



GOVERNMENT OF TAMILNADU

PUBLIC WORKS DEPARTMENT

WATER RESOURCES ORGANISATION

MADURAI REGION, MADURAI

**DETAILED PROJECT REPORT ON
REHABILITATION OF LEFT OUT
COMPONENTS OF SYSTEM TANKS AND
LINING OF THIRUMANGALAM MAIN
CANAL IN THERKKAR SUB BASIN IN
THIRUMANGALAM TALUK AND MADURAI
TALUK OF MADURAI DISTRICT**

Estimate Amt. Rs. 154.16 Lakhs.

DETAILED PROJECT REPORT ON REHABILITATION OF LEFT OUT COMPONENTS OF SYSTEM TANKS AND LINING OF THIRUMANGALAM MAIN CANAL IN THERKKAR SUB BASIN IN THIRUMANGALAM TALUK USILAMPATTI TALUK OF MADURAI DISTRICT.

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GENERAL:

Agriculture is the dominant sector in the Indian economy. Tamil Nadu depends largely on the surface water Irrigation as well as ground water irrigation. The state has used the surface ground water potentials to the maximum limit and hence the future development and expansion depends only on the efficient and economical use of water potential and resources.

To achieve higher water use efficiency, it is necessary to improve and upgrade the existing conveyance system and also to introduce modern irrigation methods.

With the above objective, a comprehensive programme has been proposed with a Multi Disciplinary Approach.

Description of the Gundar Basin:

The Gundar River takes its rise from the Eastern slope of Varusanadu hills at an altitude of 1273m in the eastern slopes of Western Ghats in Theni District and run eastward for a distance of 150km and finally empties in to Gulf of Mannar. Theni river Basin is located between latitude 9°05' to 10°03' N and Longitude 77°35' to 78°35' E having an area of 5960 sq.km. and is surrounded by Vaippar basin on the south, Vaigai on the west and north and bay of Bengal on the east.

The Gundar Basin has been divided in to 9 sub basins and Therkkar is one of the sub basin.

1. Gridhumal nadhi.

- 2.Kanalodai**
- 3.Lower Gundar**
- 4.Palar**
- 5.Paralaiaru**
- 6.Therkkar**
- 7.Upper Gundar**
- 8.Uthirakosamangaiaru**
- 9.Vembar**

Description of the Therkkar sub basin:

Therkkar originates from Pothampatti and karukattanpatti villages located in the western ghats near usilampatti . This river is called as Aswamanadhi at the place of its origin. A small stream named Vellimalai odai originating from northern end of Doddappanaickenpatti hill ranges joins Therkkar as distributor. It runs as a small stream until reaches Sathangudi village Thirumangalam taluk. Beyond Sathangudi it is wider and deeper resembling small river.

Therkkar flows in the southwest direction to enter Kariyapatti block of Virudhunagar district and it confluence with Goundanadhi near Pudupatti Village.After unification of Goundanadhi and Therkkar, the river is called Gundar.

Therkkar sub basin area 948.031sq.km including a hilly area of 10.26sq.km.The taluks covered in the sub basin are Usilampatti, Thirumangalam, Madurai south of Madurai district and Kariapatti, Aruppukottai and Thiruchuli Taluks of Virudhunagar district.

Apart from the resources from its own watershed the Therkkar sub basin gets water for Periyar system, through Thirumangalam Main Canal Vaigai system through Nilaiyur channel and flood flows from Periyar Vaigai basin through tanks. Thirumangalam Main Canal runs for a length of 28.03 km and it enters. Therkkar sub basin at LS 13.54km and feed 70 tanks besides direct ayacut in this sub basin.

Under Phase II of IAMWARM Project the estimates are prepared for sub basin adopting the schedule of rates for the year 2008-2009

has been cleared by the World Bank and subsequently the Government has administratively sanctioned the proposals for Rs.185.8828 crores in G.O. NO.205/Public works(WRI) Department dated 13.06.2008. An Amount of Rs. 22.9340 crores has been Provided for the rehabilitation of system tanks under Therkkar Sub basin.

Rehabilitation taken up under phaseII and completed:

Under Phase II of the Project rehabilitation 103 tanks out of 111, 11 Anicuts and supply channels for a length of 21.96km had been taken in Therkkar Sub basin.

Rehabilitation of left out irrigation infrastructure of Therkkar sub basin.

Out of 111 tanks bund strengthening was carried out in 103 tanks under phase II. Only 4 Nos of tanks bund strengthening is now proposed.

The bunds Kilneri tank, Kovilangulam tank, Sengulam tank and Kurayur tanks have got narrow edge at many places and the side slopes are also not to standards.

Now it is proposed to strengthened the tank bund upto TBL(MWL + 1.50M) by utilizing the earth obtained from tank bund. The top width of bund is proposed as 3.00m.

Out of 202 sluices 127 Nos of sluices were either repaired or reconstructed and now only 4 Nos of sluices are to be reconstructed out of 75 Nos of Sluices.

The sluice in Kilaneri tank (1no.) Vadivelkarai tank (2nos) and Kurayur tank (1 no) are fully in collapsed condition.

Now it is proposed to reconstruct the sluices of kilaneri tank, vadivelkari tank and kurayur tank.

Out of 127 weirs, 44 Nos of weirs were either repaired or reconstructed and now 5 nos of weirs are to be proposed to repaired out of 83 weirs.

The weirs in Poonnamangalam tank, Vinnakkudi tank, kurayur tank and Thoombakulam tank are also damaged.

Now Ponnangalam tank, Vinnakudi tank, Kurayur tank and Thoomabakulam tank weirs are to be repaired.

The overall cost of the project for this package is worked out Rs.154.16 lakhs including Provision for labour welfare fund and provision for documentation charges, advertisement charges, Photographic charges and petty supervision charges. This estimate is prepared based on the current schedule of rates for the year 2012-2013.