DETAILED PROJECT REPORT FOR LEFT OUT COMPONENT WORKS IN PHASE-I TANKS IN SOUTH VELLAR SUB BASIN IN TRICHY REGION

General:

The South Vellar Sub Basin is bounded on North by Agniar and Ambuliyar Sub Basin, East by Bay of Bengal, West by Velamalai Hills and South by Pambar Basin. The South Vellar Sub Basin is located at the latitude from 10°0′ 40″ N to 10° 29′ 50″ N and the Longitude from 78° 13′ 50″ E to 79° 15′ 50″ E. South Vellar River originates as a stream in Kumarikattai Reserve forest area of Velamalai Hills North west of Thuvarankurichi in Manapparai Taluk of Trichy District. The South Vellar River runs to a distance of 137 Kms from its origin and confluences with the Bay of Bengal near Mumbalai Village in Manamelkudi Taluk of Pudukkottai District.

The main Tributaries of South Vellar River are:

- 1. Nerungikudiar and
- 2. Gundar

Nerungikudiyar originates from the surplus of Maravamadurai Tank in Thirumayam Taluk of Pudukkottai District. Gundar originates from the surplus of Kavinadu Big Tank near Pudukkottai Town.

There is a river called Narasinga Cauvery, originating from the surplus of Narpavalakudi Tank and runs on the northern side of South Vellar River and confluences the Bay of Bengal near Kattumavadi Village in Pudukkottai District.

Total 316 Nos of Tanks maintained by the WRD in South Vellar Sub Basin and Command area of 21,079 Hectare.

The Government was accorded the administrative sanction for Rs.6048.00Lakhs vide G.O. Ms. No.43/PW/WR (1) /Dept./Dt.26.07.2007 for implementing IAMWARM Project in South Vellar Sub Basin. Accordingly the works were taken up with 7 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 291 tanks out of 316 tanks
- Desilting the supply channels by earthwork excavation using Machineries for 297.35 km out of 401.95 km.
- Reconstruction of 32 Nos./repairs of 99 Nos. of weirs out of 178 Nos.
- Reconstruction of 399 Nos./repairs of 247 Nos. of sluices out of 763 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 316 tanks 292 tanks were taken under IAMWARM Project. In the above 292 tanks, the tanks bund work was not carried out in 1 number, now these tank included. The balance 24 tanks was not included in the IMAWARM Project since these are included in some other schemes. Out of 24 Nos. of tanks now rehabilitation required

in 15 tanks. Hence totally 16 Nos of tanks are included in the left our IAMWARAM works.

The following components of works to be carried out.

- Raising and strengthening the tank bund in 16 tanks.
- Reconstruction of 25 Nos. sluices / repairs of 3 Nos. Sluices
- Repairs of 5 Nos of weirs.

Accordingly this detailed project is prepared for rehabilitation of left out components in 16 tanks in south vellar sub basin for the following packagers.

PACKAGE No	No. OF	NAME OF PACKAGE	AMOUNT
	TANKS		IN LAKHS
01/IAMWARM /SV/WRD/2012- 2013	8 TANKS	Rehabilitation of left out irrigation infrastructures in Meenveli Periyakulam, Pudur Periyakulam, Annavasal Periyakulam, Vayalogam Periyakulam, Perumanadu Periyakulam, Kavinddu Tank, Miratunilai Kanmoi and Palayakanmoi in South Vellar Sub Basin	202.80
02/IAMWARM /SV/WRD/2012- 2013	8 TANKS	of Pudukottai District. Rehabilitation of left out Irrigation Infrastructures in Arasandan Kanmoi, Chittur Kanmoi, Goodalur Kanmoi, Illuni Kanmoi, Sullani Tank, Palanthamarai Tank, Veelimangalam Tank and Manjakudi Tank, in South Vellar Sub Basin, Pudukottai District.	201.60
TOTAL	16TANKS		404.40

PACKAGES NO. 01/IAMWARM/SV/WRD/2012-2013

Rehabilitation of left out irrigation infrastructures in Meenveli Periyakulam, Pudur Periyakulam, Annavasal Periyakulam, Vayalogam Periyakulam, Perumanadu Periyakulam, Kavinddu Tank, Miratunilai Kanmoi and Palayakanmoi in South Vellar Sub Basin of Pudukottai District. Estimate Rs. 202.80 Lakhs.

1. MEENAVELI PERIYAKULAM

This tank is located in South Vellar Sub Basin area but not included in the IAMWARM Project. This tank was Rehabiliated under part II scheme during the year 2003 – 2004.

The tank bund of this tank is required standardization since side slpes and top width are damaged by rain gullies. Sluice No. 1 is in dilapidated condition which needs reconstruction. Now in this DPR the standardization of tank bund and reconstruction of sluice are included.

2. PUDUR PERIYAKULAM

This tank is located in South Vellar Sub Basin area but not included in the IAMWARM project. Since the tanks was Rehabilitated under part-II scheme during the year 2003-04.

In The tank bund of this tank is required standardization since side slopes and top width are damaged by rain gullies. Sluice No. 1 is in dilapidated condition which needs reconstruction. Now in this DPR the standardization of tank bund and reconstruction of sluice are included.

3. ANNAVASAL PERIYAKULAM

This tank is located in South Vellar Sub Basin area but not included in the IAMWARM project. Since the tanks was Rehabilitated under NABARD scheme during the year 2003-04.

In this tank the tank bund is very below standards Sluice No. 2 in dislabilated condition which needs reconstruction. Now in this DPR the standardization of tank bund and reconstruction of sluices are included.

4. VAYALOGAM PERIYAKULAM

This tank is located in South Vellar Sub Basin area but not included in the IAMWARM project. Since the tanks was Rehabilitated under SGRY scheme during the year 2004.

The tank bund of this tank is required standardization since side slopes and top width are damaged by rain gullies. Sluice No. 1 is in dilapidated condition which needs reconstruction. Now in this DPR the standardization of tank bund and reconstruction of sluice are included.

5. PERUMANADU PERIYAKULAM

This tank is located in South Vellar Sub Basin area but not included in the IAMWARM project. Since the tanks was rehabilitated under NABARD scheme during the year 2006

The tank bund of this tank is required standardization since side slopes and top width are damaged by rain gullies. Sluice No. 2 is in dilapidated condition which needs reconstruction. Now in this DPR the standardization of tank bund and reconstruction of sluice are included.

6. KAVINADU PERIYAKULAM

This tank is located in South Vellar Sub Basin area but not included in the IAMWARM project. Since the tanks was Rehabilitated under NABARD scheme during the year 2006-07.

The tank bund of this tank is required standardization since side slopes and top width are damaged by rain gullies and weir is in damaged condition which needs repair. Now in this DPR the standardization of tank bund and repairs of weir are included.

7. MIRATTUNILAI KANMOI

This tank is located in South Vellar Sub Basin area but not included in the IAMWARM project. Since the tanks was Rehabilitated under NABARD scheme during the year 2006-07.

The tank bund of this tank is required standardization since side slopes and top width are damaged by rain gullies. Weir and Sluices no 2& 3 are in damaged condition which needs repair. Now in this DPR the standardization of tank bund, sluices and repairs of weir are included.

8. PALAYA KANMOI

This tank is located in South Vellar Sub Basin area but not included in the IAMWARM project. Since the tanks was Rehabilitated under NABARD scheme during the year 2006-07.

The tank bund of this tank is required standardization since side slopes and top width are damaged by rain gullies. Weir and Sluices no 2& 3 are in damaged condition which needs reconstruction. Now in this DPR the standardization of tank bund, reconstruction of sluices and repairs of weir are included.

PACKAGES No.02/ IAMWARM/ SV/ WRD / 2012-13

Rehabilitation of left out Irrigation Infrastructures in Arasandan Kanmoi, Chitthur Kanmoi, Goodalur Kanmoi, Illuni Kanmoi, Sullani Tank, Palanthamarai Tank, Veelimankalam Tank and Manjakudi Tank in South Vellar Sub Basin in Pudukottai District. Estimate Rs. 172.68 Lakhs.

1. ARASANDAN KANMOI.

This tank is located in South Vellar Sub Basin area but not included in the IAMWARM project. Since the tanks was Rehabilitated under NABARD scheme during the year 2004-05.

The tank bund of this tank is required standardization since side slopes and top width are damaged by rain gullies. Sluice No. 2 is in dilapidated condition which needs reconstruction. Now in this DPR the standardization of tank bund and reconstruction of sluices are included.

2. CHITHOOR KANMOI

This tank is located in South Vellar Sub Basin area but not included in the IAMWARM project. Since the tanks was Rehabilitated under Part II scheme during the year 2003-04.

The tank bund of this tank is required standardization since side slopes and top width are damaged by rain gullies. Sluice No. 1 & 2 are in dilapidated condition which needs reconstruction. Now in this DPR the standardization of tank bund and reconstruction of sluices are included.

3. GOODALUR PERIYA KANMOI

This tank is located in South Vellar Sub Basin area .Reconstruction of sluices were carried out under IAMWARM scheme. As permission to cut the trees has not been received from the revenue department within the stipulation Project period. Now that the trees had been removed during 2011-12, Strengthening of tank bund is included in this project.

4. ILLUNI KANMOI

This tank is located in South Vellar Sub Basin area but not included in the IAMWARM project. Since the tanks was not Rehabilitated for the past twenty five years.

In The tank bund of this tank is required standardization since side slopes and top width are damaged by rain gullies. Sluices no 3 in damaged condition which needs repair. Now in this DPR the standardization of tank bund, repairs of sluice are included.

B5. SULLANI TANK

This tank is located in South Vellar Sub Basin area but not included in the IAMWARM project. Since the tanks was Rehabilitated under NABARD scheme during the year 2006

The tank bund of this tank is required standardization since side slopes and top width are damaged by rain gullies. Sluice No. 2 is in dilapidated condition which needs reconstruction. Now in this DPR the standardization of tank bund, weir repair and reconstruction of sluices are included.

6. PALANTHAMARAI TANK

This tank is located in South Vellar Sub Basin area but not included in the IAMWARM project. Since the tanks was Rehabilitated under NABARD scheme during the year 2006

The tank bund of this tank is required standardization since side slopes and top width are damaged by rain gullies. Sluice No. 2 & 3 are in dilapidated condition which needs reconstruction. Weir is in damaged condition, required repair. Now in this DPR the standardization of tank bund, weir repair and reconstruction of sluices are included.

7. VEELIMANGALAM TANK.

This tank is located in South Vellar Sub Basin area but not included in the IAMWARM project. Since the tanks was Rehabilitated under NABARD scheme during the year 2006

The tank bund of this tank is required standardization since side slopes and top width are damaged by rain gullies. Sluice No. 1,2,3&5 are in dilapidated condition which needs reconstruction. Now in this DPR the standardization of tank bund and reconstruction of sluices are included.

MANJAKUDI TANK

This tank is located in South Vellar Sub Basin area .Reconstruction of sluices no 1,2&3were carried out under IAMWARM scheme.

The tank bund of this tank is required standardization since side slopes and top width are damaged by rain gullies. Sluice No.4,6,7&8 are in

dilapidated condition which needs reconstruction. . Now in this DPR the standardization of tank bund, and reconstruction of sluices are included.

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

The Additional D.P.R. is prepared as per current schedule of rates for the year 2012-2013.

THE TOTAL COST FOR THE D.P.R WORKS OUT TO RS. 404.40 LAKHS

Executive Engineer, WRD, South Vellar Basin Division, Pudukkottai. Superintending Engineer, WRD, Middle Cauvery Basin Circle, Trichy. Chief Engineer, WRD, Trichy Region, Trichy.

REHABILITATION OF LEFT OUT COMPONENTS WORKS IN PHASE –I TANKS IN SOUTH VELLAR SUB BASIN OF IAMWARM PROJECT

SOUTH VELLAR SUB BASIN - TRICHY REGION

PACKAGE WISE ABSTRACT

PACKAGE No	No. OF	NAME OF PACKAGE	AMOUNT
	TANKS		IN LAKHS
01/IAMWARM /SV/WRD/2012- 2013	8 TANKS	Rehabilitation of left out irrigation infrastructures in Meenveli Periyakulam, Pudur Periyakulam, Annavasal Periyakulam, Vayalogam Periyakulam, Perumanadu Periyakulam, Kavinddu Tank, Miratunilai Kanmoi and Palayakanmoi in South Vellar Sub Basin of Pudukottai District.	202.80
02/IAMWARM /SV/WRD/2012- 2013	8 TANKS	Rehabilitation of left out Irrigation Infrastructures in Arasandan Kanmoi, Chittur Kanmoi, Goodalur Kanmoi, Illuni Kanmoi, Sullani Tank, Palanthamarai Tank, Veelimangal am Tank and Manjakudi Tank, in South Vellar Sub Basin, Pudukottai District.	201.60
TOTAL	16TANKS	•	404.40

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

STATEMENT -1 REHABILITATION OF LEFT OUT WORKS IN SOUTH VELLAR SUB BASIN ABSTRACT SHOWING THE DETAILS OF REHABILITATION WORKS PROPOSED

Sl. No	Description	Tanks Nos	Anicut Nos.	Supply channel KM.
1	Available Infrastructure in the sub basin	316	46	401.95
	Rehabilitation works taken up under IAMWARM Project	292	29	297.35
2	a) Infrastructure in which all the components are in good condition and does not require rehabilitation now	291	29	297.35
	b) Infrastructures taken up under IAMWARM but certain components not taken up then, but require rehabilitation now.	1	-	-
	Tanks not taken up for rehabilitation since 2005 under any other schemes.	24	17	104.60
3	a) Infrasture in which all the components are in good condition and does not require rehabilitation now	9	17	104.60
	b) Infrastructures in which certain components not taken up since 2005 but require rehabilitation now.	15	-	-
4	Total No.of Infrastructures requiring rehabilitation now.	16	-	-

- 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.

Executive Engineer, WRD, South Vellar Basin Division, Pudukkottai. Superintending Engineer, WRD, Middle Cauvery Basin Circle, Trichy. Chief Engineer, WRD, Trichy Region, Trichy.

STATEMENT II A

REHABILITATION OF LEFT OUT COMPONENT WORKS IN PHASE - I TANKS IN SUB BASIN OF IAMWARM PROJECT. REHABILITATION OF TANK WORKS

Name of Sub Basin: South Vellar Sub Basin

SI. N	Name of Tanks	Tank Bund Improvements		Repairs to sluice		Reconstructio n of sluices		Repairs to weirs		Reconstructio n of weirs		Total	Lumpsu	Gross Total
0		Length in M	Amount	N o	Amoun t	No	Amount	N o	Amoun t	N o	Amount	Amount (Lakhs)	m Provision	Amount (Lakhs)
	PACKAGE 1													
1	Meenaveli Periakulam	1607	11.14			2	9.68					20.82		
2	Pudur Periakulam	1545	13.11			1	5.29					18.40		
3	Annavasal Periyakulam	1680	13.84			1	5.85					19.69		
4	Vayalogam PeriyaKulam	1853	9.53			1	4.62					14.15		
5	Perumandu Periyakulam	2402	11.36			2	11.81					23.17		
6	Kavinadu tank	4625	28.51					1	4.79			33.30		
7	Mirattunilai	5070	26.84	2	4.96			1	0.89			32.69		
8	PalayaKanmoi	3610	17.08			2	13.40	1	5.23			35.71		
	Sub Total											197.93	4.87	202.80

	PACKAGE 2												
9	Arasandan Kanmoi	1891	11.87			1	3.75				15.62		
10	Chithoor Peria Kanmoi	2242	14.11			2	9.40				23.51		
11	Goodalur Peria Kanmoi	2870	15.85								15.85		
12	Illuni Kanmoi	1530	13.41	1	2.00						15.41		
13	Sullani Tank	1230	3.76			3	10.63	1	0.78		15.17		
14	Palanthamarai Tank	3600	21.46			2	6.62	1	0.54		28.62		
15	Veelimangalam Tank	2340	14.14			4	20.72				34.86		
16	Manjakudi Tank	4575	26.44			4	20.62				47.06		
	Sub Total										196.10	5.50	201.60
	Grand Total										394.0		
		42670	252.45	3	6.96	25	122.39	5	12.23		3	10.37	404.40

LEFTOUT COMPONENT WORKS -SOUTH VELLAR SUB BASIN PROJECT COST: 404.40 Lakhs

Sl.		Total						
No	Component	Qty	y	Amount in lakhs				
1	Tank Bund Improvements	42.67	42.67 KM					
2	Improvements to sluice							
	a) Repair	3	Nos	6.96				
	b) Reconstruction	25	Nos	122.39				
3	Improvements to weir (Repair)	5	Nos	12.23				
	Total			394.03				
4	Lumsum Provision for Labour welfare fund, Photographic charges, Advertisement charges, Name board, Petty supervision charges, Unforseen items at 2.80%			10.37				
	Total			404.40				

REHABILITATION OF LEFT OUT COMPONENTS WORKS IN PHASE - I TANKS IN SOUTH VELLAR SUB BASIN OF IAMWARM PROJECT

SOUTH VELLAR SUB BASIN - TRICHY REGION

PACKAGE WISE ABSTRACT

PACKAGE No.	No. OF TANKS / ANICUT	NAME OF PACKAGE	AMOUNT IN LAKHS
01/IAMWARM/SV/WRD/ 2012-2013	8 TANKS	Rehabilitation of left out Irrigation Infrastructures in Meenveli Periyakulam, Pudur Periyakulam, Annavasal Periyakulam, Vayalogam Periyakulam, Perumanadu Periyakulam, Kavinadu Tank, Miratunilai Kanmoi and Palayakanmoi in South Vellar Sub Basin of Pudukkottai District.	202.80
02/IAMWARM/SV/WRD/ 2012-2013	8 TANKS	Rehabilitation of left out Irrigation Infrastructures in Arasandan Kanmoi, Chittur Kanmoi, Goodalur Kanmoi, Illuni Kanmoi, Sullani Tank, Palanthamarai Tank, Veelimanagalm Tank and Manjakudi Tank in South Vellar Sub Basin, Pudukkottal District.	201.60
	16 TANKS	TOTAL	404.40