

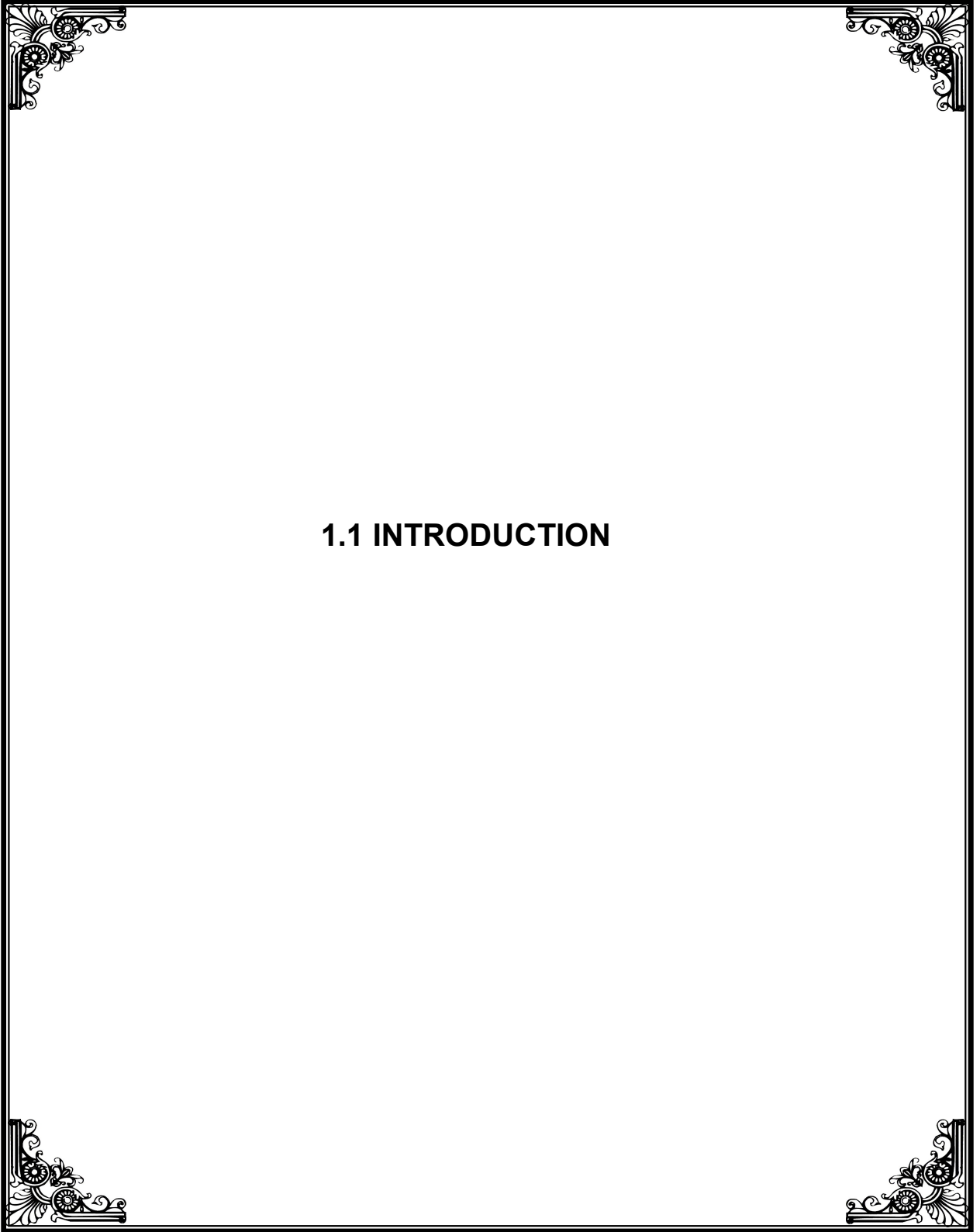


TN IAMWARM PROJECT

KARUMENIAR SUB BASIN

**WATER RESOURCES DEPARTMENT
DETAILED PROJECT REPORT**





1.1 INTRODUCTION

1.1 INTRODUCTION

1.1.1 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 and 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.

1.1.2 Description of the Nambiyar Basin

Nambiyar River basin geographically extends from the western ghats in the west to the Bay of Bengal in the east and covering an area of about 2018 . The basin lies in Thoothukudi, Tirunelveli and Kanyakumari Districts. Nambiyar Basin is surrounded by Thambraparani Basin on the North, Pazhayar and Valliyar river basin on the west, Bay of Bengal on the East and the Indian Ocean on the South.

The basin is drained by the Major river Nambiyar and other three separate minor rivers known as Karumeniar, Hanumanadhi and Uppar.

The Nambiyar basin has been divided into three sub basins namely as follows.

1. Nambiyar Sub Basin
2. Karumeniyar Sub Basin
3. Hanumanadhi Sub Basin

1.1.3 Description of the Karumeniyar Sub-Basin

Karumeniyar river originates in east of Kalakadu Village of Tirunelveli District at an altitude of about 1000m above M.S.L. It has a number of small streams and gets its flows mainly from the surpluses of a few tanks. After traversing a distance of 2 K.M. Manimuthar Main Canal joins with the river near Pillaikulam village. After traversing a total distance of 56.5 K.M, the Karumeniyar river flows into the Bay of Bengal near Manapadu village in Thoothukudy District.

At present there is no major source fed by Karumaniyar river lying in between Manimuthar Canal XIth distributory and Nambiyar river. The main source of supply for the river is the drainage water from the tanks fed by Pachayar river, Manimuthar canal and Nambiyar river. As such the river has no appreciable catchment to get copious water.

Below the confluence of Vijanarayanan tank surplus course with Karumeniyar, the terrain on both sides of the river is Sand teri. Hence the catchment area is bad in nature and receives very low runoff.

This is one of the three sub-basins of the Nambiyar River Basin. There are 127 tanks and 15 anicuts under the control of WRD of PWD in this sub basin. In addition to this there are 109 tanks with an ayacut of 1735.24 HA. Under the control of Panchayat unions within this sub basin. The list of Infrastructures covered with more details are furnished in the **Annexure -1**. These Infrastructures are located within the Sub-Basin's hydraulic boundary spread over 17 villages of 2 Taluks in Tirunelveli and 17 Village of 2 Taluks in Thoothukudy District. The Total Command area under these Infrastructures works out to 5036.18 Ha. **(Annexure1)**.

Command area :

System tanks : 4966.07 Ha

Non system tanks : 70.11 Ha

Total : **5036.18** Hectare

Sl. No.	District	Block	Taluk	No.of Tanks	Ayacut
1.	Tirunelveli	Nanguneri	Nanguneri	65	3636.44
2.	Tirunelveli	Kalakad	Nanguneri	2	135.81
					3772.25
3.	Tirunelveli	Radhapuram	Radhapuram	1	09.83
		Tirunelveli District		68	3792.08
4.	Thoothukudy	Alwarthirunagiri	Srivaikuntam	36	684.01
5.	Thoothukudy	Sathankulam	Sathankulam	23	560.09
		Thoothukudy District		59	1244.10
		Total			5036.18



1.2 HYDROLOGY

GENERAL

Karumeniyar sub basin of Nambiar river basin receives water from Thamiraparani river basin through Manimuthar Canal and surplus from the tanks fed by Manimuthar Distributory.

1.2.2 LOCATION

Karumeniyar Sub Basin area is 903.397 Sq. km. The taluks covered in this sub basin are Nanguneri and Radhapuram in Tirunelveli District and Srivaikuntam, Sathankulam and Tiruchendur in Thoothukudy District.

1.2.3 CATCHMENT AREA OF KARUMENIYAR SUB-BASIN

The Karumeniyar Sub Basin has a typical climate, having catchments area in plains. Karumeniyar Sub Basin enjoys the benefits of mostly North East monsoon and South West Monsoon.

1.2.4 HYDRO METEOROLOGY

The Hydro Meteorology parameters include rainfall, temperature, humidity, wind velocity, evaporation and duration of sun shine which determine the climate of the basin.

1.2.5 RAIN FALL

Average annual rainfall of gauging stations influencing this sub basin is as follows.

Sl No	Sub Basin	Rain gauge Station	RG Station influencing Area	Sub Basin Area	Weight in %	Annual Average rainfall in mm	Annual average weighted rainfall for the subbasin in mm
1.	Karumeniyar	Nanguneri	161.265	903.937	0.18	698	125
2.		Radhapuram	117.601		0.13	618	80
3.		Kalakadu	3.750		0.01	729	7
4.		Sathankulam	451.262		1.50	678	338
5.		Srivaikuntam	13.328		0.01	630	9
6.		Tiruchendur	3.920		0.01	749	7
7.		Kulasekarpattinam	152.808		0.16	745	109

a. SOIL CLASSIFICATION

In this sub basin, due to different stages, Weathering & parent material, the soil types are met with in combination of Inceptisol, Alfisol and Vertisol. More prominent type is Inceptisol.

Inceptisol	Red or brown or grey soil with surface horizon more developed than sub surface. They are developing soils, moderately deep, coarse loamy to loam moderately drained to well drained	Suited for commonly grown crops with exceptions
Alfisol	The red or brown soils having accumulation of alleviated clay in sub surface horizon it well drained, poor water and nutrient holding capacity.	Annual crops with shallow roots systems cum up wells
Vertisols	Black soil	Suitable for cotton, Pulses etc

b.1 LAND HOLDINGS

The details of farm holdings and size classes prevalent in Karumeniyar Sub basin are given below:

Category	Size of holdings	Numbers	Percentage
Marginal	Below 1.00 Ha	11709	96.55%
Small	1.00 – 2.00 Ha	403	3.32%
Medium	2.00 – 5.00 Ha	13	0.11%
Big	5.0 ha & above	3	0.02%
Total		12128	

Above table revealed that the marginal farmers alone accounted for 85.88 percent in the sub basin followed by small farmers. Developmental initiatives will need to take the fact into account

1.2.6 DEMOGRAPHY

Name of Sub Basin	Total No. of Blocks	Total No. of Villages
Karumeniyar Sub Basin	5	34

CROPPING PATTERN

Name of the sub Basin	: Karumeniyar	Fully Irrigated	3117.00	Ha
Nodal District	: Tirunelveli & Tuticorin	Partially Irrigated	1069.62	Ha
Registered Ayacut Area	5036.18 Ha.	Gap	849.56	Ha
		Total Ayacut Area	5036.18	Ha

S.No.	Crop	Without Project				With Project				Increasing
		FI	PI	RF/G	TOTAL	FI	PI	RF/G	TOTAL	
I	Perennial crop									
1	Coconut	0	143.00	0	143.00	143.00	0	0	143.00	0.00
2	Casurina	0	0	0	0	202.00	0	0	202.00	202.00
3	Fodder Grass	0	0	0	0	30.00	0	0	30.00	30.00
	Sub Total	0	143.00	0	143.00	375.00	0	0	375.00	232.00
II	Annual crop									
	Sugar cane	0	3.00	0	3.00	3.00	0	0	3.00	0.00
	Banana	182.00	227.00	0	409.00	639.00	0	0	639.00	230.00
	Sub Total	182.00	230.00	0	412.00	642.00	0	0	642.00	230.00
III	1st crop									
1. a	Paddy	2931.00	491.00	0	3422.00	0	0	0	0.00	-3422.00
b	Paddy - SRI	0	0	0	0.00	3075.00	0	0	3075.00	3075.00
2	Cotton	4.00	30.50	0	34.50	68.50	0	0	68.50	34.00
3	Ground nut	0	87.40	0	87.40	100.00	0	0	100.00	12.60
4	Pulses	0	75.72	0	75.72	375.10	0	0	375.10	299.38
5	Cucumber	0	4	0	4.00	29.00	0	0	29.00	25.00
6	Bhendi	0	6	0	6.00	66.00	0	0	66.00	60.00
7	Bringal	0	2	0	2.00	65.00	0	0	65.00	63.00
8	Chillie	0	0	0	0.00	40.00	0	0	40.00	40.00
9	Fodder Cholan	0	0	0	0.00	60.00	0	0	60.00	60.00
10	Fallow / Gap	0	0	708.98	708.98	0	0	0	0.00	-708.98
11	Prosopis	0	0	140.58	140.58	0	0	140.58	140.58	0.00
	Sub Total	2935.00	696.62	849.56	4481.18	3878.60	0	140.58	4019.18	-462.00
	Grand Total (I+II+III)	3117.00	1069.62	849.56	5036.18	4895.60	0	140.58	5036.18	0.00

IV	2 nd Crop									
1	Groundnut	0	0	0	0.00	150.00	0	0	150.00	150.00
2	Pulses	0	0	0	0.00	80.00	0	0	80.00	80.00
	Sub Total	0	0	0	0.00	230.00	0	0	230.00	230.00
V	3 rd Crop									
		0	0	0	0.00	0	0	0	0.00	0.00
	Total	0	0	0	0.00	0	0	0	0.00	0.00
	Great Grand Total	3117.00	1069.62	849.56	5036.18	5125.60	0.00	140.58	5266.18	230.00
	Cropping Intensity				83.13%				101.78%	

KARUMENI ARU SUB BASIN - NAMBIYAR BASIN**Crop water requirement without Project**

Sl.No	Name of Crop	Area in Ha	Crop water requirement in mm	Total Crop water requirement in Mem	Irrigation water requirement at source Eff=43%	Total Irrigation requirement in Mem
I	Perennial Crops					
1	Cocount	143.00	1376	1.968	4.58	10.64
2	Casurina	0.00	290	0.000	0.00	0.00
3	Fodder Grass	0.00	438	0.000	0.00	0.00
	Sub Total	143.00		1.97	4.58	10.64
II	Annual Crops					
1	Sugar cane	3.00	1350	0.041	0.09	0.09
2	Banana	409.00	1278	5.227	9.86	9.86
	Sub Total	412.00		5.27	9.96	9.96
III	1st crop (Sep- Jan)					
1.a	Paddy	3422.00	1235	42.262	98.28	98.28
b	Paddy - SRI	0.00	865	0.000	0.00	0.00
2	Cotton	34.50	546	0.188	0.44	0.44
3	Groundnut	87.40	453	0.396	0.92	0.92
4	Pulses	75.72	352	0.267	0.62	0.62
5	Cucumber	4.00	250	0.010	0.02	0.02
6	Bhendi	6.00	315	0.019	0.04	0.04
7	Brinjal	2.00	462	0.009	0.02	0.02
8	Chillies	0.00	833	0.000	0.00	0.00
9	Fodder Cholam	0.00	50	0.000	0.00	0.00
10	Fallow/Gap	0.00	0	0.000	0.00	0.00
11	Prosopis	0.00	0	0.000	0.00	0.00
	Sub Total	3631.62		43.15	100.35	100.35
	Grand Total (I+II+III)	4186.62		50.39	114.88	120.95
IV	2nd crop					
1	Groundnut	0.00	453.00	0.000	0.00	0.00
2	Pulses	0.00	300.00	0.000	0.00	0.00
	Sub Total	0.00		0.00	0.00	0.00
	Great Grand Total	4186.62		50.39	114.88	120.95

KARUMENI ARU SUB BASIN - NAMBIYAR BASIN

Crop water requirement with Project

SLNo.	Name of Crop	Area in Ha	Crop water requirement in mm	Total Crop water requirement in Mem	Irrigation water requirement at source Eff=53%	Total Irrigation requirement in Mem
I	Perennial Crops					
1	Coconut	143.00	1376	1.968	3.71	3.71
2	Casurina	202.00	290	0.586	1.11	1.11
3	Fodder Grass	30.00	438	0.131	0.25	0.25
	Sub Total	375.00		2.68	5.07	5.07
II	Annual Crops					
1	Sugar cane	3.00	1350	0.041	0.08	0.08
2	Banana	639.00	1278	8.166	15.41	15.41
	Sub Total	642.00		8.21	15.48	15.48
III	1st crop (Sep- Jan)					
I.a	Paddy	0.00	1235	0.000	0.00	0.00
b	Paddy - SRI	3075.00	865	26.583	50.16	50.16
2	Cotton	68.50	546	0.374	0.71	0.71
3	Groundnut	100.00	453	0.453	0.85	0.85
4	Pulses	375.10	352	1.320	2.49	2.49
5	Cucumber	29.00	250	0.073	0.14	0.14
6	Bhendi	66.00	315	0.208	0.39	0.39
7	Brinjal	65.00	462	0.300	0.57	0.57
8	Chillies	40.00	833	0.333	0.63	0.63
9	Fodder Chofam	60.00	50	0.030	0.06	0.06
10	Fallow/Gap	0.00	0	0.000	0.00	0.00
11	Prosopis	0.00	0	0.000	0.00	0.00
	Sub Total	3878.60		29.67	55.99	55.99
	Grand Total (I+II+III)	4895.60		40.57	76.54	76.54
IV	2nd crop					
1	Groundnut	150.00	453.00	0.680	1.28	1.28
2	Pulses	80.00	300.00	0.240	0.45	0.45
	Sub Total	230.00		0.92	1.73	1.73
	Great Grand Total	5125.60		41.49	78.28	78.28

KARUMENI ARU SUB BASIN - NAMBIYAR BASIN

Water Potential without Project

Surface Water Potential		86.07	McM
Ground Water Potential	=	78.01	McM
Total Potential	=	164.08	McM

Water Demand without Project

Domestic	=	9.28	McM
Livestock	=	7.66	McM
Industrial	=	14.2	McM
Irrigation	WRO	= 120.95	McM
	PU & GW	= 53.58	McM
Total Water Demand	=	205.67	McM

<u>Water Balance</u>	-	-41.59	McM
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KARUMENI ARU SUB BASIN - NAMBIYAR BASIN

Water Potential with Project

Surface Water Potential	-	86.07	Mcm
Ground Water Potential	-	78.01	Mcm
Total Potential	=	164.08	Mcm

Water Demand with Project

Domestic	=	9.28	Mcm
Livestock	=	7.66	Mcm
Industrial	=	14.2	Mcm
Irrigation	=	78.28	Mcm
WRO	=		
PU & GW	-	53.58	Mcm
Total Water Demand	=	163.00	Mcm
<u>Water Balance</u>	-	1.08	Mcm



1.3 HYDRAULICS PARTICULARS OF THE COMPONENTS

HYDRAULIC PARTICULARS

a) TANKS (Non System Tanks)

Sl. No	District	Taluk	Name of Work	Ayacut in Ha	Capacity in Mcft	Number of Fillings	Free catchment in Sqkm	Combined Catchment in Sq.K.M	Water spread area (Sq. K m)	FTL in M	MWL in M	No of Sluices.	Nos. and Length of weir (m)		Discharge in Cusecs	Length of bund (M)	Upper Tank	Lower Tank
													Nos.	Length in M				
			CLUSTER - I															
1	Tirunelveli	Nanguneri	KAZHUVUR KULAM	45.140	11.65	1.600 Nos	0.0720	0.0540	0.2175			2	1			2000		

HYDRAULIC PARTICULARS

b) TANKS (System Tanks)

Sl. No	District	Taluk	Name of Work	Ayacut in Ha	Capacity in Mcft	Number of Fillings	Free catchment in Sqkm	Combined Catchment in Sq.K.M	Water spread area (Sq. K m)	FTL in M	MWL in M	No of Sluices.	Nos. and Length of weir (m)		Discharge in Cusecs	Length of bund (M)	Upper Tank	Lower Tank
													Nos.	Length in M				
			CLUSTER - I															
1	Tirunelveli	Nanguneri	VEERAKERALAM-PERIKULAM	28.325	10.82	1.7605 Nos. (Restricted)	0.7005	0.7005	0.2947	82.98	83.28	3	1	5.75	20.9	1380	--	Arumpon-darkulam
2		Nanguneri	ARUMPOON-DARKULAM	36.150	4.49	3 Nos. (Restricted)	2.575	3.101	0.2816	79.79	80.34	3	1	13.9	255	2550	Veerakeralam-perikulam	Ambalamkulam
3		Nanguneri	AMBALAMKULAM	21.615	6.14	0.240 Nos.	2.1445	16.9354	0.1826	77.63	77.93	1	1	5	17.7	1845	Arumpoondar-kulam	Ariya-kulam
4		Nanguneri	ARIYAKULAM	89.31	16.10	3 Nos. (Restricted)	1.5762	1.5762	0.6360	72.82	73.12	2	1	3	150	3308	--	Eduppai-kulam
5		Nanguneri	ARUMUGANERIKULAM	17.725	4.36	1.0763 Nos. (Restricted)	1.9895	12.4895	0.2099	65.01	65.61	1				1590		
			CLUSTER - II															
6	Tirunelveli	Nanguneri	PARANIPADUKULAM	17.275	3.66	3 Nos. (Restricted)	0.8409	2.9665	0.1123	58.76	59.16	1	1	7		1150	--	Thiruvarunerikulam
7	Tirunelveli	Nanguneri	NEMANI KULAM	6.450		0.937 Nos.	0.8256	0.8256	0.09469	57.285	57.885	1	1			1050	--	Thiruvarunerikulam
8		Nanguneri	VANNANKULAM	5.800		1.23 Nos.	0.905	1.6852	0.0753	52.88	53.48	1	1			850	Thevarkulam	Thiruvarunerikulam
9	Tirunelveli	Nanguneri	THIRUVARULNERI - KULAM	12.805	4.40					49.35	49.95	1			43.4	1500		
10		Nanguneri	PILLAIYAR KULAM	63.490	9.62	3 Nos.	0.9342	0.9342	0.3207	49.28	49.88	1				0960	--	Rettai-kulam

Sl. No	District	Taluk	Name of Work	Ayacut in Ha	Capacity in Mcft	Number of Fillings	Free catchment in Sqkm	Combined Catchment in Sq.K.M	Water spread area (Sq. K m)	FTL in M	MWL in M	No of Sluices.	Nos. and Length of weir (m)		Discharge in Cusecs	Length of bund (M)	Upper Tank	Lower Tank
													Nos.	Length in M				
			CLUSTER - III															
11	Thoothukudy	Sathankulam	SENKULAM-PERIAKULAM	48.770	9.80	0.615 Nos.	2.2513	10.9315	0.6329	44.16	44.66	1			42.2	2590	Thiruvanerikulam	Vira-kulam
12		Sathankulam	VEERAKULAM	22.920	5.18	0.863 Nos.	2.8531	12.3713	1.50341	38.17	38.62	1	1	38	68.7	2710	Senkulam	Velanpudukulam
13		Sathankulam	VELAN PUDUKULAM	20.315	6.12	1.847 Nos.	2.2530	14.6243	0.2135	29.96	31.506	1	1	5		1260	Virakulam	Amuthavannakudikulam
			CLUSTER - IV															
14	Thoothukudy	Sathankulam	MEERAN MELAKULAM	16.505	2.83	1.640 Nos.	0.7039	0.7039	0.1255	47.42	47.72	1	1	123		1005	--	Meeranmelakulam
15		Sathankulam	MEERAN KEELAKULAM	24.025	9.26	0.607 Nos.	1.2436	1.947	0.3086	46.76	47.06	1	1	14.1	10.9	1240	Meeranmelakulam	Perumalmela & Keelakulam
			CLUSTER - V															
16	Thoothukudy	Sathankulam	PERUMAL MELA & KEELA KULAM	25.145	6.02	0.652 Nos.	2.6792	4.6267	0.3835	44.59	44.89	1	1	22.9	095	21.8	Meerankelakulam	Karunkulam
17		Sathankulam	KURUGAL PERIKULAM	15.545	2.66	2.587 Nos.	0.7063	6.7179	0.1042	43.04	43.34	1	1	10.1	154	840	Musalaikulam Perumalmela & Keelakulam	Perumalmela & Keelakulam
18		Sathankulam	THERKKUPEI KULAM	31.575	7.45	1.50388 Nos.	2.9679	9.6858	0.3608	39.48	39.78	1	1	41.5	524	1425	Karunkalperi	Panaikulam
09		Sathankulam	PETTAIKULAM	5.555	1.24	1.941 Nos.	1.503	4.7971	0.3044	40.74	41.04	1	1	7.85	2.84	750	Malayamperi	Velathattakulam
20		Sathankulam	PANAIKULAM	28.465	5.77	0.402 Nos.	1.0945	11.4228	0.2099	37.92	38.22	1	1	44.3	11.6	1470	Therkkuperi Pettaikulam	Puliyankulam
21		Sathankulam	KARUNKADAL KULAM	29.350	8.95	0.8914 Nos.	1.7668	15.6909	0.2464	25.24	25.84	1	1	24.7	17	2130	Puliyankulam	Elamalkulam
22		Sathankulam	ILAMAL KULAM	41.550	13.90	1.255 Nos.	2.2445	17.9354	0.7108	22.30	22.75	1	1	55.7	943	1360	Karunkadal	Chettikulam
23		Sathankulam	NARTHANKURICHI KULAM	8.630	0.78	0.108 Nos.	0.023	0.0311	0.0933	21.505	21.00	1	1	9.2	210	810	Ilamalkulam	Chettikulam
24		Sathankulam	CHETTI KULAM	61.055	11.40	0.769 Nos.	0.114	0.152	0.4577	18.43	09.03	1	1	32	875	1860	Narthankurichikulam	--

Sl. No	District	Taluk	Name of Work	Ayacut in Ha	Capacity in Mcft	Number of Fillings	Free catchment in Sqkm	Combined Catchment in Sq.K.M	Water spread area (Sq. K m)	FTL in M	MWL in M	No of Sluices.	Nos. and Length of weir (m)		Discharge in Cusecs	Length of bund (M)	Upper Tank	Lower Tank
													Nos.	Length in M				
25	Thoothukudy	Sathankulam	PULIYANKULAM	25.910	12.61	0.7351 Nos.	2.5013	13.9241	0.3413	27.94	28.39	1	1	30.6	39.7	1620	Panaikulam	Karunkadal-kulam
26		Sathankulam	NOCHIKULAM	6.930	1.15	1.456 Nos.	1.628	1.628	0.1094	09.90	21.50	1	1	9.2	6.17	995	--	Thiruvaranganerikulam
27		Sathankulam	KARUVELANPADU KULAM	1.985		0.068 Nos.	1.4075	1.4075	0.4634	28.22	28.52	1	1			2200	--	Palankulam Srikrishnaperi Vadakkukulam
28		Sathankulam	THIRUVARANKANERI MELA KULAM	4.125	6.95	1.62 Nos.	0.218	1.846	0.067	18.76	09.36	1	1	9.6	96	795	Nochikulam	Arumuganeri
29		Sathankulam	THIRUVARANKANERI KEELA KULAM	10.075	3.30	1.716 Nos.	3.077	3.077	0.1573	09.47	20.47	1	1	3	172	875	--	Pallankinarukulam
30		Sathankulam	PALANKINARU VADAKU KULAM	6.325	2.03	3 Nos.	0.991	4.068	0.0976	15.72	16.17	1	1	9.1	68.3	1045	Thiruvaranganerikulam	Andankulam
31		Sathankulam	SRIKRISHNAPERI VADAKU KULAM	4.090	3.91	0.0530 Nos.	0.0520	0.069	0.2084	24.39	24.54	1	1			1100	Thiruvaranganeri Keelakulam	Palankulam
32		Sathankulam	SRIKRISHNAPERI THERKU KULAM	1.145	0.71	--	1.5031 Nos.	1.5031	---	23.00	23.46	1				600	---	Andankulam
33		Sathankulam	KIDA MOZHI KULAM	2.920	0.95	--	0.491 Nos.	0.491 Nos.	---	22.40	22.56	1				555	---	Andankulam
34		Sathankulam	ARUMUGANERI KULAM	6.470	2.62	2.473 Nos.	4.4378	24.5413	0.1408	16.58	17.18	2	1	63.6	1225	995	Chettikulam Urani Thiruvaranganeri Melakulam	Udayarkulam
35		Sathankulam	KEELA ARUMUGANERI KULAM	3.235		0.0400 Nos.	0.0300	0.0260	0.1059			1	1			875	Arumuganerikulam	Udayarkulam
36		Sathankulam	UDAIYAR KULAM	37.465	6.62	3 Nos.	0.6248	25.1661	0.2631	15.41	16.01	1	1	25.3	248	1783	Arumuganeri	--
37		Sathankulam	SIRU UDAIYAR KULAM	5.395	0.49	2.24 Nos.	1.056	3.2111	0.0504	18.99	09.59	1	1	52.7	15.1	810	Udayarkulam	Kadamban thottakulam
38		Sathankulam	KADAMBAN THOTTA KULAM	10.235	2.08	0.129 Nos.	0.0490	0.0370	0.1498	18.18	18.63	1	1	50	103	1350	Siruudayarkulam	Pudukinarukulam
39		Sathankulam	PANNAI PATHU KULAM	09.955	2.94	1.252 Nos.	0.0700	0.052	0.2086	16.97	17.57	1	1	26	252	1085	Pudukinarukulam	---

Sl. No	District	Taluk	Name of Work	Ayacut in Ha	Capacity in Mcft	Number of Fillings	Free catchment in Sqkm	Combined Catchment in Sq.K.M	Water spread area (Sq. K m)	FTL in M	MWL in M	No of Sluices.	Nos. and Length of weir (m)		Discharge in Cusecs	Length of bund (M)	Upper Tank	Lower Tank
													Nos.	Length in M				
40	Thoothukudiy	Sathankulam	PUDUKINARUKULAM	9.550	1.98	0.120 Nos.	0.047	0.0350	0.1409	09.11	09.71	1	1	13.2	93	850	Kadambanthottakulam	Panaipathukulam
41		Sathankulam	PALAN KULAM	27.985	6.26	0.353 Nos.	0.057	0.043	0.1724	15.605	16.205	2	1			0950	Karovelambadukulam	--
			CLUSTER - VI															
42	Thoothukudy	Sathankulam	KATTARIMANGALAM KULAM	57.455	9.29	0.724 Nos.	0.171	0.128	0.1537	37.60	38.05	1	1		283	1685	--	Alankulam
43		Sathankulam	ALANKULAM	6.610	0.60	3 Nos.	1.448	7.159	0.1356	35.69	35.99	1	1	67	684	670	Kattarimangalam & Manakavalam-puram	Kadambanthottakulam
44		Sathankulam	THERKU PERIKULAM	21.800	8.43	0.3385 Nos.	3.5290	10.6880	0.3705	31.36	31.81	1	1	79	9.04	1230	Alankulam	Achampadu
45		Sathankulam	MANAKAVALAMPURAM KULAM	12.670	2.33	1.159 Nos.	0.648	0.648	0.1316	37.30	37.75	1			220	835	--	Alankulam
46		Tiruchendur	MELAPUDUKADUVETTIKULAM	7.920	1.670	0.090 Nos.	0.024	0.180	0.0726	29.47	30.07	1	1	4.2	10.6	885	--	Udaviyarkulam
47		Tiruchendur	KEELAPUDUKADUVETTIKULAM	6.920	2.10	1.400 Nos.	0.8366	0.8366	0.0853	16.71	17.01	1	1	39	10.6	1110	--	Paramarthankulam
48		Sathankulam	PARAMARTHANKULAM	17.305	3.66	1.0564 Nos.	1.8492	12.3034	0.1381	22.93	23.38	1	1	23	13.1	1280	Keelapudukadu - vetti Achampadu	Amachiyar Pettaikulam
49		Sathankulam	VADAKKU VAGAI KULAM	16.325	3.28	1.224 Nos.	2.3738	2.3738	0.2096	33.21	33.66	1	1	9.3	8.92	800	--	Achampadu
50		Sathankulam	ACHEMBADU KULAM	43.870	09.20	1.5055 Nos.	5.0854	18.1472	0.3346	25.55	25.00	1	3	30.3	54.1	1885	Therkkuperi Vadakku Vagai	Baramarthankulam
51		Sathankulam	MALAYAMPERIKULAM	6.910	3.42	1.50603 Nos.	3.2968	3.2968	0.2010	17.43	17.73	1	1	6.3	14.7	1470	--	Pettaikulam
52		Sathankulam	PIRANDARKULAM	2.975		1.044 Nos.	1.9223	3.7614	0.1495	38.84	39.44	1	1	11.1	14.1	1440	Petharkulam & Senkulam	Komaneri
				CLUSTER - VII														
53	Tirunelveli	Nanguneri	UNNANKULAM	37.130	10.29	2 Nos.	0.894	4.815	0.2910	76.20	76.51	1	1		450	1530	Pillaikulam	Hanumar-pudukulam
54		Nanguneri	HANUMAR PUDUKULAM	7.78	12.44	0.758 Nos.	0.117	0.080	0.3520	70.16	70.47	1	1		1350	1530	Unnankulam	Thennavanerikulam

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													Nos.	Length in M				
55	Tirunelveli	Nanguneri	THENNAVANERI KULAM	12.360	4.00	0.155 Nos.	0.037	0.028	0.1120	68.58	68.89	1	1		093	1286	Hanumarpudukulam	Kadankulam
56		Nanguneri	AYARKULAM	27.250	4.94	3 Nos.	1.9411	1.9411	0.2175	68.03	68.13	1	1	09.7	8.38	2435	--	Eduppaikulam
57		Nanguneri	EDUPPAIKULAM	17.235	2.59	1.40 Nos.	1.7713	5.2886	0.0975	62.27	62.87	1	1	9.25	90	1608	Ayarkulam & Arumuganeri	Periyamunanchi
58		Nanguneri	PERIYAMUNANJI KULAM	43.000	3.03	0.8873 Nos.	1.5929	6.8815	0.2047	57.31	57.81	1	1	8.1	7.62	1490	Eduppalkulam	Thulukkan-kulam Thiruvaruneri
59		Nanguneri	THULUKKANKULAM	9.785	1.76	1.035 Nos.	1.50184	3.7900	0.0937	54.93	55.53	1	1	10.3	9.03	990	Nemani & Periyamunanchi	Thiruvaruneri
60		Nanguneri	TUTTIKULAM	15.915	2.95	2.698 Nos.	3.1430	3.1430	0.3245	57.43	58.03	1	1		48	1425	--	Thevarkulam & Kodankulam
61		Nanguneri	THE VARKULAM	15.910	1.17	0.9183 Nos.	1.50729	1.6852	0.1044	54.60	55.20	1	1	5.5	120	795	Thuttikulam	Keerankulam
62		Nanguneri	THILLADAM KULAM	23.185	8.61	3 Nos.	1.4117	1.4117	0.3368	65.66	65.79	1	1	14	1.36	0965	--	Kundankulam
63		Nanguneri	KANNANKULAM	23.800	2.13	15.60 Nos.	0.8091	0.8091	0.1649	63.55	63.65	1	1	16.2	6.05	1250	--	Kodankulam & Kundarkulam
64		Nanguneri	KOONDHAKULAM	77.040	15.48	0.971 Nos.	0.1762	0.132	1.50286	63.38	63.73	1	1		14.8	2220	Kannankulam	Kadankulam
			CLUSTER - VIII															
65	Tirunelveli	Nanguneri	KADANKULAM	132.450	10.47	3 Nos.	2.5837	5.7863	0.6754	60.00	60.60	1	1	32.9	24	2475	Kannakulam & Kundankulam	Padaikkankulam
66		Nanguneri	PADAKKAM KULAM	35.500	6.88	0.6918 Nos.	1.2557	7.0420	0.2681	58.37	58.82	1	1	12.8	30.3	2340	Kadankulam	Kodankulam & Samanathaperikulam
67		Nanguneri	KODAN KULAM	09.860	3.12	1.8565 Nos.	2.2121	8.8761	0.1699	55.27	55.87	1	1	7.9	15.6	1347	Pathaikkam & Thuttiklam	Somanathaperi Keerankulam Pettaikulam
68		Nanguneri	RETTAI KULAM	34.850	5.10	1.8315 Nos.	2.3308	12.6130	0.2146	46.61	46.91	1	1	35.1	34.4	1335	Mankulam Kodankulam Pillayarkulam	Ramanerikulam Petharkulam

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													Nos.	Length in M				
69	Tirunelveli	Nanguneri	PETTAIKULAM	8.055	1.11	0.101 Nos.	0.036	0.027	0.1095	51.82	52.12	1			100	635	Rettaikulam	Komaneri-kulam
70		Nanguneri	SOMANATHAPERI KULAM	09.945	6.10	2.110 Nos.	3.1687	7.6992	0.2175	46.48	47.08	1	1	7.8	300	1305	Pathaikaran & Kodankulam	Ramaneri
71		Nanguneri	KEERAN KULAM	40.03		1.288 Nos.	1.072	4.9828	0.1612			1	1			1200	Thevarkulam Kodankulam	Mankulam
72		Nanguneri	MANKULAM	10.015		1.652 Nos.	1.297	6.2798	0.1292			1	1			1000	Keerankulam	Rettaikulam
73		Nanguneri	RAMANERI KULAM	37.135	6.97	1.779 Nos.	3.5257	26.2015	0.3330	41.73	42.33	1	1	7	53.3	2310	Rettaikulam& Somanathaperi	Komaneri
			CLUSTER - IX															
74	Thoothukudy	Sathankulam	KOMANERI KULAM	102.550	3.39	2.51 Nos.	2.2747	42.4270	0.4188	35.22	35.82	1	1	7.1	629	2514	Ramaneri Pirancheri & sadayaneri	Nedunkulam
75		Sathankulam	AVALAI KULAM	14.630	2.56	2.796 Nos.	2.3441	3.0582	0.1059	29.69	29.99	1	1	31.50	11.5	1105	Nedunkulam	Amudavanna-kulam
76		Sathankulam	NEDUNKULAM	47.245	16.10	0.951 Nos.	3.2774	51.4871	0.7076	30.84	31.44	1	1	54.4	84.1	2220	Komaneri & Valipulankulam	Nedunkulam
			CLUSTER - X															
77	Tirunelveli	Nanguneri	KADAMBAN KULAM	10.880	2.04	3 Nos.	0.860	2.125	0.1066	43.40	44.00	1	1	11.9	11.2	1140	Thattankulam	Venkatraya-puramkulam
78		Nanguneri	RAMAKRISHNA PURAM KULAM	53.550	4.68	1.925 Nos.	0.0640	0.0480	0.0941	54.97	55.27	1	1	29.8	9.44	15.72	--	Pettaikulam
79		Nanguneri	PETTAIKULAM	10.170	1.93	1.368 Nos.	0.8104	2.7051	0.1095	53.47	54.07	1	1	6.8	9.54	1177	Ramakuritha-puramkulam	Thirumalai-purammela-kulam
80		Nanguneri	THIRUMALAPURAM MELAKULAM	14.120	2.60	1.082 Nos.	1.4958	4.2009	0.0995	52.62	53.22	1	1	12.2	16.8	1545	Pettaikulam	Thirumala-keelakulam
81		Nanguneri	THIRUMALAPURAM KEELAKULAM	24.755	6.23	1.40 Nos.	1.9715	6.1724	0.1731	47.12	47.72	1	1	9	7.74	1325	Thirumalapura mmelakulam	Sadayaneri-kulam
82		Nanguneri	SADAYANERI KULAM	14.555	6.23	2.283 Nos.	1.0994	10.1894	0.1548	41.78	42.38	1	1	7.4	095	990	Thirumalapura m Keelakulam	Komaneri-kulam
83		Nanguneri	KARIYANDI KULAM	34.065	15.42	0.899 Nos.	2.761	2.761	1.50564	48.62	49.22	1	1	9.3	10.7	2020	--	Ilankulam
84		Nanguneri	ILANKULAM	14.440	6.15	0.670 Nos.	0.6325	3.5104	0.1614	47.50	47.80	1	1	21.2	13.3	810	Kariyandikulam	Santhuvarkulam

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													Nos.	Length in M				
85	Tirunelveli	Nanguneri	SEKARANKULAM	12.055	7.21	0.815 Nos.	1.0625	2.8176	0.1879	43.20	43.65	1	1	20.2	10	905	Elankulam	Sadayanerikulam
86		Nanguneri	SRI RAMAN KULAM	29.695	15.14	3 Nos.	2.779	3.291	0.3364	41.59	42.04	1	1	10	3.91	1890	Thinayurankulam	---
87		Nanguneri	THATTANKULAM	47.085	6.66	2 Nos.	2.329	8.592	0.2094	45.72	46.03	1	1		133	1830	--	Kadambankulam
88		Nanguneri	VENKATRAYA PURAMKULAM	33.095	18.20	3 Nos.	1.864	3.989	0.3691	40.12	40.76	1	1	11.9	10.6	1620	Kadambankulam	Rettaikinarukulam
89		Nanguneri	VEERANCHERIKULAM	40.980	9.16	3 Nos.	1.281	1.281	0.2351	39.37	40.32	1	1	12.3	8.34	1305	Thattarkulam	Venkatrayapuramkulam
			CLUSTER - XI															
90	Thoothukudy	Sathankulam	SANTHUVARI KULAM	11.245	2.07	1.5097 Nos.	1.1381	2.8933	0.1644	41.24	41.79	1	1	83.8	10.4	1065	Elankulam	Thuvankulam & Minor surplus of Kombankulam
91		Sathankulam	THUVARIKULAM	16.705	9.26	9.76 Nos.	1.3040	4.1680	0.3177	39.17	39.77	1	1	5.5	14.8	1406	Santhuvarkulam	Valipulankulam
92		Sathankulam	VALIPULAN KULAM	11.405	2.83	0.705 Nos.	1.6147	5.7827	0.1655	33.59	34.09	1	1	10.4	132	940	Thuvarkulam	Nedunkulam
93		Sathankulam	KODAMBAN KULAM	20.705	6.15	2.150 Nos.	1.590	7.174	0.1066	35.09	35.79	1	1	8.5	5.15	1530	Thattankulam	Venkatrayapuram
94		Sathankulam	ILUPPAIKULAM	21.255	6.66	1.014 Nos.	2.1412	3.5839	0.2094	29.99	30.29	1	1	9.1		1560	Kombankulam	Amudunnakudikulam
			CLUSTER - XII															
95	Tirunelveli	Nanguneri	NAYANA MUNDAN KADIAN KULAM	6.600	4.88	0.080 Nos.	0.022	0.17	0.680	41.15	41.45	1	1		63	2750	Vijayanarayana Periyakulam	Vijayaachampadu
96		Nanguneri	VIJAYA ACHAMBADU KULAM	25.680	9.20	0.8305 Nos.	1.030	2.025	0.318	38.10	38.41	1	1		120	1740	Nayanamundankadian kulam	Ilangaiadikulam
97		Nanguneri	ILANGAIADI KULAM	33.650	6.30	2.203 Nos.	2.925	12.829	0.7151	35.05	35.36	1	1		203	1800	Vijayaachampadu	Nainarkulam
98		Nanguneri	NAINAR KULAM	23.950	8.70	2.40 Nos.	0.875	5.272	0.3265	32.01	32.86	1	1			850	Ilangayadiklam	Ayakkarakulam

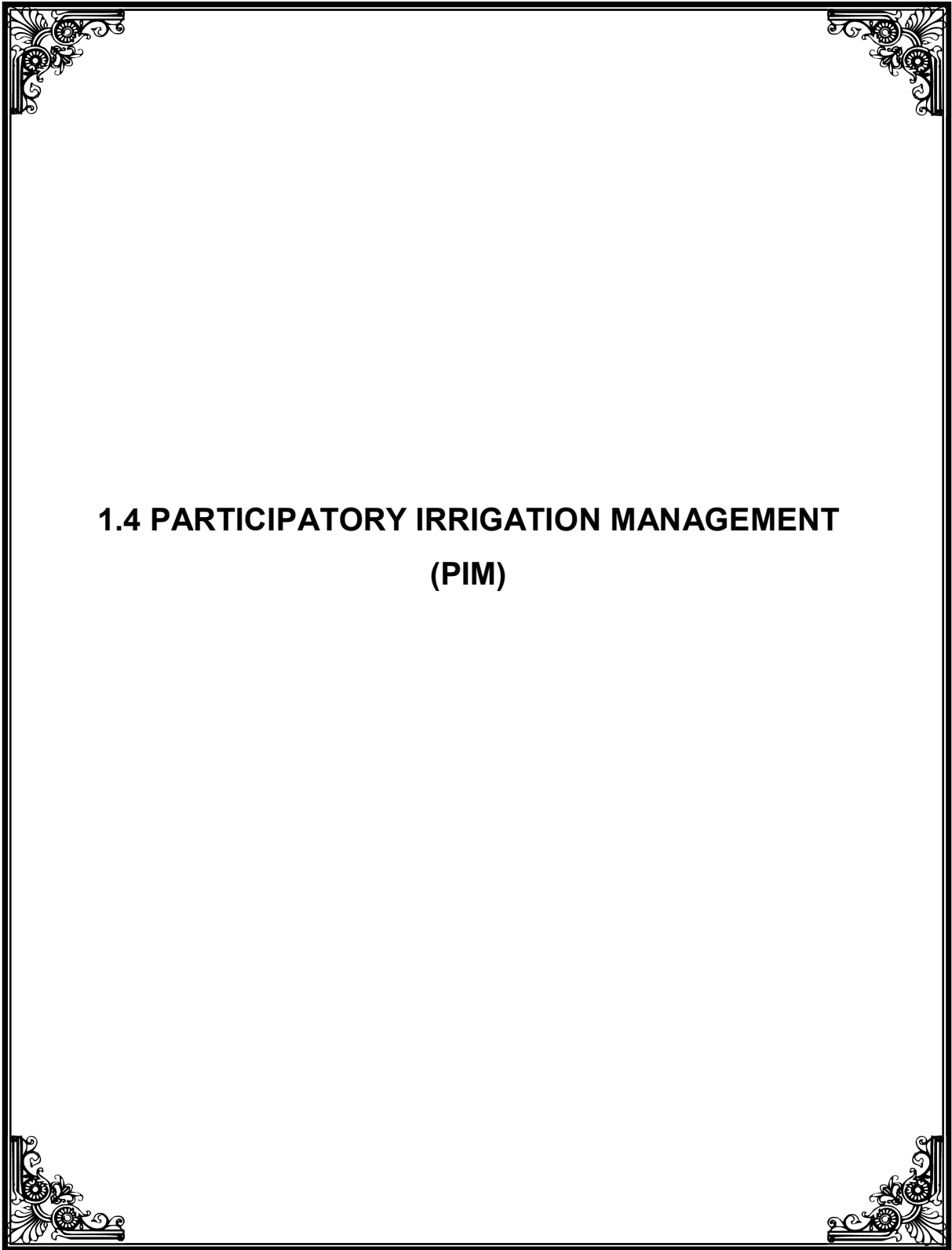
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													Nos.	Length in M				
99	Tirunelveli	Nanguneri	AYAKKARAN KULAM	21.440	1.88	2.840 Nos.	1.914	1.859	0.630			2	1			650	Nainarkulam	Suviseshapuram
100		Nanguneri	PATTANCHERY KULAM	28.910	2.90	--	1.7725 Nos.	0.7102	0.7102	38.55	38.85	1	1	18.1	11	895	--	Kanavanerikulam
101		Nanguneri	KANAVANERI KULAM	125.990	3.40	0.6232 Nos.	0.929	1.9339	0.2482	36.39	36.84	1	1	7.75	7.23	11.25	Pattancherikulam	Kanavanerikulam Nannikulam
102		Nanguneri	NANNI KULAM	20.760	1.72	2.2427 Nos.	1.5161	1.6349	0.1463	34.94	35.54	1	1	7.1	5.59	1100	Kanavanerikulam	Panadaippukulam
103		Nanguneri	PANAYADIPUDU KULAM	5.220	0.74	7.94 Nos.	1.008	2.0882	0.0314	34.25	34.70	1	1	9.8	9.38	465	Vannikulam	Umabaganerikulam
104		Nanguneri	IYYANARKULAM	21.445		0.270 Nos.	0.022	0.017	0.0685			1	1			985	Nainarmundankadiankulam	Vijayaachampadu
105		Nanguneri	THINAILOORANAI KULAM	09.505	7.32	3 Nos.	1.5012	1.5012	0.2950	46.37	46.82	1	1	6.5	2.56	1428	--	Sri Ramanukulam
106		Radhapuram	SUVISESHAPURAM KULAM	09.83		1.250 Nos.	0.013	0.009	0.03792			1	1			1250	Ayakarankulam	--
			CLUSTER - XIII															
107	Thoothukudy	Sathankulam	RETTAIKINAR KULAM	9.825	1.05	1.862 Nos.	1.497	5.486	0.3774	36.48	37.08	1	1	11.7	8.81	1425	Venkatapuramkulam	Kuthankudikulam
108		Sathankulam	KUTHANKUDI KULAM	17.340	7.21	0.823 Nos.	1.317	4.433	0.3528	35.57	36.17	1	1	13.9	4.56	1495	Rettaikinarukulam	Vettarayanukulam
109		Sathankulam	VETARAMKULAM	23.545	12.38	1.288 Nos.	0.792	5.225	1.50330	34.17	34.62	1	1	43.1	15	2007	Kuthankudi	Ilayaneri
110		Sathankulam	ILLAYANERI KULAM	15.995	5.22	3 Nos.	1.765	6.990	0.2804	30.60	31.20	1	1	35.2	28	1658	Vattarasankulam	Madavarayanerikulam
111		Sathankulam	MATHANARAYANA PERIKULAM	11.5095	0.26	2.736 Nos.	1.5062	7.552	0.0446	25.37	25.82	1	1	10.3	5.15	885	Ilayanerikulam	Amudunnakudikulam
112		Sathankulam	AMUTHAVANNA KUDIKULAM	42.750	6.36	0.405 Nos.	2.560	18.153	0.4541	24.21	24.81	1	1	18.6	120	2240	Mathanarayanperikulam	---
113	Sathankulam	KALLAKULAM	26.305		0.331 Nos.	0.066	0.049	0.0995			1	1			1755	Umaibaganerikulam	Pudukulam	

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													Nos.	Length in M				
114	Thoothukudy	Sathankulam	PUDUKULAM PERIYA KULAM	26.705		0.336 Nos.	0.065	0.049	0.0975			2	2			2150	Kallakulam	--
115		Sathankulam	UMAIBANGANERI KULAM	39.255		0.675 Nos.	1.6697	3.757	0.1058			1	1			850	Ilayanerikulam	Amudunnakudikulam
			CLUSTER - XIV															
116	Tirunelveli	Nanguneri	THIRUPPUNGANERI KULAM	32.010		0.404 Nos.	0.072	0.055	0.2180			1	1			1350	15th A Group Supply channel	Rajagopalapuram kulam
117		Nanguneri	RAJAGOPALA PURAM KULAM	31.460		0.396 Nos.	0.072	0.054	0.2172			1	1			1050	Rajagopalapuram kulam	Alaganerikulam
118		Nanguneri	ALAGANERI KULAM	3.525		0.044 Nos.	0.0130	0.009	0.0395			1	1			980	Rajagopalapuram kulam	----
109		Nanguneri	SANKANAN KULAM	24.560		0.309 Nos.	0.113	0.085	0.3385			1	1			995	15th B Group Supply channel	Moolikulam
120		Nanguneri	ANDAN KULAM	21.33		0.269 Nos.	0.039	0.029	0.1182			1	1			990	Vijayanarayana m Periyakulam	Vijayaacham padu
			CLUSTER - XV															
121	Tirunelveli	Nanguneri	ERANTHAIKULAM	57.835		0.0729 Nos.	0.108	0.081	0.3258					--		1555	Moolikulam	Kalkulam
122		Nanguneri	JYARKULAM	71.490	11.75	2.50Nos.	1.254	10.749	1.505	98.86	99.46	2	1	15.00	--	0970	Nanguneriakal	Pambankulam
123		Nanguneri	NANGUNERI PERIYA KULAM	663.905	113.75	2.40Nos.	13.706	16.33	2.28	97.545	98.145	5	2	79.25 10.24	--	4995	Nanguneriakal	Vilvarayan- kulam
124		Nanguneri	NEDUNKULAM	59.865	16.03	1.55Nos.	2.81	24.49	1.507	92.41	93.01	2	2	59.10 11.05	--	3400	Vilvarayan- kulam	Karathaneri Tank
125		Nanguneri	SURANKUDI KULAM	64.320	23.53	1.20Nos.	1.62	4.413	0.684	104.28	104.58	4	2	27.50 45.65	--	1610	Nanguneriakal	Veerankulam
126		Nanguneri	VIJAYANARAYANAM	1009.05	297.62	1.40 Nos.	33.20	39.25	5.625	--	--	3	3	33.30 94.00 22.00	--	5600	From Group 15	Andankulam

HYDRAULIC PARTICULARS

a) ANICUT

Sl. No.	Name of Anicut	Village	Ayacut	Length of Anicut (M)	Crest Level of Anicut (M)	Front(M)	Free Sq.M	Combined	Maximum flood discharge Cumecs/Cusecs	Head sluice Location	Vent (M)	Sill Level sluice(M)	Discharge cumecs	Supply Channel					Remarks
														Length (m)	Bed width(m)	FSD (M)	Bed slope	Sluice	
1	Group No.I	Unnankulam	139.125	09					540 C/s		1.50 x 0.90								
2	Group No.II	Ariyakulam	122.525	30					815 C/s		1.50 x 0.90								
3	Group No.III	Koondankulam	23.310	36					1010 C/s		1.50 x 0.90								
4	Group No.IV	Koondankulam	100.845	77.35					1270 C/s		1.50 x 0.60								
5	Group No.V	Koondankulam	452.235	42.5					1270 C/s		1.50 x 0.60								
6	Group No.VI	Kadankulam	121.295	42							1.50 x 0.90								
7	Group No.VII & VII A	Ramakrishna-puram	171.205	48					1823 C/s		1.50 x 0.80								
8	Group No.VIII	Ramakrishna-puram	91.160	68							1.50 x 0.80								
9	Group No.IX	Sadayaneri	40.955	58					2075 C/s		1.50 x 0.70								
10	Group No.X	Vijayanarayanam	134.230	60					2218 C/s		1.50 x 0.75								
11	Group No.XI	Vijayanarayanam	80.890	75					2334 C/s		1.50 x 0.80								
12	Group No.XII	Kombankulam	27.155	81					2508 C/s		1.50 x 0.80								
13	Group No.XIII	Kombankulam	93.090	71.5					2538 C/s		1.50 x 0.60								
14	Group No.XIV	Vijayanarayanam	41.625	24					850 C/s		1.50 x 0.60								
15	Group No.XV	Kadankulam	1405.710	42							1.50 x 0.45								



**1.4 PARTICIPATORY IRRIGATION MANAGEMENT
(PIM)**

1.1 SALIENT FEATURES OF IMPLEMENTATION OF PIM IN KARUMENIYAR SUB-BASIN

1. **The Sub-Basin:** This is one of the three sub-basins of the Nambiyar River Basin. There are 127 tanks and 15 anicuts under the control of WRD of PWD in this sub basin. The list of infrastructures covered. The list of Infrastructures covered with more details are furnished in the **Annexure -1**. These Infrastructures are located within the Sub-Basin's hydraulic boundary spread over 17 villages of 2 Taluks in Tirunelveli and 17 Village of 2 Taluks in Thoothukudy District. The Total Command area under these Infrastructures worksout to 5036.18 Ha. (**Annexure1**).

2. Command area :

System tanks	: 4966.07 Ha
Non system tanks	: <u>70.11</u> Ha
Total	: <u>5036.18</u> Hectare

3. An Assessment of number of WUAs.

i)	WUA's are formed already in WRCP	5 Nos.
ii)	The Total command area covered by the above (5) WUAs works out to	5036.18 Hectare.

4. An account of "Awareness creation" among the farming community:

Activities undertaken and "Walkthrough Survey" carried out :

- i) There are 127 Tanks and 15 Anicuts in the Sub-Basin spread over 34 villages as detailed out in Annexure – 01. All these Villages were visited by the WRO officials and awareness about various activities, contemplated under IAMWARM project has been created.
- ii) Details of villages covered, walkthrough surveys conducted, farmers attended, list of works suggested by the farmers, list of works analyzed and finalized by WRO officials, are all furnished in the Annexure -02 and Annexure -03:

5. Appointment and the Role of Competent Authorities:

- i) Section 26 of the Tamil Nadu Farmer's Management of Irrigation Systems (TNFMIS) Act provides for the appointment of "Competent Authorities" to assist the respective Organization (WUA, Distributory Committee and Project Committee), in the Implementation and execution of all decisions taken by such farmers organization. Similarly, every farmer's organization shall extend such co-operation or assistance, as may be required by the competent Authority, for carrying out all the tasks related to implementation of TNFMIS Act.
- ii) Appointment of Competent Authorities for the WUAs proposed to be formed under IAMWARM project is based on the "WRO section Officer wise" distribution as indicated below.

Name of the WRO Sub Divisional Officers working in the Karumeniyar Sub-Basin:

- a. Manimuthar Main Canal Sub Division WUA 1 (TNV 49)
- b. Nambiyar Sub Division, Nanguneri WUA 4 (137,138,139 & 140)

a.	Junion Engineer, WRD, Manimuthar Canal Section, Moolaikaraipatti	WUA 1(TNV 49)
b.	Assistant Engineer, WRD, Irrigation Section, Nanguneri	WUAs 4 (TNV 137, TNV 138, TNV 139 & TNV 140)

6. Involvement of farmers in the preparation "Scheme Modernization Plans".

- i) Based on the outcome of the "Awareness Creation Programme" and walkthrough survey carried out with the involvement of farmers, a list of tasks proposed to be taken up for "Modernization" under IAMWARM Project was discussed with 395 No. of farmers from 16 Villages.
- ii) The cost, period of contract and Name of the contractor will all be fixed at the site of work, as well as the Executive Engineer of WRO, who has been designated as the Nodal Officer for the Sub-Basin concerned.
- iii) The field Officers of WRO are all aware of the problems in handing over the operation and maintenance responsibilities to the farmers concerned, if the

tasks as desired by the farmers in the command area are not included in the modernization of the system and also in case, some of the tasks already included and planned are not implemented due to some reasons or other.

- iv) The WRO officers were also informed that they are personally responsible for handing over the irrigation systems, under IAMWARM Project.

7. “Capacity Building” of the WUA farmers:

- i) The “Support Organization Group” will prepare “Training Modules” required for building the capacity of the WUA farmers, based on a “Training Needs” Analysis. They will also organize various “Capacity Building” programs at suitable locations within the Sub-Basin command area, to benefit the farmers of the WUAs in the Sub-Basin.
- ii) The “Support Organization” will also arrange for organization the “Study Tours” both within and outside the state to enhance their knowledge and experiences which will help them to improve the crop productivity and there by the farmer’s income.
- iii) The support Organization will also conduct necessary “Awareness programme” and impart training to educate the farmers of the WUAs in all aspects of the TNFMIS Act, TNFMS Rules and Election procedures for constituting the “Managing Committee” of the WUAs.

The “Component Authorities” appointed for the Sub-Basin will also be trained to effectively to interact with WUA farmers and maintain good report and relationship with the farming community in the Sub-Basin.

Annexure: 1

**AN ASSESSMENT OF COMMAND AREA AND WUAs UNDER THE CONTROL OF WRO OF PWD IN
KARUMENIYAR SUB - BASIN**

WUA No	Name of Irrigation Systems and Tanks	Command Area in (Ha)	Location of the Command Area			Coverage of Command area under different projects (Ha)		Status of formation of WUAs in the Sub-Basin	
			Villages	Taluk	District	WRCP and Others	IAM-WARM	Formed under WRCP	To be formed under IAMWARM
1	2	3	4	5	6	7	8	9	10
WUA - 49	Veerkeralamperi kulam	28.325	Unnankulam	Nanguneri	Tirunelveli	28.325		Yes	
	Arumpoondar kulam	47.120	Ambalam	Nanguneri	Tirunelveli	47.120			
	Ambalam kulam	40.280	Ariyakulam	Nanguneri	Tirunelveli		40.280		
	Ariyakulam	89.310	Ariyakulam	Nanguneri	Tirunelveli	89.310			
	Arumuganeri kulam	17.725	Koonthan kulam	Nanguneri	Tirunelveli	17.725			
	Paranipudukulam	17.275	Moolaikaraipatti	Nanguneri	Tirunelveli		17.275		
	Nemani kulam	13.900	Moolaikaraipatti	Nanguneri	Tirunelveli		13.900		
	Vannan kulam	11.070	Munanchipatti	Nanguneri	Tirunelveli		11.070		
	Thiruvarulneri kulam	12.805	Munanchipatti	Nanguneri	Tirunelveli		12.805		
	Pillaiyar kulam	63.490	Munanchipatti	Nanguneri	Tirunelveli	63.490			
	Senkulam-Periyakulam	48.770	Srivenkadeshvarapuram	Sathankulam	Tuticorin	48.770			
	Veera kulam	22.920	Karunkadal	Sathankulam	Tuticorin				
	Velan Pudu Kulam	20.315	Nedunkulam	Sathankulam	Tuticorin	20.315			
	Meeran Mela kulam	16.505	Meerankulam	Sathankulam	Tuticorin	16.505			

1	2	3	4	5	6	7	8	9	10
	Meeran Keela kulam	24.025	Meerankulam	Sathankulam	Tuticorin		24.025		
	Perumal Mela &Keelakulam	25.145	Meerankulam	Sathankulam	Tuticorin	25.145			
	Kurugalperi kulam	15.545	Srivenkadeshvar apuram	Sathankulam	Tuticorin		15.545		
	Therkku peikulam	31.575	Srivenkadeshvar apuram	Sathankulam	Tuticorin		31.575		
	Pettaikulam	5.555	Srivenkadeshvar apuram	Sathankulam	Tuticorin		5.555		
	Panai kulam	28.465	Karunkadal	Sathankulam	Tuticorin		28.465		
	Karunkadal Kulam	29.350	Karunkadal	Sathankulam	Tuticorin		29.350		
	Ilamal kulam	41.550	Karunkadal	Sathankulam	Tuticorin		41.550		
	Narthan kurichi kulam	8.630	Karunkadal	Sathankulam	Tuticorin		8.630		
	Chetti kulam	61.055	Palankulam	Sathankulam	Tuticorin		61.055		
	Puliyam kulam	25.910	Karunkadal	Sathankulam	Tuticorin		25.910		
	Nochi kulam	6.930	Palankulam	Sathankulam	Tuticorin		6.930		
	Karuvelanpadu kulam	1.985	Karuvelampadu	Sathankulam	Tuticorin		1.985		
	ThiruvarankaneriMelakulam	4.125	Palankulam	Sathankulam	Tuticorin		4.125		
	Thiruvarankanerikeelakulam	10.075	Palankulam	Sathankulam	Tuticorin		10.075		
	Palankinaru Vadakku kulam	6.325	Palankulam	Sathankulam	Tuticorin		6.325		
	SriKrishnaperi vadakku kulam	4.920	Palankulam	Sathankulam	Tuticorin		4.920		
	Sri Krishnaperi Therku kulam	1.420	Palankulam	Sathankulam	Tuticorin		1.420		
	Kida mozhi kulam	2.920	Palankulam	Sathankulam	Tuticorin	2.920			
	Arumuganeri kulam	6.470	Sathankulam	Sathankulam	Tuticorin		6.470		
	Keela Arumuganeri kulam	3.235	Eluvaraimukki	Sathankulam	Tuticorin		3.235		
	Udaiyar kulam	37.465	Sathankulam	Sathankulam	Tuticorin		37.465		
	Siru udaiyar kulam	5.395	Sathankulam	Sathankulam	Tuticorin		5.395		

1	2	3	4	5	6	7	8	9	10
	Kadamban Thotta kulam	10.235	Pannamparai kulam	Sathankulam	Tuticorin		10.235		
	Pannai pathu kulam	09.955	Pannamparai kulam	Sathankulam	Tuticorin		09.955		
	Pudu kinaru kulam	9.550	Pannamparai kulam	Sathankulam	Tuticorin		9.550		
	Palan kulam	27.985	Palankulam	Sathankulam	Tuticorin		27.985		
	Kattarimangalam kulam	57.455	Kattarimangalam	Sathankulam	Tuticorin	57.455			
	Alankulam	6.610	Kattarimangalam	Sathankulam	Tuticorin	6.610			
	Therkuperi kulam	29.810	Kattarimangalam	Sathankulam	Tuticorin	29.810			
	Manakavalampuram kulam	12.670	Kattarimangalam	Sathankulam	Tuticorin	12.670			
	Mela pudu kaduvetti kulam	7.920	Vellamadam	Sathankulam	Tuticorin		7.920		
	Keela pudu kaduvetti kulam	6.920	Eluvaraimukki	Sathankulam	Tuticorin		6.920		
	Paramarthan kulam	17.305	Eluvaraimukki	Sathankulam	Tuticorin		17.305		
	Vadkku vagai kulam	16.325	Kattarimangalam	Sathankulam	Tuticorin		16.325		
	Achampadu kulam	43.870	Eluvaraimukki	Sathankulam	Tuticorin		43.870		
	Malayamperi kulam	6.910	Eluvaraimukki	Sathankulam	Tuticorin		6.910		
	Pirandar kulam	2.975	Pirandar kulam	Sathankulam	Tuticorin		2.975		
	Unnan kulam	40.430	Nanguneri	Nanguneri	Tirunelveli	40.430			
	Hanumar Pudu kulam	60.090	Sembagarama-nallur	Nanguneri	Tirunelveli	60.090			
	Thennavaneri kulam	38.690	Sembagarama-nallur	Nanguneri	Tirunelveli	38.690			
	Ayar kulam	27.250	Ariyakulam	Nanguneri	Tirunelveli	27.250			
	Eduppai kulam	17.235	Moolaikaraipatti	Nanguneri	Tirunelveli	17.235			
	Periya munanchi kulam	43.000	Moolaikaraipatti	Nanguneri	Tirunelveli		43.000		
	Thulukkan kulam	9.785	Moolaikaraipatti	Nanguneri	Tirunelveli		9.785		
	Tutti kulam	15.915	Moolaikaraipatti	Nanguneri	Tirunelveli		15.915		

1	2	3	4	5	6	7	8	9	10
	Thevar kulam	9.330	Moolaikaraipatti	Nanguneri	Tirunelveli		9.330		
	Thilladam kulam	23.185	Koontha kulam	Nanguneri	Tirunelveli		23.185		
	Kannan kulam	23.800	Koontha kulam	Nanguneri	Tirunelveli		23.800		
	Koondha kulam	77.040	Koontha kulam	Nanguneri	Tirunelveli	77.040			
	Kadan kulam	132.450	Kadan kulam	Nanguneri	Tirunelveli	132.450			
	Padakkam kulam	35.500	Thirumalapuram	Nanguneri	Tirunelveli	35.500			
	Kazhuvur kulam	45.140	Thirumalapuram	Nanguneri	Tirunelveli		45.140		
	Kodan kulam	09.860	Munanchipatti	Nanguneri	Tirunelveli		09.860		
	Rettai kulam	34.850	Munanchipatti	Nanguneri	Tirunelveli		34.850		
	Pettai kulam	8.055	Munanchipatti	Nanguneri	Tirunelveli		8.055		
	Somanathaperi kulam	09.945	Munanchipatti	Nanguneri	Tirunelveli		09.945		
	Keeran kulam	40.030	Munanchipatti	Nanguneri	Tirunelveli		40.030		
	Mankulam	10.015	Munanchipatti	Nanguneri	Tirunelveli		10.015		
	Ramaneri kulam	37.135	Sadayaneri	Nanguneri	Tirunelveli	37.135			
	Komaneri kulam	102.550	Komaneri	Sathankulam	Tuticorin		102.550		
	Avalai kulam	14.630	Nedunkulam	Sathankulam	Tuticorin		14.630		
	Nedun kulam	47.245	Nedunkulam	Sathankulam	Tuticorin		47.245		
	Kadamban kulam	10.880	Sadayaneri	Nanguneri	Tirunelveli		10.880		
	Ramakrishnaperi kulam	53.550	Ramakrishna- puram	Nanguneri	Tirunelveli	53.550			
	Pettai kulam	10.170	Ramakrishna- puram	Nanguneri	Tirunelveli		10.170		
	ThirumalapuramMela kulam	14.120	Thirumalapuram	Nanguneri	Tirunelveli		14.120		
	Thirumalapuram Keela kulam	24.755	Thirumalapuram	Nanguneri	Tirunelveli		24.755		
	Sadayaneri kulam	14.555	Sadayaneri	Nanguneri	Tirunelveli		14.555		

1	2	3	4	5	6	7	8	9	10
	Kariyandi kulam	34.065	Ramakrishna-puram	Nanguneri	Tirunelveli		34.065		
	Ilan kulam	14.440	Sadayaneri	Nanguneri	Tirunelveli	14.440			
	Sekaran kulam	12.055	Sadayaneri	Nanguneri	Tirunelveli	12.055			
	Sri Raman kulam	29.695	Ramakrishna-puram	Nanguneri	Tirunelveli	29.695			
	Thattan kulam	47.085	Ramakrishna-puram	Nanguneri	Tirunelveli	47.085			
	Venkatrayapuramkulam	33.095	Sadayaneri	Nanguneri	Tirunelveli		33.095		
	Veerancheri kulam	40.980	Sadayaneri	Nanguneri	Tirunelveli	40.980			
	Santhu vari kulam	11.245	Kombankulam	Sathankulam	Tuticorin		11.245		
	Thuvarai kulam	16.705	Kombankulam	Sathankulam	Tuticorin		16.705		
	Vali pulan kulam	11.405	Kombankulam	Sathankulam	Tuticorin		11.405		
	Kadamban kulam	20.705	Kombankulam	Sathankulam	Tuticorin		20.705		
	Iluppai kulam	21.255	Kombankulam	Sathankulam	Tuticorin		21.255		
	NayanamundanKadian kulam	51.950	Vijayanarayana m	Nanguneri	Tirunelveli		51.950		
	Vijayaachambadukulam	25.680	Ittamozhi	Nanguneri	Tirunelveli	25.680			
	Ilangaiadi kulam	33.650	Ittamozhi	Nanguneri	Tirunelveli	33.650			
	Nainar kulam	6.850	Ittamozhi	Nanguneri	Tirunelveli		6.850		
	Ayakkaran kulam	8.010	Ittamozhi	Nanguneri	Tirunelveli		8.010		
	Pattanchery kulam	28.910	Ittamozhi	Nanguneri	Tirunelveli	28.910			
	Kanavaneri kulam	25.990	Ittamozhi	Nanguneri	Tirunelveli	25.990			
	Nanni kulam	20.760	Ittamozhi	Nanguneri	Tirunelveli	20.760			
	Panayadi Pudu kulam	5.220	Ittamozhi	Nanguneri	Tirunelveli	5.220			
	Iyyanar kulam	21.445	Ittamozhi	Nanguneri	Tirunelveli		21.445		

1	2	3	4	5	6	7	8	9	10
	Thinaioorani kulam	41.630	Ramakrishnapuram	Nanguneri	Tirunelveli		41.630		
	Suviseshapuram kulam	09.830	Kumarapuram	Radhapuram	Tirunelveli		09.830		
	Rettai kinar kulam	9.825	Kombankulam	Sathankulam	Tuticorin		9.825		
	Kuthankudi kulam	17.340	Kombankulam	Sathankulam	Tuticorin		17.340		
	Vetaram kulam	23.545	Kombankulam	Sathankulam	Tuticorin	23.545	23.545		
	Ilayaneri kulam	15.995	Kombankulam	Sathankulam	Tuticorin	15.995	15.995		
	Mathanarayanaperi kulam	11.5095	Nedunkulam	Sathankulam	Tuticorin		11.5095		
	Amuthavannakudi kulam	42.750	Sathankulam	Sathankulam	Tuticorin		42.750		
	Kalla kulam	39.270	Pudukulam	Sathankulam	Tuticorin		39.270		
	Pudukulam Periya kulam	26.705	Pudukulam	Sathankulam	Tuticorin		26.705		
	Umaibanganeri kulam	39.255	Pudukulam	Sathankulam	Tuticorin		39.255		
	Thiruppunganeri kulam	32.010	Vijayanarayanam	Nanguneri	Tirunelveli		32.010		
	Rajagopalapuramkulam	31.460	Vijayanarayanam	Nanguneri	Tirunelveli		31.460		
	Alaganeri kulam	3.525	Vijayanarayanam	Nanguneri	Tirunelveli		3.525		
	Sankanam kulam	24.560	Vijayanarayanam	Nanguneri	Tirunelveli		24.560		
	Andan kulam	24.560	Vijayanarayanam	Nanguneri	Tirunelveli		24.560		
	Eranthai kulam	57.835	Vijayanarayanam	Nanguneri	Tirunelveli		57.835		
	Jiyar kulam	71.490	Surankudi	Nanguneri	Tirunelveli		71.490		
	Nanguneri Periyakulam	663.905	Nanguneri	Nanguneri	Tirunelveli		663.905		
	Nedun kulam	59.865	Karandaneri	Nanguneri	Tirunelveli		59.865		
	Surankudi kulam	64.320	Surankudi	Nanguneri	Tirunelveli		64.320		
	Vijayanarayanamkulam	100905	Vijayanarayanam	Nanguneri	Tirunelveli	100905			

ABSTRACT

1. Command Area already covered under WRCP and other Project / Schemes	2393.91 Hectares
2. Command Area proposed to be covered under IAMWARM Project	1426.08 Hectares
3. Total command area controlled by WRO of PWD in the Sub Basin	5036.18 Hectares
4. Total No. of WUAs already formed under WRCP	5 Nos.
5. Total No. of WUAs proposed to be formed under IAMWARM	Nil
6. Total No. of WUAs that will cover the entire Sub-Basin	5 Nos.

Annexure: 2**Details of "Awareness Creation Activities and Walk - Through Surveys"**

Sl. No	Date of Visit	Names if the Villages Visited	Awareness Programme (No.of farmers attended) (Prepare the list of farmers with acknowledgement seperately and attach)	Walk - Through Survey (No.of farmers Participated) (Prepare the list of farmers with acknowledgement seperately and attach)	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
1	13.11.2008	VEERAKERALAMPERIKULAM	25	10	
2	13.11.2008	ARUMPOONDARKULAM	22	11	
3	13.11.2008	AMBALAMKULAM	20	11	
4	13.11.2008	ARIYAKULAM	28	15	
5	13.11.2008	ARUMUGANERIKULAM	21	9	
6	20.01.2009	PARANIPADUKULAM	27	15	
7	20.01.2009	NEMANI KULAM	24	11	
8	07.05.2009	VANNANKULAM	24	9	
9	20.01.2009	THIRUVARULNERI KULAM	30	13	
10	20.01.2009	PILLAIYAR KULAM	25	11	
11	15.12.08	SENKULAMPERIAKULAM	27	10	
12	13.05.2009	VEERAKULAM	23	12	
13	08.12.08	VELAN PUDU KULAM	31	16	
14	11.12.08	MEERAN MELA KULAM	20	8	
15	11.12.08	MEERAN KEELA KULAM	22	10	
16	05.01.09	PERUMAL MELA & KEELA KULAM	26	10	
17	02.12.08	KURUGAL PERIKULAM	30	13	
18	04.12.08	THERKKUPEI KULAM	25	11	
09	03.12.08	PETTAIKULAM	27	10	
20	04.12.08	PANAIKULAM	23	12	
21	02.12.08	KARUNKADAL KULAM	31	16	
22	05.12.08	ILAMAL KULAM	20	8	
23	05.12.08	NARTHANKURICHI KULAM	22	10	
24	10.12.08	CHETTI KULAM	26	10	
25	05.12.08	PULIYANKULAM	23	12	

26	08.12.08	NOCHIKULAM	31	16	
27	08.12.08	KARUVELANPADU KULAM	20	8	
28	08.12.08	THIRUVARANKA-NERI MELA KULAM	22	10	

29	08.12.08	THIRUVARANKA-NERI KEELA KULAM	26	10	
30	08.12.08	PALANKINARU VADAKU KULAM	30	13	
31	10.12.08	SRIKRISHNAPERI VADAKU KULAM	25	11	
32	10.12.08	SRIKRISHNAPERI THERKU KULAM	27	10	
33	10.12.08	KIDA MOZHI KULAM	30	13	
34	23.12.08	ARUMUGANERI KULAM	25	11	
35	23.12.08	KEELA ARUMUGA NERI KULAM	27	10	
36	23.12.08	UDAIYAR KULAM	23	12	
37	23.12.08	SIRU UDAIYAR KULAM	31	16	
38	22.12.08	KADAMBAN THOTTA KULAM	20	8	
39	13.01.09	PANNAI PATHU KULAM	22	10	
40	02.12.08	PUDUKINARU-KULAM	26	10	
41	02.12.08	PALAN KULAM	23	12	
42	12.12.08	KATTARIMANGALAM KULAM	31	16	
43	05.01.09	ALANKULAM	20	8	
44	09.12.08	THERKU PERIKULAM	22	10	
45	17.12.08	MANAKAVARAM PURAM KULAM	26	10	
46	20.01.09	MELAPUDU-KADUVETTIKULAM	30	13	
47	20.01.09	KEELAPUDU KADUVETTIKULAM	25	11	
48	20.01.09	PARAMARTHAN KULAM	27	10	
49	20.01.09	VADAKKU VAGAI KULAM	25	10	
50	21.01.09	ACHEMBADU KULAM	22	11	
51	21.01.09	MALAYAMPERI KULAM	20	11	
52	21.01.2009	PIRANDARKULAM	28	15	
53	13.11.2008	UNNANKULAM	21	9	
54	04.12.2008	HANUMAR PUDUKULAM	27	15	
55	04.12.2008	THENNAVANERIKULAM	24	11	

56	04.12.2008	AYARKULAM	24	9	
57	04.12.2008	EDUPPAIKULAM	30	13	
58	04.12.2008	PERIYAMUNANJIKULAM	25	11	
59	04.12.2008	THULUKKANKULAM	27	10	
60	04.12.2008	TUTTIKULAM	23	12	
61	04.12.2008	THE VARKULAM	31	16	
62	04.12.2008	THILLADAMKULAM	20	8	
63	04.12.2008	KANNANKULAM	22	10	

(1)	(2)	(3)	(4)	(5)	(6)
64	04.12.2008	KOONDHAKULAM	26	10	
65	04.12.2008	KADANKULAM	30	13	
66	04.12.2008	PADAKKAM KULAM	25	11	
67	04.12.2008	KODAN KULAM	27	10	
68	04.12.2008	RETTAI KULAM	23	12	
69	04.12.2008	PETTAIKULAM	31	16	
70	04.12.2008	SOMANATHAPERIKULAM	20	8	
71	04.12.2008	KEERAN KULAM	22	10	
72	04.12.2008	MANKULAM	26	10	
73	04.12.2008	RAMANERI KULAM	23	12	
74	4.12.09	KOMANERIKULAM	31	16	
75	08.12.08	AVALAI KULAM	20	8	
76	12.12.08	NEDUNKULAM	22	10	
77	04.12.2008	KADAMBANKULAM	26	10	
78	04.12.2008	RAMAKRISHNA PURAM KULAM	30	13	
79		PETTAIKULAM	25	11	
80	04.12.2008	THIRUMALAPURAM MELAKULAM	27	10	
81	04.12.2008	THIRUMALAPURAM KEELAKULAM	30	13	
82	04.12.2008	SADAYANERI KULAM	25	11	
83	04.12.2008	KARIYANDIKULAM	27	10	
84	04.12.2008	ILANKULAM	23	12	
85	04.12.2008	SEKARANKULAM	31	16	
86	04.12.2008	SRI RAMAN KULAM	20	8	
87	04.12.2008	THATTANKULAM	22	10	
88	04.12.2008	VENKATRAYA PURAMKULAM	26	10	
89	20.01.2009	VEERANCHERIKULAM	23	12	
90	11.12.08	SANTHUVARIKULAM	31	16	
91	11.12.08	THUVARIKULAM	20	8	
92	09.12.08	VALIPULANKULAM	22	10	
93	12.12.08	KODAMBANKULAM	26	10	
94	06.01.09	ILUPPAIKULAM	30	13	
95	20.01.2009	NAYANA MUNDAN KADIAN KULAM	25	11	
96	20.01.2009	VIJAYA ACHAMBADU KULAM	27	10	
97	20.01.2009	ILANGAIADI KULAM	30	13	
98	20.01.2009	NAINAR KULAM	25	11	

(1)	(2)	(3)	(4)	(5)	(6)
99	20.01.2009	AYAKKARAN KULAM	27	10	
100	20.01.2009	PATTANCHERY KULAM	23	12	
101	20.01.2009	KANAVANERI KULAM	31	16	
102	20.01.2009	NANNI KULAM	20	8	
103	20.01.2009	PANAYADIPUDU KULAM	22	10	
104	20.01.2009	IYYANARKULAM	26	10	
107	20.01.2009	THINAIORANAI KULAM	23	12	
106	20.01.2009	SUVISESHAPURAM KULAM	31	16	
107	09.01.09	RETTAIKINARKULAM	20	8	
108	09.01.09	KUTHANKUDIKULAM	22	10	
109	09.01.09	VETARAMKULAM	26	10	
110	20.01.09	ILLAYANERIKULAM	30	13	
111	09.01.09	MATHANARAYANA PERIKULAM	25	11	
112	20.01.09	AMUTHAVANNAKUDIKULAM	27	10	
113	12.12.08	KALLAKULAM	20	8	
114	12.12.08	PUDUKULAM PERIYA KULAM	22	10	
115	20.01.09	UMAIBANGANERI KULAM	26	10	
116	20.01.2009	THIRUPPUNGANERI KULAM	23	12	
117	12.12.2008	RAJAGOPALA PURAM KULAM	31	16	
118	12.12.2008	ALAGANERI KULAM	20	8	
109	12.12.2008	SANKANAN KULAM	22	10	
120	12.12.2008	ANDAN KULAM	26	10	
121	20.01.2009	ERANTHAIKULAM	30	13	
122	12.12.2008	JYARKULAM	25	11	
123	12.12.2008	NANGUNERI PERIYAKULAM	27	10	
124	12.12.2008	NEDUNKULAM	30	13	
125	12.12.2008	SURANKUDIKULAM	25	11	
126	12.12.2008	VIJAYANARAYANAM	20	8	
127	04.12.2008	KAZHUVURKULAM	22	10	

Annexure - 03

Details of Modernisation works as suggested by the Farmers and as finalized by the officials of WRO

Sl. No	Date of Visit	Names of the villages visited	Outcome of walk through survey and discussions with farmers	
			Works Suggested by Farmers	Works finalized by WRO Officials
1	13.11.2008	VEERAKERALAMPERIKULAM	WRCP	WRCP
2	13.11.2008	ARUMPOONDARKULAM	WRCP	WRCP
3	13.11.2008	AMBALAMKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Bund Strengthening, Sluice Repairs, Supply channel improvements
4	13.11.2008	ARIYAKULAM	WRCP	WRCP
5	13.11.2008	ARUMUGANERIKULAM	WRCP	WRCP
6	20.01.2009	PARANIPADUKULAM	WRCP	WRCP
7	20.01.2009	NEMANI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	
8	7.05.2009	VANNANKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs,	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs Bye Pass Channel
9	20.01.2009	THIRUVARULNERI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs,	
10	20.01.2009	PILLAIYAR KULAM	WRCP	WRCP
11	15.12.08	SENKULAMPERIAKULAM	WRCP	WRCP
12	13.05.2009	VEERAKULAM	Sluice Reconstruction, Weir repair works, Bund strengthening, Tank desilting, Removal of vegetation of in side the tank, Supply channel desilting	Weir improvements

13	08.12.08	VELAN PUDU KULAM	Sluice Reconstruction, Weir repair works, Bund strengthening, Tank desilting, Removal of vegetation of in side the tank, Supply channel desilting	Bund Strengthening, and Supply channel improvements
14	11.12.08	MEERAN MELA KULAM	WRCP	WRCP
15	11.12.08	MEERAN KEELA KULAM	WRCP	WRCP
16	05.01.09	PERUMAL MELA & KEELA KULAM	WRCP	WRCP
17	02.12.08	KURUGAL PERIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Sluice improvements and Weir repairs
18	04.12.08	THERKKUPEI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice improvements and Supply channel improvements,
09	03.12.08	PETTAIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Sluice improvements
20	04.12.08	PANAIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Supply channel improvements and Weir Repairs
21	04.12.08	KARUNKADAL KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, and Supply channel improvements

22	05.12.08	ILAMAL KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs, and Weir Repairs
23	05.12.08	NARTHANKURICHI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening and Supply channel improvements
24	10.12.08	CHETTI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs,	Bund Strengthening and Sluice improvements
25	05.12.08	PULIYANKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs,	Bund Strengthening and Supply channel improvements
26	08.12.08	NOCHIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs,	Supply channel improvements
27	08.12.08	KARUVELANPADU KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs,	Supply channel improvements
28	08.12.08	THIRUVARANKANERI MELA KULAM	Sluice Reconstruction, Weir repair works, Bund strengthening, Tank desilting, Removal of vegetation of in side the tank, Supply channel desilting	Sluice Repairs
29	08.12.08	THIRUVARANKA-NERI KEELA KULAM	Sluice Reconstruction, Weir repair works, Bund strengthening, Tank desilting, Removal of vegetation of in side the tank, Supply channel desilting	Bund strengthening and Supply channel improvements
30	08.12.08	PALANKINARU VADAKU KULAM	Sluice Reconstruction, Shutters for weir, Bund strengthening, Removal of light jungle inside the tank, Construction of Bathing Ghat, Desilting the tank, Construction of Retaining wall	Sluice Repairs and supply channel improvements

31	10.12.08	SRIKRISHNAPERI VADAKU KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Sluice Repairs and Supply channel improvements
32	10.12.08	SRIKRISHNAPERI THERKU KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Sluice Repairs
33	10.12.08	KIDA MOZHI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	
34	23.12.08	ARUMUGANERI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Sluice Repairs and Weir Repairs
35	23.12.08	KEELA ARUMUGA NERI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Sluice Repairs and Weir Repairs
36	23.12.08	UDAIYAR KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs, and Weir Repairs
37	23.12.08	SIRU UDAIYAR KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Repairs and Weir Repairs
38	22.12.08	KADAMBAN THOTTA KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs,	Bund Strengthening, Sluice Repairs, and Weir Repairs
39	13.01.09	PANNAI PATHU KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs,	Bund Strengthening, Sluice Repairs, and Weir Repairs

40	02.12.08	PUDUKINARU-KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening and Weir Repair
41	02.12.08	PALAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs,	Bund Strengthening, Sluice Repairs and Weir Repairs
42	12.12.08	KATTARIMANGALAM KULAM	WRCP	WRCP
43	05.01.09	ALANKULAM	WRCP	WRCP
44	09.12.08	THERKU PERIKULAM	WRCP	WRCP
45	17.12.08	MANAKAVALAM PURAM KULAM	WRCP	WRCP
46	20.01.09	MELAPUDU- KADUVETTIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Sluice Repairs and Weir Repairs
47	20.01.09	KEELAPUDU KADUVETTIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Sluice Repairs and Weir repairs
48	20.01.09	PARAMARTHAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs and Weir Repairs

49	20.01.09	VADAKKU VAGAI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	
50	21.01.09	ACHEMBADU KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice improvements, and Weir Repairs
51	21.01.09	MALAYAMPERI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Sluice Repairs and Weir Repairs
52	21.01.2009	PIRANDARKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs,	Sluice Repairs
53	13.11.2008	UNNANKULAM	WRCP	WRCP
54	04.12.2008	HANUMAR PUDUKULAM	WRCP	WRCP
55	04.12.2008	THEENAVANERIKULAM	WRCP	WRCP
56	04.12.2008	AYARKULAM	WRCP	WRCP
57	04.12.2008	EDUPPAIKULAM	WRCP	WRCP
58	04.12.2008	PERIYAMUNANJIKULAM	Sluice Reconstruction, Shutters for weir, Bund strengthening, Removal of light jungle inside the tank, Construction of Bathing Ghat, Desilting the tank, Construction of Retaining wall	Bund strengthening, Sluice Repair, Weir Repair, Supply channel improvements
59	04.12.2008	THULUKKANKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Supply channel improvements

60	04.12.2008	TUTTIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	
61	04.12.2008	THE VARKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	
62	04.12.2008	THILLADAMKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements and Weir Repairs
63	04.12.2008	KANNANKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Repairs, and Supply channel improvements
64	04.12.2008	KOONDHAKULAM	WRCP	WRCP
65	04.12.2008	KADANKULAM	WRCP	WRCP
66	04.12.2008	PADAKKAM KULAM	WRCP	WRCP
67	04.12.2008	KODAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs,	Sluice Repairs and Supply channel improvements
68	04.12.2008	RETTAI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs, Supply channel improvements and weir repairs
69	04.12.2008	PETTAIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs,	Bund Strengthening

70	04.12.2008	SOMANATHAPERIKULAM	Sluice Reconstruction, Weir repair works, Bund strengthening, Tank desilting, Removal of vegetation of in side the tank, Supply channel desilting	Weir repair works, Bund strengthening, and Supply channel improvements
71	04.12.2008	KEERAN KULAM	Sluice Reconstruction, Weir repair works, Bund strengthening, Tank desilting, Removal of vegetation of in side the tank, Supply channel desilting	Sluice Reconstruction, Weir repair works, Bund strengthening and Supply channel improvements
72	04.12.2008	MANKULAM	Sluice Reconstruction, Shutters for weir, Bund strengthening, Removal of light jungle inside the tank, Construction of Bathing Ghat, Desilting the tank, Construction of Retaining wall	Sluice Repair and supply channel
73	04.12.2008	RAMANERI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	
74	4.12.09	KOMANERIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice improvements, Supply channel improvements and Weir Repairs
75	08.12.08	AVALAI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Bund Strengthening, Sluice Repairs and Weir Repairs
76	12.12.08	NEDUNKULAM	WRCP	WRCP
77	04.12.2008	KADAMBANKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Sluice Repairs, Supply channel improvements and Weir Repairs

78	04.12.2008	RAMAKRISHNA PURAM KULAM	WRCP	WRCP
79	04.12.08	PETTAIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Sluice Repairs and Supply channel improvements
80	04.12.2008	THIRUMALAPURAM MELAKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs,	Bund Strengthening, Sluice Reconstruction and Weir Repairs
81	04.12.2008	THIRUMALAPURAM KEELAKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs,	Bund Strengthening, Sluice Reconstruction and Weir Repairs
82	04.12.2008	SADAYANERI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Reconstruction and Weir Repairs
83	04.12.2008	KARIYANDIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs,	Bund Strengthening Supply channel improvements and Weir Repairs
84	04.12.2008	ILANKULAM	WRCP	WRCP
85	04.12.2008	SEKARANKULAM	WRCP	WRCP
86	04.12.2008	SRI RAMAN KULAM	WRCP	WRCP
87	04.12.2008	THATTANKULAM	WRCP	WRCP
88	04.12.2008	VENKATRAYA PURAMKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repair Supply channel improvements and Weir Repairs
89	20.01.2009	VEERANCHERIKULAM	WRCP	WRCP

90	11.12.08	SANTHUVARIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs Supply channel improvements and Weir Repairs
91	11.12.08	THUVARIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening and Weir Repairs
92	09.12.08	VALIPULANKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening and Weir Repairs
93	12.12.08	KOMBANKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Repairs and Supply channel improvements
94	06.01.09	ILUPPAIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs,	Bund Strengthening and Sluice Repairs
95	20.01.2009	NAYANA MUNDAN KADIAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs,	Bund Strengthening, Sluice Reconstruction and Supply channel improvements
96	20.01.2009	VIJAYA ACHAMBADU KULAM	WRCP	WRCP
97	20.01.2009	ILANGAIADI KULAM	WRCP	WRCP
98	20.01.2009	NAINAR KULAM	Sluice Reconstruction, Weir repair works, Bund strengthening, Tank desilting, Removal of vegetation of in side the tank, Supply channel desilting	Sluice Repair and Weir Repair

99	20.01.2009	AYAKKARAN KULAM	Sluice Reconstruction, Weir repair works, Bund strengthening, Tank desilting, Removal of vegetation of in side the tank, Supply channel desilting	Bund Strengthening
100	20.01.2009	PATTANCHERY KULAM	WRCP	WRCP
101	20.01.2009	KANAVANERI KULAM	WRCP	WRCP
102	20.01.2009	NANNI KULAM	WRCP	WRCP
103	20.01.2009	PANAYADIPUDU KULAM	WRCP	WRCP
104	20.01.2009	IYYANARKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	
107	20.01.2009	THINAILOORANAI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Reconstruction and Supply channel improvements
106	20.01.2009	SUVISESHAPURAM KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening Supply channel improvements and Weir Repairs
107	09.01.09	RETTAIKINARKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Sluice Repairs and Weir Repairs
108	09.01.09	KUTHANKUDIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs,	Bund Strengthening, Sluice Repairs and Weir Repairs
109	09.01.09	VETARAMKULAM	WRCP	WRCP
110	20.01.09	ILLAYANERIKULAM	WRCP	WRCP

111	20.01.09	MATHANARAYANA PERIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs,	Bund Strengthening and Weir Repairs
112	20.01.09	AMUTHAVANNAKUDIKULAM	Sluice Reconstruction, Weir repair works, Bund strengthening, Tank desilting, Removal of vegetation of in side the tank, Supply channel desilting	Sluice improvements, Weir repair works, and Bund strengthening
113	12.12.08	KALLAKULAM	Sluice Reconstruction, Weir repair works, Bund strengthening, Tank desilting, Removal of vegetation of in side the tank, Supply channel desilting	Bund strengthening and Sluice Repair
114	12.12.08	PUDUKULAM PERIYA KULAM	Sluice Reconstruction, Shutters for weir, Bund strengthening, Removal of light jungle inside the tank, Construction of Bathing Ghat, Desilting the tank, Construction of Retaining wall	Bund strengthening, weir repair and supply channel improvements
115	12.12.08	UMAIBANGANERI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Bund Strengthening, Weir Repair and Supply channel improvements
116	20.01.2009	THIRUPPUNGANERI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, supply channel improvements and Weir Repairs
117	12.12.2008	RAJAGOPALAPURAM KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Bund Strengthening, and Supply channel improvements

118	12.12.2008	ALAGANERI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, and Sluice repairs
109	12.12.2008	SANKANAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Repairs, and Weir Repars
120	12.12.2008	ANDAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs and Supply channel improvements
121	20.01.2009	ERANTHAIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice improvements Supply channel improvements and Weir Repairs
122	12.12.2008	JYARKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs,	Bund Strengthening, Sluice improvements and Supply channel improvements
123	12.12.2008	NANGUNERI PERIYAKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs,	Bund Strengthening, Sluice Repairs, Supply channel improvements and Weir Repairs
124	12.12.2008	NEDUNKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks	Bund Strengthening, Sluice Repairs and Weir Repairs
125	12.12.2008	SURANKUDIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs,	Bund Strengthening and Sluice Repairs
126	12.12.2008	VIJAYANARAYANAM	Sluice Reconstruction, Weir repair works, Bund strengthening, Tank desilting, Removal of vegetation of in side the tank, Supply channel desilting	Supply channel improvements

127	04.12.2008	KAZHUVURKULAM	Sluice Reconstruction, Weir repair works, Bund strengthening, Tank desilting, Removal of vegetation of in side the tank, Supply channel desilting	Bund Strengthening, Sluice improvements and Weir Repairs
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DETAILS OF WUAs IN KARUMENIYAR SUB BASIN

WUA No	Tank and Villages it covers		Name of WUA	Ayacut in Ha
	Tanks	Villages		
1	2	3	4	5
49	Veerkeralamperi kulam	Unnankulam	Manimuthar Main Canal Reach III and IV Water Users Association	28.325
49	Arumpoondar kulam	Ambalam	-do-	47.120
49	Ambalam kulam	Ariyakulam	-do-	40.280
49	Ariyakulam	Ariyakulam	-do-	89.310
49	Arumuganeri kulam	Koonthan kulam	-do-	17.725
49	Paranipudukulam	Moolaikaraipatti	-do-	17.275
49	Nemani kulam	Moolaikaraipatti	-do-	13.900
49	Vannan kulam	Munanchipatti	-do-	11.070
49	Thiruvarulneri kulam	Munanchipatti	-do-	12.805
49	Pillaiyar kulam	Munanchipatti	-do-	63.490
49	Senkulam-Periyakulam	Srivenkadeshvarapuram	-do-	48.770
49	Veera kulam	Karunkadal	-do-	22.920
49	Velan Pudu Kulam	Nedunkulam	-do-	20.315
49	Meeran Mela kulam	Meerankulam	-do-	16.505
49	Meeran Keela kulam	Meerankulam	-do-	24.025
49	Perumal Mela & Keelakulam	Meerankulam	-do-	25.145
49	Kurugalperi kulam	Srivenkadeshvarapuram	-do-	15.545
49	Therkku peikulam	Srivenkadeshvarapuram	-do-	31.575
49	Pettaikulam	Srivenkadeshvarapuram	-do-	5.555
49	Panai kulam	Karunkadal	-do-	28.465
49	Karunkadal Kulam	Karunkadal	-do-	29.350
49	Ilamal kulam	Karunkadal	-do-	41.550
49	Narthan kurichi kulam	Karunkadal	-do-	8.630
49	Chetti kulam	Palankulam	-do-	61.055

49	Puliyankulam	Karunkadal	-do-	25.910
49	Nochikulam	Palankulam	-do-	6.930
49	Karuvelanpadukulam	Karuvelampadu	-do-	1.985
49	ThiruvrankaneriMelakulam	Palankulam	-do-	4.125
49	ThiruvrankaneriKeelakulam	Palankulam	-do-	10.075
49	PalankinaruVadakukulam	Palankulam	-do-	6.325
49	SriKrishnaperivadakukulam	Palankulam	-do-	4.920
49	Sri KrishnaperiTherkukulam	Palankulam	-do-	1.420
49	Kidamozhikulam	Palankulam	-do-	2.920
49	Arumuganerikulam	Sathankulam	-do-	6.470
49	Keela Arumuganerikulam	Eluvaramukki	-do-	3.235
49	Udaiyarkulam	Sathankulam	-do-	37.465
49	Siruduaiyarkulam	Sathankulam	-do-	5.395
49	KadambanThottakulam	Pannamparai kulam	-do-	10.235
49	Pannai pathukulam	Pannamparai kulam	-do-	09.955
49	Pudukinarukulam	Pannamparai kulam	-do-	9.550
49	Palankulam	Palankulam	-do-	27.985
49	Kattarimangalamkulam	Kattarimangalam	-do-	57.455
49	Alankulam	Kattarimangalam	-do-	6.610
49	Therkuperikulam	Kattarimangalam	-do-	29.810
49	Manakavalampuramkulam	Kattarimangalam	-do-	12.670
49	Mela pudukaduvetikulam	Vellamadam	-do-	7.920
49	Keela pudukaduvetikulam	Eluvaramukki	-do-	6.920
49	Paramarthan kulam	Eluvaramukki	-do-	17.305
49	Vadkkuvagai kulam	Kattarimangalam	-do-	16.325
49	Achampadukulam	Eluvaramukki	-do-	43.870
49	Malayamperikulam	Eluvaramukki	-do-	6.910
49	Pirandar kulam	Pirandar kulam	-do-	2.975
49	Unnankulam	Nanguneri	-do-	40.430

49	Hanumar Pudu kulam	Sembagaramanallur	-do-	60.090
49	Thennavaneri kulam	Sembagaramanallur	-do-	38.690
49	Ayar kulam	Ariyakulam	-do-	27.250
49	Eduppai kulam	Moolaikaraipatti	-do-	17.235
49	Periya munanchi kulam	Moolaikaraipatti	-do-	43.000
49	Thulukkan kulam	Moolaikaraipatti	-do-	9.785
49	Tutti kulam	Moolaikaraipatti	-do-	15.915
49	Thevar kulam	Moolaikaraipatti	-do-	9.330
49	Thilladam kulam	Koontha kulam	-do-	23.185
49	Kannan kulam	Koontha kulam	-do-	23.800
49	Koondha kulam	Koontha kulam	-do-	77.040
49	Kadan kulam	Kadan kulam	-do-	132.450
49	Padakkam kulam	Thirumalapuram	-do-	35.500
49	Kazhuvur kulam	Thirumalapuram	-do-	45.140
49	Kodan kulam	Munanchipatti	-do-	09.860
49	Rettai kulam	Munanchipatti	-do-	34.850
49	Pettai kulam	Munanchipatti	-do-	8.055
49	Somanathaperi kulam	Munanchipatti	-do-	09.945
49	Keeran kulam	Munanchipatti	-do-	40.030
49	Mankulam	Munanchipatti	-do-	10.015
49	Ramaneri kulam	Sadayaneri	-do-	37.135
49	Komaneri kulam	Komaneri	-do-	102.550
49	Avalai kulam	Nedunkulam	-do-	14.630
49	Nedun kulam	Nedunkulam	-do-	47.245
49	Kadamban kulam	Sadayaneri	-do-	10.880
49	Ramakrishnaperi kulam	Ramakrishna-puram	-do-	53.550
49	Pettai kulam	Ramakrishna-puram	-do-	10.170
49	ThirumalapuramMela kulam	Thirumalapuram	-do-	14.120
49	Thirumalapuram Keela kulam	Thirumalapuram	-do-	24.755

49	Sadayaneri kulam	Sadayaneri	-do-	14.555
49	Kariyandi kulam	Ramakrishna-puram	-do-	34.065
49	Ilan kulam	Sadayaneri	-do-	14.440
49	Sekaran kulam	Sadayaneri	-do-	12.055
49	Sri Raman kulam	Ramakrishna-puram	-do-	29.695
49	Thattan kulam	Ramakrishna-puram	-do-	47.085
49	Venkatrayapuramkulam	Sadayaneri	-do-	33.095
49	Veerancheri kulam	Sadayaneri	-do-	40.980
49	Santhu vari kulam	Kombankulam	-do-	11.245
49	Thuvarai kulam	Kombankulam	-do-	16.705
49	Vali pulan kulam	Kombankulam	-do-	11.405
49	Kadamban kulam	Kombankulam	-do-	20.705
49	Iluppai kulam	Kombankulam	-do-	21.255
49	NayanamundanKadian kulam	Vijayanarayanam	-do-	51.950
49	Vijayaachambadukulam	Ittamozhi	-do-	25.680
49	Ilangaiadi kulam	Ittamozhi	-do-	33.650
49	Nainar kulam	Ittamozhi	-do-	6.850
49	Ayakkarani kulam	Ittamozhi	-do-	8.010
49	Pattanchery kulam	Ittamozhi	-do-	28.910
49	Kanavaneri kulam	Ittamozhi	-do-	25.990
49	Nanni kulam	Ittamozhi	-do-	20.760
49	Panayadi Pudukulam	Ittamozhi	-do-	5.220
49	Iyyanar kulam	Ittamozhi	-do-	21.445
49	Thinaioorani kulam	Ramakrishnapuram	-do-	41.630
49	Suviseshapuram kulam	Kumarapuram	-do-	09.830
49	Rettai kinar kulam	Kombankulam	-do-	9.825
49	Kuthankudi kulam	Kombankulam	-do-	17.340
49	Vetaram kulam	Kombankulam	-do-	23.545
49	Ilayaneri kulam	Kombankulam	-do-	15.995

49	Mathanarayanaperi kulam	Nedunkulam	-do-	11.5095
49	Amuthavannakudi kulam	Sathankulam	-do-	42.750
49	Kalla kulam	Pudukulam	-do-	39.270
49	Pudukulam Periya kulam	Pudukulam	-do-	26.705
49	Umaibanganeri kulam	Pudukulam	-do-	39.255
49	Thiruppunganeri kulam	Vijayanarayanam	-do-	32.010
49	Rajagopalapuram-kulam	Vijayanarayanam	-do-	31.460
49	Alaganeri kulam	Vijayanarayanam	-do-	3.525
49	Sankanam kulam	Vijayanarayanam	-do-	24.560
49	Andan kulam	Vijayanarayanam	-do-	24.560
49	Eranthai kulam	Vijayanarayanam	-do-	57.835
138	Jiyar kulam	Surankudi	Vadaku Pachayar Jiyarkulam Water Users Association	71.490
139	Nanguneri Periyakulam	Nanguneri	Vadaku Pachayar Nanguneri Periyakulam Water Users Association	663.905
140	Nedun kulam	Karandaneri	Vadaku Pachayar Nedun kulam Water Users Association	59.865
137	Surankudi kulam	Surankudi	Vadaku Pachayar Surankudi kulam Water Users Association	64.320
49	Vijayanarayanam-kulam	Vijayanarayanam	Manimuthar Main Canal Reach III and IV Water Users Association	1009.05

17	02.12.08	KURUGAL PERIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Sluice improvements and Weir repairs							
18	04.12.08	THERKKUPEI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening, Sluice improvements and Supply channel improvements,							
09	03.12.08	PETTAIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Sluice Repairs, Bund Strengthening, Supply channel improvements								Sluice improvements							
20	04.12.08	PANAIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening, Supply channel improvements and Weir Repairs							
21	04.12.08	KARUNKADAL KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Bund Strengthening, Sluice Repairs, Supply channel improvements								Bund Strengthening, and Supply channel improvements							
22	02.12.08	ILAMAL KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening, Sluice Repairs, and Weir Repairs							
23	05.12.08	NARTHANKURIC HI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening and Supply channel improvements							

24	05.12.08	CHETTI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening and Sluice improvements							
25	05.12.08	PULIYAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Sluice Repairs, Bund Strengthening, Supply channel improvements								Bund Strengthening and Supply channel improvements							
26	05.12.08	NOCHIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Supply channel improvements							
27	05.12.08	KARUVELAN PADU KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Bund Strengthening, Sluice Repairs, Supply channel improvements								Supply channel improvements							
28	05.12.08	THIRUVARAN KANERI MELA KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Sluice Repairs							
29	08.12.08	THIRUVARAN KANERI KEELA KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund strengthening and Supply channel improvements							
30	08.12.08	PALANKINARU VADAKU KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Sluice Repairs and supply channel improvements							

38	22.12.08	KADAMBAN THOTTA KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening, Sluice Repairs, and Weir Repairs							
39	13.01.09	PANNAI PATHU KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Bund Strengthening, Sluice Repairs, Supply channel improvements								Bund Strengthening, Sluice Repairs, and Weir Repairs							
40	02.12.08	PUDUKINARU- KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening and Weir Repair							
41	02.12.08	PALAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening, Sluice Repairs and Weir Repairs							
42	12.12.08	KATTARIMANGAL AM KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								WRCP							
43	05.01.09	ALANKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Sluice Repairs, Bund Strengthening, Supply channel improvements								WRCP							
44	09.12.08	THERKU PERIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								WRCP							

45	17.12.08	MANA KAVALAM PURAM KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Bund Strengthening, Sluice Repairs, Supply channel improvements								WRCP							
46	20.01.09	MELAPUDU- KADUVETTI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Sluice Repairs and Weir Repairs							
47	20.01.09	KEELAPUDU KADUVETTI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Sluice Repairs and Weir repairs							
48	20.01.09	PARAMARTHAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening, Sluice Repairs and Weir Repairs							
49	20.01.09	VADAKKU VAGAI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Sluice Repairs, Bund Strengthening, Supply channel improvements															
50	21.01.09	ACHEMBADU KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening, Sluice improvements, and Weir Repairs							
51	21.01.09	MALAYAMPERI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Bund Strengthening, Sluice Repairs, Supply channel improvements								Sluice Repairs and Weir Repairs							

52	21.01.2009	PIRANDAR KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs																Sluice Repairs
53	13.11.2008	UNNANKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs																WRCP
54	04.12.2008	HANUMAR PUDUKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs																WRCP
55	04.12.2008	THENNAVA NERIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Sluice Repairs, Bund Strengthening, Supply channel improvements																WRCP
56	04.12.2008	AYARKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs																WRCP
57	04.12.2008	EDUPPAIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Bund Strengthening, Sluice Repairs, Supply channel improvements																WRCP
58	04.12.2008	PERIYAMU NANJIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs																Bund strengthening, Sluice Repair, Weir Repair, Supply channel improvements

59	04.12.2008	THULUKKAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs									Supply channel improvements						
60	04.12.2008	TUTTIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs															
61	04.12.2008	THE VARKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Sluice Repairs, Bund Strengthening, Supply channel improvements															
62	04.12.2008	THILLADAM KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs									Bund Strengthening, Sluice Repairs, Supply channel improvements and Weir Repairs						
63	04.12.2008	KANNAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Bund Strengthening, Sluice Repairs, Supply channel improvements									Bund Strengthening, Sluice Repairs, and Supply channel improvements						
64	04.12.2008	KOONDHA KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs									WRCP						
65	04.12.2008	KADANKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs									WRCP						

66	04.12.2008	PADAKKAM KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								WRCP							
67	04.12.2008	KODAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Sluice Repairs, Bund Strengthening, Supply channel improvements								Sluice Repairs and Supply channel improvements							
68	04.12.2008	RETTAI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening, Sluice Repairs, Supply channel improvements and weir repairs							
69	04.12.2008	PETTAIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Bund Strengthening, Sluice Repairs, Supply channel improvements								Bund Strengthening							
70	04.12.2008	SOMANATHA PERIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Weir repair works, Bund strengthening, and Supply channel improvements							
71	04.12.2008	KEERAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Sluice Reconstruction, Weir repair works, Bund strengthening and Supply channel improvements							
72	04.12.2008	MANKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Sluice Repair and supply channel							

73	04.12.2008	RAMANERI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Sluice Repairs, Bund Strengthening, Supply channel improvements															
74	4.12.09	KOMANERI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs							Bund Strengthening, Sluice improvements, Supply channel improvements and Weir Repairs								
75	08.12.08	AVALAI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Bund Strengthening, Sluice Repairs, Supply channel improvements							Bund Strengthening, Sluice Repairs and Weir Repairs								
76	12.12.08	NEDUNKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs							WRCP								
77	04.12.2008	KADAMBAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs							Sluice Repairs, Supply channel improvements and Weir Repairs								
78	04.12.2008	RAMAKRISHNA PURAM KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs							WRCP								
79	04.12.08	PETTAIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Sluice Repairs, Bund Strengthening, Supply channel improvements							Sluice Repairs and Supply channel improvements								

80	04.12.2008	THIRUMALA PURAM MELAKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening, Sluice Reconstruction and Weir Repairs							
81	04.12.2008	THIRUMALA PURAM KEELAKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Bund Strengthening, Sluice Repairs, Supply channel improvements								Bund Strengthening, Sluice Reconstruction and Weir Repairs							
82	04.12.2008	SADAYANERI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening, Sluice Reconstruction and Weir Repairs							
83	04.12.2008	KARIYANDI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening Supply channel improvements and Weir Repairs							
84	04.12.2008	ILANKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								WRCP							
85	04.12.2008	SEKARAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Sluice Repairs, Bund Strengthening, Supply channel improvements								WRCP							
86	04.12.2008	SRI RAMAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								WRCP							

87	04.12.2008	THATTAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Bund Strengthening, Sluice Repairs, Supply channel improvements								WRCP							
88	04.12.2008	VENKATRAYA PURAMKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening, Sluice Repair Supply channel improvements and Weir Repairs							
89	20.01.2009	VEERANCHERI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								WRCP							
90	11.12.08	SANTHUVARI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening, Sluice Repairs Supply channel improvements and Weir Repairs							
91	11.12.08	THUVARI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Sluice Repairs, Bund Strengthening, Supply channel improvements								Bund Strengthening and Weir Repairs							
92	09.12.08	VALIPULAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening and Weir Repairs							
93	12.12.08	KODAMBAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Bund Strengthening, Sluice Repairs, Supply channel improvements								Bund Strengthening, Sluice Repairs and Supply channel improvements							

94	06.01.09	ILUPPAIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening and Sluice Repairs							
95	20.01.2009	NAYANA MUNDAN KADIAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening, Sluice Reconstruction and Supply channel improvements							
96	20.01.2009	VIJAYA ACHAMBADU KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								WRCP							
97	20.01.2009	ILANGAIADI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Sluice Repairs, Bund Strengthening, Supply channel improvements								WRCP							
98	20.01.2009	NAINAR KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Sluice Repair and Weir Repair							
99	06.01.09	AYAKKARAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Bund Strengthening, Sluice Repairs, Supply channel improvements								Bund Strengthening							
100	20.01.2009	PATTANCHERY KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								WRCP							

101	20.01.2009	KANAVANERI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								WRCP							
102	20.01.2009	NANNI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								WRCP							
103	20.01.2009	PANAYADI PUDU KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Sluice Repairs, Bund Strengthening, Supply channel improvements								WRCP							
104	20.01.2009	IYYANAR KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs															
107	20.01.2009	THINAI OORA NAI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Bund Strengthening, Sluice Repairs, Supply channel improvements								Bund Strengthening, Sluice Reconstruction and Supply channel improvements							
106	20.01.2009	SUVISESHA PURAM KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening Supply channel improvements and Weir Repairs							
107	09.01.09	RETTAKINAR KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Sluice Repairs and Weir Repairs							

108	09.01.09	KUTHANKUDI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening, Sluice Repairs and Weir Repairs							
109	09.01.09	VETARAM KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Sluice Repairs, Bund Strengthening, Supply channel improvements								WRCP							
110	20.01.09	ILLAYANERI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								WRCP							
111	20.01.09	MATHANA RAYANA PERIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Bund Strengthening, Sluice Repairs, Supply channel improvements								Bund Strengthening and Weir Repairs							
112	20.01.09	AMUTHAVANNA KUDIKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Sluice improvements, Weir repair works, and Bund strengthening							
113	12.12.08	KALLAKULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund strengthening and Sluice Repair							
114	12.12.08	PUDUKULAM PERIYA KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund strengthening, weir repair and supply channel improvements							

115	12.12.08	UMAIBANGA NERI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Sluice Repairs, Bund Strengthening, Supply channel improvements							Bund Strengthening, Weir Repair and Supply channel improvements							
116	20.01.2009	THIRUPPUNGANE RI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs							Bund Strengthening, Sluice Repairs, supply channel improvements and Weir Repairs							
117	12.12.2008	RAJAGOPALA PURAM KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Bund Strengthening, Sluice Repairs, Supply channel improvements							Bund Strengthening, and Supply channel improvements							
118	12.12.2008	ALAGANERI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs							Bund Strengthening, and Sluice repairs							
109	12.12.2008	SANKANAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs							Bund Strengthening, Sluice Repairs, and Weir Repairs							
120	12.12.2008	ANDAN KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs							Bund Strengthening, Sluice Repairs and Supply channel improvements							
121	20.01.2009	ERANTHAI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Sluice Repairs, Bund Strengthening, Supply channel improvements							Bund Strengthening, Sluice improvements Supply channel improvements and Weir Repairs							

122	12.12.2008	JIYAR-KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening, Sluice improvements and Supply channel improvements							
123	12.12.2008	NANGU-NERI PERIYA-KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting	Bund Strengthening, Sluice Repairs, Supply channel improvements								Bund Strengthening, Sluice Repairs, Supply channel improvements and Weir Repairs							
124	12.12.2008	NEDUN-KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Sand vent shutters, Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening, Sluice Repairs and Weir Repairs							
125	12.12.2008	SURAN-KUDI KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks, Supply channel desilting Weir Repairs	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening and Sluice Repairs							
126	12.12.2008	VIJAYANA RAYANAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Supply channel improvements							
127	04.12.2008	KAZHUVUR KULAM	Sluice Repairs, Tanks Desilting, Bund Strengthening, Removal of Vegetation of in the tanks,	Bund Strengthening, Sluice Repairs, Supply channel improvements, Weir Repairs								Bund Strengthening, Sluice improvements and Weir Repairs							



1.5 IRRIGATION INFRASTRUCTURE

LIST OF TANKS (Non System tanks)

Sl. No	Tank	Village	Block	Taluk	District	Direct Ayacut Area in Ha	Capacity
1	Kazhuvur kulam	Thirumalapuram	Nanguneri	Nanguneri	Tirunelveli	45.140	1.5026
					Total	45.140 Ha	

LIST OF TANKS (System tanks)

Sl. No	Tank	Village	Block	Taluk	District	Direct Ayacut Area in Ha	Capacity
1	Veerkeralamperi kulam	Unnankulam	Nanguneri	Nanguneri	Tirunelveli	28.325	0.2220
2	Arumpoondar kulam	Ambalam	Nanguneri	Nanguneri	Tirunelveli	47.120	0.2314
3	Ambalam kulam	Ariyakulam	Nanguneri	Nanguneri	Tirunelveli	40.280	0.1485
4	Ariyakulam	Ariyakulam	Nanguneri	Nanguneri	Tirunelveli	89.310	0.1400
5	Arumuganeri kulam	Koonthan kulam	Nanguneri	Nanguneri	Tirunelveli	17.725	0.1652
6	Paranipudukulam	Moolaikaraipatti	Nanguneri	Nanguneri	Tirunelveli	17.275	0.0902
7	Nemani kulam	Moolaikaraipatti	Nanguneri	Nanguneri	Tirunelveli	13.900	0.162
8	Vannan kulam	Munanchipatti	Nanguneri	Nanguneri	Tirunelveli	11.070	0.129
9	Thiruvarulneri kulam	Munanchipatti	Nanguneri	Nanguneri	Tirunelveli	12.805	0.1250
10	Pillaiyar kulam	Munanchipatti	Nanguneri	Nanguneri	Tirunelveli	63.490	0.2830
11	Senkulam-Periyakulam	Srivenkadeshvarapuram	Alwar Thirunagari	Sathankulam	Tuticorin	48.770	0.7270
12	Veera kulam	Karunkadal	Alwar Thirunagari	Sathankulam	Tuticorin	22.920	1.50260
13	Velan Pudu Kulam	Nedunkulam	Alwar Thirunagari	Sathankulam	Tuticorin	20.315	0.1520
14	Meeran Mela kulam	Meerankulam	Alwar Thirunagari	Sathankulam	Tuticorin	16.505	0.8140
15	Meeran Keela kulam	Meerankulam	Alwar Thirunagari	Sathankulam	Tuticorin	24.025	0.3030
16	Perumal Mela &Keelakulam	Meerankulam	Alwar Thirunagari	Sathankulam	Tuticorin	25.145	0.2800
17	Kurugalperi kulam	Srivenkadeshvarapuram	Alwar Thirunagari	Sathankulam	Tuticorin	15.545	0.0600
18	Therkku peikulam	Srivenkadeshvarapuram	Alwar Thirunagari	Sathankulam	Tuticorin	31.575	0.2220
09	Pettaikulam	Srivenkadeshvarapuram	Alwar Thirunagari	Sathankulam	Tuticorin	5.555	0.0200
20	Panai kulam	Karunkadal	Alwar Thirunagari	Sathankulam	Tuticorin	28.465	
21	Karunkadal Kulam	Karunkadal	Alwar Thirunagari	Sathankulam	Tuticorin	29.350	0.1400
22	Ilamal kulam	Karunkadal	Alwar Thirunagari	Sathankulam	Tuticorin	41.550	1.50830

Sl. No	Tank	Village	Block	Taluk	District	Direct Ayacut Area in Ha	Capacity
23	Narthan kurichi kulam	Karunkadal	Alwar Thirunagari	Sathankulam	Tuticorin	8.630	0.0050
24	Chetti kulam	Palankulam	Alwar Thirunagari	Sathankulam	Tuticorin	61.055	0.3730
25	Puliyar kulam	Karunkadal	Alwar Thirunagari	Sathankulam	Tuticorin	25.910	0.3590
26	Nochi kulam	Palankulam	Alwar Thirunagari	Sathankulam	Tuticorin	6.930	0.0680
27	Karuvelanpadu kulam	Karuvelampadu	Alwar Thirunagari	Sathankulam	Tuticorin	1.985	0.2850
28	ThiruvarankaneriMelakulam	Palankulam	Alwar Thirunagari	Sathankulam	Tuticorin	4.125	0.0390
29	Thiruvarankanerikeelakulam	Palankulam	Alwar Thirunagari	Sathankulam	Tuticorin	10.075	0.1100
30	Palankinaru Vadakku kulam	Palankulam	Alwar Thirunagari	Sathankulam	Tuticorin	6.325	0.0780
31	SriKrishnaperi vadakku kulam	Palankulam	Alwar Thirunagari	Sathankulam	Tuticorin	4.920	0.1110
32	Sri Krishnaperi Therku kulam	Palankulam	Alwar Thirunagari	Sathankulam	Tuticorin	1.420	0.0200
33.	Kida mozhi kulam	Palankulam	Alwar Thirunagari	Sathankulam	Tuticorin	2.920	0.0270
34	Arumuganeri kulam	Sathankulam	Sathankulam	Sathankulam	Tuticorin	6.470	0.0940
35	Keela Arumuganeri kulam	Eluvaraimukki	Alwar Thirunagari	Sathankulam	Tuticorin	3.235	0.0710
36	Udaiyar kulam	Sathankulam	Sathankulam	Sathankulam	Tuticorin	37.465	0.1870
37	Siru udaiyar kulam	Sathankulam	Sathankulam	Sathankulam	Tuticorin	5.395	0.0500
38	Kadamban Thotta kulam	Pannamparai kulam	Sathankulam	Sathankulam	Tuticorin	10.235	0.1500
39	Pannai pathu kulam	Pannamparai kulam	Sathankulam	Sathankulam	Tuticorin	09.955	0.1130
40	Pudu kinaru kulam	Pannamparai kulam	Sathankulam	Sathankulam	Tuticorin	9.550	
41	Palan kulam	Palankulam	Alwar Thirunagari	Sathankulam	Tuticorin	27.985	0.1170
42	Kattarimangalam kulam	Kattarimangalam	Alwar Thirunagari	Sathankulam	Tuticorin	57.455	0.4990
43	Alankulam	Kattarimangalam	Alwar Thirunagari	Sathankulam	Tuticorin	6.610	0.1060

Sl. No	Tank	Village	Block	Taluk	District	Direct Ayacut Area in Ha	Capacity
44	Therkuperi kulam	Kattarimangalam	Alwar Thirunagari	Sathankulam	Tuticorin	29.810	0.4040
45	Manakavalampuram kulam	Kattarimangalam	Alwar Thirunagari	Sathankulam	Tuticorin	12.670	0.1080
46	Mela pudu kaduvetti kulam	Vellamadam	Alwar Thirunagari	Sathankulam	Tuticorin	7.920	0.0470
47	Keela pudu kaduvetti kulam	Eluvaraimukki	Alwar Thirunagari	Sathankulam	Tuticorin	6.920	0.0690
48	Paramarthan kulam	Eluvaraimukki	Alwar Thirunagari	Sathankulam	Tuticorin	17.305	0.1000
49	Vadkku vagai kulam	Kattarimangalam	Alwar Thirunagari	Sathankulam	Tuticorin	16.325	0.1530
50	Achampadu kulam	Eluvaraimukki	Alwar Thirunagari	Sathankulam	Tuticorin	43.870	0.3830
51	Malayamperi kulam	Eluvaraimukki	Alwar Thirunagari	Sathankulam	Tuticorin	6.910	0.2010
52	Pirandar kulam	Pirandar kulam	Alwar Thirunagari	Sathankulam	Tuticorin	2.975	
53	Unnan kulam	Nanguneri	Nanguneri	Nanguneri	Tirunelveli	40.430	0.2910
54	Hanumar Pudu kulam	Sembagaramanallur	Nanguneri	Nanguneri	Tirunelveli	60.090	0.3520
55	Thennavneri kulam	Sembagaramanallur	Nanguneri	Nanguneri	Tirunelveli	38.690	0.1120
56	Ayar kulam	Ariyakulam	Nanguneri	Nanguneri	Tirunelveli	27.250	0.1438
57	Eduppai kulam	Moolaikaraipatti	Nanguneri	Nanguneri	Tirunelveli	17.235	0.1246
58	Periya munanchi kulam	Moolaikaraipatti	Nanguneri	Nanguneri	Tirunelveli	43.000	0.2133
59	Thulukkan kulam	Moolaikaraipatti	Nanguneri	Nanguneri	Tirunelveli	9.785	0.0800
60	Tutti kulam	Moolaikaraipatti	Nanguneri	Nanguneri	Tirunelveli	15.915	0.2357
61	Thevar kulam	Moolaikaraipatti	Nanguneri	Nanguneri	Tirunelveli	9.330	0.0612
62	Thilladam kulam	Koontha kulam	Nanguneri	Nanguneri	Tirunelveli	23.185	0.2866
63	Kannan kulam	Koontha kulam	Nanguneri	Nanguneri	Tirunelveli	23.800	0.0786
64	Koondha kulam	Koontha kulam	Nanguneri	Nanguneri	Tirunelveli	77.040	1.50370

Sl. No	Tank	Village	Block	Taluk	District	Direct Ayacut Area in Ha	Capacity
65	Kadan kulam	Kadan kulam	Nanguneri	Nanguneri	Tirunelveli	132.450	0.4284
66	Padakkam kulam	Thirumalapuram	Nanguneri	Nanguneri	Tirunelveli	35.500	1.2590
67	Kodan kulam	Munanchipatti	Nanguneri	Nanguneri	Tirunelveli	09.860	0.1373
68	Rettai kulam	Munanchipatti	Nanguneri	Nanguneri	Tirunelveli	34.850	0.1690
69	Pettai kulam	Munanchipatti	Nanguneri	Nanguneri	Tirunelveli	8.055	0.0360
70	Somanathaperi kulam	Munanchipatti	Nanguneri	Nanguneri	Tirunelveli	09.945	0.1530
71	Keeran kulam	Munanchipatti	Nanguneri	Nanguneri	Tirunelveli	40.030	0.1560
72	Mankulam	Munanchipatti	Nanguneri	Nanguneri	Tirunelveli	10.015	0.1390
73	Ramaneri kulam	Sadayaneri	Nanguneri	Nanguneri	Tirunelveli	37.135	0.0970
74	Komaneri kulam	Komaneri	Sathankulam	Sathankulam	Tuticorin	102.550	0.0960
75	Avalai kulam	Nedunkulam	Sathankulam	Sathankulam	Tuticorin	14.630	0.0720
76	Nedun kulam	Nedunkulam	Sathankulam	Sathankulam	Tuticorin	47.245	0.3990
77	Kadamban kulam	Sadayaneri	Nanguneri	Nanguneri	Tirunelveli	10.880	0.0660
78	Ramakrishnaperi kulam	Ramakrishnapuram	Nanguneri	Nanguneri	Tirunelveli	53.550	0.0971
79	Pettai kulam	Ramakrishnapuram	Nanguneri	Nanguneri	Tirunelveli	10.170	0.0614
80	ThirumalapuramMela kulam	Thirumalapuram	Nanguneri	Nanguneri	Tirunelveli	14.120	0.1320
81	Thirumalapuram Keela kulam	Thirumalapuram	Nanguneri	Nanguneri	Tirunelveli	24.755	0.1740
82	Sadayaneri kulam	Sadayaneri	Nanguneri	Nanguneri	Tirunelveli	14.555	0.0930
83	Kariyandi kulam	Ramakrishnapuram	Nanguneri	Nanguneri	Tirunelveli	34.065	0.4033
84	Ilan kulam	Sadayaneri	Nanguneri	Nanguneri	Tirunelveli	14.440	0.1270
85	Sekaran kulam	Sadayaneri	Nanguneri	Nanguneri	Tirunelveli	12.055	0.1230

Sl. No	Tank	Village	Block	Taluk	District	Direct Ayacut Area in Ha	Capacity
86	Sri Raman kulam	Ramakrishnapuram	Nanguneri	Nanguneri	Tirunelveli	29.695	0.2070
87	Thattan kulam	Ramakrishnapuram	Nanguneri	Nanguneri	Tirunelveli	47.085	0.1890
88	Venkatrayapuramkulam	Sadayaneri	Nanguneri	Nanguneri	Tirunelveli	33.095	0.3350
89	Veerancheri kulam	Sadayaneri	Nanguneri	Nanguneri	Tirunelveli	40.980	-
90	Santhu vari kulam	Kombankulam	Sathankulam	Sathankulam	Tuticorin	11.245	0.0700
91	Thuvarai kulam	Kombankulam	Sathankulam	Sathankulam	Tuticorin	16.705	0.2620
92	Vali pulan kulam	Kombankulam	Sathankulam	Sathankulam	Tuticorin	11.405	0.0800
93	Kadamban kulam	Kombankulam	Sathankulam	Sathankulam	Tuticorin	20.705	0.1740
94	Iluppai kulam	Kombankulam	Sathankulam	Sathankulam	Tuticorin	21.255	0.1890
95	NayanamundanKadian kulam	Vijayanarayanam	Nanguneri	Nanguneri	Tirunelveli	51.950	0.0410
96	Vijayaachambadukulam	Ittamozhi	Nanguneri	Nanguneri	Tirunelveli	25.680	0.2630
97	Ilangaiadi kulam	Ittamozhi	Nanguneri	Nanguneri	Tirunelveli	33.650	0.1780
98	Nainar kulam	Ittamozhi	Nanguneri	Nanguneri	Tirunelveli	6.850	0.2440
99	Ayakkaran kulam	Ittamozhi	Nanguneri	Nanguneri	Tirunelveli	8.010	0.0330
100	Pattanchery kulam	Ittamozhi	Nanguneri	Nanguneri	Tirunelveli	28.910	0.1030
101	Kanavaneri kulam	Ittamozhi	Nanguneri	Nanguneri	Tirunelveli	25.990	0.0960
102	Nanni kulam	Ittamozhi	Nanguneri	Nanguneri	Tirunelveli	20.760	0.0490
103	Panayadi Pudu kulam	Ittamozhi	Nanguneri	Nanguneri	Tirunelveli	5.220	0.0360
104	Iyyanar kulam	Ittamozhi	Nanguneri	Nanguneri	Tirunelveli	21.445	0.0420
105	Thinaioorani kulam	Ramakrishnapuram	Nanguneri	Nanguneri	Tirunelveli	41.630	0.4290
106	Suviseshapuram kulam	Kumarapuram	Radhapuram	Radhapuram	Tirunelveli	09.830	0.0590

Sl. No	Tank	Village	Block	Taluk	District	Direct Ayacut Area in Ha	Capacity
107	Rettai kinar kulam	Kombankulam	Sathankulam	Sathankulam	Tuticorin	9.825	0.0500
108	Kuthankudi kulam	Kombankulam	Sathankulam	Sathankulam	Tuticorin	17.340	0.3510
109	Vetaram kulam	Kombankulam	Sathankulam	Sathankulam	Tuticorin	23.545	0.6030
110	Ilayaneri kulam	Kombankulam	Sathankulam	Sathankulam	Tuticorin	15.995	0.1480
111	Mathanarayanaperi kulam	Nedunkulam	Sathankulam	Sathankulam	Tuticorin	11.5095	0.8740
112	Amuthavannakudi kulam	Sathankulam	Sathankulam	Sathankulam	Tuticorin	42.750	0.1880
113	Kalla kulam	Pudukulam	Sathankulam	Sathankulam	Tuticorin	39.270	0.1320
114	Pudukulam Periya kulam	Pudukulam	Sathankulam	Sathankulam	Tuticorin	26.705	0.1290
115	Umaibanganeri kulam	Pudukulam	Sathankulam	Sathankulam	Tuticorin	39.255	0.1890
116	Thiruppunganeri kulam	Vijayanarayanam	Nanguneri	Nanguneri	Tirunelveli	32.010	0.1440
117	Rajagopalapuramkulam	Vijayanarayanam	Nanguneri	Nanguneri	Tirunelveli	31.460	0.1420
118	Alaganeri kulam	Vijayanarayanam	Nanguneri	Nanguneri	Tirunelveli	3.525	0.0260
109	Sankanam kulam	Vijayanarayanam	Nanguneri	Nanguneri	Tirunelveli	24.560	0.3990
120	Andan kulam	Vijayanarayanam	Nanguneri	Nanguneri	Tirunelveli	24.560	0.0650
121	Eranthai kulam	Vijayanarayanam	Nanguneri	Nanguneri	Tirunelveli	57.835	0.2370
122	Jiyar kulam	Surankudi	Kalakad	Nanguneri	Tirunelveli	71.490	0.333
123	Nanguneri Periyakulam	Nanguneri	Nanguneri	Nanguneri	Tirunelveli	663.905	3.22
124	Nedun kulam	Karandaneri	Nanguneri	Nanguneri	Tirunelveli	59.865	0.454
125	Surankudi kulam	Surankudi	Kalakad	Nanguneri	Tirunelveli	64.320	0.666
126	Vijayanarayanamkulam	Vijayanarayanam	Nanguneri	Nanguneri	Tirunelveli	1009.05	8.428
						4991.04	

Sl.No.	Name of Tank	Name of Village	Name of Block	Ayacut (Ha)
86	Mahadevankulam	Mahadevankulam	Radhapuram	10.25
87	Oorkamanerikulam	Kottaikarungulam	Radhapuram	12.38
88	Uthavanerikulam	Kottaikarungulam	Radhapuram	5.31
89	Rajasingaperikulam	Kottaikarungulam	Radhapuram	12.93
90	Sengalpadu	Kottaikarungulam	Radhapuram	4.51
91	Nambikurihurkulam	Thisayanvilai	Radhapuram	3.10
92	Sengulam	Thisayanvilai	Radhapuram	5.44
93	Nalanthula	Kumarapuram	Radhapuram	4.95
94	Mahadevankulam	Mahadevankulam	Radhapuram	10.24
95	Pallikovilkulam	Pannamparai	Sathankulam	3.05
96	Ammatchiyarpettaikulam	Pidanerikulam	Sathankulam	90.96
97	Vavalpettaikulam	Pidanerikulam	Sathankulam	31.16
98	Pulayanputhukulam	Pannamparai	Sathankulam	4.165
99	Puthukulam	Pannamparai	Sathankulam	14.095
100	Vadakupanamparaikulam	Pannamparai	Sathankulam	16.265
101	Kadankulam	Pannamparai	Sathankulam	4.555
102	Nagaikinarukulam	Pannamparai	Sathankulam	7.11
103	Chetiirrupukulam	Nedunkulam	Sathankulam	1.845
104	Kalanputhukulam	Pudukulam	Sathankulam	37.095
105	Kanvanerikulam	Pudukulam	Sathankulam	25.62
106	Perumpathukulam	Sathankulam	Sathankulam	3.35
107	Amaravathikulam	Sathankulam	Sathankulam	9.79
108	Kurukalkulam	Sathankulam	Sathankulam	12.76
109	Nalanthulakulam	Sathankulam	Sathankulam	5.09
	Total			1735.24

List of Supply Channel

Sl. No.	Name of Supply Channel	Off take point	Length in Km	Village	Block	Taluk	District	Direct Ayacut in Ha
1	Veerkeralamperi kulam	Sluice No 1	1000m	Unnankulam	Nanguneri	Nanguneri	Tirunelveli	
2	Arumpoondar kulam	Veerakeralaperi Tank weir	500m	-Do-	-Do-	-Do-	-Do-	
3	Ambalam kulam	Sluice 2A	850m	Ariyakulam	-Do-	-Do-	-Do-	
4	Ariyakulam	Sluice 3	1500m	Moolaikaraipatti	-Do-	-Do-	-Do-	
5	Arumuganeri kulam	Kadambankulam weir	700m	-Do-	-Do-	-Do-	-Do-	
6	Paranipudukulam	Sluice 6	500m	-Do-	-Do-	-Do-	-Do-	
7	Thiruvarulneri kulam	Sluice 6 A	4000m	-Do-	-Do-	-Do-	-Do-	
8	Pillaiyar kulam	-Do-	18m	-Do	-Do-	-Do-	-Do-	
9	Senkulam-Periyakulam	Thiruvarulneri kulam	2000m	Munanchipatti	-Do-	-Do-	-Do-	
10	Veera kulam	SenkulamPeriyakulam weir	1500m	Srivenkadesh-warapuram	Alwar Thirunagari	Sathankulam	Tuticorin	
11	Velan Pudu Kulam	Veerakulam	2000m	-Do-	-Do-	-Do-	-Do-	
12	Meeran Mela kulam	Sluice 10	1500m	Chinthamani	Nanguneri	Nanguneri	Tirunelveli	
13	Meeran Keela kulam	Sluice 10 A	1500m	Meerankulam	Alwar Thirunagari	Sathankulam	Tuticorin	
14	Perumal Mela &Keelakulam	Sluice 13/1	1000m	Meerankulam	Alwar Thirunagari	Sathankulam	Tuticorin	
15	Kurugalperi kulam	Sluice 13/3	500m	Srivenkadesh warapuram	Alwar Thirunagari	Sathankulam	Tuticorin	
16	Therkku peikulam	Pettaikulam	1000m	Srivenkadesh-warapuram	Alwar Thirunagari	Sathankulam	Tuticorin	
17	Pettaikulam	Sluice 13/4	400m	Srivenkadesh-warapuram	Alwar Thirunagari	Sathankulam	Tuticorin	
18	Panai kulam	13 th supply channel	800m	Srivenkadesh-warapuram	Alwar Thirunagari	Sathankulam	Tuticorin	

SI. No.	Name of Supply Channel	Off take point	Length in Km	Village	Block	Taluk	District	Direct Ayacut in Ha
09	Karunkadal Kulam	13 th supply channel	1000m	Karunkadal	Alwar Thirunagari	Sathankulam	Tuticorin	
20	Ilamal kulam	13 th supply channel	600m	Karunkadal	Alwar Thirunagari	Sathankulam	Tuticorin	
21	Narthan kurichi kulam	Ilamal kulam	500m	Karunkadal	Alwar Thirunagari	Sathankulam	Tuticorin	
22	Chetti kulam	Narthan kurichi kulam	100m	Karunkadal	Alwar Thirunagari	Sathankulam	Tuticorin	
23	Puliyam kulam	13 th supply channel	1500m	Karunkadal	Alwar Thirunagari	Sathankulam	Tuticorin	
24	Nochi kulam	13 th supply channel	2500m	Karunkadal	Alwar Thirunagari	Sathankulam	Tuticorin	
25	Karuvelanpadu kulam	13 th supply channel	1000m	Palankulam	Alwar Thirunagari	Sathankulam	Tuticorin	
26	ThiruvarankaneriMelakulam	13 th supply channel	200m	Palankulam	Alwar Thirunagari	Sathankulam	Tuticorin	
27	Thiruvarankanerikeela kulam	13 th supply channel	1200m	Palankulam	Alwar Thirunagari	Sathankulam	Tuticorin	
28	Palankinaru Vadakku kulam	13 th supply channel	0900m	Palankulam	Alwar Thirunagari	Sathankulam	Tuticorin	
29	SriKrishnaperi vadakku kulam	13 th supply channel	700m	Palankulam	Alwar Thirunagari	Sathankulam	Tuticorin	
30	SriKrishnaperi Therku kulam	Palankinaru kulam	100m	Palankulam	Alwar Thirunagari	Sathankulam	Tuticorin	
31	Kida mozhi kulam	Sri Krishnaperi Therku kulam	100m	Palankulam	Alwar Thirunagari	Sathankulam	Tuticorin	
32	Arumuganeri kulam	Palankinaru Tank	3000m	Palankulam	Alwar Thirunagari	Sathankulam	Tuticorin	
33	Keela Arumuganeri kulam	Arumuganeri Tank	550m	Sathankulam	Sathankulam	Sathankulam	Tuticorin	
34	Udaiyar kulam	Arumuganeri Tank	600m	Sathankulam	Sathankulam	Sathankulam	Tuticorin	
35	Siru udaiyar kulam	Udaiyar kulam	50m	Sathankulam	Sathankulam	Sathankulam	Tuticorin	

Sl. No.	Name of Supply Channel	Off take point	Length in Km	Village	Block	Taluk	District	Direct Ayacut in Ha
36	Kadamban Thotta kulam	Siru udaiyar kulam	50m	Pannamparai	Sathankulam	Sathankulam	Tuticorin	
37	Pannai pathu kulam	Pudu kinaru Tank	50m	Pannamparai	Sathankulam	Sathankulam	Tuticorin	
38	Pudu kinaru kulam	Kadamban Thotta kulam	50m	Pannamparai	Sathankulam	Sathankulam	Tuticorin	
39	Palan kulam	Sluice 13 supply channel	1000m	Palankulam	Alwar Thirunagari	Sathankulam	Tuticorin	
40	Kattarimangalam kulam	Sluice 15	2000m	Kattarimangalam	Alwar Thirunagari	Sathankulam	Tuticorin	
41	Alankulam	Kattarimangalam Tank	500m	Kattarimangalam	Alwar Thirunagari	Sathankulam	Tuticorin	
42	Therkuperi kulam	Alankulam	1000m	Kattarimangalam	Alwar Thirunagari	Sathankulam	Tuticorin	
43	Manakavalampuram kulam	Sluice 18	500m	Kattarimangalam	Alwar Thirunagari	Sathankulam	Tuticorin	
44	Mela pudu kaduvetti kulam	-Do-	1500m	Vellamadam	Alwar Thirunagari	Tiruchendur	Tuticorin	
45	Keela pudu kaduvetti kulam	Mela pudu kaduvetti kulam	500m	Vellamadam	Alwar Thirunagari	Tiruchendur	Tuticorin	
46	Paramarthan kulam	Keela pudu kaduvetti kulam	1000m	Vellamadam	Alwar Thirunagari	Tiruchendur	Tuticorin	
47	Vadkku vagai kulam	T.D.right supply channel	1000m	Kattarimangalam	Alwar Thirunagari	Sathankulam	Tuticorin	
48	Achampadu kulam	Vadkku vagai kulam	1500m	Kattarimangalam	Alwar Thirunagari	Sathankulam	Tuticorin	
49	Malayamperi kulam	Achampadu kulam	3000m	Eluvaraimukki	Alwar Thirunagari	Sathankulam	Tuticorin	
50	Pirandar kulam	Sluice 13/2	1000m	Srivenkadeshwara-puram	Sathankulam	Sathankulam	Tuticorin	
51	Unnan kulam	I Group	600m	Unnan kulam	Nanguneri	Nanguneri	Tirunelveli	
52	Hanumar Pudu kulam	Unnankulam	2000m	Unnan kulam	Nanguneri	Nanguneri	Tirunelveli	
53	Thennavaneri kulam	Hanumar Pudu kulam	100m	Shenbagaraman allur	Nanguneri	Nanguneri	Tirunelveli	

Sl. No.	Name of Supply Channel	Off take point	Length in Km	Village	Block	Taluk	District	Direct Ayacut in Ha
54	Ayar kulam	Group II	600m	Ariyakulam	Nanguneri	Nanguneri	Tirunelveli	
55	Eduppai kulam	Ayar kulam	1500m	Ariyakulam	Nanguneri	Nanguneri	Tirunelveli	
56	Periya munanchi kulam	Ayar kulam supply channel	1000m	Ariyakulam	Nanguneri	Nanguneri	Tirunelveli	
57	Thulukkan kulam	Periya munanchi kulam	500m	Moolaikaraipatti	Nanguneri	Nanguneri	Tirunelveli	
58	Tutti kulam	Ayar kulam supply channel	1500m	Ariyakulam	Nanguneri	Nanguneri	Tirunelveli	
59	Thevar kulam	Tutti kulam	500m	Moolaikaraipatti	Nanguneri	Nanguneri	Tirunelveli	
60	Thilladam kulam	Group III	400m	Koondhakulam	Nanguneri	Nanguneri	Tirunelveli	
61	Kannan kulam	Group IV	300m	Koondhakulam	Nanguneri	Nanguneri	Tirunelveli	
62	Koondha kulam		-	-	-	-	-	
63	Kadan kulam	Group V	1500m	Koondhakulam	Nanguneri	Nanguneri	Tirunelveli	
64	Padakkm kulam	Kadan kulam weir	500m	Kadankulam	Nanguneri	Nanguneri	Tirunelveli	
65	Kodan kulam	Kadan kulam weir		Kadankulam	Nanguneri	Nanguneri	Tirunelveli	
66	Rettai kulam	Kadan kulam supply channel	2000m	Kadankulam	Nanguneri	Nanguneri	Tirunelveli	
67	Pettai kulam	-	-	-	-	-	-	
68	Somanathaperi kulam	Kadan kulam supply channel	1000m	Kadankulam	Nanguneri	Nanguneri	Tirunelveli	
69	Keeran kulam	Kodankulam weir	1020	Munanchipatti	Nanguneri	Nanguneri	Tirunelveli	
70	Mankulam	Keerankulamweir	985	Munanchipatti	Nanguneri	Nanguneri	Tirunelveli	
71	Ramaneri kulam	Somanathaperi weir	1500m	Munanchipatti	Nanguneri	Nanguneri	Tirunelveli	
72	Komaneri kulam	Ramaneri Tank	2015m	Sadayaneri	Nanguneri	Nanguneri	Tirunelveli	
73	Avalai kulam	Nedun kulam	798m	Nedun kulam	Sathankulam	Sathankulam	Tuticorin	
74	Nedun kulam	Komaneri	1015m	Komaneri	Sathankulam	Sathankulam	Tuticorin	

Sl. No.	Name of Supply Channel	Off take point	Length in Km	Village	Block	Taluk	District	Direct Ayacut in Ha
75	Kadamban kulam	Thattankulam	590m	Ramakrishnapuram	Nanguneri	Nanguneri	Tirunelveli	
76	Ramakrishnapuram kulam	Group VI	1510	Kadankulam	Nanguneri	Nanguneri	Tirunelveli	
77	Pettai kulam	Ramakrishnapuram	-	Ramakrishnapuram	Nanguneri	Nanguneri	Tirunelveli	
78	ThirumalapuramMela kulam	Pettai kulam	485m	Kadankulam	Nanguneri	Nanguneri	Tirunelveli	
79	Thirumalapuram Keelakulam	Pettai kulam supply channel	1600m	Kadankulam	Nanguneri	Nanguneri	Tirunelveli	
80	Sadayaneri kulam	Thirumalapuram Keelakulam	1105m	Kadankulam	Nanguneri	Nanguneri	Tirunelveli	
81	Kariyandi kulam	GroupVII	558m	Ramakrishnapuram	Nanguneri	Nanguneri	Tirunelveli	
82	Ilan kulam	Kariyandi Tank weir	995m	Ramakrishnapuram	Nanguneri	Nanguneri	Tirunelveli	
83	Sekaran kulam	Ilan kulam	815m	Sadayaneri	Nanguneri	Nanguneri	Tirunelveli	
84	Sri Raman kulam	GroupVII A	515m	Ramakrishnapuram	Nanguneri	Nanguneri	Tirunelveli	
85	Thattan kulam	GroupVIII	495m	Ramakrishnapuram	Nanguneri	Nanguneri	Tirunelveli	
86	Venkatrayapuram-kulam	Kadambankulam	950m	Sadayaneri	Nanguneri	Nanguneri	Tirunelveli	
87	Veerancheri kulam	GroupIX	2850m	Sadayaneri	Nanguneri	Nanguneri	Tirunelveli	
88	Santhu vari kulam	Ilan kulam	685m	Sadayaneri	Nanguneri	Nanguneri	Tirunelveli	
89	Thuvarai kulam	Santhu vari kulam	485m	Kombankulam	Sathankulam	Sathankulam	Tuticorin	
90	Vali pulan kulam	Thuvarai kulam	565m	Kombankulam	Sathankulam	Sathankulam	Tuticorin	
91	Kadamban kulam	Santhu vari kulam	950m	Kombankulam	Sathankulam	Sathankulam	Tuticorin	
92	Iluppai kulam	Kombankulam	1100m	Kombankulam	Sathankulam	Sathankulam	Tuticorin	

Sl. No.	Name of Supply Channel	Off take point	Length in Km	Village	Block	Taluk	District	Direct Ayacut in Ha
93	NayanamundanKadian kulam	Group X	925m	Vijayanarayanam	Nanguneri	Nanguneri	Tirunelveli	
94	Vijayaachambadukulam	NayanamundanKadian kulam	595m	Vijayanarayanam	Nanguneri	Nanguneri	Tirunelveli	
95	Ilngaiadi kulam	Vijayaachambadukulam	1535m	Ittamozhi	Nanguneri	Nanguneri	Tirunelveli	
96	Nainar kulam	Ilngaiadi kulam	500m	Ittamozhi	Nanguneri	Nanguneri	Tirunelveli	
97	Ayakkaran kulam		-	-	-	-	-	
98	Pattanchery kulam	Group XI	1535m	Vijayanarayanam	Nanguneri	Nanguneri	Tirunelveli	
99	Kanavaneri kulam	Pattanchery kulam	628m	Ittamozhi	Nanguneri	Nanguneri	Tirunelveli	
100	Nanni kulam	Kanavaneri kulam	525m	Ittamozhi	Nanguneri	Nanguneri	Tirunelveli	
101	Panayadi Pudu kulam	Nanni kulam	485m	Ittamozhi	Nanguneri	Nanguneri	Tirunelveli	
102	Iyyanar kulam	10 th Group channel	1000m	Ittamozhi	Nanguneri	Nanguneri	Tirunelveli	
103	Thinaioorani kulam	Group XIV	475m	Vijayanarayanam	Nanguneri	Nanguneri	Tirunelveli	
104	Suviseshapuram kulam	Ayakarankulam	735m	Ittamozhi	Nanguneri	Nanguneri	Tirunelveli	
105	Rettai kinar kulam	Group XII	1055m	Kombankulam	Sathankulam	Sathankulam	Tuticorin	
106	Kuthankudi kulam	Rettai kinar kulam	185m	Kombankulam	Sathankulam	Sathankulam	Tuticorin	
107	Vetaram kulam	Group XIII	498m	Kombankulam	Sathankulam	Sathankulam	Tuticorin	
108	Illyaneri kulam	Group XIII channel	735m	Kombankulam	Sathankulam	Sathankulam	Tuticorin	
109	Mathanarayanaperi kulam	Illyaneri kulam	1495m	Nedun kulam	Sathankulam	Sathankulam	Tuticorin	
110	Amuthavannakudi kulam	Mathanarayanaperi Tank	985m	Nedun kulam	Sathankulam	Sathankulam	Tuticorin	
111	Kalla kulam	13 th supply channel	1000m	Kombankulam	Sathankulam	Sathankulam	Tuticorin	
112	Pudukulam Periya kulam	13 th Groupsupply channel	3350m	Kombankulam	Sathankulam	Sathankulam	Tuticorin	

Sl. No.	Name of Supply Channel	Off take point	Length in KM	Village	Block	Taluk	District	Direct Ayacut in Ha
113	Umaibanganeri kulam	13 th supply channel	500m	Kombankulam	Sathankulam	Sathankulam	Tuticorin	
114	Thiruppunganeri kulam	Group XV A	1485m	Vijayanarayanam	Nanguneri	Nanguneri	Tirunelveli	
115	Rajagopalapuram-kulam	Thiruppunganeri kulam	0998m	Vijayanarayanam	Nanguneri	Nanguneri	Tirunelveli	
116	Alaganeri kulam	Rajagopalapuramkulam	515m	Vijayanarayanam	Nanguneri	Nanguneri	Tirunelveli	
117	Sankanam kulam	Group 15 B	985m	Vijayanarayanam	Nanguneri	Nanguneri	Tirunelveli	
118	Andan kulam	Vijayanarayanam	1000m	Vijayanarayanam	Nanguneri	Nanguneri	Tirunelveli	
109	Eranthai kulam	Sankanam kulam	2000m	Vijayanarayanam	Nanguneri	Nanguneri	Tirunelveli	
120	Jiyarkulam	Nanguneriakal (Jiyarkulam Head sluice)	1000m	Surankudi	Kalakad	Nanguneri	Tirunelveli	
121	Nanguneri Periyakulam	--	--	Nanguneri	Nanguneri	Nanguneri	Tirunelveli	
122	Nedun kulam	Vilvarayan Tank Surplus weir	1000m	Karathaneri	Nanguneri	Nanguneri	Tirunelveli	
123	Surankudi kulam	Nanguneriakal (Kadamboduvalvoo Head sluice)	2500m	Surankudi	Kalakad	Nanguneri	Tirunelveli	
124	Vijayanarayanam-kulam	Group No.15 and Nambiyar River	1050m & 5000m	Vijayanarayanam	Nanguneri	Nanguneri	Tirunelveli	
	Total		122.863 K.M					

List of tanks/Anicuts executed under various schemes (Viz, Part II Scheme, NABARD, WRCP I etc.,) since 2003.

Sl. No.	Name of Anicut / Tank	Ayacut	Scheme in which executed	Amount	Details of components executed	Remarks
1	VEERAKERALAMPERIKULAM	28.325	W.R.C.P		Sluices and Weirs repair and reconstruction and bund strengthening	
2	ARUMPOONDARKULAM	47.12	W.R.C.P		-do-	
3	ARIYAKULAM	89.31	W.R.C.P		-do-	
4	ARUMUGA`NERIKULAM	17.725	W.R.C.P		-do-	
5	PARANIPUDUKULAM	17.275	W.R.C.P		-do-	
6	PILLAIYAR KULAM	63.490	W.R.C.P		-do-	
7	SENKULAM-PERIAKULAM	48.770	W.R.C.P		-do-	
8	MEERAN MELA KULAM	16.505	W.R.C.P		-do-	
9	MEERAN KEELA KULAM	24.025	W.R.C.P		-do-	
10	PERUMAL MELA & KEELA KULAM	25.145	W.R.C.P		-do-	
11	KATTARIMANGALAM KULAM	57.455	W.R.C.P		-do-	
12	ALANKULAM	6.610	W.R.C.P		-do-	
13	THERKU PERIKULAM	29.810	W.R.C.P		-do-	
14	MANAKAVALAMPURAM KULAM	12.670	W.R.C.P		-do-	

Sl. No.	Name of Anicut / Tank	Ayacut	Scheme in which executed	Amount	Details of components executed	Remarks
15	UNNANKULAM	40.430	W.R.C.P		-do-	
16	HANUMAR PUDUKULAM	60.09	W.R.C.P		-do-	
17	THENNAVANERIKULAM	38.690	W.R.C.P		-do-	
18	AYARKULAM	27.250	W.R.C.P		-do-	
09	EDUPPAIKULAM	17.235	W.R.C.P		-do-	
20	KOONDHAKULAM	77.040	W.R.C.P		-do-	
21	KADANKULAM	132.450	W.R.C.P		-do-	
22	PADAKKAM KULAM	35.500	W.R.C.P		-do-	
23	RAMANERIKULAM	37.135	W.R.C.P		-do-	
24	NEDUNKULAM	47.245	W.R.C.P		-do-	
25	RAMAKRISHNAPURAM KULAM	53.550	W.R.C.P		-do-	
26	ILANKULAM	14.440	W.R.C.P		-do-	
27	SEKARANKULAM	12.055	W.R.C.P		-do-	
28	SRI RAMAN KULAM	29.695	W.R.C.P		-do-	
29	THATTANKULAM	47.085	W.R.C.P		-do-	

Sl. No.	Name of Anicut / Tank	Ayacut	Scheme in which executed	Amount	Details of components executed	Remarks
30	VEERANCHERIKULAM	40.980	W.R.C.P		Sluices and Weirs repair and reconstruction and bund strengthening	
31	VIJAYA ACHAMBADU KULAM	25.680	W.R.C.P		-do-	
32	ILANGAIADI KULAM	33.650	W.R.C.P		-do-	
33	PATTANCHERY KULAM	28.910	W.R.C.P		-do-	
34	KIDAMOZHICKULAM	2.920	W.R.C.P		-do-	
35	KANAVANERI KULAM	25.990	W.R.C.P		-do-	
36	NANNI KULAM	20.760	W.R.C.P		-do-	
37	PANAYADIPUDU KULAM	5.220	W.R.C.P		-do-	
38	VETARAMKULAM	23.545	W.R.C.P		-do-	
39	ILLAYANERIKULAM	15.995	W.R.C.P		-do-	
40	VIJAYANARAYANAM	1009.05	NABARD		Weir Construction, Sluice Repairs, Retaining wall construction and Bund Strengthening	

ABSTRACT ON THE DETAILS OF IRRIGATION INFRASTRUCTURE AVAILABLE AND WORKS TAKEUP UNDER IAMWARM PROJECT

Name of Sub Basin: Karumeniar

SL. NO	DETAILS	ANICUT			SYSTEM TANK			NON- SYSTEM TANK			ANY OTHER SUPPLY CHANNEL		RE-MARKS
		NOS.	SUPPLY CHANNEL IN KM	DIRECT AYACUT IN HECT	NOS	SUPPLY CHANNEL IN KM	AYACUT IN HECT	NOS	SUPPLY CHANNEL IN KM	AYACUT IN HECT	LENGTH IN K.M	DIRECT AYACUT	
1	Available Infrastructure in sub basin	15	26.04	-	126	125.923	4991.04	1	-	45.14			
2	Infrastructure excluded in iamwarm project since works carried out under various schemes from 2000	-	8.64	-	39	56.093	2393.91	-	-	-	-	-	-
3	Infrastructures that does not require any rehabilitation works	-	-	-	-	-	-	-	-	-	-	-	-
4	Works taken up in iamwarm project	15	17.400		87	69.830	2597.13	1	-	45.14	-	-	

1. Certified that the Panchayat Union Tanks are not considered in this project.
2. Certified that the component of works in tanks executed under various schemes (Viz, WRCP I, NABARD, PART II schemes etc.,) since 2000 were not proposed in this project.



1.6 REHABILITATION OF IRRIGATION

1.6 Rehabilitation of Irrigation Infrastructure

1.6.1 Structural Status & Deficiencies in the System

1.6 Rehabilitation of Irrigation Infrastructure

1.6.1 Structural Status & Deficiencies in the System

The following are the present structural condition of the Karumeniyar sub-basin.

1. This system is a old system existing for more than 100 Years as such requires Rehabilitation.
2. Heavy accumulation of silt formed during heavy floods.
3. Lack of adequate control of regulating structures like Anicuts, Head Sluices, Sand/ scour vents etc.,
4. The damaged (or) dilapidated condition of the existing anicuts, diversion head works etc. and supply channels causes to poor standard of the entire conveyance system.
5. The System and Non system tanks are to be rehabilitated.

Salient Features of Proposals :

In order to improve the conveyance and Operational Efficiency in Irrigation, it is now proposed to improve and modernize the Irrigation Infrastructures in Karumeniyar Sub basin.

1. Repairs to the damaged Anicuts
2. Providing Head Sluice to some of the supply channels to avoid breaches during floods and for better water management
3. Providing Scour vent in some Anicuts
4. Trimming the supply channels by earthwork excavation
5. Providing revetments and Retaining walls in selective area of the supply channels.
6. Repairing, Restoring the traditional water bodies (i.e. tanks)
 - a. Restoring the capacity of the tanks, supply channels by desilting
 - b. Strengthening the bunds of the tanks and channels wherever necessary for effectively storing the water and conveying it to the entire command area and also for conveying agriculture inputs to the field.
 - c. Reconstruction of Collapsed weirs
 - d. Repairs to the damaged weirs
 - e. Reconstruction of Collapsed Sluices
 - f. Repairs to the damaged Sluices
 - g. Providing revetments and Retaining walls in selective area of the tanks

- h. Providing S.G. Shutter to Sluices, Head sluices, Scour vents etc.,
- i. Removing, Repairing and re fixing in position of the existing S.G. shuttering arrangements and providing locking arrangements etc.,

1.6.2 Expected Outcome

1. Increase in conveyance efficiency.
2. The following irrigation infrastructure development works are proposed in the sub basin.
Rehabilitation works for 15 anicuts,
Rehabilitation works for 88 tanks
Rehabilitation of supply channel. -87230 M

TANK DETAILS WITH FREE BOARD PROVIDED

Sl. No.	Name of the Tank	Maximum Height of Bund in m	Free Board		Length of Bund in m
			Provided previously in m	Provided now in	
1	AMBALAMKULAM	3.74	1	1.5	1845
2	NEMANI KULAM	3.155	1	1.5	1410
3	THIRUVARULNERI KULAM	2.305	1	1.25	1500
4	VELAN PUDU KULAM	3.41	1	1.5	1260
5	THERKKUPEIKULAM	2.7	1	1.25	1425
6	PANAIKULAM	3.79	1	1.5	1470
7	KARUNKADAL KULAM	2.601	1	1.25	2130
8	ILAMAL KULAM	3.87	1	1.5	1360
9	NARTHANKURICHI KULAM	3.175	1	1.5	810
10	CHETTI KULAM	2.79	1	1.25	1860
11	PULIYANKULAM	4.665	1.25	1.5	1620
12	THIRUVARANKANERI KEELA KULAM	3.575	1	1.5	875
13	UDAIYAR KULAM	2.91	1	1.25	1783
14	SIRU UDAIYAR KULAM	2.305	1	1.25	810
15	KADAMBAN THOTTA KULAM	2.85	1	1.25	1350
16	PANNAI PATHU KULAM	2.82	1	1.25	1085
17	PUDUKINARUKULAM	3.29	1	1.5	850
18	PALAN KULAM	3.34	0.915	1.5	1850
19	PARAMARTHAN KULAM	3.585	1	1.5	1280
20	VADAKKU VAGAI KULAM	3.245	1	1.5	800
21	ACHEMBADU KULAM	4.695	1.25	1.5	1885
22	PERIAMUNANJIKULAM	3.53	1	1.5	1490
23	TUTTIKULAM	3.61	1	1.5	1425
24	THILLADAMKULAM	3.085	1	1.5	1965
25	KANNANKULAM	2.31	1	1.25	1250
26	KAZHUVUR KULAM	3.13	1	1.25	2000

27	RETTAI KULAM	2.95	1	1.25	1335
28	PETTAIKULAM	2.975	1	1.25	635
29	SOMANATHAPERIKULAM	2.99	1	1.25	1305
30	KEERAN KULAM	3.965	1	1.5	1055
31	KOMANERIKULAM	4.15	1	1.5	2514
32	AVALAI KULAM	2.605	1	1.25	1105
33	THIRUMALAPURAM MELAKULAM	2.73	1	1.25	1545
34	THIRUMALAPURAM KEELAKULAM	2.9	1	1.25	1325
35	SADAYANERI KULAM	2.95	1	1.25	990
36	KARIYANDIKULAM	3.635	1	1.5	1545
37	VENKATRAYAPURAMKULAM	4.155	1	1.5	1620
38	SANTHUVARIKULAM	4.735	1.25	1.5	1065
39	THUVARIKULAM	3.955	1	1.5	1406
40	VALIPULANKULAM	3.135	1	1.5	940
41	KADAMBANKULAM	3.295	1	1.5	1530
42	ILUPPAIKULAM	3.79	1	1.5	1560
43	NAYANA MUNDAN KADIAN KULAM	3.66	0.915	1.5	2750
44	IYYANARKULAM	3.1	1	1.5	800
45	THINAIOORANAI KULAM	3.51	1	1.5	1428
46	SUVISESHAPURAM KULAM	2.89	1.03	1.25	1250
47	KUTHANKUDIKULAM	3.77	1	1.5	1495
48	MATHANARAYANAPERIKULAM	2.865	1	1.25	885
49	KALLAKULAM	2.8	1.02	1.25	1755
50	PUDUKULAM PERIYA KULAM	2.89	1	1.25	2150
51	UMAIBANGANERI KULAM	2.95	1	1.25	850
52	THIRUPPUNGANERI KULAM	3.57	1	1.5	900
53	RAJAGOPALAPURAM KULAM	2.025	1	1.25	1050
54	ALAGANERI KULAM	4.58	1	1.5	655
55	SANKANAN KULAM	3.55	1	1.5	910
56	ANDAN KULAM	2.505	1	1.25	990
57	ERANTHAIKULAM	2.48	1.25	1.25	1555
58	JYARKULAM	3.075	1	1.5	1970

59	NANGUNERI PERIYAKULAM	7.66	1.5	1.5	4995
60	NEDUNKULAM	4.465	1	1.25	3400
61	SURANKUDIKULAM	4.27	1	1.5	1610

Details of proposals in each Infrastructure of the sub basin

Sl. No	Name of tank/ Anicut/ Reservoir	Bund		Sluice		Weir		Measuring Devices		Supply Channel		Amount in Lakhs
		Length (m)	Amt	No	Amt	No	Amt	No	Amt	Length (m)	Amt	
1	2	3	4	5	6	7	8	9	10	11	12	13
1	AMBALAMKULAM	1845	7.80937	1	2.064			1	0.1464			10.02
2	NEMANI KULAM	1050	5.33588					1	0.1464	2000	0.5771	6.06
3	VANNANKULAM			1	1.939			1	0.1464	2500	0.8793	2.96
4	THIRUVARULNERI KULAM	1500	7.51176					1	0.1464	1000	0.4977	8.16
5	VEERAKULAM					2	5.31	1	0.1464			5.45
6	VELAN PUDU KULAM	1260	5.92344					1	0.1448	2000	0.7072	6.78
7	KURUGALPERIKULAM			1	1.923	1	0.7	1	0.1464			2.77
8	THERKKUPEIKULAM	1425	7.10357	1	2.059			1	0.1464	1000	0.4977	9.81
9	PETTAIKULAM			1	1.652			1	0.1464			1.80
10	PANA KULAM	1470	7.60716			1	3.28	2	0.2927	800		11.18
11	KARUNKADAL KULAM	2130	10.33210					1	0.1448	1000	0.4114	10.89
12	ILAMAL KULAM	1360	7.66785	1	1.954			1	0.1448			9.77
13	NARTHANKURICHI KULAM	810	4.03372					1	0.1448			4.18
14	CHETTI KULAM	1860	10.23180	1	2.272			1	0.1448			12.65
15	PULIYANKULAM	1620	8.15514					1	0.1448	1500	0.6039	8.90
16	NOCHIKULAM							1	0.1448	2500	1.1996	1.34
17	KARUVELANPADU KULAM							1	0.1448	1000	0.75840	0.90
18	THIRUVARANKANERI MELAKULAM			1	1.707			1	0.1448			1.85
19	THIRUVARANKANERI KEELAKULAM	875	4.26700					1	0.1448			4.41
20	PALANKINARU VADAKU KULAM			1	1.69			1	0.1448			1.83
21	SRIKRISHNAPERI VADDU KULAM			1	1.614			1	0.1448			1.76
22	SRIKRISHNAPERI THERKU KULAM			1	1.585			1	0.1448			1.73
23	ARUMUGANERI KULAM			1	1.964			1	0.1448			2.11
24	KEELA ARUMUGANERI KULAM					1	0.75	1	0.1448			0.90
25	UDAIYAR KULAM	1783	9.14216	1	1.677	1	0.6	1	0.1448			11.56
26	SIRU UDAIYAR KULAM	840	3.11388	1	2.168	1	0.8	1	0.1448			6.22
27	KADAMBAN THOTTA KULAM	1140	5.88073	1	2.256			1	0.1448			8.28
28	PANNAI PATHU KULAM	1085	5.56651	3	0.051	1	0.89	1	0.1448			6.66
29	PUDUKINARUKULAM	810	4.04245			1	0.04	1	0.1448			4.23
30	PALAN KULAM	948	2.55307	2	2.5	1	3.39	1	0.1448			8.59
31	MELA PUDU KADUVETTI KULAM			1	1.802			1	0.1448			1.95
32	KEELAPUDU KADUVETTICKULAM			1	1.956			1	0.1448			2.10
33	PARAMARTHAN KULAM	1280	6.00579	1	1.802	1	0.64	1	0.1448			8.59
34	VADAKKU VAGAI KULAM	800	4.50672			1	0.69	1	0.1448			5.34
35	ACHEMBADU KULAM	1885	9.59278	1	3.368			1	0.1448			13.11
36	MALAYAMPERI KULAM			1	1.832	1	0.3	1	0.1448			2.28
37	PIRANDARKULAM			1	1.926			1	0.1464			2.07
38	PERIAMUNANJIKULAM	1490	8.30676	1	3.972	1	1.87	2	0.2927	1000		14.44
39	THULUKKANKULAM							1	0.1464	2100	2.0074	2.15
40	TUTTICKULAM	1425	7.08338					1	0.1464	2000	0.5001	7.73
41	THE VARKULAM					1	2.18	1	0.1464			2.33
42	THILLADAMKULAM	1965	9.75246	1	1.917	1	0.51	1	0.1464	400		12.32
43	KANNANKULAM	1250	6.31656	1	1.781			1	0.1464	300		8.24
44	KAZHUVUR KULAM	2000	13.5369	2	5.125			2	0.2927			18.95
45	KODAN KULAM			1	1.797			1	0.1464	2500	2.1639	4.11
46	RETTAI KULAM	1335	6.55322	1	1.933	1	1.21	1	0.1464	2000	0.7999	10.65
47	PETTAIKULAM	635	3.05028					1	0.1464			3.20
48	SOMANATHAPERIKULAM	1305	6.55057			1	1.43	1	0.1464	1000	0.5023	8.63

49	KEERAN KULAM	1200	6.81032	1	2.071	1	0.41	2	0.2927	1020	0.2497	9.84
50	MANKULAM			1	1.787			1	0.1464	985	0.506	2.44
51	KOMANERIKULAM	2514	12.6195	2	5.278	2	5.15	3	0.4391	2015	0.5013	23.99
52	AVALAI KULAM	1105	4.72661			1	1.48	1	0.1464			6.35
53	KADAMBANKULAM						0.84	2	0.238			1.08
54	PETTAIKULAM			1	1.756			1	0.1464	1700	0.7999	2.70
55	THIRUMALAPURAM MELAKULAM	1545	7.00889	1	1.856	1	0.53	1	0.1464			9.54
56	THIRUMALAPURAM KEELAKULAM	1325	5.44774	1	1.982	1	1.27	1	0.1464	1000		8.84
57	SADAYANERI KULAM	990	3.7807	1	1.988	1	0.93	1	0.1464			6.84
58	KARIYANDIKULAM	1545	8.70					2	0.238			8.94
59	VENKATRAYAPURAMKULAM	1620	7.74		1.97	1	0.97	2	0.238			10.92
60	SANTHUVARIKULAM	1050	5.31	1	0.37	1	0.62	2	0.238	1300	0.50	7.04
61	THUVARIKULAM	1390	7.09			1	0.44	2	0.238			7.77
62	VALIPULANKULAM	940	4.78			1	1.5	2	0.238			6.52
63	KADAMBANKULAM	1550	7.86	1	1.2			2	0.238	1400	0.50	9.80
64	ILUPPAIKULAM	1560	7.86	1	0.8			2	0.238			8.90
65	NAYANA MUNDAN KADIAN KULAM	2750	13.73	1	3.31	1	1.3	2	0.238			18.58
66	NAINAR KULAM			2	1.74	1	1.88	2	0.238			3.86
67	AYAKKARAN KULAM							2	0.238			0.24
68	IYYANARKULAM	800	4.04					2	0.238			4.28
69	THINAIORANAI KULAM	1428	6.97	1	2.74			2	0.238	475	0.12	10.07
70	SUVISESHAPURAM KULAM	1250	6.34			2	1.37	2	0.238	1200	0.50	8.45
71	RETTAIKINARKULAM			1	2.459			1	0.1448			2.60
72	KUTHANKUDIKULAM	1495	6.08313	1	2.45	1	0.66	1	0.1448			9.34
73	MATHANARAYANAPERIKULAM	885	4.54282			1	0.46	1	0.1448			5.15
74	AMUTHAVANNAKUDIKULAM	2240	8.42000	1	4.69			1	0.1448			13.25
75	KALLAKULAM	1755	8.88557	1	0.121			1	0.1448			9.15
76	PUDUKULAM PERIYA KULAM	2150	10.9433			1	5.26	1	0.1448			16.35
77	UMAIBANGANERI KULAM	850	4.04245			1	0.8	1	0.1448			4.99
78	THIRUPPUNGANERI KULAM	900	4.33	1	0.05	1	1.09	2	0.238	1485	0.70	6.41
79	RAJAGOPALAPURAM KULAM	1050	5.29					2	0.238			5.53
80	ALAGANERI KULAM	655	3.04	1	1.72			2	0.238			5.00
81	SANKANAN KULAM	910	4.54	1	1.5	1	0.12	2	0.238			6.40
82	ANDAN KULAM	990	5.05	1	2.02			2	0.238			7.31
83	ERANTHAIKULAM	1555	7.84	1	3.22	1	2.36	2	0.238			13.66
84	JYARKULAM	1970	14.94585	2	5.19593			2	0.3093	1000	0.94	21.39
85	NANGUNERI PERIYAKULAM	4995	53.32913	5	1.79648	1	2.9143	5	0.7732	20000	117.562	176.37
86	NEDUNKULAM	3400	26.80734	2	0.12264	1	2.3688	2	0.3093			29.61
87	SURANKUDIKULAM	1610	9.93457	2	3.59115			3	0.4639			13.99
88	VIJAYANARAYANAM							3	0.4639	9650	91.0891	91.55
	Tanks Total	91153	496.371	68	118.069	42	59.323	124	17.126	69830	226.07	916.96
	Group I				...			1	22.753	500		22.75
	Group II							1	19.405	600		19.40
	Group III							1	19.276	500		19.28
	Group IV							1	19.83	400		19.83
	Group V							1	12.39	1500		12.39
	Group VI							1	11.953	1100		11.95
	Group VII & VIIA							1	20.162	950		20.16
	Group VIII							1	15.965	500		15.97
	Group IX							1	15.475	2600		15.48
	Group X							1	15.85	800		15.85
	Group XI							1	17.653	1500		17.65
	Group XII							1	15.817	850		15.82
	Group XIII							1	16.682	400		16.68
	Group XIV							1	4.5275	400		4.53
	Group XV							1	11.158	4800		11.16
	Anicut Total							15	238.9	17400		
	Grand TOTAL	91153	496.37	68	118.08	42	59.33	139	256.02	87230	226.07	1155.88

B. WRO COST TABLE – KARUMENIYAR SUB BASIN

Sl. No	Description of work	Quantity	Amount in Lakhs	Remarks
I. Tank Component				
1.	Bund Standardisation	91153 M	496.37	
2.	Sluice Repair	68 Nos.	118.08	
3.	Weir Repair	42Nos.	59.33	
4.	Measuring Devices	124 Nos.	17.12	
4.	Anicut	15Nos.	238.90	
5.	Supply Channel	87230 M	226.07	
	SubTotal		1155.87	
	Environment cell		10.00	
	Ground water		0.00	
	Total		1165.87	
II. Non Tank Component			Nil	

TANK COMPONENT = 1165.87 LAKHS

NON TANK COMPONENT = 0.00 LAKHS

TOTAL = 1165.87 LAKHS

PACKAGE DETAILS

Package - I

Sl. No.	Name of Tank/Anicut	Amount in Lakhs
1.	Tanks : AMBALAMKULAM, NEMANI KULAM, VANNANKULAM, THIRUVARULNERI KULAM, VEERAKULAM, KURUGALPERIKULAM, THERKKUPEIKULAM, PETTAIKULAM, PANA KULAM, PIRANDARKULAM, PERIYAMUNANJIKULAM, THULUKKANKULAM, TUTTIKULAM, THE VARKULAM, THILLADAMKULAM, KANNANKULAM, KAZHUVUR KULAM, KODAN KULAM, RETTAI KULAM, PETTAIKULAM, SOMANATHAPERIKULAM, KEERAN KULAM, MANKULAM, KOMANERIKULAM, AVALAI KULAM, PETTAIKULAM, THIRUMALAPURAM MELAKULAM, THIRUMALAPURAM KEELAKULAM, SADAYANERI KULAM (29 Tanks)	340.35
	Anicuts : Group I, Group II, Group III, Group IV, Group V, Group VI, Group XV (Part I)	
	Total	340.35

Package - II

Sl. No.	Name of Tank/Anicut	Amount in Lakhs
1.	Tanks : VELAN PUDU KULAM, KARUNKADAL KULAM, ILAMAL KULAM, NARTHANKURICHI KULAM, CHETTI KULAM, PULIYANKULAM, NOCHIKULAM, KARUVELANPADU KULAM, THIRUVARANKANERI MELA KULAM, THIRUVARANKANERI KEELA KULAM, PALANKINARU VADAKU KULAM, SRIKRISHNAPERI VADDU KULAM, SRIKRISHNAPERI THERKU KULAM, ARUMUGANERI KULAM, KEELA ARUMUGANERI KULAM, UDAIYAR KULAM, SIRU UDAIYAR KULAM, KADAMBAN THOTTA KULAM, PANNAI PATHU KULAM, PUDUKINARUKULAM, PALAN KULAM, MELA PUDU KADUVETTI KULAM, KEELAPUDU KADUVETTICKULAM, PARAMARTHAN KULAM, VADAKKU VAGAI KULAM, ACHEMBADU KULAM, MALAYAMPERI KULAM, RETTAIKINARKULAM, KUTHANKUDIKULAM, MATHANARAYANAPERIKULAM, AMUTHAVANNAKUDIKULAM, KALLAKULAM, PUDUKULAM PERIYA KULAM, UMAIBANGANERI KULAM (34 Tanks)	242.24
	Anicuts : Group XII and Group XIII	
	Total	242.24

Package - III

Sl. No.	Name of Tank/Anicut	Amount in Lakhs
1.	Tanks : KADAMBANKULAM, KARIYANDIKULAM, VENKATRAYAPURAMKULAM, SANTHUVARIKULAM, THUVARIKULAM, VALIPULANKULAM, KADAMBANKULAM, ILUPPAIKULAM, NAYANA MUNDAN KADIAN KULAM, NAINAR KULAM, AYAKKARAN KULAM, IYYANARKULAM, THINAIOORANAI KULAM, SUVISESHAPURAM KULAM, THIRUPPUNGANERI KULAM, RAJAGOPALAPURAM KULAM, ALAGANERI KULAM, SANKANAN KULAM, ANDAN KULAM, ERANTHAIKULAM (20 Tanks) Anicuts : Group VII & VII A Group VIII, Group IX, Group X, Group XI and Group XIV	240.37
	Total	240.37

Package - IV

Sl. No.	Name of Tank/Anicut	Amount in Lakhs
1.	Tanks :Vijayanarayanam, Jiyarkulam, Nanguneri Periyakulam, Nedunkulam and Surankudi Kulam	332.91
	Anicuts : Group XV	
	Total	332.91

KARUMENIYAR SUB BASIN
PACKAGE 1
Calculation of machineries Requirement

Hydraulic excavator & Tippers /

	8	Nos
working hour=	8	Hours / Day
	2	loads/ hour
1 trip of quantity=	4	m ³ / trip
		m ³
For 1 day=	512	/Day
For 1 month=	25	Working days
	12800	m ³

Total quantity of earth work = 370690 m³ `=370690/12800 28.96 Months
 Working period for earth work= 6 months + 4 Months rainy season

Machineries required for earth work:

1 Hydraulic excavator	=	8	Nos
2 Tippers / Lorries	=	20	Nos
3 Power roller	=	6	Nos
4 Vibrated compactor	=	6	Nos
5 Water lorries	=	8	Nos

Mixer machine

working hour=	6	Hours / Day
		m ³ /
	3	hour
		m ³
For 1 day=	18	/Day
For 1 month=	25	Working days
	450	m ³

Total quantity of concrete 5481 m³ `=5334/450 12.18 Nos

Mixer machine required= 12Nos for 15 days / month -- 8 months

Material conveyance Tippers / Lorries

Cement = 10 mt / Trip 1 trip / day 10 mt / day

Sand =	5.66 m ³ / Trip	4 trips / day	22.64 m ³ / day
Metal / stone =	5.6 m ³ / Trip	5 trips / day	28 m ³ / day
M 7.5 concrete	193 mt		
M 10 concrete	826 mt		
M 15 concrete	88 mt		
M 20 concrete	82 mt		
Total quantity of cement	1189 mt		lorries
Lorry required for conveyance	118.9 Nos		115 lorries
Total quantity of sand	2400.3 m ³	$\div 22.64$	
Lorry required for conveyance	106.02 m ³		107 Lorries
Total quantity of metal	4800.6 m ³	$\div 28$	
Lorry required for conveyance	171.45 m ³		172 Lorries
Lorry required for conveyance			394 Lorries

Tipper / Lorries for conveyance of materials

$\div 394/25$ 15.76 Lorries/days
16 Lorries/days
5 Nos for 20 days for 8 months

KARUMENIYAR SUB BASIN
PACKAGE 2
Calculation of machineries Requirement

Hydraulic excavator & Tippers /

	8	Nos
working hour=	8	Hours / Day
	2	loads/ hour
1 trip of quantity=	4	m ³ / trip
		m ³
For 1 day=	512	/Day
For 1 month=	25	Working days
	12800	m ³

Total quantity of earth work = 349632 m³ $\div=349632/12800$ 27.315 Months
 Working period for earth work= 6 months + 4 Months rainy season

Machineries required for earth work:

1 Hydraulic excavator	=	7	Nos
2 Tippers / Lorries	=	15	Nos
3 Power roller	=	6	Nos
4 Vibrated compactor	=	6	Nos
5 Water lorries	=	8	Nos

Mixer machine

working hour=	6	Hours / Day
		m ³ /
	3	hour
		m ³
For 1 day=	18	/Day
For 1 month=	25	Working days
	450	m ³

Total quantity of concrete 3140 m³ $\div=3140/450$ 6.9778 Nos
 5 Nos

Mixer machine required= 5Nos for 15 days / month -- 8 months

Material conveyance Tippers / Lorries

Cement = 10 mt / Trip 1 trip / day 10 mt /

				day
	Sand =	5.66 m ³ / Trip	4 trips / day	22.64 m ³ /day
	Metal / stone =	5.6 m ³ / Trip	5 trips / day	28 m ³ /day
	M 7.5 concrete	149 mt		
	M 10 concrete	389 mt		
	M 15 concrete	94 mt		
	M 20 concrete	55 mt		
	Total quantity of cement	687 mt		lorries
	Lorry required for conveyance	68.7 Nos		46 lorries
	Total quantity of sand	935.55 m ³	=935.55 / 22.64	
	Lorry required for conveyance	41.323 m ³		42 Lorries
	Total quantity of metal	1871.1 m ³	=1871.1 / 28	
	Lorry required for conveyance	66.825 m ³		67 Lorries
	Lorry required for conveyance			155 Lorries

Tipper / Lorries for conveyance of materials

=155/25 6.2 Lorries/days
7 Lorries/days
4 Nos for 15days for 8 months

KARUMENIYAR SUB BASIN
PACKAGE 3
Calculation of machineries Requirement

Hydraulic excavator & Tippers /

	7	Nos
working hour=	8	Hours / Day
	2	loads/ hour
1 trip of quantity=	4	m ³ / trip
		m ³
For 1 day=	448	/Day
For 1 month=	25	Working days
	11200	m ³

Total quantity of earth work = 266347 m³ `=266347/11200 23.781 Months
 Working period for earth work= 6 months + 4 Months rainy season

Machineries required for earth work:

1 Hydraulic excavator	=	6	Nos
2 Tippers / Lorries	=	13	Nos
3 Power roller	=	5	Nos
4 Vibrated compactor	=	5	Nos
5 Water lorries	=	6	Nos

Mixer machine

working hour=	6	Hours / Day
		m ³ /
	3	hour
		m ³
For 1 day=	18	/Day
For 1 month=	25	Working days
	450	m ³

Total quantity of concrete 3726 m³ `=3726/450 8.28 Nos
 9 Nos

Mixer machine required= 6Nos for 20 days / month -- 8 months

Material conveyance Tippers / Lorries

Cement =	10	mt / Trip	1 trip / day	10	mt / day
Sand =	5.66	m ³ / Trip	4 trips / day	22.64	m ³ /day
Metal / stone =	5.6	m ³ / Trip	5 trips / day	28	m ³ /day
M 7.5 concrete	161	mt			
M 10 concrete	563	mt			
M 15 concrete	7	mt			
M 20 concrete	43	mt			
Total quantity of cement	774	mt			lorries
Lorry required for conveyance	77.4	Nos		78	lorries
Total quantity of sand	1645.2	m ³	$\div=1645.2/ 22.64$		
Lorry required for conveyance	72.668	m ³		73	Lorries
Total quantity of metal	3290.4	m ³	$\div=3290.4 / 28$		
Lorry required for conveyance	117.51	m ³		118	Lorries
Lorry required for conveyance				269	Lorries

Tipper / Lorries for conveyance of materials

$\div=267/25$ 10.76 Lorries/days
11 Lorries/days

4 Nos for 15days for 8 months

KARUMENIYAR SUB BASIN
PACKAGE 4
Calculation of machineries Requirement

Hydraulic excavator & Tippers /

	9	Nos
working hour=	8	Hours / Day
	3	loads/ hour
1 trip of quantity=	4	m ³ / trip
		m ³
For 1 day=	864	/Day
For 1 month=	25	Working days
	21600	m ³

Total quantity of earth work = 399087 m³ `=399087/21600 18.476 Months
 Working period for earth work= 6 months + 4 Months rainy season

Machineries required for earth work:

1 Hydraulic excavator	=	7	Nos
2 Tippers / Lorries	=	14	Nos
3 Power roller	=	6	Nos
4 Vibrated compactor	=	5	Nos
5 Water lorries	=	6	Nos

Mixer machine

working hour=	6	Hours / Day
		m ³ /
	3	hour
		m ³
For 1 day=	18	/Day
For 1 month=	25	Working days
	450	m ³

Total quantity of concrete 4625 m³ `=4323450 10.278 Nos
 10 Nos

Mixer machine required= 6Nos for 20 days / month -- 8 months

Material conveyance Tippers / Lorries

Cement =	10	mt / Trip	1 trip / day	10	mt / day
Sand =	5.66	m ³ / Trip	4 trips / day	22.64	m ³ /day
Metal / stone =	5.6	m ³ / Trip	5 trips / day	28	m ³ /day
M 7.5 concrete	125	mt			
M 10 concrete	753	mt			
M 15 concrete	11	mt			
M 20 concrete	145	mt			
Total quantity of cement	1034	mt			lorries
Lorry required for conveyance	103.4	Nos		91	lorries
Total quantity of sand	1945.4	m ³	=4323/ 22.64		
Lorry required for conveyance	85.925	m ³		86	Lorries
Total quantity of metal	3890.7	m ³	=4323 / 28		
Lorry required for conveyance	138.95	m ³		139	Lorries
Lorry required for conveyance				316	Lorries

Tipper / Lorries for conveyance of materials

=316/25 12.64 Lorries/days
13 Lorries/days

5 Nos for 20days for 8 months

REQUIREMENT OF EQUIPMENTS AND MATERIALS

PACKAGE NUMBER	EQUIPMENTS REQUIRED IN NUMBERS							MATERIAL REQUIRED						
	HYDRAULIC EXCAVATOR	POWER ROLLER	VIBRATED COMPACTOR	TIPPER / LORRY	WATER LORRY	CONCRETE MIXER MACHINE	CONCRETE VIBRATOR	CEMENT IN M.T.	SAND IN m ³	STEEL IN M.T.	METAL 40MM IN m ³	METAL 20MM IN m ³	RR IN m ³	RCC HUME PIPE 900MM IN RM
1	8	6	6	394	8	12	4	1189	2400	1.2	2880	1920	200	313
2	7	6	6	155	7	8	5	456	936	0.18	1122.6	749	400	181
3	6	5	5	267	6	9	5	774	1645	0.4	2410	880	466	123
4	7	6	5	316	6	10	5	1034	1946	1.6	2334	1556	-	60

PACKAGE I
C. (PHYSICAL AND FINANCIAL PROGRAM)

Sl. No	Description	I Year		II Year		Total	
		Quantity	Amount in Lakhs	Quantity	Amount in Lakhs	Quantity	Amount in Lakhs
1	Channel	25500	59376535	31589	73554720	57089	132931255.5
2	Foundation	3800	22416278	1553	9161179	5353	31577457.23
3	Bund	210000	924936159	83569	368076142	293569	1293012302
	Concrete						
4	M 7.5 grade	900	640411720	293	208489593	1193	848901312.7
5	M 10 grade	700	160579848	3126	717103719	3826	877683566.6
6	M 15 grade			273	71070637	273	71070637.28
7	M 20 grade			190	105100884	190	105100883.7
8	Random rubble masonry	538	33763483			538	33763483.08
9	Plastering	923	9434840			923	9434840.296
	Total		1850918863		1552556875		3403475738

PACKAGE III
C. (PHYSICAL AND FINANCIAL PROGRAM)

Sl. No	Description	I Year		II Year		Total	
		Quantity	Amount in Lakhs	Quantity	Amount in Lakhs	Quantity	Amount in Lakhs
1	Channel	25500	642132	29733	748726	55233	1390858.185
2	Foundation	1850	119295			1850	119295.3948
3	Bund	170000	7876195	35547	1646912	205547	9523107.198
	Concrete						
4	M 7.5 grade	800	1968875	196	482374	996	2451249.338
5	M 10 grade	800	2789420	1800	6276195	2600	9065614.369
6	M 15 grade			23	63500	23	63499.65987
7	M 20 grade			101	503256	101	503255.6688
8	Random rubble masonry	638	180068			638	180067.861
9	Plastering	1000	525232	409	214820	1409	740052.3356
	Total		14101217		9935783		24037000



1.7. ENVIRONMENTAL COMPONENT

INDEX

Sl. No	Details	Sheet no
1	Environmental Component in Karumeniyaru Odai sub basin	
2	Tanks affected by Aquatic weeds (Annexure-I)	
3	Domestic sewage let into water bodies (Annexure II)	
4	Dumping of solid waste (Annexure III)	
5	List of industries (Annexure- IV)	
6	Estimate report	
7	Detailed estimate	
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10	Karumeniyaru Odai sub basin map	

IAMWARM Project

(Environmental Component in Kaumeniyaru Odai Subbasin)

Name of the River Basin	Nambiyar River Basin
Name of Sub basin	Karumeniyaru Odai Sub basin
Name of WUA	Manimutharu 3 rd reach and 4 th reach water users Association
Name of Division	1.The Executive Engineer, PWD-WRO., Thamiraparni Basin division, Thirunelveli. 2.The Executive Engineer, PWD-WRO., Chithar Basin division, Thenkasi.
Name of Sub division	1.The Assistant Executive Engineer, PWD-WRO, Manimuthar Canal Sub division, Moolakaraipatti. 2. The Assistant Executive Engineer, PWD-WRO., Nambiyar Basin Sub division, Nanguneri.
District	1.Thirunelveli District 2.Thoothukudi District
Taluk	Virudhunagar District 1. Nanguneri Taluk 2. Radhapuram Taluk Thoothukudi District 3. Thiruchendur Taluk 4. Sathankulam Taluk
Block	Thirunelveli District 1. Nanguneri block. 2. Radhapuram block. 3. Valliyoor block. Thoothukudi District 1. Sthankulam block. 2. Udangudi block. 3. Alwarthirunagar block.
I) Name of tank severely	Enclosed Annexure - I

affected by Aquatic weeds	
II) Domestic Sewage	Enclosed Annexure II
III) Municipal solid Waste	Enclosed Annexure III
IV) Industries	Enclosed Annexure - II
V) Water quality status	<p>i)Surface water</p> <p>The surface water samples were collected and tested periodically by the Environmental Cell Division, Madurai The surface water quality is generally good in this sub basin, low in TDS (< 0.5gms/cm), chloride is medium to hard (temporary) and alkaline in nature. All the steams and tanks are complied with drinking and irrigation quality standards.</p>
	<p>ii) Ground water</p> <p>The ground water samples collected at Valasaikinaru, Alkinaru, Mudalur, Alwarthirunagar, Udangudi, Moolakaraipatti and tested periodically by the ground water wing of P.W.D. The water analysis data indicate that the electrical conductivity ranges between 950 to 2080 micro ohms/ cm which is high value. Nitrate ranges between 2 to 15 mg/lit which is with in the permissible limits. Excess nitrate content is present in 1 or 2 places. As excessive nitrate values are not persistently present in the ground water the nitrate pollution has not taken place in this sub Basin. Flouride content ranges between 0.1 to 0.8ppm which is moderate. In general the quality of ground water is moderate.</p>

ANNEXURE – I

Tanks affected by Aquatic weeds

Sl. No	Name of tank	Name of village	Ayacut in Ha	Type of weed
1.	Unnankulam	Nanguneri	40.43.0	Prosopis Julie Flora
2.	Hanumarpuudukulam	Sembagarama Nallur	60.09.0	Prosopis Julie Flora
3.	Thennavanerikulam	Sembagarama Nallur	38.69.0	Prosopis Julie Flora
4.	Veerakeralamperikulam	Unnankulam	28.32.5	Prosopis Julie Flora
5.	Arumpoondarkulam	Ambalam	47.12.0	Prosopis Julie Flora
6.	Ambalamkulam	Ariyakulam	40.28.0	Prosopis Julie Flora
7.	Ariyakulam	Ariyakulam	89.31.0	Prosopis Julie Flora
8.	Paranipudukulam	Moolakaraipatti	17.27.5	Prosopis Julie Flora
9.	Nemani Kulam	Moolakaraipatti	13.9.0	Prosopis Julie Flora
10.	Vannan Kulam	Munanjipatti	11.07.0	Prosopis Julie Flora
11.	Thiruvarulneri Kulam	Munanjipatti	12.80.5	Prosopis Julie Flora
12.	Pillayar Kulam	Munanjipatti	63.49.0	Prosopis Julie Flora
13.	Ayarkulam	Ariyakulam	27.25.0	Prosopis Julie Flora
14.	Arumuganerikulam	Koonthakulam	17.72.5	Prosopis Julie Flora
15.	Eduppaikulam	Moolakaraipatti	17.23.5	Prosopis Julie Flora

Sl. No	Name of tank	Name of village	Ayacut in Ha	Type of weed
16.	Periya Munanjikulam	Moolakaraipatti	43.00.0	Prosopis Julie Flora
17.	Thulukkankulam	Moolakaraipatti	9.78.5	Prosopis Julie Flora
18.	Tuttikulam	Moolakaraipatti	15.91.5	Prosopis Julie Flora
19.	Thevarkulam	Moolakaraipatti	9.33.0	Prosopis Julie Flora
20.	Kariyandikulam	Ramakrishnapuram	34.06.5	Prosopis Julie Flora
21.	Ilankulam	Sadayaneri	14.44.0	Prosopis Julie Flora
22.	Sekarankulam	Sadayaneri	12.05.5	Prosopis Julie Flora
23.	Kurugal Perikulam	Srivenkadeshvarapuram	15.54.5	Prosopis Julie Flora
24.	Therkkupeikulam	Srivenkadeshvarapuram	31.57.5	Prosopis Julie Flora
25.	Pettaikulam	Srivenkadeshvarapuram	5.55.5	Prosopis Julie Flora
26.	Puliyankulam	Karunkadal	25.91.0	Prosopis Julie Flora
27.	Karunkadalkulam	Karunkadal	25.91.0	Prosopis Julie Flora
28.	Panai Kulam	Karunkadal	28.46.5	Prosopis Julie Flora
29.	Ilamalkulam	Karunkadal	41.55.0	Prosopis Julie Flora
30.	Narthankurichikulam	Karunkadal	8.63.0	Prosopis Julie Flora
31.	Chettikulam	Palankulam	61.05.5	Prosopis Julie Flora
32.	Nochikulam	Palankulam	6.93.0	Prosopis Julie Flora

Sl. No	Name of tank	Name of village	Ayacut in Ha	Type of weed
33.	Thiruvaranganeri Keela Kulam	Palankulam	10.07.5	Prosopis Julie Flora
34.	Arumuganerikulam	Sathankulam	6.47.0	Prosopis Julie Flora
35.	Keela Arumuganeri Kulam	Eluvaraimuki	3.23.5	Prosopis Julie Flora
36.	Udaiyarkulam	Sathankulam	37.46.5	Prosopis Julie Flora
37.	Siru Udiyarkulam	Sathankulam	5.39.5	Prosopis Julie Flora
38.	Kadamban Thottakulam	Pannamparaikulam	10.23.5	Prosopis Julie Flora
39.	Puthukinaru Kulam	Pannamparaikulam	9.55.0	Prosopis Julie Flora
40.	Pannaipathukula	Pannamparaikulam	19.95.5	Prosopis Julie Flora
41.	Kattarimangalam kulam	Kattarimangalam	57.45.5	Prosopis Julie Flora
42.	Manakavalampuram kulam	Kattarimangalam	12.67.0	Prosopis Julie Flora
43.	Alan Kulam	Kattarimangalam	6.61.0	Prosopis Julie Flora
44.	Therkuperikulam	Kattarimangalam	29.81.0	Prosopis Julie Flora
45.	Vadakkuvagaikulam	Kattarimangalam	16.32.5	Prosopis Julie Flora
46.	Karuvelambadukulam	Karuvelambadu	1.98.5	Prosopis Julie Flora
47.	SriKrishnaperi Vaddaku Kulam	Palankulam	4.92.0	Prosopis Julie Flora
48.	SriKrishnaperi Therku Kulam	Palankulam	1.42.0	Prosopis Julie Flora
49.	Kidamozhikulam	Palankulam	2.92.0	Prosopis Julie Flora

Sl. No	Name of tank	Name of village	Ayacut in Ha	Type of weed
50.	Thiruvaranganeri Mela Kulam	Palankulam	4.12.5	Prosopis Julie Flora
51.	Palankinaru Vadakku Kulam	Palankulam	6.32.5	Prosopis Julie Flora
52.	Palankulam	Palankulam	27.98.5	Prosopis Julie Flora
53.	Malayanperikulam	Eluvaraimukki	6.91.0	Prosopis Julie Flora
54.	Mela Pudu Kaduvetti Kulam	Vellamadam	7.92.0	Prosopis Julie Flora
55.	Keela Pudu Kaduvetti Kulam	Eluvaraimukki	6.92.0	Prosopis Julie Flora
56.	Paramarthan Kulam	Eluvaraimukki	17.30.5	Prosopis Julie Flora
57.	Achmbadu Kulam	Eluvaraimukki	43.87.0	Prosopis Julie Flora
58.	Thinaiyoorani Kulam	Ramakrishnapuram	41.63.0	Prosopis Julie Flora
59.	Sri Raman Kulam	Ramakrishnapuram	29.69.5	Prosopis Julie Flora
60.	Veerancheri Kulam	Sadayaneri	40.98.0	Prosopis Julie Flora
61.	Venkatryapuram Kulam	Sadayaneri	33.19.5	Prosopis Julie Flora
62.	Thattan Kulam	Ramakrishnapuram	47.08.5	Prosopis Julie Flora
63.	Pattanchery Kulam	Ittamozhi	28.91.0	Prosopis Julie Flora
64.	Kanavaneri Kulam	Ittamozhi	25.99.0	Prosopis Julie Flora
65.	Nanni Kulam	Ittamozhi	20.76.0	Prosopis Julie Flora
66.	Panayadaipudu Kulam	Ittamozhi	5.22.0	Prosopis Julie Flora

Sl. No	Name of tank	Name of village	Ayacut in Ha	Type of weed
67.	Iyyanar kulam	Ittamozhi	21.44.5	Prosopis Julie Flora
68.	Umaibanganeri Kulam	Pudu Kulam	39.25.5	Prosopis Julie Flora
69.	Kalla Kulam	Pudu Kulam	39.27.0	Prosopis Julie Flora
70.	Pudu Kulam Periya Kulam	Pudu Kulam	26.70.5	Prosopis Julie Flora
71.	Vijaya Achambadu Kulam	Ittamozhi	25.68.0	Prosopis Julie Flora
72.	Ilangaiadi Kulam	Ittamozhi	33.65.0	Prosopis Julie Flora
73.	Nainar Kulam	Ittamozhi	6.85.0	Prosopis Julie Flora
74.	Ayakkaran Kulam	Ittamozhi	8.01.0	Prosopis Julie Flora
75.	Suviseshapuram Kulam	Kumarapuram	19.83.0	Prosopis Julie Flora
76.	Andan Kulam	Vijayanarayanam	24.56.0	Prosopis Julie Flora
77.	Thiruppunganeri Kulam	Vijayanarayanam	32.01.0	Prosopis Julie Flora
78.	Rajakopalapuram Kulam	Vijayanarayanam	31.46.0	Prosopis Julie Flora
79.	Alaganeri Kulam	Vijayanarayanam	3.52.5	Prosopis Julie Flora
80.	Sankanam Kulam	Vijayanarayanam	24.56.0	Prosopis Julie Flora
81.	Veera Kulam	Karunkadal	22.92.0	Prosopis Julie Flora
82.	Eranthai Kulam	Vijayanarayanam	57.83.5	Prosopis Julie Flora
83.	Senkulam	Srivenkadesh Varapuram	48.77.0	Prosopis Julie Flora

Sl. No	Name of tank	Name of village	Ayacut in Ha	Type of weed
84.	Velan Pudukulam	Nedunkulam	20.31.5	Prosopis Julie Flora
85.	Thilladamkulam	Koonthakulam	23.18.5	Prosopis Julie Flora
86.	Kannarkulam	Koonthakulam	23.80.0	Prosopis Julie Flora
87.	Koondhakulam	Koonthakulam	77.04.0	Prosopis Julie Flora
88.	Kadankulam	Kadankulam	132.45.0	Prosopis Julie Flora
89.	Padakkamkulam	Thirumalapuram	35.50.0	Prosopis Julie Flora
90.	Kazhuvur Kulam	Thirumalapuram	45.14.0	Prosopis Julie Flora
91.	Kodankulam	Munanjipatti	19.86.0	Prosopis Julie Flora
92.	Keerankulam	Munanjipatti	40.03.0	Prosopis Julie Flora
93.	Mankulam	Munanjipatti	10.01.5	Prosopis Julie Flora
94.	Rettaikulam	Munanjipatti	34.85.0	Prosopis Julie Flora
95.	Pettaikulam	Munanjipatti	8.05.5	Prosopis Julie Flora
96.	Pirandarkulam	Pirandarkulam	2.97.5	Prosopis Julie Flora
97.	Somanathaperikulam	Munanjipatti	19.94.5	Prosopis Julie Flora
98.	Ramanerikulam	Sadayaneri	37.13.5	Prosopis Julie Flora
99.	Kadamban Kulam	Sadayaneri	10.88.0	Prosopis Julie Flora
100.	Ramakrishnapuram Kulam	Ramarkrishnanpuram	53.55.0	Prosopis Julie Flora

Sl. No	Name of tank	Name of village	Ayacut in Ha	Type of weed
101.	Pettaikulam	Ramakrishnapuram	10.17.0	Prosopis Julie Flora
102.	Thirumalpuram Melakulam	Thirumalapuram	14.12.0	Prosopis Julie Flora
103.	Thirumalpuram Keelakulam	Thirumalapuram	24.75.5	Prosopis Julie Flora
104.	Sadayanerikulam	Sadayaneri	14.55.5	Prosopis Julie Flora
105.	Komanerikulam	Komaneri	102.55.0	Prosopis Julie Flora
106.	Nedunkulam	Nedunkulam	47.24.5	Prosopis Julie Flora
107.	Avalaikulam	Nedunkulam	14.63.0	Prosopis Julie Flora
108.	Santhuvvari Kulam	Kombankulam	11.24.5	Prosopis Julie Flora
109.	Thuvarai Kulam	Kombankulam	16.70.5	Prosopis Julie Flora
110.	Valipulan Kulam	Kombankulam	11.40.5	Prosopis Julie Flora
111.	Kdamban Kulam	Kombankulam	20.70.5	Prosopis Julie Flora
112.	Iluppai Kulam	Nedunkulam	21.25.5	Prosopis Julie Flora
113.	Rettaikinaru Kulam	Kombankulam	9.82.5	Prosopis Julie Flora
114.	Kuthankudi Kulam	Kombankulam	17.34.4	Prosopis Julie Flora
115.	Vetaram Kulam	Kombankulam	23.54.5	Prosopis Julie Flora
116.	Illayaneri Kulam	Kombankulam	15.99.0	Prosopis Julie Flora
117.	Mathanarayanaperi Kulam	Nedunkulam	10.59.5	Prosopis Julie Flora

Sl. No	Name of tank	Name of village	Ayacut in Ha	Type of weed
118.	Meeran Mela kulam	Meeran Kulam	16.50.5	Prosopis Julie Flora
119.	Meeran Keela Kulam	Meeran Kulam	24.02.5	Prosopis Julie Flora
120.	Amuthavannakudi Kulam	Sathankulam	42.75.0	Prosopis Julie Flora
121.	Perumal Mela & Keela Kulam	Meeran Kulam	25.14.5	Prosopis Julie Flora
122.	Jiyar Kulam	Surankudi	71.49.0	Prosopis Julie Flora
123.	Nanguneri periya Kulam	Nanguneri	663.90.5	Prosopis Julie Flora
124.	NedunKulam	Karandaneri	59.86..5	Prosopis Julie Flora
125.	Surankudi Kulam	Surankudi	64.32.0	Prosopis Julie Flora
126.	Naya mundan kadian Kulam	Vijayanarayanam	51.95.0	Prosopis Julie Flora
127.	Vijayanarayanam	Vijayanarayanam	1019.05.0	Prosopis Julie Flora
		Total	5036.175	

Annexure II

Domestic sewage inlet

Name of Town/Village	Name of water body into which sewage is discharged
Moolakaraipatti	Koonikulam
Sathankulam	Amaravathikulam, Karumeniyar Odai

Annexure III

Solid waste Dumping

Name of Town/Village	Name of water body into which solid waste is dumped
Moolakaraipatti	Koonikulam
Sathankulam	Amaravathikulam,

ANNEXURE – IV

Industries

Sl. No	Name of industry	Category	Type
1.	Chidambaram Hospital, Thisayanvilai.	Red Small	Hospital
2.	V.V.Minaral, Thisayanvilai	Orange small	Garnet separation
3.	Rathinam Rice Mill, Thisayanvilai.	Orange small	Rice Mill
4.	Shanthi Hospital, Thisayanvilai.	Red Small	Hospital
5.	Karpagam Hospital, Thisayanvilai.	Red Small	Hospital
6.	Sri Ramana Hospital, Thisayanvilai.	Red Small	Hospital
7.	Paripoorna Rice Mill, Thisayanvilai	Orange Small	Rice Mill
8.	T.N.S.T.C. Ltd, Thisayanvilai Branch	Orange Small	Automobile Service
9.	Beach Minerals Sands Company, Kuttam.	Orange Small	Garnet Separation
10.	Beach Minerals Sands Company, Thirvambalapuram.	Red Small	Garnet Separation
11.	Jayanthi Nathar Chemicals, Thisayanvilai.	Red Small	Chemical
12.	Vijay Retreading, Thisayanvilai	Orange Small	Tyre Retreading
13.	Paulkani Hospital Thisayanvilai	Red Small	Hospital
14.	A.D.J. Hospital, Thisayanvilai	Red Small	Hospital
15.	Beach Minarals Company (P) Ltd, Kuttam.	Red Small	Power Plant
16.	The India Cements Limited, Arasur.	Red Small	Cement
17.	V.V.Minerals, Kulasekarapattinam.	Red Small	Garnet sornd mining
18.	Siva Sakthi Fibre, Kulasekarapattinam.	Orange Small	Fibre
19.	A.G.K. Plastic Industries, Nathakulam.	Orange small	Plastics
20.	S.Rajakani Plastics, Pallakurichi.	Orange Small	Plastics

21.	Arun Sankar Match Industries, Panamparai.	Red Small	Matches
22.	India Cements Ltd (Sathankulam Mines), Sathankulam.	Red Small	Cement
23.	Suriya Match Company, Sathankulam.	Red Small	Matches
24.	G.D.R. Plastics, Sathankulam.	Orange Small	Plastics
25.	TVL Dist Co-op Milk Producers union Ltd., Sathankulam.	Orange Small	Diary
26.	Sri Vadivu Modern Rice mill, Alwarthirunagar.	Orange Small	Rice mill
27.	GDR Food Products, Thatchamoli.	Orange Small	Food
28.	GDR Polymers, Thatchamoli.	Orange small	Plastics
29.	Karpagm Hospital, Udangudi.	Red small	Hospital
30.	Sri Lakshmi Chemicals, Udangudi.	Red Small	Chemicals
31.	Samudra Biopharma (P) Ltd., Udangudi.	Orange Large	Pharmaceuticals
32.	Bharathi Fibre Industries, Udangudi.	Orange Small	Fibre
33.	Meera Plastics, Udangudi.	Orange Small	Plastics
34.	Royal Plastics, Udangudi.	Orange Small	Plastics

Note: The total number of industries located in the Karumeniyaru Odai sub basin is around 34, in which the red category industries are given in the table.

Name of work :- Environmental Monitoring on Water and Soil quality and creating awareness & Updating of “Environmental and Social Assessment Report” for Karumeniyar Odai Sub Basin of Nambiar River Basin

Estimate Cost Rs10.00 Lakhs

ENVIRONMENTAL MANAGEMENT FRAME WORK

INTRODUCTION

Under TNWRCP, with World Bank assistance, special emphasis was given for the first time in WRO, to assess the Environmental status and degradation caused for all River basins in Tamilnadu. An Environmental assessment study has been conducted by Environment Protection Training and Research Institute, Hyderabad and identifies the Environmental issues, social issues and remedial measures for Nambiyar river basin as follows.

- | | | |
|----------------------|---|---|
| Environmental issues | - | Drought prone sub basin |
| Social issues | - | Dry land agriculture |
| | - | Reduction in livestock |
| | - | Women empowerment-SHG |
| Remedial measures | - | Livestock services delivered and managed. |
| | - | Aquatic weed management |
| | - | Solid Waste management |

The Environmental Cell of WRO assessed Environmental impact on the quality of Surface water, Ground water and Soil by collecting water & soil samples and testing them.

Micro level Environmental Status Report for Nambiyar River basin was prepared with the assistance of World Bank.

Also awareness programs and Workshops were conducted to create awareness on the Environmental issues and remedies among the Public, Farmers, Government Officials and NGO's. Seminars were conducted to find out new techniques and methods developed recently to solve Environmental problems.

Now under IAMWARM project, focus is at each sub basin level to identify and prioritize the requirements for improvements to storage structures, rehabilitation, new schemes for water harvest and diversification of crops. Any new schemes or rehabilitation of existing one, consideration of the Environmental issues pertaining to that area and remedial action to overcome the problems is must.

DESCRIPTION OF SUB BASIN

Karumeniyar Odai Originates near Nanguneri where the Surplus water of Manimuthar 9th Canal is let into the Karumeniyar Odai. The river traverses through Nanguneri and Radhapuram Taluks of Tirunelveli District and Sathankulam and Thiruchandur Taluks of Thoothukudi District before it meets the sea near Manappadu in Thiruchendur Taluk of Thoothukudi District.

The important places in the sub Basin are Nanguneri, Moolakaraipatti, Sathankulam, Kulasekarapattinam and Manappadu.

The Sub Basin Area is 660 Sqkm The influential rain gauge Station in the Sub Basin are Moolakaraipatti, Sathankulam and Udangudi. There are 15 Anaicuts, 127 PWD tanks and three channels in this Sub Basin. The total registered Ayacut is 5036.175 ha

ENVIRONMENTAL PROBLEMS:

The following environmental issues were identified in the Karumeniyaru Odai sub basin..

WATER WEEDS

Prosopis Julie flora has invaded the cultivable lands in lower reaches and water bodies' ie, tanks, channels and rivers. Hence, these plants need to be eliminated totally for the conserving precious water resources. But on the contrary, in some villages local people desire to grow this plant in the water spread area of the tanks. Once in 4 or 5 years they get cutting order from the revenue authorities, sale the Julie flora or coal produced from it and keep the money for the common expenses like court case for the temple repair and Local festivals etc. This is on account of lack of guidance and ignorance of its ill effects. Hence, this problem has to be addressed in all forms.

INDUSTRIAL POLLUTION

The total number of industries located in the sub basin is around 34, which includes the industries like Cement Garnet, sand mining, Fibre, Plastics, Matches, Rice Mill Hospitals etc. There is no highly polluting Red category Industries, except the following. Other important red category industries are listed out in the annexure – IV

- The India cements limited Arasur
- The India cements Limited (Mines) sathankulam

All the industries have their own treatment plant and the treated effluent is used to irrigate their own farm land. Trade Effluent from these industries is being monitored periodically by TNPCB. Any improvement to minimize the effect of pollution will be dealt by the TNPCB.

SOLID WASTE DIPOSAL

The problem of Garbage collection and its disposal has assumed importance, in the context of rapid growth of population, Urbanization, industrial growth and development. There is no organized scientific method of disposal in all the Panchayats of this sub basin.

In Moolakaraipatti Panchayat about 1.00 MT of solid waste is collected and dumped in the nearby open yard without proper treatment.

In Sathankulam town panchayat, about 2.80 MT of solid waste is collected and dumped in the nearby open area without proper treatment.

Under the Rural welfare funds a new scheme for Solid waster Management plan is under implementation. Under that scheme, collection tank for disposable and un-disposable garbage have been constructed. But in most of the Panchayats, recycling the

waste and converting the solid waste into manure and production of energy is yet to come up.

SEWAGE DISPOSAL LET INTO WATER BODIES

During the field survey, it is found that in many locations, public sanitary complex have been constructed near riverbanks and banks of tanks. This leads to every possibility to contaminate the water sources. It is observed that the sewage is directly let into the Koonikulam at Moolakarapatti and at sathankulam Sewage is partly into kanmeniyaru odai.

So creating awareness among the Presidents of the local bodies is must and to motivate them to adopt solid waste management and sewage management. Wherever required. Workshop including field visits, exclusively for them is to be conducted under the IAM WARM project.

ACTIVITIES PROPOSED

To monitor the quality of water and soil and create database regarding the Environmental Status for this sub basin, this proposal has now been proposed with the following activities at sub basin level. The provisions and necessity are explained below.

I. MONITORING WATER AND SOIL QUALITY PROJECT WORKS MONITORING

Collection and testing of surface water samples is essential to understand the problem on water quality more precisely. Hence, it is proposed to collect and test the surface water sample in Karumeniyaru Odai at 4 selected locations, for a period of three years. Water samples at the following locations will be collected and tested once in 4 months for a period of three years so as to assess the environmental impact on the quality of surface water of this sub basin more precisely.

1. Pillaikulam - D/S of Bridge in Pillaikulam – Thazhaikulam Road.
2. Kazhavor - D/S of causeway in Kazhavor –Kariyandi Road
3. Irattaikinaru - D/S of Causeway in Azhagapuram–Sathankulam Road
4. Sathankulam - D/S of Bridge in Sathankulam – Nazareth Road.

In addition to the above identified locations, water samples will also be collected once in a year from tanks and nearby wells in 4 selected locations, where sewage is directly let into water bodies. These samples will be tested to assess the impact on the quality of surface and ground water.

Soil samples are also to be collected from 4 selected locations to assess the impact on the quality of soil due various Environmental problems like use of chemical fertilizer and using the polluted water. Even from the same locations more number of samples at regular one-year interval has been collected and tested to determine precisely the impact on the degradation of the quality of the soil. Therefore testing of soil samples is essential. Soil samples thus collected will be tested in the Manonmaniam Sundaranar University.

Under this item following provisions have been made.

1. Testing charges for the water and soil samples.
2. Provision for Conveyance, Purchase of Cans, bottles, chemicals, Documentation of water quality data, Driver salary and Computer operator

II.ENVIRONMENTAL AND SOCIAL KNOWLEDGE

Micro level Environmental Status Reports for Nambiyar river basin have been prepared. In these reports Environmental problems and remedial measures have been documented at the basin level. Moreover Environmental and social assessment on river basins of Tamilnadu have been done by Environmental protection Training & Research Institute, Hyderabad. Based on these report and the data now proposed to be collected, Environmental and social assessment for each sub basins are to be updated and documented in order to program further activities.

Under this item following provisions have been made.

1. Salary for supporting staff i.e.Technical assistant,
2. Expert analysis and development reporting.

III.TRANSFER OF TECHNICAL KNOW HOW FOR SOLID WASTE AND WEED MANAGEMENT

Now new scheme for solid waste management is under implementation in all the Municipalities and Panchayats. Under this scheme, collection tank for disposable and non disposable garbage have been constructed in most of the local bodies. But, recycling the waste and converting the solid waste in to manure and production of energy from them are yet to come up.

Hence Demonstration and action programs are planned with user agencies and necessary field visits are planned to transfer of technical know how for solid waste management

IV.ENVIRONMENTAL AND SOCIAL AWARENESS CREATION

Awareness programs are necessary to create awareness among the public about environmental problems and the action to be taken by them to remove or reduce the impacts due to the environmental problems.

Hence, to create and motivate the people, awareness programs are to conducted in the villages where sewage is directly let in to the water bodies. It is also proposed to conduct awareness meeting in schools /institutions to cover the following subjects in addition to placing stickers, tin sheets, and pamphlets containing message related to the following.

- **Sanitation.**
- **Solid waste treatment.**
- **Sewage treatment and converting the same in to gas.**
- **Natural farming.**
- **Conversion of aquatic weeds in to manure etc.**

As per the instructions of the environmental specialist Mr. Anupham Joshi, the following alterations are made in the proposal,

In addition to the above, pesticides test for water quality is added and test will be carried out for Two locations for once in a year.

Moreover, it is proposed to conduct field visits for environmental monitoring of project activities with respect to environmental safe guards.

It is proposed to study the impact due to project investments and hence, provisions for data collection and development reports have now been added.

Provision for preparing environmental atlas is now inserted in the context of marking all environmental and social issues with consultations of stake holders, line departments and NGOS.

MODE OF EXECUTION

All the works proposed are to be carried out by outsourcing through an educational institution / NGO's.

TOTAL COST

The total proposal cost works out to Rs. **10.00 Lakhs (Rupees Ten Lakhs only)**

Name of Work : - Environmental Monitoring on Water and Soil Quality and Creating Awareness & Updating of "Environmental and Social Assessment Report" for KARUMENIYARU ODAI of NAMBIYAR RIVER BASIN

Detailed Estimate

Sl no	Description of work	No	Measurements			Contents
			L	B	D	
I	Monitoring Water and Soil Quality, Project Works Monitoring					
1	Testing charges for Water samples 4x 3x 3=36 Nos Water samples from tanks and wells collected once in six months 5x2x3 =30					
	Testing charges for water samples 36+30=66 nos	66 Nos				66 Nos
2	Testing Charges for Water Samples (Pesticides) 2x3 = 6 Nos	6 nos				6 Nos
3	Testing charges for Soil sample collected from polluted sites (4 nos / year x 3 years = 12 Nos)	12 Nos				12 Nos
4	Hiring Jeep driver on service contract basis for the Department vehicle(3manmonths/yearx3years=9 Nos)	9 Man months				9 Man months
5	Purchase of Cans, bottles, chemicals and Documentation of water quality data, engaging labour etc.,	3 years				3 years
6	Provision for field visits for environmental monitoring of project activities with respect to environmental safeguards	3 year				3 year
II	Environmental and Social knowledge base					
1	Village level data collection on Environmental and Social state regarding other impacts	30 Man months				30 Man months
2	Expert analysis and Development reporting on other impacts	LS				LS
3	Impact studies due to project investments	20 Man months				20 Man months
4	Expert Analysis and development reporting due to project investments	LS				LS
III	Transfer of technical know how for Solid waste and Weed management					
1	Motivating Office bearers of local bodies for Solid waste and Sewage treatment to prevent pollution of water sources through Demo and Technical visit (1 No / year x 3years= 3 Nos)	1 No				1 No

2	Formation of Herbal gardens in Institutions	1 Nos				1Nos
3	Demonstration and Consultative meeting for eradication of weed by making manure (2 Nos in 3 years= 2 Nos)	1 Nos				1 Nos
IV	Environmental and Social Awareness creation					
1	Awareness propagation through Stickers, Tin sheets, Pham lets and Banners	3yrs				3Yrs
2	Awareness programme for public	3 Nos				3 Nos
3	Awareness meeting in Schools / Institutions	1Nos				1 Nos
4	Workshop at sub basin level	1 No				1 No
5	Preparing and publishing Environmental Atlas at sub basin level for the use of the line departments / Institutions	LS				LS
6	Documentation of the entire activities, Up gradation of computer and accessories and purchase of Video films and stationeries, computer operator, etc.,	LS				LS
V	Variation in Rates and unforeseen items	LS				LS

Name of Work : - Environmental Monitoring on Water and Soil Quality and Creating Awareness & Updating of "Environmental and Social Assessment Report" for KARUMENIYARU ODAI of NAMBIYAR RIVER BASIN

Est.Amt:- Rs. 10,00,000

ABSTRACT ESTIMATE

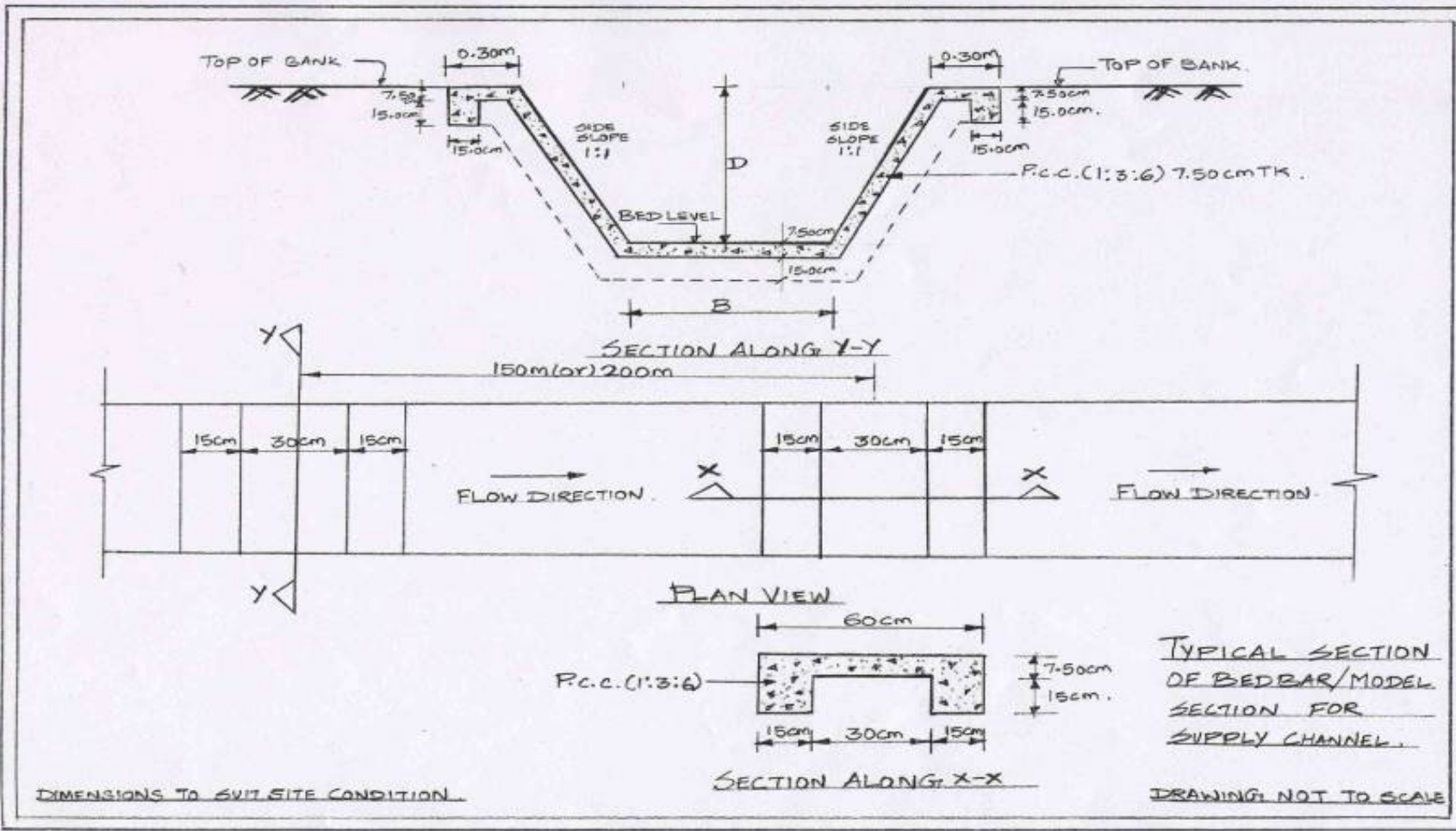
Sl no	Qty.	Description of work	Rate (Rs)	Per	Amount (Rs)
I	Monitoring Water and Soil Quality				
1	66 Nos	Testing charges for Water samples	1400	Each	92400
2	6 Nos	Testing charges for Water samples(Pesticides)	12000	Each	72000
3	12 Nos	Testing charges for Soil sample	7350	LS	88200
4	9 Man months	Hiring Jeep driver on service contract basis	3500	1Man month	31500
5	3 years	Conveyance, Purchase of Cans, bottles, chemicals and Documentation of water quality data, engaging labour etc.,	7000	Per year	21000
6	3 year	Provision for field visits for environmental monitoring of project activities with respect to environmental safeguards	10000	Per Year	30000
II	Environmental and Social knowledge base				
1	30 Man months	Village level data collection on Environmental and Social state regarding other impacts	5000	1Man month	150000
2	LS	Expert analysis and Development reporting on other impacts	LS	LS	30000
3	20 Man Months	Impact studies due to project investments	5000	1Man month	100000
4	LS	Expert Analysis and development reporting due to project investments	LS	LS	20000
III	<i>Transfer of technical know how for Solid waste and Weed management</i>				
1	1 Nos	<i>Motivating Office bearers of local bodies for Solid waste and Sewage treatment to prevent pollution of water sources through Demo and Technical visit</i>	25000	Each	25000

2	1	Nos	Formation of Herbal gardens in Institutions	25000	Each	25000
3	1	Nos	Demonstration and Consultative meeting for eradication of weed by making manure	15000	Each	15000
IV	Environmental and Social Awareness creation					
1	3	years	Awareness propagation through Stickers, Tin sheets, Pham lets and Banners	15000	Per year	45000
2	3	Nos	Awareness programme for public	15000	Each	45000
3	1	Nos	Awareness meeting in Schools / Institutions	15000	Each	15000
4	1	No	Workshop at sub basin level	75000	Each	75000
5		LS	Preparing and publishing Environmental Atlas at sub basin level for the use of the line departments / Institutions	LS	LS	100000
6		LS	Documentation of the entire activities, Up gradation of computer and accessories and purchase of Video films and stationeries, computer operator etc.,	LS	LS	17400
V		LS	Variation in Rates and unforeseen items	LS	LS	2500
Total						1000000

(Rupees Ten Lakhs only)

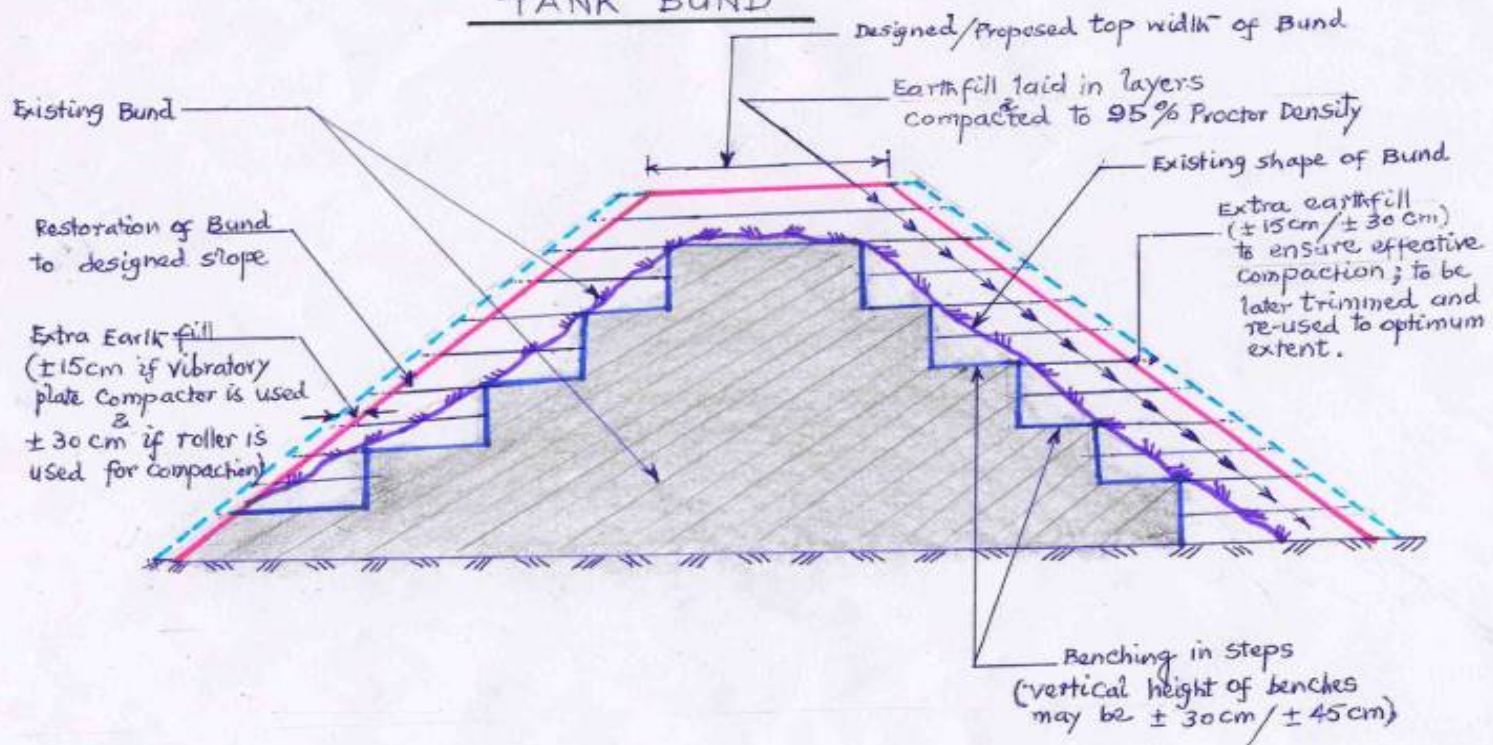


DESIGN AND DRAWINGS

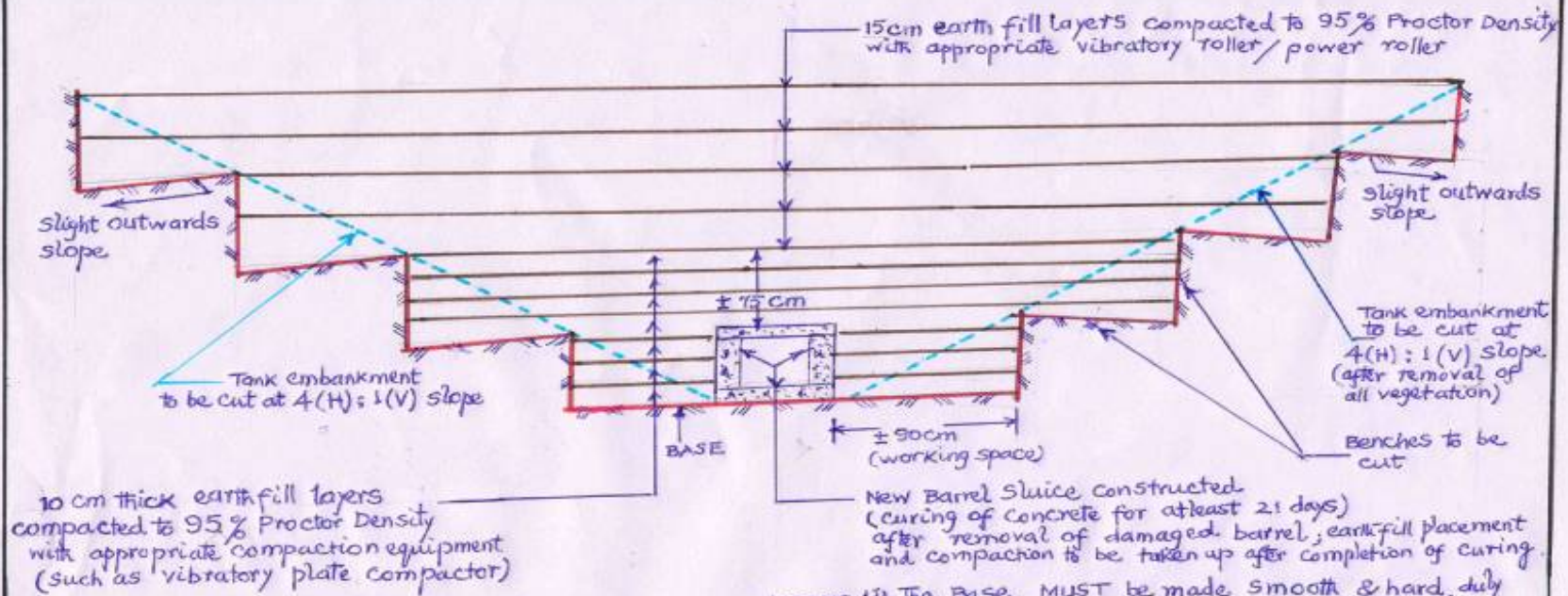


TYPICAL SKETCH

RAISING & STRENGTHENING OF TANK BUND



TYPICAL SKETCH

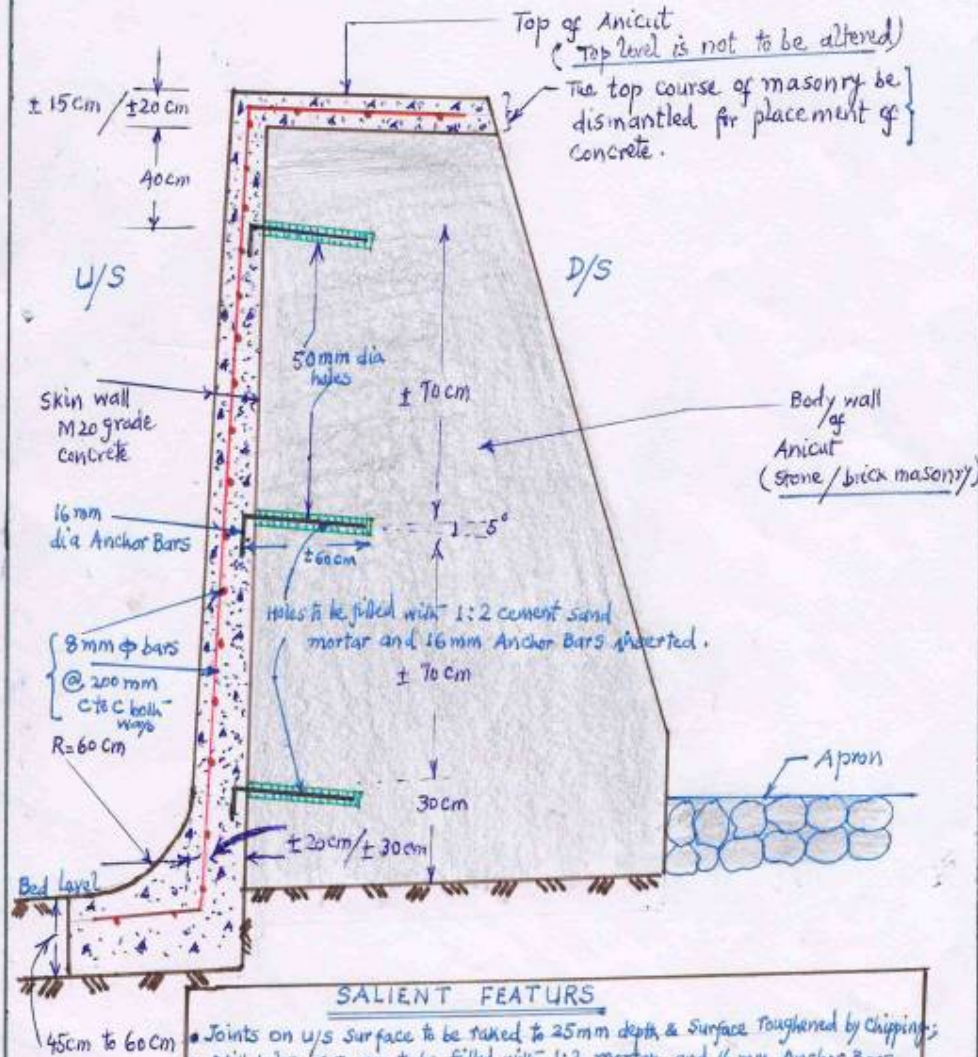


RECONSTRUCTION OF SLUICES

- NOTES
- (i) The Base MUST be made smooth & hard, duly compacted with compactors/pneumatic tampers.
 - (ii) Earth fill compaction adjoining the Barrel and Benches should be compacted by mechanical/pneumatic tampers to ensure effective compaction.
 - (iii) Earth obtained from "benching" be reused (after removal of clods (bigger than 7.5 cm), vegetation etc) in earth fill layers.

TYPICAL SKETCH

Rehabilitation of Anicut through SKIN WALL Concrete



SALIENT FEATURES

- Joints on U/S surface to be raked to 25 mm depth & surface roughened by chipping;
- Drill holes of 50 mm to be filled with 1:2 mortar and 16 mm Anchor Bars to be pushed in. The roughened surface to be kept wet for 72 hours and cement slurry (1:2:5) of 0.10 water-cement ratio be applied over the surface prior to placement of skin concrete.
- Concrete of M20 Grade is to be used with 20 mm maximum aggregate size.
- Curing is to be done for 28 days.
 - Thickness of skin concrete: 15 cm at top & 20 cm at bottom for Anicuts of height upto ± 1.50 m and 20 cm at top & 30 cm at bottom for Anicuts of height more than ± 1.50 m.