



ABSTRACT

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Open

Water Resources Department – Announcement made by Hon'ble Minister (Water Resources) for 2021-2022 - 8 Nos. of Rehabilitation Works in Chennai Region at an estimated cost of Rs.29.01 Crore - Sanction accorded – Orders issued.

Water Resources (S1) Department

G.O. (4D) No.33

Dated 28.04.2022

சுபகிருது, சித்திரை 15 திருவள்ளுவர் ஆண்டு 2053 Read :



- 1. From the Chief Engineer, Plan Formulation, Water Resources Department, Letter No.B4 / 2308/Anno 21-22 / Rehabilitation-8 / AE 1/ AEE 2, dated: 13.10.2021.
- 2. Government Letter No. 59279 / Finance (Res.II) / 2021-1, Finance Department, dated 15.02.2022.

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, in the letters first read above, the Chief Engineer, Plan Formulation, Water Resources Department has sent a proposal along with estimates to the Government for according administrative sanction for 8 Nos. of Rehabilitation Works in Chennai Region at estimated cost of Rs.45.02 Crore as detailed below:
 - I. <u>Capacity enhancement by deepening & rehabilitation of Somangalam Tank in Adyar Sub Basin in Kancheepuram District at an estimated cost of Rs. 7.50 Crore.</u>

Somangalam Tank is one of the Non System Tanks in Adyar sub basin in Chennai Basin. It is located near Somangalam Village in

Kundrathur Taluk of Kancheepuram District. The tank receives water from its upper tank Amarambedu Tank and its own catchment.

The salient features of the tank are

i. Length of bund - 2860 m
ii. No of sluices - 4
iii. No of Weir - 1
iv. Ayacut - 43.39 Ha

v. Capacity - 43.39 Ha
- 43.39 Ha
- 1.23 MM³

During floods, the runoff could not be truncated and caused breaches in the tank bund and all its structural components were damaged. To safeguard the tank and the adjacent fields it is necessary to do the rehabilitation works.

Hence the following provisions are made in the estimate

i. Standardisation of Bund for a length of 2860 m

ii. Formation of foreshore bund for a length of 1050 m

iii. Reconstruction of Sluice No-1 & 3

iv. Reclamation of tank bed

v. Repairs to weir

vi. Construction of inlets - 2 Nos

vii. Construction of Regulator

viii. Regarding the supply channel for a length of 2500 m

II. <u>Capacity enhancement by deepening & Rehabilitation of Athanjeri Tank in Adyar Sub Basin in Kancheepuram District at an estimated cost of Rs.3.40 Crore</u>

Athanjeri Tank is a Non System Tank in Adyar sub-Basin of Chennai Basin. It is located near Athanjeri Village in Kundrathur Taluk of Kancheepuram District. The tank receives water from its Upper Tank of Salamangalam. The surplus of this tank flows through surplus course of Padappai Tank and finally drains into Adyar River.

The salients features of the tank are

i. Length of bund - 2485 m

ii. No of sluices - 3 iii. No of Weir - 2

iv. Ayacut - 84.18 Ha v. Capacity - 0.38 MM³

During 2015 floods, the structural components of the tank are damaged and there is a need to rehabilitate and revitalize the Tank irrigation system.

Hence, the following provisions are made in the estimate

i. Standardisation of Bund for a length of 2485 m.

- ii. Reconstruction of Sluice No -1
- iii. Repairs to weir.
- iv. Improvements to Supply Channel
- v. Provision for Eviction of Encroachment in Foreshore area.
- vi. Provision for Park Arrangements
- III. Capacity enhancement by deepening & Rehabilitation of Malaipattu
 Tank and Improvement to Surplus course in Adyar sub Basin in
 Kancheepuram District at an estimated cost of Rs.6.00 Crore

Malaipattu Tank is a Non System Tank in Adyar Sub-Basin of Chennai Basin. It is located near Malaipattu Village in Kundrathur Taluk of Kancheepuram District. The tank receives water from its upper Tanks namely Velleri Tank & Maganium Periya Eri. The surplus of the Tank, finally drains into Adyar River.

The salient features of the tank are

i. Length of bund – 1350 m

ii. No of sluices - 2 iii. No of Weir - 1

iv. Ayacut - 92.27 Ha v. Capacity - 0.40 MM³

During 2015 floods, the structural components of the tank are damaged and there is a need to rehabilitate and revitalize the Tank irrigation system.

Hence, the following provisions are made in the estimate

- i. Standardisation of Bund for a length of 1350 m
- ii. Formation of foreshore bund for a length of 1050 m
- iii. Reclamation of Tank bed
- iv. Reconstruction of Sluice no -1 and 3
- v. Repairs to weir.
- vi. Construction of inlets 2 Nos
- vii. Construction of Regulator
- viii. Improvements to Supply Channel
- ix. Provision for Soil Treatment.
- x. Provision for Contour and Cadastral Survey.
- xi. Provision for Tree plantation and Park arrangements.
- xii. Provision for Shutter arrangements.
- IV. Repair and Rehabilitation of Kavanur Tank, Punnapaadi Tank and Sathur Tank and desilting of its supply channel through Kuppam, Venkatapuram and Sambasivapuram Villages in Arcot Taluk of Ranipet District at an estimated cost of Rs.1.25 Crore.

The Kavanur Tank, Punnapadi Tank and Sathur Tanks are Non System Tanks.

Kavanur Tank:

The source of water mainly depends free catchment on eastern side of the Palamathi hill and runs for a length of 4 km and divides into two. One flows to Arungundram Tank and other to Vilapakkam Tank. A branch channel offtakes from Vilapakkam Tank supply channel and feeds Kavanur Tank. The surplus goes to Anaimallur Tank.

- 1400 m Length of bund i. - 2 No of sluices ii. - 1 No of Weir iii. - 89.13 Ha Ayacut iv. $-0.6607 \, \text{MM}^3$ Capacity ٧.

Length of supply channel - 6400 m vi.

The following provisions are made in the estimate

Desilting and Strengthening of Bund for a length of 1400 m i.

Repairs to Sluice No-1 & No-2 ii.

Repairs to weir iii.

Desilting and Improvements of supply channel for a length iv. of 6400m.

Punnapadi Tank:

The source of water mainly comes from its Tank namely Virali Tank. The surplus goes to Kilpadi Tank.

- 1350 m i. Length of bund - 2 ii. No of sluices - 1 iii. No of Weir - 61.97 Ha iv. Ayacut $-0.36 \, \text{MM}^3$ v. Capacity vi. Length of supply channel - 2000 m

The following provisions are made in the estimate

i. Desilting and Strengthening of Bund for a length of 1350 m

ii. Reconstruction of Sluice No-1

iii. Repairs to Sluice No-2

iv. Repairs to weir

v. Desilting and Improvements of supply channel for a length of 2000m.

vi. Field Channel lining

Sathur Tank:

The source of water mainly comes from its Tank namely Thazhanur Tank. The surplus goes to Mangadu Tank.

- 2130 m i. Length of bund - 3 No of sluices ii. - 2 No of Weir iii. - 186.53 Ha iv. Ayacut -2.12 MM^3 Capacity ٧.

Length of supply channel - 2000 m vi.

The following provisions are made in the estimate

- i. Desilting and Strengthening of Bund for a length of 2130 m
- ii. Reconstruction of Sluice No-1
- iii. Repairs to Sluice No-2
- iv. Repairs to weir
- v. Desilting and Improvements of supply channel for a length of 4000m.
- V. Rehabilitation of Willington reservoir low level channel and its cross masonries in Tittakudi Taluk of Cuddalore District at an estimated cost of Rs.12.00 Crore.

Willington reservoir is only reservoir in lower Vellar sub basin of Vellar River basin. The reservoir is located in Keelacheruvai Village of Tittakudi Taluk in Cuddalore District. The reservoir receives supply from Vellar River through feeder channel off taking from Tholudhur regulator and from its own catchment area.

i. Length of Reservoir - 4300 m

ii. No of head sluice - 1

iii. No of vents -3(1.52m x1.22m) iv. Ayacut -24059 Acres

v. Tank benefited - 94 Tanks

During 2015 floods, the runoff could not be truncated and caused breaches in the Tank bund and all its structural component got damaged. Hence the following provisions are made in this estimate.

- i. Standardization and strengthening of bund in channels.
- ii. Repairs to drop.
- iii. Repairs to spout.
- iv. Repairs to Syphon.
- v. Provision for demarcate the P.W.D lands and fixing of demarcation stones.

By implementing this scheme the command area of the Wellington low level channel of 6767 acres will be benefitted.

VI. Rehabilitation of Vallimalai Tank, Mutharasikuppam Tank and Ponnai anicut south main canal in Katpadi Taluk of Vellore District at an estimated cost of Rs.3.23 Crore.

The Vallimalai Tank is located in Vallimalai Village of Katpadi Taluk of Vellore District with Ayacut of 47.37Ha.

The Mutharasikuppam Tank is located in Mutharasikuppam Village of Katpadi Taluk of Vellore District with Ayacut of 126.30 Ha.

The south main canal is from Ponnai anicut and flows for a length of 22.96 Km and irrigates an of 1946.00 Ha.

The south main channel originates from LS 6.25km of east main canal of Ponnai anicut. The length of south main canal is 22.96km. This channel supplies water to 32 Tanks and it irrigates 1946 Ha. Some portion of canal bund from LS700m to 1000m is very weak and very often breached out during water regulation. The structures like weir, head regulators, culverts are age old structures and they require immediate repair works. Hence the following provisions are made in the estimate,

i. Catchment treatment works

The supply channel is to be desilted for a length of 3000m for Vallimalai Tank and 3000m supply channel for Mutharasikuppam Tank is to be desilted.

ii. Repairs to Tank bund

The entire stretch of 610m of Vallimalai Tank and 983m of Mutharasikuppam has been standardized and strengthened by using machineries to top width of 3m and side slopes compacted to front and rear 2:1 were made good by doing earth work.

iii. Repairs to weir

Surplus weir and Apron concrete and cutoff wall works were done.

- iv. Laying of boundary stoneThe boundary of Tank is measured and boundary stones fixed.
- v. To provide retaining wall.
- vi. Shutter repair work
- vii. Head regulator repair work
- viii. Culverts.

By implementing this scheme, a total ayacut of 2119.37 hectares of land of Vallimalai Tank, Mutharasikuppam Tank and south main canal ayacut from Ponnai anicut will be benefitted.

VII. Rehabilitation of Amoor Channel in Tiruvennainallur Taluk in Villupuram District at an estimated cost of Rs.5.00 Crore.

Thirukoilur anicut is one of the anicuts constructed across Pennaiyar River. Raghavaiyan channel off takes from Thirukoilur anicut. The Amoor channel is off taking from right side of Raghavaiyan channel at LS 2984 m in Sundharesapuram Village in Thiruvennainallur Taluk of Villupuram District. Finally the Amoor channel falls into Gadilam River.

The salient features of the channel are,

Length of the channel - 12500 m

Carrying capacity - 37 cusecs

Ayacut benefitted - 633.34 Hec

No of Tanks benefitted - 11

Due to continuous water flow, the structures like head sluices, apron, cutoff walls, revetments and retaining walls at various locations are in damaged condition. The banks on both sides are eroded and overwashed in many places. Presently the channel from 3000 m to 12500 m is considered for improvement as this portion is almost exists in worst condition. Hence, the following provisions are made in this estimate

- i. Improvements to Amoor channel head sluice
- ii. Improvements to Amoor large Tank
- iii. Improvements to Amoor Kurumandal Tank
- iv. Improvements to Amoor Melandal Tank
- v. Improvements to T.Kolathur large Tank
- vi. Improvements to T.Kolathur Sitheri
- vii. Improvements to Oddanandal Tank
- viii. Improvements to Kondasamuthiram Tank
 - ix. Improvements to Kasthapattu Tank

By rehabilitation of this channel, an ayacut of 633.34 Hec will be benefited.

VIII. Renovation of V.Mathur anicut across Pambai Channel in V.Mathur Village in Vikkiravandi Taluk of Villupuram District at an estimated cost of Rs.6.64 Crore.

Thirukoilur anicut is one of the anicuts constructed across Pennaiyar River. The Pambai channel offtakes from Thirukoilur anicut. V. Mathur anicut is constructed across this channel. The total length of the channel is 45km and feeds 29 Tanks

The salient features of the anicut are,

Length of the anicut - 62 m

Maximum flood discharge - 6943 Cusecs

No of Scour vents - 2 No of canal sluice - 2

Ayacut benefitted - 391.57 Hec

No of Tanks benefitted - 4

At present the anicut is fully in dilapidated condition. Due to continuous water flow, the structures like head sluices, apron, cutoff walls, at various locations are in damaged condition. Hence, the anicut needs renovation by attending the repairs in the above structure.

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 8 Nos.

of rehabilitation works in Chennai Region at an estimated cost of Rs.45.02 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.29.01 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 8 Nos. of rehabilitation works in Chennai Region at an estimated cost of Rs.29.01 crore (Rupees Twenty nine crore and one lakh only) in anticipation of NABARD loan assistance under RIDF XXVII for 2021-2022 as follows:

SI No.	Name of the Work	Amount Sanctioned (Rupees in Crore)
1.	Capacity enhancement by deepening and Rehabilitation of Somangalam Tank in Adyar Sub Basin in Kancheepuram District by carrying out the following Works: a) Sluice Reconstruction b) Flood Control Inlets c) Flood Control Regulator d) Weir Modification Remaining items of works are deferred.	1.91
2.	Capacity enhancement by deepening & Rehabilitation of Athanjeri Tank in Adyar Sub Basin in Kancheepuram District, by carrying out the following Works: a) Sluice Reconstruction b) Weir Repairs c) Improvements to Supply Channel Remaining items of works are deferred.	0.49
3.	Capacity enhancement by deepening & Rehabilitation of Malaipattu Tank and Improvement to Surplus course in Adyar Sub Basin in Kancheepuram District by carrying out the following Works: a) Sluice Reconstruction b) Flood Control Inlets c) Flood Control Regulator d) Weir Modification	1.10
	Remaining works are deferred.	

4.	Repair and Rehabilitation of Kavanur Tank, Punnapaadi Tank and Sathur Tank and desilting of its supply channel through Kuppam, Venkatapuram and Sambasivapuram Villages in Arcot Taluk of Ranipet District.	1.25
5.	Rehabilitation of Willington Reservoir low level channel and its cross masonries in Tittakudi Taluk of Cuddalore District.	12.00
6.	Rehabilitation of Vallimalai Tank, Mutharasikuppam Tank and Ponnai Anicut south Main Canal in Katpadi Taluk of Vellore District by carrying out the following Works: a) Weir repairs b) Supply Channels c) Culvert d) Head Regulator e) Shutter Remaining works are deferred.	0.62
7.	Rehabilititation of Amoor Channel in Tiruvennainallur Taluk in Villupuram District.	5.00
8.	Renovation of V.Mathur Anicut across Pambai Channel in V.Mathur Village in Vikkiravandi Taluk of Villupuram District.	6.64
	Total	29.01

- 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.18208/PW-II/2022, dated 28.04.2022.

(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, Chennai Region, Chennai-5.

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 Collectors, Kancheepuram/ Ranipet/ Cuddalore/ Vellore/ Villupuram.

The District Treasury Officers, Kancheepuram/ Ranipet/ Cuddalore/ Vellore / Villupuram.

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

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Section Officer.

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