



**GOVERNMENT OF TAMILNADU**

PUBLIC WORKS DEPARTMENT

**WATER RESOURCES ORGANISATION**

**TN IAM WARM PROJECT**

**NISHABANADHI SUB BASIN  
LEFT OUT INFRASTRUCTURES  
DETAILED PROJECT REPORT**

Madurai Region

Estimate Rs. 122.43 Lakhs

**REPORT TO ACCOMPANY THE DETAILED PROJECT REPORT FOR  
ADDITIONAL PROPOSAL OF LEFT OUT INFRASTRUCTURES IN  
NISHABANADHI SUB BASIN**

**ESTIMATE Rs.122.43 Lakhs.**

**GENERAL**

Nishabanadhi sub basin is located on the Eastern side of Western Ghats which is formed from the right flank surplus course of Vasudevanallur big tank and ends in Vembakottai Reservoir. The sub basin area is 565 sq.km. covered by the portion of sankarankoil, sivagiri taluks of Tirunelveli District and sivakasi taluk of Virudhunagar District. The tanks and supply channels under the Nishabanadhi sub basin has been proposed for rehabilitation under IAMWARM Project in Phase II. This sub basin consists of 42 tanks and 26 supply channels.

The Government has accorded the administrative sanction for Rs185.8828 Crores Vide in G.O.Ms. No. 205 P.W. (WRD ) Department of 13.06.2008 for implementing IAMWARM Project in 16 sub basins under Phase II. The Nishabanadhi sub basin is one among the above 16 sub basins for which an amount of 13.76 crores has been provided for rehabilitation works comprising three packages. Accordingly the following works were carried out in this sub basin.

**REHABILITATION TAKEN UP UNDER PHASE II AND COMPLETED:**

In the original proposals rehabilitation to infrastructures in Nishabanadhi sub basin have been taken up vide Phase II. Out of the 42 tanks and 26 supply channels rehabilitation works were carried out in 40 tanks and 2 supply channels. 1 tank and 11 supply channel does not require any improvement, since they were improved through other schemes or not required at that time. The following infrastructures have been contemplated in the Phase II works.

- Raising and strengthening the tank bund by using Machineries for 97.835 Km in 40 tanks out of 42 tanks.
- Desilting the supply channels by earthwork excavation using Machineries for 8.65Km out of 31.985Km supply channels in the sub basin.
- Repairs to 15 Nos of weirs out of 54 Weirs in the sub basin.
- Reconstruction of 18 Nos. of Collapsed Sluices out of 126 Nos. in the sub basin.
- Retaining walls and Model Section in selective area of the tanks
- Providing S.G. Shutter / Plug arrangements to Sluices, Head sluices, Scour vents etc.,
- Fixing Boundary Stones in the tank bund and water spread area

#### **LEFT OUT COMPONENTS:-**

Out of the 42 tanks in the sub basin only 40 tanks have been rehabilitated. Still in these tanks certain components have been left out. But during the WRO officials visit in the sub basin need for rehabilitation of certain components in the infrastructures which have been left out was emphasized and WUA people also requested to carry out the left out components to make up the system in functional condition.

Hence this estimate is prepared to carry out the left out components by using the overall savings amount available and based on the agreed actions in the wrap up meeting chaired by the Finance secretary on 17.09.2012, which was communicated in the Engineer in Chief WRD Letter No. Tech cell / 57252/WB Mission/ 2009/Dated: 05.10.2012 and also the World Bank Implementation support mission draft aide memoir.

## LEFT OUT COMPONENTS NOW PROPOSED TO BE TAKEN UP :

- Raising and strengthening the tank bund for 4.19 Km in 1 tanks in which tank bund strengthening has not been taken up in the Phase II IAMWARM works.
- Desilting supply channels for 23.335 Km
- Repairs of 2 Nos. of weirs.
- Providing flow measuring devices in the left out tank.

1.	01/IAMWARM/WRD/NBN /LEFT OUT/2012-13.	Rehabilitation and Modernisation of left out components in the Non System tanks and left out supply channels under Nishabanadhi Sub Basin in Sivagiri and sankarankoil taluks of Tirunelveli District and Sivakasi taluk in Virudhunagar District.	122.43
<b>Total</b>			122.43

## WRO COST TABLE

<b>SINo.</b>	<b>Description</b>	<b>Nos.</b>	<b>Amount in Lakhs</b>
1	Rehabilitation of Tank Bund	1	35.94
2	Sluices Repair	1	8.31
3	Weirs Repair	2	14.12
4	Rehabilitation of Supply Channel	13	50.36
5	Repairs to Head Sluice	1	0.89
6	Providing Shutters	15	9.48
7	L.S. Prosvion for labour welfare fund 0.30%	L.S.	0.36
8	L.S. Prosvion for for P.S.Charges & Contingencies,photographic charges, advertisement and documentation charges,unforeseen items @ 2.50%	L.S.	2.97
	<b>Total</b>		<b>122.43</b>

Name of Work : REHABILITATION OF LEFT OUT INFRASTRUCTURE WORKS IN NISHABANADHI SUB BASIN OF TIRUNELVELI DISTRICT

**GENERAL ABSTRACT**

SLNo.	DESCRIPTION	AMOUNT
1	VEERAPARAKKIRAMAN TANK SUPPLY CHANNEL	850035
2	MANALUR TANK SUPPLY CHANNEL	214679
3	MARUTHANKULAM TANK SUPPLY CHANNEL	428274
4	MARATHONI TANK SUPPLY CHANNEL	535328
5	CHATTIRAPPATTI THERKUKULAM SUPPLY CHANNEL	329162
6	THIRUVENDAGAM SUPPLY CHANNEL	612006
7	KOOTHADIKULAM TANK SUPPLY CHANNEL	248680
8	PERUMBATHUR TANK SUPPLY CHANNEL	865893
9	ARIYOOR TANK SUPPLY CHANNEL	283468
10	NAGARAM TANK SUPPLY CHANNEL	381203
11	CHINTHAMANI TANK SUPPLY CHANNEL	498510
12	PATAKKURICHI TANK SUPPLY CHANNEL	390851
13	KEELAKARISALKULAM TANK SUPPLY CHANNEL	166177
14	KEELANMARAIADU TANK	5872579
15	KEELANMARAINADU ANICUT	269190
	SUB TOTAL	11909779
16	PS CHARGES AND CONTINGENCIES, UNFORSEEN ITEMS, NAME BOARD, PHOTOGRAPHIC AND DOCUMENTATION CHARGES @2.5	297492
17	LABOUR WELFARE FUND @ -0.3 %	35729
	<b>TOTAL</b>	<b>12243000</b>

## NISHABANADHI SUB BASIN

Sl No	Originally Taken up in Phase II			Now Proposed	
	Package No	Administrative Sanction in Lakhs (AS)	Revised Administrative Sanction in Lakhs(RAS)	Package No	Amount in Lakhs
1	Package No - 1	488.50	530.8	Package No - 1	122.43
2	Package No - 2	495.00	536		
3	Package No - 3	392.50	392.50 (No RAS)		
		<b>1376.00</b>	<b>1459.30</b>		<b>122.43</b>

## NISHABANADHI SUB BASIN

Sl No	Description	Total Infrastructures in the sub basin in Nos	Already Taken up under Phase II		Total Infrastructures left out in the sub basin in Nos	Now Proposed in Left out Works	
			Repairs	Reconstruction		Repairs	Reconstruction
	<b>I Tanks</b>						
	Tank Bund	42	35	-	1	1	-
	Sluices	110	46	24	1	1	-
	Weirs	66	23	-	2	2	-
	Supply Channel	26	2	-	13	13	-
	Field Channel	-	-	-	2	2	-
	<b>II Anicuts</b>						-
	Head Sluices	18	17	-	1	1	-
	Repairs to Anicut	18	17	-	-	-	-
	Flood Banks	-	-	-	-	-	-
	Supply Channel	-	-	-	-	-	-
	Shutters	38	8	-	15	15	-

- 1 No Sluices reconstruction is proposed in the tanks were already earth work bund strengthening in IAMWARM
- 2 For the last five years no tanks, anicuts have been rehabilitated under any scheme.

### Abstract Showing the details Rehabilitation Works Proposed

Sl.No	Details	Tanks	Anicuts	Supply channel (Km)
1	Available infrastructure in Sub Basin	42	18	31.985km
2	Rehabilitation taken up under IAMWARM Project	40	17	8.65km
	a) Infrastructure in which all the components are in good condition and does not require rehabilitation now	41	17	8.65km
	b) Infrastructure taken up under IAMWARM but certain components not taken up then, but require rehabilitation now.	1	1	--
3	Tanks not taken up for rehabilitation since 2005 under any other schemes.	2	--	23.335km
	a) Infrastructure in which all the components are in good condition and does not require rehabilitation now	2	--	--
	b) Infrastructure in which certain components not taken up since 2005 but require rehabilitation now.	0	--	23.335km
4	Total no. of infrastructures requiring rehabilitation now.	1	1	23.335km

1. Certified that the works are proposed in the selected IAMWARM Sub Basin area
2. Certified that the Panchayat Union tanks are not considered in this project
3. Certified that for item 2b, the components of the infrastructure now proposed were not taken up under IAMWARM Project
4. For items No.3, - Certified that the works are not executed under various schemes (viz NABARD, Part-II schemes, etc.,)



## STATEMENT - II- A

REHABILITATION OF LEFT OUT TANKS & INFRASTRUCTURE IN NISHABANADHI SUB BASIN OF IAMWARM PROJECT

REHABILITATION OF TANK WORKS

NAME OF SUB BASIN : NISHABANADHI

Amount in Lakhs

SINo.	Name of Tanks	Tank Bund Improvements		Repairs to Sluice		Reconstruction of Sluice		Repairs to weirs		Reconstruction of weirs		Shutter Renewal		Total
		Length	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	
1	Keelanmarainadu Tank	4190	35.94	1	8.31	-	-	2	9.32	-	-	6	4.80	58.37

## Statement-II - B

### REHABILITATION OF IRRIGATION CHANNELS

NAME OF SUB BASIN : NISHABANADHI

Amount in Lakhs.

SNo.	Name of Tanks	Desilting of Irrigation channel		Linnig of Irrigation channel		Repairs to Drops ,Syphon, Cistern		Repairs to Culvert, Aquiduct,etc		Shutter Renewal		Total
		Length	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	
		-Nil-										

## Statement-II - C

### REHABILITATION OF IRRIGATION CHANNELS

NAME OF SUB BASIN : NISHABANADHI

Amount in Lakhs.

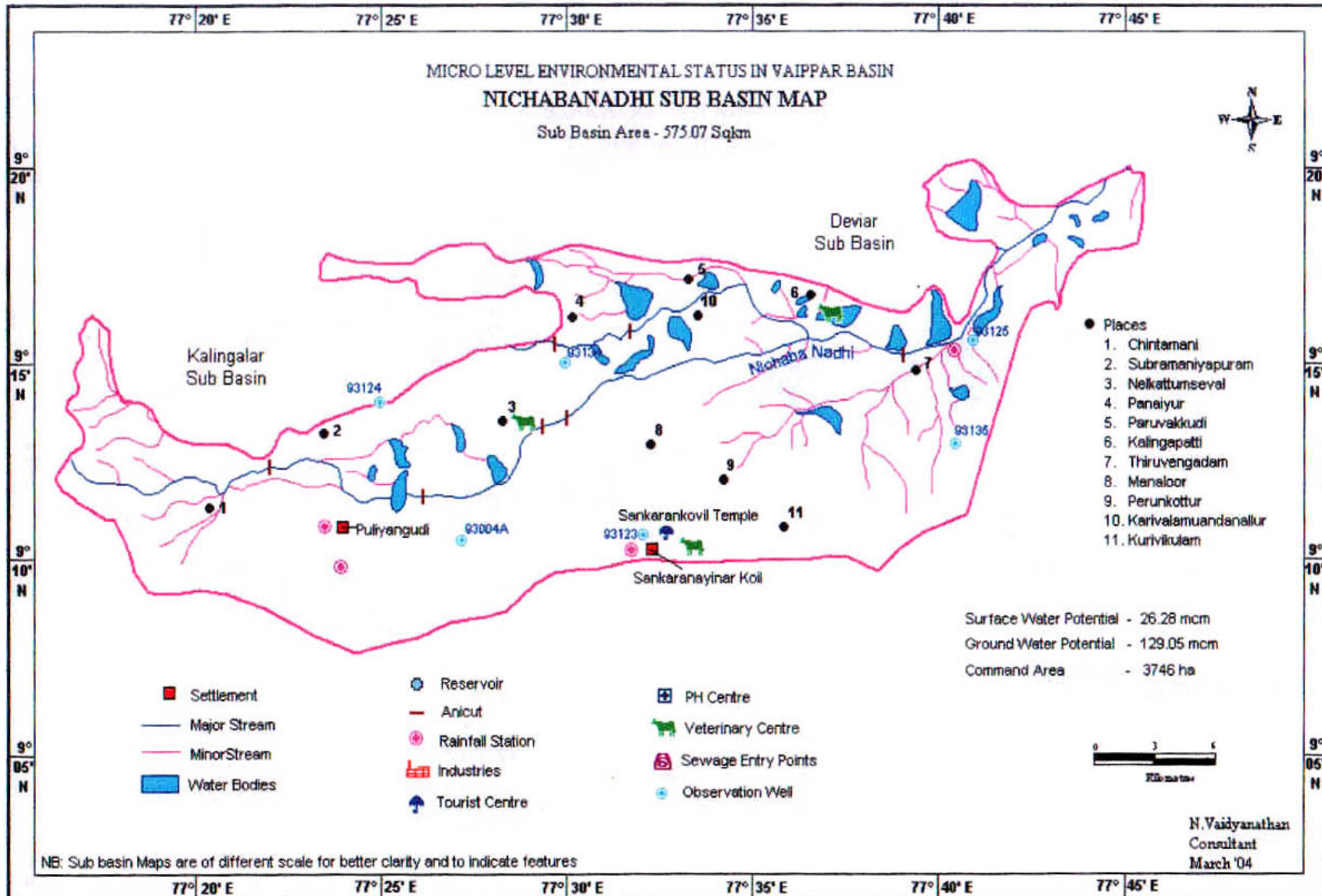
SINo.	Name of Anicut / Supply Channel	Reconstruction of Anicut		Repairs to Anicut		Repairs to Head Sluice		Shutter Renewal		Supply Channel		Total
		No.	Amount	No.	Amount	No.	Amount	No.	Amount	Length in m	Amount	
1	Veeraparakkiraman Tank Supply Channel	-	-	-	-	-	-	6	1.98	2800	6.52	8.50
2	Manalur Tank Supply Channel	-	-	-	-	-	-	-	-	800	2.15	2.15
3	Maruthankulam Tank Supply Channel	-	-	-	-	-	-	2	2.58	915	1.70	4.28
4	Marathoni Tank Supply Channel	-	-	-	-	-	-	-	-	2800	5.35	5.35
5	Chattirappatti Therkukulam Tank Supply Channel	-	-	-	-	-	-	-	-	1600	3.29	3.29
6	Thiruvengadam Tank Supply Channel	-	-	-	-	-	-	-	-	3180	6.12	6.12
7	Koothadikulam Tank Supply Channel	-	-	-	-	-	-	-	-	840	2.49	2.49
8	Perumbathur Tank Supply Channel	-	-	-	-	-	-	5	3.12	1500	5.54	8.66
9	Ariyoor Tank Supply Channel	-	-	-	-	-	-	-	-	1500	2.83	2.83
10	Chinthamani Tank Supply Channel	-	-	-	-	-	-	-	-	2500	4.99	4.99

11	Nagaram Tank Right flank Supply Channel	-	-	-	-	-	-	-	-	1900	3.81	3.81
12	Pattakurichi supply channel	-	-	-	-	-	-	-	-	2200	3.91	3.91
13	Pattakurichi supply channel	-	-	-	-	-	-	-	-	800	1.66	1.66
14	Keelanmarainadu Anicut	-	-	-	-	1	0.89	2	1.80	-	-	2.69
	Total								9.48	23335	50.36	60.73

## COST TABLE

### Rehabilitation of Left Out Works in the Nishbanadhi sub basin

SI.No	Description	Length	Amount
			Rs. in lakhs
1	Rehabilitation of Tank Component	4190m	58.37
2	Desilting of supply channel	23335 m	58.04
3	Rehabilitation of Anicut	1 No.	2.69
4	L.S. Provisions for Labour Welfare fund 0.30%		0.36
5	L.S. Provisions for PS Charges 2.50%		2.97
	<b>Total</b>		<b>122.43</b>



Source: Institute of Water Studies