



GOVERNMENT OF TAMILNADU

**PUBLIC WORKS DEPARTMENT
WATER RESOURCES ORGANISATION**

NAGARIYAR SUB BASIN

VAIPPAR BASIN

MADURAI REGION

TN IAMWARM PROJECT

DETAILED PROJECT REPORT FOR LEFT OUT WORKS

NAGARIYAR SUB BASIN

AN OVER VIEW

1. INTRODUCTION

The Vaippar Basin has been divided into 13 sub basins and the Nagariyar is one of the sub basin. The Nagariyar river is a tributary to Deviyar river which in turn is a tributary to Nishabanadhi, the main course of Vaippar in head reach. The Basin lies inbetween the main sub basin of Deviyar in south and the minor sub basin of Manamakiar and Piravadaiyar in the north which comes under the sub basin of Deviyar. It originates in the eastern slope of western Ghats at an altitude of about 1400m above MSL. Apart from above Pachaiyar is also a tributary to Nagariyar. It has got number of small streams in the reserved forest area. After passing through number of tanks the surplus falls into Deviyar.

The total catchment area of Nagariyar is 94 Sqkm. Out of which the hilly catchment area is 28 Sqkm. The basin is influenced by Sivagiri rainfall station. There are 11Nos of Anicuts across the Nagariyar and as follows ,

- 1) Kallanai Anicut, 2) NagariDividingdam, 3) Nagarikulam Anicut,
- 4) Mugavoor Anicut, 5) Kottayadi Anicut, 6) Thavarampathi Anicut,
- 7) Braminankulam Anicut, 8) Ezhilapathi Anicut, 9) Nallamagalam Anicut,
- 10) Maruthuvaneri Anicut, 11) Ellanthiraikondan Anicut.

In this sub basin 80.135Ha land is fed by channels as direct ayacut and there are 11Non system tanks fed by this sub basin in Rajapalayam Taluk of Virudhunagar

District. The total registered ayacut under these tanks is 1412.35Ha. There are 10 rainfed tanks to feed 229.71Ha which is under the control of panchayat union of Rajapalayam Taluk.

2. Details of Ayacut

The details of ayacut area is classified as Direct Ayacut and Indirect Ayacut which are furnished below.

AYACUT UNDER NAGARIYAR:-

Sl. No.	Description	No. of tanks/Channel	Ayacut Area in Ha
1	Non System Tanks	11	1412.35
2	Direct Ayacut from Anicut	3	80.13

The total ayacut area under the Nagariyar sub-basin: 1492.48 ha

PRESENT STATUS OF THE SYSTEM

In Nagariyar Sub basin there are 11 nos tanks having an ayacut of 1492.48 ha. Out of which rehabilitation work for 7 Numbers of tanks were taken up under IAMWARM Phase III and the balance 4 No, of tanks are being leftout and that has been proposed for rehabilitation. The balance left out components of works covered under IAMWARM works are also proposed for rehabilitation.

SALIENT FEATURES OF PROPOSED WORKS

Standerdisation of Tank bund :-

The tank bunds of the left out the tanks are below standards and the same has to be standardized. This will also increase the capacity of the tank.

The tank sluices and are in damaged conditions and also without shutter arrangements. Hence reconstruction of sluices, and repairs to the sluices and weirs and shutter arrangements wherever necessary to be proposed. Due to this repair to the sluices and weirs and reconstruction of Sluices the wastage of water is sustainably reduced and proper water regulation for irrigation has to be maintained.

Desilting the Supply Channel:-

The earthen supply channel feeding to Devadanam big tank to a length of 2000 m is at present reduced from the original section , which results adequate quantum of water is not carried out through this channel to the tanks and finds its way to adjacent fields and lesser quantum of water flows to the tanks and balance water overflank and flows in to agriculture land.

By restoring the supply channel to the original section to carry adequate discharge to the tanks without flanking. Hence the desilting of supply channel proposed in this project. This ensures adequate storage in the tanks during normal rainfall seasons.

Package Details

Package – I

Sl.No.	Name of Tank / Anicut	Amount in Lakhs
1.	Rehabilitation of leftout works for tanks in Nagariyar sub basin in Rajapalayam Taluk of Virudhunagar District.	166.77
2.	Provision for labour welfare fund (0.30%)	0.50
3	Provision for PS charges, Contingencies, Advertisement charges, Documentation charges, Name boards, Photo graphic charges @ 2.80%.	4.17
	Total	171.44

ABSTRACT

PACKAGE – I

Sl.No.	Name of Tanks & Anicuts	Amount Rs in Lakhs
	<u>Tanks</u>	
1	Valavandan tank	48.59
2	Maruthuvaneri Tank	44.96
3	Elandiraikondan Tank	69.42
4	Mugavoor Tank	3.80
	<u>LS Provision</u>	
1	Provision for labour welfare fund (0.30%)	0.50
2	Provision for PS charges, Contingencies, Advertisement charges, Documentation charges, Name boards, Photo graphic charges @ 2.80%.	4.17
	Total	171.44

B.WRO COST TABLE

SI.No	Description of work	Quantity	Amount in Lakhs	Remarks
<u>A.Tank component</u>				
I	Tank Bund Improvements			
a)	Earth work for Bund	7880m	74.67	
b)	Retaining wall	--	--	
II	Improvement of Sluice			
a)	Reconstruction	6Nos	78.50	
b)	Repair	-	-	
III	Improvement of Weir			
a)	Repair	2Nos	6.49	
IV)	Field Channel Improvment			
a)	Lining of Field channel	65m	4.74	
b)	Repair to syphon in field channel	1No	2.37	
	Sub Total		166.77	
	<u>LS Provisions</u>			
1	Provision for labour welfare fund (0.30%)	(0.30%)	0.50	
2	Provision for PS charges, Contingencies, Advertisement charges, Documentation charges, Name boards, Photo graphic charges @ 2.80%.		4.17	
	Total		171.44	
	Environment cell		0.00	
	Groundwater		0.00	
	Total		171.44	

1)	Tank component	:	171.44 Lakhs
2)	Non-Tank component	:	Nil
3)	Environment cell	:	Nil
	Total	:	171.44 Lakhs

- 1) Certified that the Panchayat union Tanks are not Considered in this Project.
- 2) Certified that the components of works in the tanks which were executed under various schemes (Namely WRCP 1,NABARD PART-II etc.,) since 2005. were not proposed in this project

1. WRO COST TABLE (PHYSICAL AND FINANCIAL PROGRAM)

Sl. No.	Component	I Year		II Year				Amount in Lakhs	
		Qty	Amount in Lakhs	Qty	Amount in Lakhs	Qty	Amount in Lakhs		
A. Tank Bund Component									
I	Tank Bund Improvements								
	a	Earthwork for Bund	4800	44.80	3080	29.87	7880	M	74.67
	b	Retaining wall	--	--	--	--	--	--	--
II	Improvement of sluices								
1		Reconstruction	4.00	48.00	2.00	30.50	6	Nos.	78.50
2		Repair	--	--	--	--	--	--	--
III	Improvement of Weir								
1		Reconstruction	--	---	--	---	---	---	---
2		Repair	1	3.90	1	2.59	2	Nos.	6.49
IV	Field Channel Improvement								
1		Lining	40	2.90	25	1.84	65	M	4.74
		Repair to syphon in field channel	1	2.37	---	---	1	No	2.37
V	L.S.Provision								
		TOTAL		104.77		66.67			171.44

