ABSTRACT

Agriculture -Farmers Welfare Department – Agricultural Engineering – Agriculture Budget, 2023-2024 – **"Ensuring Irrigation to the tail end"** during the year 2023-2024 – Sanction of Rs.500.00 Lakh – Orders – Issued.

AGRICULTURE - FARMERS WELFARE (AE2) DEPARTMENT

சோபகிருது வருடம், சித்திரை 29 நாள், திருவள்ளுவர் ஆண்டு 2054

G.O.(Ms.) No.87 **Dated:12.05.2023**

Read:

1. Agriculture Budget Speech 2023-2024 by the Hon'ble Minister for Agriculture and Farmers Welfare on 21.03.2023.
2. From the Chief Engineer (Agricultural Engineering), Letter No. CADP2/12373/2023, dated 29.03.2023.

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ORDER:

During the Agriculture Budget Speech held on 21.03.2023, the Honourable Minister for Agriculture - Farmers Welfare has made the following announcement:-

Announcement No. 40 "Ensuring Irrigation to the tail end"

"To ensure irrigation water till tail end, desilting of C' and 'D' channels will be executed in the second phase in Cauvery and Vennar Basins of Thanjavur, Tiruvarur, Nagapattinam, Mayiladuthurai and Cuddalore districts during the next year as done in the last year,benefitting an area of 1.32 lakh acres for a length of 1146 Kilometers at an allocation of five crore Rupees."

2) Accordingly, the Chief Engineer (Agriculture Engineering) vide letter 2nd read above, has sent the proposal for desilting the 'C' and 'D' channels of Cauvery and Vennar basins in Thanjavur, Tiruvarur, Nagapattinam, Mayiladuthurai and Cuddalore Districts under the scheme of **"Ensuring Irrigation to the tail end"** covering a length of 1146 Km and area of 1.32 lakh acres for an amount of Rs.500.00 lakh under State fund.

I. Background:

Normally, 'A' and 'B' class channels are being periodically desilted by Water Resources Department, in the Delta regions. At the same time, the smaller field channels are being desilted by the farmers themselves. Whereas, the 'C" and 'D' class channels are being neglected. To achieve smooth conveyance of water in the channels so as to reach the tail end in time and at required quantity, it is very much essential to desilt C" and 'D' class channels.

A good maintenance programme can prolong the life of channels. Maintenance of an irrigation channel system is usually carried out in between two irrigation seasons, or at times of low water demand. It consists of cleaning, weeding, desilting, re-shaping, and executing minor repairs.

The requirement of water is increasing day by day and the ground water level is decreasing every year due to over tapping of ground water. Most of the rain water during the rainy season is inundated in the fields due to non renovation of irrigation and drainage channels. Moreover, the water released from Mettur dam does not reach the tail end fields. Since the schedule of the opening of Mettur Reservoir is on 12th June, timely desilting of all channels is essential.

In addition, the channels in the delta districts act as an irrigation channel for the areas in the downstream side. The link and intermittent field drains in the upland side drain the excess water into the same channel. Hence, they serve as irrigation cum drainage channels. During North East Monsoon season during flood, the water flow should be regularized by desilting the channels or it leads to crop damage due to inundation of water. In order to achieve equitable distribution and smooth conveyance of water in the channels so as to reach the tail end in the required time and required quantity and also to drain the fields from inundation during North East monsoon, it is imperative to maintain all categories of channels.

In this context, during the year 2022-23, necessary sanction was accorded vide G.O.(Ms) No.95 Agriculture and Farmers Welfare (AE2) Department, Dated 11.05.2022 and the district-wise length covered is given below and it is proposed to continue the desilting works during the year 2023-24 also.

Table: Length of "C" and "D" Channels desilted during 2022-23

Sl. No	District	Physical (in Km)
1	Thanjavur	121.28
2	Tiruvarur	554.00
3	Mayiladuthurai	419.00
4	Nagapattinam	215.00
5	Cuddalore	278.59
	Total	**1587.87**

II. Objectives:

The desilting works in Delta Districts of Cauvery and Vennar Basins are proposed with the following objectives.

- To Improve conveyance efficiency and carrying capacity of the irrigation channels by bringing back to its desired capacity
- To improve irrigation systems with reduced maintenance cost
- To ensure reliable availability of irrigation water at farm level
- To maintain equity in distribution of available water

III. Strategy:

- Works will be executed by the Agricultural Engineering Department officials through tendering process duly following the Tamil Nadu Transparency in Tenders Act 1998 and Tamil Nadu Transparency in Tender Rules 2000 at district level.

- The Cost norms will be based on PWD schedule of Rates. Estimates will be prepared accordingly along with the opinion of the local farmers. Bushes or small trees in the channel will be removed. They may obstruct the water flow

and their roots will open the compacted soil in the banks and cause the development of leakages. The desilted earth will be utilised for sectioning and strengthening of bunds to maintain the desired side slope and bed gradient. It will be ensured that there will not be any duplication of works by consulting with Rural Development and Panchayat Raj department officials during execution and assured that no tender excess shall be allowed for the project.

IV. Target Beneficiaries:

- All the farmers in the project areas proposed to be covered in the 'C' and 'D' channels of Cauvery and Vennar basins in Thanjavur, Tiruvarur, Nagapattinam, Mayiladuthurai and Cuddalore Districts are benefitted.

V. Project Area and Finance Details:

- The selected project areas are located in Cauvery and Vennar basins in 5 Districts, namely, Thanjavur Thiruvarur, Nagapattinam, Mayiladuthurai and Cuddalore. During the year 2023-24, it is proposed to desilt C and D channels to a length of 1,146 Km for an amount of **Rs.500.00 lakh** under State fund with 100% subsidy.

Table: Desilting of "C" and "D" Channels proposed for the year 2023-24

Sl. No	District	Physical (in Km)	Financial (Rs in lakh)
1	Thanjavur	219.15	116.02
2	Tiruvarur	250.00	95.05
3	Nagapattinam	258.00	97.60
4	Mayiladuthurai	305.43	141.15
5	Cuddalore	113.42	50.18
	Total	**1146.00**	**500.00**

VI. Expected Outcome

- Increase in channel carrying capacity
- Increase in command area
- Ensure the availability of water at the tail end
- Prevention of Water Logging
- Flood mitigation
- An area of 1,32,000 acres are proposed to be benefitted in five districts.

3. Hence, the Chief Engineer (Agricultural Engineering) has requested to permit him to interchange the allotment among the districts or to revise the length of the channels based on the requirement at the fields, requisition of the local farmers and the desilting works taken up by Rural Development and Panchayat Raj department under Mahatma Gandhi National Rural Employment Guarantee scheme (MGNREGS) without exceeding the overall cost norms. Further he has requested to accord financial sanction for an amount of Rs.500.00 lakh, to take up desilting works in 'C' and 'D' channels of Cauvery and Vennar basins under the scheme of "Ensuring the irrigation to tail end" in Thanjavur, Tiruvarur, Nagapattinam, Mayiladuthurai and Cuddalore districts to a length of 1146 Km for an amount of **Rs.500.00 lakh** for the year 2023-24.

4. The Government, after careful examination, accept the proposal of Chief Engineer (Agricultural Engineering), and issue orders on the following lines :-

i. To accord sanction for an amount of Rs.5,00,00,000/- (Rupees Five Crore only) under State funds, to take up desilting works in 'C' and 'D' channels of Cauvery and Vennar basins under the scheme of "Ensuring the Irrigation to tail end" in Thanjavur, Tiruvarur, Nagapattinam, Mayiladuthurai and Cuddalore districts to a length of 1146 KM.

ii. To accord permission to the Chief Engineer (Agricultural Engineering) (Agricultural Engineering Department) to interchange the allotment among the districts or to revise the length of the channels based on the requirements at the fields, requisition of the local farmers and the desilting works taken up by Rural Development and Panchayat Raj department under Mahatma Gandhi National Rural Employment Guarantee scheme (MGNREGS) without exceeding the overall cost norms.

iii. Due to revision in GST & Schedule of Rates (SOR) approximately 10% reduction in previous year's total quantity of work executed in cubic meter is accepted. The Agricultural Engineering Department shall take responsibility to ensure this while executing the desilting works.

5. The expenditure sanctioned in para 4(i) above shall be debited to the following Head of Account.

2401-00. CROP HUSBANDRY – 113. Agricultural Engineering – State's Expenditure – AL. Desilting of C & D Channels – 317. Minor Works – 01. Minor Works

(IFHRMS DPC: 2401 00 113 AL 31701)

6. The Modalities for scheme of **"Ensuring Irrigation to the tail end"** are indicated in the Annexure to this order.

7. The Chief Engineer (Agricultural Engineering) is responsible for the technical and the quality control of the implementation of the project.

8. The Chief Engineer (Agricultural Engineering) is permitted to draw and disburse the funds sanctioned in para 4(i) above.

9. The Chief Engineer (Agricultural Engineering) is directed to send Monthly, Quarterly and Annual reports on the Physical and Financial Achievement of the scheme, regularly to Government.

10. The Chief Engineer (Agricultural Engineering) is directed to instruct the Executive Engineer (Agricultural Engineering)s to prepare Master Plan for covering the total area and the area proposed for the year 2023-24. Instruction shall be given to the Executive Engineers (Agricultural Engineering)'s to ensure that there is no duplication by consulting with the officials of Rural Development and Panchayat Raj Department during execution.

11. The Government permits the Executive Engineers (Agricultural Engineering) of the respective districts to act as the Tender Inviting Authority (TIA) and Tender Accepting Authority (TAA) of the works and also instructed to finalise the tender without tender excess for the project.

12. The Chief Engineer (Agricultural Engineering) is directed to ensure the following measurement check norms while executing the project:-

i. The Assistant Engineer (Agricultural Engineering) / Junior Engineer (Agricultural Engineering)s shall take 100% Pre Measurement and Measurement of desilting works.
ii. The Assistant Executive Engineer (Agricultural Engineering)s should check at least 25% of Pre Measurement and desilting works.
iii. The Executive Engineer (Agricultural Engineering)s should counter-check at least 5% of desilting works.
iv. The Superintending Engineers (Agricultural Engineering) should super check at least 2% of desilting works.

13. This orders issues with the concurrence of Finance Department vide its U.O.No.15824/Finance (Agri-FW) Department, dated 8.5.2023.

//BY ORDER OF THE GOVERNOR//

C.SAMAYAMOORTHY
AGRICULTURAL PRODUCTION COMMISSIONER
AND SECRETARY TO GOVERNMENT

To
The Chief Engineer (Agricultural Engineering), Chennai-35.
The Director of Agriculture, Chennai-5.
The Director of Horticulture and Plantation Crops, Chennai-5.
The District Collectors, Thanjavur, Tiruvarur, Nagapattinam, Mayiladuthurai and Cuddalore.
The Principal Accountant General, Chennai-18.
The Accountant General (E&RSA), Chennai-18.
The Accountant General (G&SSA), Chennai-18.
The Treasury Officer Concerned, Thanjavur, Tiruvarur, Nagapattinam, Mayiladuthurai and Cuddalore.
The Chief Engineer, Chennai Region, Water Resources Department, Chennai-5.
The Chief Engineer, Trichy Region, Water Resources Department, Trichy.
The Director, Rural Development and Panchayat Raj Department, Chennai-15.

Copy to:
The Special Personal Assistant to Hon'ble Minister (Agriculture - Farmers Welfare), Chennai-9.
The Private Secretary to Agricultural Production Commissioner and Secretary to Government, Agriculture - Farmers Welfare Department, Chennai-9.
The Finance (Agriculture - Farmers Welfare) Department Chennai-9.
The Agriculture - Farmers Welfare (B&P) Department, Chennai-9.
The Assistant Programmer, Agriculture - Farmers Welfare Department, Chennai-9.
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//FORWARDED BY ORDER//

SECTION OFFICER 12/5/23

12/5/23

ANNEXURE

(G.O.(Ms) No.87, Agriculture - Farmers welfare (AE2) Department, Dated 12.05.2023)

Modalities for the scheme of "Ensuring Irrigation to the tail end"

1. Necessity of the scheme:

For ensuring irrigation to the tail end, the irrigation network should be maintained for free flow of water in the channels and to reach adequate water to the tail end in time. Poor maintenance of channels leads to plant growth and sedimentation of silt. Plant growth and sedimentation not only impede the flow in a channel, they also diminish the area of the cross-section. To protect the system from these problems, the channels should be maintained on a regular basis.

2. Project Area:

The project area taken up for ensuring irrigation to the tail end are "C" and "D" channels of Cauvery and Vennar basins in Thanjavur, Tiruvarur, Nagapattinam, Mayiladuthurai and Cuddalore Districts.

3. Objectives:

- To improve the conveyance efficiency and carrying capacity of the irrigation channels by bringing to its desired capacity
- To improve the irrigation systems with reduced maintenance cost
- Reliable availability of irrigation water at farm level
- Equity in distribution of available water

4. Modalities of the scheme:

- Collection of records from concerned Water Resource Department offices for "C" and "D" channels of the Cauvery and Vennar Basin areas.
- Preparation of Master Plan by Reconnaissance survey of the entire project area with respect to the above records and mark all the C and D channels in the plan indicating the works in phased manner.
- The master plan for the project area shall be approved by the Executive Engineer (Agricultural Engineering).
- Surveying the "C" and "D" channels and to identify the vulnerable stretches which have reduced cross section with silt and bushes.
- Prepare estimate for desilting works to bring back to the desired capacity to ensure effectiveness of the system by considering the bed slope/gradient and the opinion of the farmers.
- The Executive Engineer (Agricultural Engineering)s before giving approval to the estimates should ensure that the work proposed have not been taken up during the last year by Agricultural Engineering Department and by Rural Development and Panchayat Raj department under Mahatma Gandhi National Rural Employment Guarantee scheme (MGNREGS)
- Works shall be executed following Tamil Nadu Transparency in Tenders Act 1998 and Tamil Nadu Transparency in Tenders Rules 2000.
- Proper and systematic planning should be made to assess the area benefitted and it should be included in the estimate.
- The works should be commenced and completed well ahead of release of irrigation water.
- Desilting operation should be done from bottom reach to top reach direction.

- Pre measurement and post measurement are to be taken in terms of length of channel and quantity of earth removal.
- The works should be monitored by the Assistant Executive Engineer (AE)s, Executive Engineer (AE)s and Superintending Engineer (AE)s periodically with proper technical guidance.
- The Executive Engineer (AE)s of the respective districts will be the Tender Inviting Authority and Tender Accepting Authority of the works.
- The Assistant Engineer (AE) / Junior Engineer (AE)s will take 100 % Pre Measurement and Measurement of desilting works. The Assistant Executive Engineer (AE)s will Check at least 25% of Pre Measurement and desilting works. The Executive Engineer (AE)s will Counter Check at least 5% of desilting works. The Superintending Engineer (AE)s will Super Check at least 2% of desilting works.
- After completion of the works, the completion report has to be prepared by the Assistant Engineer (AE) /Junior Engineer (AE) in time and the Assistant Executive Engineer should get it approved from the Executive Engineer (AE) before due time.
- All the works should be Geotagged. The Geo tagging may be done in minimum four corners of the proposed project area for each estimate.
- Documentation should be done for each work which includes the photos (before, during and after completion of works) and video coverage with local farmers preferably with tail end farmers on the quality of works.

5. List of Registers to be maintained at the office of the Executive Engineer (AE)

- Register of Sanctioned Estimates
- Register of Tenders
- Earnest Money Deposit register
- Tender Schedule sale register.
- Register of Agreements
- Payment Register
- Completion Report (Approved)

6. List of Registers to be maintained at the office of the Assistant Executive Engineer (AE)

- Estimate Register
- Work Register
- Field Level Books
- Asset Register
- Completion Register

C.SAMAYAMOORTHY
AGRICULTURAL PRODUCTION COMMISSIONER
AND SECRETARY TO GOVERNMENT

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