalai hills to the above Tanks were heavily silted and filled with heavy jungles. Due to the above reason the flow of water to the above Tanks is fully affected. Hence it is necessary to desilt and regrading the small odais and river from Pachaimalai hills to store the rain water without any wastage in the above Tanks. It is necessary to rehabilitate bund and irrigation structures in the above 11 Tanks.

Proposals:

- i. Strengthening of 7 Tanks bund.
- ii. Regrading the River courses and supply channels.
- iii. Reconstruction of 16 Nos. of sluice.
- iv. Reconstruction of Head sluice.
- v. Rehabilitation of 6 Nos. of well Syphon
- vi. Repairs to weirs of 5 Tanks.
- vii. Repairs to 2 Nos.. of Outlets.
- viii. Field Channel Lining works for a length of 2 Km.
- ix. Construction of U/S core wall for Arasalur Tank bund.

By implementing the above scheme an extent of 1455.13 hectares of Ayacuts under the above chain of Tanks will be benefitted.

III. Rehabilitation of Mirattu Nilai Periya Kulam, Vemban Mugunthankulam, Vannankundu and Pidarikulam and Senkulam in Mirattu Nilai Village in Tirumayam Taluk of Pudukkottai District at an estimated cost of Rs.1.90 crore.

The Mirattunilai Periyakulam & Vemban Mugunthankulam Kanmoi, Vannankundu & Pidarikulam Kanmoi and Senkulam Kanmoi are situated in Tirumayam Taluk of Pudukkottai District. The above 3 Tanks are rain fed Tanks. In these Tanks maintenance works and rehabilitation works are not carried out for the past 15 years. Hence entire water spread area is silted up heavily and due to this storage capacity has been reduced. The Tank bunds are eroded and weaker in condition. The existing weir, sluices are in damaged condition

The following Provisions are made in this estimate.

- i. Reconstruction of sluices
- ii. Repairs to weir
- iii. Lining of field channel
- iv. Strengthening of bund
- v. Desilting of water spread area

IV. Rehabilitation of Theeyathur Tank in Theeyathur Village, Adampur Tank in Adampur Village of Avudaiyarkovil Taluk in Pudukkottai District at an estimated cost of Rs.1.50 Crore.

The Theeyathur Tank is located in Theeyathur Village of Avudaiyarkovil Taluk in Pudukkottai District. This Tank lies in Pambaru sub basin of Pambaru- Kottakaraiyar Basin. The Ayacuts of Theeyathur Tank is 136.08.5 Ha. The Adampur Tank is located in Adampur Village of Avudaiyarkovil Taluk in Pudukkottai District. This Tank lies in Pambaru sub basin of Pambaru- Kottakaraiyar Basin. The Ayacuts of Adampur Tank is 78.62.5 Ha.

The Theeyathur Tank has 6 Nos.. of sluices, two weirs, a supply channel and a surplus course. The Adampur Tank has 4 Sluices, 1 Weir, a supply Channel and a Surplus course. All the sluices of these Tanks are very old and are in dilapidated condition caused heavy leaking and piping action which has to be attended immediately to avoid further damage. The supply channels to the Tanks and the field channels of all the sluices are in heavily dilapidated condition and hence they are not able to supply water to the fields.

The following components are made in this estimate

- Repair and reconstruction of sluices in Theeyathur Tank and Adampur Tank
- ii. Desilting the Supply Channels
- iii. Repair to weirs
- iv. Strengthening of Tank Bunds
- V. <u>Rehabilitation of Sengani Kanmoi in Sengalur Village of Kulathur Taluk in Pudukkottai District at an estimated cost of Rs. 1.25 Crore</u>

Sengani kanmoi is located in Sengalur Village of Kulathur Taluk in Pudukkottai District. The Ayacuts of this Tank is 127.68 Ha. This Tank consist of 3 Nos. of sluices, 3 Nos. of weirs, three supply channels and one surplus course and total length of bund is 1570m.

The sluice no 1 and surplus weirs of no 1 & 2 are in damaged condition and need to be reconstructed to avoid further damage. The Tank bund is found eroded and below standards for its entire length and the same has to be strengthened to avoid possible breaches. The supply channel to the Tank, Field channels and the surplus courses are silted up heavily which affects the free flow of water

The following components are made in this estimate

1. Strengthening of Tank bund

- 2. Desilting the Supply Channels
- 3. Desilting the Surplus Course
- 4. Reconstruction of Sluice No:1
- 5. Reconstruction of Weir No:1&2
- 6. Lining of Field Channels
- 7. Construction of Protection wall
- VI. Rehabilitation of Mattangal periya eri surplus course and providing protection walls from Mattangal periya eri in Mattangal Village to Regunathapuram Village (maharaja samuthiram drain) of Gandarvakottai & Karambakkudi Taluk in Pudukkottai District at an estimated cost of Rs.2.70 Crore.

The Mattangal big Tank is situated at Mattangal Village of Gandarvakottai Taluk in Pudukkottai District. The Registered Ayacuts of this Tank is 180.06.5 Ha. The Surplus of this Tank is called as Maharaja Samuthiram Drain and it runs for a length of 57.860 Km and it confluences with Agniyar river of Thanjavur District.

In this Drain from LS 0 to 15.20Km there are two Anicuts in which 8 Nos. of Tanks are benefitted in Pudukkottai District. The total Ayacuts of 537.31 Ha benefitted by this drain. At present the bed of this drain is silted up heavily and the bank of this course is eroded and weaker in certain portions. Due to this reason the water cannot be drawn to the lower down Tanks.

The following Provisions are made in this estimate.

- i. Construction of Protection wall for a length of 288 m.
- ii. Desilting of Surplus course from Mattangal Periya Eri to Regunathapuram Karaikulam surplus 0 Km to 15.200 Km.
- VII. Rehabilitation of Irumbanadu Tank in Irumbanadu Village, Visoor Tank in Embel Village and Kurungalur Tank in Kurungalur Village of Avudaiyarkovil Taluk in Pudukkottai District at an estimated cost of Rs.1.50 Crore.

The Irumbanadu Tank is located in Irumbanadu Village, Visoor Tank is located in Embel Village and Kurungalur Tank is located in Kurungalur Village of Avudaiyarkovil Taluk in Pudukkottai District .The Irumbanadu Tank lies in Pambaru sub basin of Pambaru- Kottakaraiyar Basin. The Visoor Tank lies in Pambaru sub basin of Pambaru-Kottakaraiyar Basin. The Kurungalur Tank lies in Pambaru sub basin of Pambaru- Kottakaraiyar Basin. These Tanks are maintained by South vellar Basin Division, Pudukkottai. Ayacuts of Irumbanadu Tank is 351.64.0 Ha. Ayacuts of Visoor Tank is 67.12.0 Ha. And Ayacuts of Kurungalu Tank is 44.36.0Ha.

The Irumbanadu Tank has 4 sluices, two weir, supply channels and a surplus course. The Visoor Tank has 4 Sluice, 2 Weirs, supply Channel and Surplus course and the Kurungalur Tank has 4 Sluice, one weir, supply Channel and surplus course. All these sluices are in badly damaged condition which has drastically reduced the supply of water for agriculture. The supply channels of this Tank are heavily silted up and hence the inflow of water into this Tank has been reduced in the past few years. Also the surplus course of this Tank is silted up because of which the carrying capacity of the channel has suffered a setback. The field channels of all the sluices are in heavily dilapidated condition and hence they are not able to supply water to the fields. The following provisions are made in the estimate.

- i. Repair of 2 Sluices in Irumbanadu Tank Nos. 1&2, 2 Sluices in Visoor Tank and 1 no of Sluice in Kurungalur Tank.
- ii. Desilting the Supply Channels to Tanks.
- iii. Strengthening of Tank Bunds.

By implementing this work, 351.64.0 Ha Ayacuts of Irumbanadu Tank, 67.12.0 Ha Ayacuts of Visoor Tank and 44.36.0 Ha Ayacuts of Kurungalur Tank will be stabilized and also the economic status of the Villages will be improved.

VIII. Rehabilitation of Siruvayalur Tank and Sluice Main Channel in Siruvayalur Hamlet of Kanakkiliyanallur Village of Lalgudi Taluk of Trichy District at an estimated cost of Rs.4.50 crore

The Siruvayalur Tank is situated across Uppu Odai in Siruvayalur Hamlet of Kanakkiliyanallur Village of Lalgudi Taluk of Trichy District. The Tank was originally formed during the Year 2000 – 2005. No repair and maintenance work has been carried out since its inception. The bund Length of Siruvayalur Tank is 2080 m. The Tank has 3 Numbers of Sluices and one surplus weir. The Tank bund has got eroded and not upto its standard. The surplus weir has got damaged and loss of seepage of water through the body wall and the field channels are silted up and carrying capacity of the channel is reduced. The field channels are filled with silt and jungles

The main canal sluices No: 1, 2 and 3 are having a length of 1960m, 2234m and 1550m. The channels are excavated earthen Trapezoidal section. Also cross masonry work are constructed at road crossing and channels crossing. Now earthen Trapezoidal channel in No:3 are fully got silted up and also in canal sluice no: 1 and 2 canal lost its section fully, got silted up from 250m and 500m. Due to the above reason the flow get affected to the downstream side and not able to reach the tail end Ayacuts. Hence sluice canal No:1,2 and 3 main canal are necessary to be rehabilitated with trough section in order to fulfil end field of irrigation.

The following components are made in this estimate.

- i. Strengthening of Tank bund
- ii. Providing Skin wall in the surplus weir.
- iii. Lining of field channel
- iv. Renewal of sluice shutter sluice 2

After rehabilitation of Siruvayalur Tank the Ayacuts of about 147.71 Ha in Siruvayalur, Kanakkiliyanallur and Vandalaigudalur Villages will be benefitted.

IX. Rehabilitation of Uyyakondan channel from mile 0/0 to 43/4 in Trichy District and Uyyakondan extension channel in Thanjavur District at an estimated cost of Rs.465.00 Crore

Uyyakondan canal is taking off from the River Cauvery with an open head at 171KM from Mettur reservoir on the right side of river Cauvery and the actual head sluice is situated at Pettavaithalai Village in Srirangam Taluk which was constructed in the year 1932. The main canal runs for a length of 70 km and tail ends into Valavanthankottai Tank in Valavanthankottai Village in Trichy District. At the end of main channel the three extension channel off takes and runs through a length of 16.50km and ends at Serandi Tank in Budalur Taluk of Thanjavur District.

The Uyyakondan channel is an earthen canal, having structures with Brick Masonry. Due to age and continuous usage of structures, they have lost their strength and binding. Similarly, the canal bunds have eroded considerably and below its standards. Further, a lot of silt has been deposited in the bed of the canal. As a result the full supply level (FSL) has been reduced. Hence the required quantity of water has not been received at the tail end areas even sufficient storage has been available. Because of unlined and heavy deterioration on the sides and bottom, significant losses of water in its transit have been observed.

Most of the drainage inside the Trichy city corporation limit (in Abisekapuram zone, Ponmalai zone and Ariyamangalam zone) directly fall inside the Uyyakondan channel.

Based on consideration the following provisions has been made in this estimate

- i. Reconstruction of Uyyakondan Sand Vent 1 No.
- ii. Repairs to New Ayyan Channel Head Sluice 1 No.
- iii. Reconstruction of Bed Dam @ mile 4/6 in Uyyakondan Main Channel 1 No.
- iv. Construction of Grade wall @ mile 5/4+100m, 6/5, 7/7, 10/2, 12/4, 15/5, 18/5, 20/1, 23/2, 29/5 in Uyyakondan Main Channel 10 Nos.

- v. Repairs to Nangavaram Drainage Sluice 1 No.
- vi. Repairs to Under Tunnel in Nangavaram Drainage and Adavathur Drain 2 Nos..
- vii. Reconstruction of Kazhuvankandarai flood escape 1 No.
- viii. Reconstruction of Channel Sluice 86 Nos.
- ix. Channel Lining in Uyyakondan Channel from mile 0/0 43/4 and its Extension Channel with separation of sewage water in corporation limit.
- x. Desilting the channel bed and formation of Bund.
- xi. Formation of Bituminous road along Left Bank in Town extension area.
- xii. Providing steel fencing in built up area.
- xiii. Reconstruction of Tank Sluice 34 Nos.
- xiv. Rehabilitation of Tank weir -15 Nos..
- xv. Desilting of Tanks 34 Nos..
- xvi. Construction of New Regulator @ Valavanthankottai 1 No.
- xvii. Reconstruction of Well Syphon 2 Nos..

Other Lump Sum Provisions

- Provision made for purchase of Pumps and constructing sumps, pipe lines to nearby pumping station to convey sewage collected from baby channel in Trichy City Corporation limit.
- ii Provision for Construction of a office building and Inspection bungalow.
- iii. Provision for dewatering, road diversion work and approach road and minimizing pollution of water.
- 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 9 Nos. of rehabilitation works in Trichy Region for an estimate amount of Rs.493.37 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.39.65 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 9 Nos. of rehabilitation works in Trichy Region at an estimated cost of Rs.39.65 Crore (Rupees Thirty nine crore and sixty five lakh only) in

anticipation of NABARD loan assistance under RIDF XXVII for 2021-2022 as follows :

S. No.	Name of work	Sanctioned amount (Rs. in Crore)
1	Rehabilitation of Ariyavur Tank in Ariyavur Village, Inamkulathur Big Tank in Inamkulathur Village of Srirangam Taluk and Kumbakkudi Anicut and Narkadalkudi Anicut in Suriyur Village of Thiruverambur Taluk in Trichy District without side wall lining	1.00
2	Rehabilitation of Koneri River originating from Pachamalai hills and its connecting Tanks in Perambalur Taluk and District without side wall lining	4.70
3	Rehabilitation of Mirattu Nilai Periya Kanmoi and Vemban Mugunthankulam Kanmoi, Vannankundu, Pidarikulam Kanmoi and Senkulam Kanmoi in Mirattu Nilai Village in Tirumayam Taluk of Pudukkottai District subject to (i) restricted LS provisions and (ii) no side wall lining.	1.75
4	Rehabilitation of Theeyathur Kanmoi in Theeyathur Village, and Adampur kanmoi in Adampur Village in Avudaiyarkoil Taluk of Pudukkottai District.	1.50
5	Rehabilitation of Senganikanmoi in Sengalur Village of Kulathur Taluk in Pudukkottai District.	1.25
6	Rehabilitation of Mattangal Periya Eri surplus course and providing protection walls from Mattangal Periya Eri in Mattangal Village to Regunathapuram Village (Maharaja Samuthiram drain) of Gandarvakottai & Karambakkudi Taluk in Pudukkottai District subject to (i) restricted LS provisions, (ii) no protection wall and (iii) Desilting on revenue model.	0.75
7	Rehabilitation of Irumbanadu Tank in Irumbanadu Village, Visoor Tank in Embal Village and Kurungalur Tank in Kurungalur Village in Avudaiyarkovil Taluk of Pudukkottai District	1.50

8	Rehabilitation of Siruvayalur Tank and Sluice main channel in Siruvayalur Hamlet of Kanakkiliyanallur Village of Lalgudi Taluk of Trichy District without side wall lining	2.20
9	Rehabilitation of Uyyakondan Channel from mile 0/0 to 43/4 in Trichy District and Uyyakondan Extension Channel in Thanjavur District subject to desilting component only allowed and purely on revenue generation model. All other components are deferred.	25.00
æ	TOTAL	39.65

- 6. The Engineer-in-Chief and Chief Engineer (General), Water Resources Department, Chennai and the District Collectors shall involve the farmers in the above rehabilitation works and ensure that proper documentation should be 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.18211/PW-II/2022, dated 27.04.2022.

(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, Institute of Water Studies, Hydrology and Quality Control, Taramani, Chennai-113.

The Chief Engineer, Water Resources Department, Trichy Region, Trichy-2. The Chief General Manager, NABARD, 48, Mahatma Gandhi Road, Post Box No.6074, Nungambakkam, Chennai-34.

The District Collector, Trichy.

The District Collector, Perambalur.

The District Collector, Pudukkottai.

The District Collector, Thanjavur.

The Treasury Officers, Trichy / Perambalur / Pudukkottai / Thanjavur.

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 / II / W&M-I / Res.II) Department, Secretariat, Chennai-9.

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

// Forwarded by Order //

Section Officer