# DETAILED PROJECT REPORT FOR LEFT OUT COMPONENT WORKS IN PHASE-I TANKS IN PAMBAR SUB BASIN (PART) IN TRICHY REGION

## GENERAL :

Pambar sub-basin is bounded on North by South Vellar Sub-Basin, East by Bay of Bengal and West & South by Manimuthar Sub-Basin. The Latitude is  $09^{\circ}$  53' 00" N to  $10^{\circ}$  17' 00" N and the Longitude is  $78^{\circ}35'$  00" E to  $79^{\circ}10'$  00" E.

The Pambar River originates from the Thamarai Kammoi and the total length of river is 75.50 km and confluence to Bay of Bengal near SP Pattinam village in Ramnad District. Total No. of 236 tanks in Pambar Sub Basin in Pudukkottai & Sivagangai District and Total command area is 10902 hectare.

The Government accorded the Administrative Sanction for Rs.3880.00 lakhs vide G.O.Ms. No.43/PW/WR(1) dept dated 26.07.2007 for implementing IAMWARM Project in South Vellar Division. Accordingly the works were taken up with 5 Package of WRD, and the works were completed during June 2010.

The following works were carried out in this sub basin.

- Raising and strengthening the tank bund by using Machineries for 218 tanks out of 236 tanks
- Desilting the supply channels by earthwork excavation using Machineries for 220.65 km out of 229.15 km.
- Reconstruction of 65 Nos./repairs of 52 Nos. of weirs out of 143 Nos.

 Reconstruction of 418 Nos./repairs of 175 Nos. of sluices out of 651 Nos.

# **LEFT OF COMPONENTS NOW PROPOSED :**

This detailed project report 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.

Out of the 236 tanks 223 No. of tanks were taken under IAMWARM Project. In the above 223 tanks, 218 Nos of tanks are taken for project and completed. Balance 5 Nos of Tanks are taken under left out works and also 10 NOs of Tanks are taken from Non IAMWARM schemes. Now totally (5+10) 15 NOs taken under left out works.

The following components of works to be carried out.

- Raising and strengthening the tank bund in 12 tanks.
- Reconstruction of 20 Nos. of Sluices.
- Reconstruction of 2 Nos. of weirs.

Accordingly this detailed project report is prepared for Rehabilitation of left out tanks and infrastructures in Pambar Sub Basin (Trichy Region) for the following packages.

PACKAGE No	No. OF TANKS	NAME OF PACKAGE	AMOUNT IN LAKHS
1/IAMWARM/ PAM/WRO/TRY 2012-2013.	15 TANKS	Rehabilitation of left out irrigation infrastructure is IAMWARM Project is Rangiam Peria Kanmoi, Aduga Kanmoi, Muniyan Eri, Puliyankundu, Oonaiya Kanmoi, Senkundu Kanmoi, Irumbanadu Tank, Nallikudi Tank, Thunjanur Tank, Theeyur Tank and Athavathur Tank, Alathur Tank, Vengakudi Tank, Palankulam Tank and Parayathur Tank in Pambar Sub-basin in Thirumayam Taluk and Avudaiyarkoil Taluk in Pattukkottai District.	291.16
TOTAL	<b>15 TANKS</b>		291.16

# **RANGIYAM PERIA KANMOI:**

This tank is located in Pambar Sub Basin area but not included in the IAMWARM Project. Since the tank was Rehabilitated under PART-II Scheme during the year 2003-2004.

In this tank, the top level of the tank bund is below the required TBL, and also lot of rain gullies are formed both in U/S and D/S slope of bund. Hence the tank bund is to strengthened to the required standards. The Sluice No.1, 2 and 3 are in dilapidated condition which needs reconstruction. Now in this DPR the

standardization of tank bund and Reconstruction of Sluices are included.

## MUNIYAN ERI:

This tank is located in Pambar Sub Basin area but not included in the IAMWARM Project. Since the tank was Rehabilitated under PART-II Scheme during the year 2003-2004.

In this tank, the top level of the tank bund is below the required TBL, and also lot of rain gullies are formed both in U/S and D/S slope of bund. Hence the tank bund is to strengthened to the required standards. The Sluice No.1 is dilapidated condition which needs reconstruction. Now in this DPR the standardization of tank bund and Reconstruction of Sluice are included.

# PULIYANKUNDU:

This tank is located in Pambar Sub Basin area but not included in the IAMWARM Project. Since the tank was Rehabilitated under PART-II Scheme during the year 2003-2004.

In this tank, the top level of the tank bund is below the required TBL, and also lot of rain gullies are formed both in U/S and D/S slope of bund. Hence the tank bund is to strengthened to the required standards. The Sluice No.1 is dilapidated condition which needs reconstruction. Now in this DPR the standardization of tank bund and Reconstruction of Sluice are included.

# ADUGA KANMOI:

This tank is located in Pambar Sub Basin area but not included in the IAMWARM Project. Since the tank was Rehabilitated under PART-II Scheme during the year 2003-2004. In this tank, the top level of the tank bund is below the required TBL, and also lot of rain gullies are formed both in U/S and D/S slope of bund. Hence the tank bund is to strengthened to the required standards. The Sluice No.1 is dilapidated condition which needs reconstruction. Now in this DPR the standardization of tank bund and Reconstruction of Sluice are included.

#### **OONAIYA KANMOI:**

In the IAMWARM Project, the weir repair work only taken. The bund strengthening was not included, since the tank bund work was done under NABARD Scheme during the year 2004-2005.

In this tank, the top level of the tank bund is below the required TBL, and also lot of rain gullies are formed both in U/S and D/S slope of bund. Hence the tank bund is to strengthened to the required standards. Hence in the DPR, standardization of tank bund is included.

# **SENGUNDU KANMOI :**

In the IAMWARM Project, the Sluice Repair work only done. The bund strengthening was not included, since the tank bund work was done under NABARD Scheme during the year 2004-2005.

In this tank, the top level of the tank bund is below the required TBL, and also lot of rain gullies are formed both in U/S and D/S slope of bund. Hence the tank bund is to strengthened to the required standards. Hence in the DPR the standardization of tank bund is included.

#### **IRUMBANADU TANK:**

This Tank is located in Pambar Sub Basin area. But this tank was not taken under IAMWARM Project, since this tank was rehabilitated under NABARD Scheme during the year 2006-2007.

In the Tank, the Sluice No.2 is in badly damaged condition. Since this sluice was constructed by brick work, which needs Reconstruction. Hence this Reconstruction of sluice is included in this DPR.

#### NALLIKUDI TANK:

This tank was included in the IAMWARM of Project. But the Reconstruction of weir is not carried out in the earlier Project.

Now the weir is in dilapidated condition. Hence the Reconstruction of weir is now included in this DPR.

#### **THUNJANUR TANK:**

This tank located in Pambar sub Basin area. But this tank was not included in the IAMWARM Projects, since this tank was rehabilitated under NABARD Scheme during the year 2006-2007.

In this tank there are four Sluices, Sluice No.1,3 and 4 has been Reconstruction under NABARD Scheme. But the Sluice No 2 was not Reconstructed. The surplus weir of this tank is also not included. Now the sluice No.2 is in dilapidated condition required reconstruction. In the surplus weir there is no abutment and wing walls. The Existing body wall was constructed by brick masonry, hence leakage was occurred in the D/s side of the weir.

Now the Reconstruction of sluice No 2 and the surplus weir are included in this DPR .

#### THEEYUR TANK:

This tank is located in the Pambar Sub Basin Area. This tank was rehabilitated under a PART-II Scheme during the year 2004-2005.Hence this tank was not included in the initial IAMWARM Project.

In this tank, the top level of the tank bund is below the required TBL, and also lot of rain gullies are formed both in U/S and D/S slope of bund. Hence the tank bund is to strengthened to the required standards. In this tank there are 3 sluices, all the sluices are in damaged condition requires Reconstruction.

Now the standardization of tank bund and Reconstruction of three sluices are included in this DPR.

# ATHAVATHUR TANK:

This tank is located in Pambar Sub Basin Area. This tank was also rehabilitated under PART-II Scheme during the year 2004-2005. Hence this tank was not included in the IAMWARM Project.

In this tank, the top level of the tank bund is below the required TBL, and also lot of rain gullies are formed both in U/S and D/S slope of bund. Hence the tank bund is to strengthened to the required standards. In this tank there are four sluices, all the sluices are in damaged condition which needs Reconstruction.

The standardization of tank bund and Reconstruction of four sluices are included in this DPR.

#### **ALATHUR TANK:**

This tank is located is Pambar Sub Basin area. This tank was rehabilitated under NABARD Scheme during the year 2004-2005. Hence this tank was not included in the IAMWARM Project. In this tank, the top level of the tank bund is below the required TBL, and also lot of rain gullies are formed both in U/S and D/S slope of bund. Hence the tank bund is to strengthened to the required standards. In this tank there are 7 sluices. The sluice No.3,6 and 7 are in damaged condition which needs Reconstruction.

Standardization of the tank bund and reconstruction of 3 sluices are included in this DPR.

#### VENGAKUDI TANK:

This tank is located in Pambar Sub Basin Area. This tank was rehabilitated under NABARD Scheme during the year 2004-2005. under RIDFIX during the year 2004-2005. So this tank was not included in the IAMWARM Project.

In this tank, the top level of the tank bund is below the required TBL, and also lot of rain gullies are formed both in U/S and D/S slope of bund. Hence the tank bund is to strengthened to the required standards. In this tank there are 4 sluices. The sluice No 1 and 2 in are damaged condition, they needs Reconstruction.

Standardization of the tank bund and reconstruction of 2 sluices are included in this DPR.

#### PALANKULAM TANK:

This tank was included in the IAMWARM Project. But the strengthening of tank was not executed due to delay in tree cutting in the tank bund. Now the trees are removed and there is no hindrance to improve the tank bund. In this tank, the top level of the tank bund is below the required TBL, and also lot of rain gullies are formed both

in U/S and D/S slope of bund. Hence the tank bund is to strengthened to the required standards. Hence now the improvements to tank bunds is included in this DPR.

#### PARAYATHUR TANK:

This tank was also included in the IAMWARM Project. But the tank bund improvement was not done due to non removal of trees in the tank bund. Now the trees in the tank bunds are removed. In this tank, the top level of the tank bund is below the required TBL, and also lot of rain gullies are formed both in U/S and D/S slope of bund. Hence the tank bund is to strengthened to the required standards. Hence now the tank bund strengthening is included in this DPR.

All the tanks in which the left out works are taken are included in the tank list mentioned in the original DPR of Pambar Sub Basin. The WUA for are all the tanks are formed. The Office bearer of the WUA are also elected under TNFMIS Act 2002.

The Estimate amount for the above three package is 291.16 Lakhs.

# LEFT OUT COMPONENT WORKS – PAMBAR SUB BASIN (PART) – TRICHY REGION

# PROJECT COST : Rs.291.16 Lakhs

SI.No.	Component	Qty	Amount in		
			Lakhs		
1	Tank Bund Improvements	23.15 km	167.33		
2	Improvements to Sluice				
	a. Repair	-	-		
	b. Reconstruction	20 Nos.	101.39		
3	Improvements to Weir				
	a. Repair	-	-		
	b. Reconstruction	2 Nos.	14.66		
		Sub Total	283.38		
	Lumpsum Provision for Labour Welfare Fund, Photographic				
4	Charges, Advertisement Charges,		7.78		
	Name Board, Petty Supervision				
	Charges, Unforseen items at 2.80 %				
		Total	291.16		

Executive Engineer, WRD, Southvellar Basin Divisions, Pudukottai.

#### STATEMENT -1 REHABILITATION OF LEFT OUT WORKS IN PAMBAR SUB BASIN - TRICHY REGION ABSTRACT SHOWING THE DETAILS OF REHABILITATION WORKS PROPOSED NAME OF REGION: PAMBAR SUB BASIN- TRICHY REGION

Sl. No	Description	Tanks Nos	Anicut Nos.	Supply channel Kilo Metre
1	Available Infrastructure in the sub basin - Trichy region (Pudukkottai Dist and Sivvaganga Dist)	236	14	229.15
	Rehabilitation works taken up under IAMWARM Project 198(Pudukkottai Dt.) 25 (Sivagangai Dt.)	223	14	220.65
2	a) Infrastructure in which all the components are in good condition and does not require rehabilitation now	218	14	220.65
	b) Infrastructures taken up under IAMWARM but certain components not taken up then, but require rehabilitation now.	5		
	Tanks not taken up for rehabilitation since 2005 under any other schemes.	13		8.50
3	a) Infrasture in which all the components are in good condition and does not require rehabilitation now	3	-	8.50
	b) Infrastructures in which certain components not taken up since 2005 but require rehabilitation now.	10	-	
4	Total No.of Infrastructures requiring rehabilitation now.	15		

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 scheme (Viz., NABARD, Part II Schemes, etc.) and IAMWARM since 2005.

# **STATEMENT II A**

#### <u>REHABILITATION OF LEFT OUT TANKS & INFRASTRUCTURE IN SUB BASIN OF IAMWARM PROJECT.</u> <u>REHABILITATION OF TANK WORKS</u>

#### NAME OF SUB BASIN: PAMBAR SUB BASIN – TRICHY REGION

SI. No	Name of Tanks	e of Tanks Tank Bund Improvements		Repairs to sluice		Reconstructi on of Sluice		Reconstruction of Weirs		Total Amount	Lumpsum Provision	Gross Total
		Lengt h in M	Amount	No	Amount	No	Amount	No	Amount	(Lakhs)	at 2.80% (Lakhs)	Amount (Lakhs)
	PACKAGE No.1											
1	Rangiyam Periya Kanmoi	1850	8.65			3	17.40			26.05		
2	Aduga Kanmoi	654	3.02			1	5.69			8.71		
3	Muniyan Eri	298	1.75			1	4.39			6.14		
4	Pullyangundu	730	3.61			1	4.20			7.81		
5	Unaiya Kanmoi	1230	5.52							5.52		
6	Sengundu Kanmoi	420	1.84							1.84		
7	Irumbanadu					1	5.91			5.91		
8	Nallikudi							1	6.65	6.65		
9	Thunjanur					1	4.77	1	8.01	12.78		

SI. No	Name of Tanks		x Bund vements		Repairs to sluiceReconstructi on of Sluice			Reconstruction of Weirs		Total Amount	Lumpsum Provision	Gross Total
		Lengt h in M	Amount	No	Amount	No	Amount	No	Amount	(Lakhs)	at 2.80% (Lakhs)	Amount (Lakhs)
10	Theeyur	2800	22.07			3	15.80			37.87		
11	Athavathur	3640	28.56			4	18.63			47.19		
12	Vengakkudi	1585	12.48			2	10.20			22.68		
13	Alathur	3360	27.00			3	14.40			41.40		
14	Palankulam	2715	21.67							21.67		
15	Parayathur	3870	31.16							31.16		
	GRAND TOTAL	23152	167.33			20	101.39	2	14.66	283.38	7.78	291.16

Executive Engineer, WRD, South Vellar Basin Division, Pudukkottai.