

Integrated Watershed Management Programme

Preliminary Project Report (PPR)

Malappuram

**Department of Land Resources,
Ministry of Rural Development,
Government of India**

I. Institutional Structures.

I. A. State Level Nodal Agencies

I. B. District Level Watershed Units

I. Selection of Watershed Projects

II. Profile of the each selected watershed project

III. Agro-climatic condition of project area.

IV. Demography & land distribution

V. Livelihoods

VI. Expected project out comes

VII. Mandatory certificates

VIII. Status of on-going projects

IX. Abstract of projects proposed for sanction

I. Institutional Structures

I. A. State Level Nodal Agencies (SLNAs):

Table-PPR 1: Details of SLNA

1	2	3	4	5	6
No	State	Type of SLNA [#]	Date of Notification	Date of MoU with DoLR	Total no. of members of SLNA
1	Kerala	Mission	14-Jun-10		Twenty Five

Table-PPR 1: Details of SLNA (Contd..)

7		8					
Chairperson and Co Chairperson		CEO					
Name	Designation [#]	Name	Designation	Date of Appointment	Nature of appointment ^{\$}	Tenure	Contact Ph. No./ Fax/ E-mail
L C Goyal	Agriculture Production commissioner		Additional Director of Agriculture (SC Unit)	14-Jun-10			
S M Vijayanand	Principal Secretary, LSGD						

Table-PPR 2: Details of functionaries in the SLNAs*

1	2	3	4	5	6	7	8		9	
No	Total no. of persons working in the SLNA for IWMP	Names & Designation	Qualification	Experience	Work allocation	Monthly remuneration (Rs.)	Total budget of SLNA (Rs.)		Funding expected from DoLR (Rs.)	
							R	NR	R	NR
1										

Table-PPR 3: Details of State Level Data Cell (SLDC) functionalities*

1	2	3	4	5	6	7	8		9	
No	Total no. of persons working in the SLDC for IWMP	Names & Designation	Qualification	Experience	Work allocation	Monthly remuneration (Rs.)	Total budget of SLDC (Rs.)		Funding expected from DoLR (Rs.)	
							R	NR	R	NR
1	N i n e	Technical expert, (Agriculture/ Agriculture Engineering)	PG/Ph.D in the related Field	10 years		50000				
2		Technical expert, (IT/Livelihood,micro enterprises /livelihood)	B Tech. Computer Science / MCA	10 years		50000				
3		Administrative Officer	PG in Administration / Management	10 years		40000				
4		Finance cum Accounts Officer	PG in FM / Accounts / CA	10 years		35000				
5		Accounts assistants - 2 numbers	Graduation in Accounts / Commerce / Economics	5 years		25000				
6		GIS expert	B Tech / M Sc / M Tech in related field	5 years		40000				
7		Data entry operator	Graduate+Certificate in DTP	5 years		15000				
8		Programmer	Diploma/Certificate in related fields	5 years		25000				

I. B. District Level Watershed Units:

Table-PPR 4: Details of functionaries in the DRDA Watershed Cell

1	2	3	4	5	6
No	Name of the District	Name of the executing Agency	Status of Chairman	Date of signing of MoU with SLNA	Total no. of persons working for Watershed programme
1	Thiruvananthapuram	Respective District Panchayaths	President, respective District panchayats		Three each in all Districts, 52 persons in the State
2	Kollam				
3	Pathanamthitta				
4	Alapuzha				
5	Kottayam				
6	Idukki				
7	Eranakulam				
8	Thrissur				
9	Palakkad				
10	Malappuram				
11	Kozhikkode				
12	Wayanadu				
13	Kannur				
14	Kasargode				

Table-PPR 4: Details of functionaries in the DRDA Watershed Cell - cont.

	7	8	9	10	11	12		13	
No	Names & Designation	Qualification	Experience	Work allocation	Monthly remuneration (Rs.)	Total budget of Watershed Cell (Rs.)		Funding expected from DoLR (Rs.)	
						R	NR	R	NR
1	Technical expert	Graduation in the related field	5 years		25000				
2	Accountant	Graduation in the related field	3 years		10000				
3	Data entry operator	Diploma / certificate in the related field	3 years		7500				
	52 persons				595000				

II. SELECTION OF WATERSHED PROJECTS

*Table-PPR 5 : Status of District-wise area covered under the watershed programme * (MIS Table-M(SP)2)*

1	2	3		4				5			
No.	Name of the District	Total micro-watersheds in the District		Micro-watersheds covered so far				Total watersheds covered		Net watersheds to be covered	
				Dept. of Land Resources		Other Ministries/ Depts.					
				Pre-IWMP projects (DPAP +DDP +IWDP)		Any other watershed project					
		No.	Area (ha.)	No.	Area	No.	Area (ha.)	No.	Area h	No.	Area (ha.)
1	Malappuram	474	355448	2	0	104	88113	106	88113	229	164350
	State	4529	3874535	29	19345	955	1018761	983	1038991	2067	1459817

Table-PPR 6: Prioritized list of projects proposed for sanction during the financial year 2010-11

1	2	3	4	5	6	7	8													
No	District	Name of the project	No. of micro-watersheds proposed to be covered	Proposed project area (ha)	Type of project	Proposed cost (Rs. in lakh)	Weightage under the criteria#													
					(Hilly/ Desert/ Others)		1	2	3	4	5	6	7	8	9	10	11	12	13	Total
1	Malappuram	IWMP1	11	5263	Hilly	789.45	55	33	0	110	2	0	165	75	50	0	100	0	165	755
		IWMP2	8	4203	Hilly	630.45	40	24	0	80	21	0	120	45	50	0	50	0	120	550
		2	19	9466		1419.90														

Criteria and weightage for selection of watershed

No	Criteria	score	Ranges & scores			
i	Poverty index (% of poor to population)	10	Above 80 % (10)	80 to 50 % (7.5)	50 to 20 % (5)	Below 20 % (2.5)
ii	% of SC/ ST population	10	More than 40 % (10)	20 to 40 % (5)	Less than 20 % (3)	
iii	Actual wages	5	Actual wages are significantly lower than minimum wages (5)	Actual wages are equal to or higher than minimum wages (0)		
iv	% of small and marginal farmers	10	More than 80 % (10)	50 to 80 % (5)	Less than 50 % (3)	
v	Ground water status	5	Over exploited (5)	Critical (3)	Sub critical (2)	Safe (0)
vi	Moisture index/	15	-66.7 & below (15)	-33.3 to -66.6 (10)		
	DPAP/ DDP Block		DDP Block	DPAP Block	Non DPAP/ DDP Block	Above 70 % (Reject)
vii	Area under rain-fed agriculture	15	More than 90 % (15)	80 to 90 % (10)	70 to 80% (5)	Fully covered (0)
viii	Drinking water	10	No source (10)	Problematic village (7.5)	Partially covered (5)	
ix	Degraded land	15	High – above 20 % (15)	Medium – 10 to 20 % (10)	Low-less than10% of TGA(5)	
x	Productivity potential of the land	15	Lands with low production & where productivity can be significantly enhanced with reasonable efforts (15)	Lands with moderate production & where productivity can be enhanced with reasonable efforts (10)	Lands with high production & where productivity can be marginally enhanced with reasonable efforts(5)	
xi	Contiguity to another watershed that has already been developed/ treated	10	Contiguous to previously treated watershed & contiguity within the micro watersheds in the project (10)	Contiguity within the micro watersheds in the project but non contiguous to previously treated watershed (5)	Neither contiguous to previously treated watershed nor contiguity within the micro watersheds in the project (0)	
xii	Cluster approach in the plains (more than one contiguous micro-watersheds in the project)	15	Above 6 micro-watersheds in cluster (15)	4 to 6 micro watersheds in cluster (10)	2 to 4 micro watersheds in cluster (5)	
	Cluster approach in the hills (more than one contiguous micro-watersheds in the project)		Above 5 micro-watersheds in cluster (15)	3 to 5 micro watersheds in cluster (10)	2 to 3 micro watersheds in cluster (5)	

III) PROJECT WISE PROFILE OF THE SELECTED WATERSHED PROJECT

Table –PPR 7: Project at a Glance

1	Name of the State	Kerala		
2	Name & type [#] (Hilly/ Desert/ Others) of the project	IWMP1	IWMP2	Hilly
3	Name of the District	Malappuram		
4	Names of the Blocks	Areekkode		
		Wandoor		
		Kondotty		
5	Names of Gram Panchayats	Keezhparamb		
		Urangattiri		
		Edavana		
		Mambad		
		Thiruvalli		
		Areekkode		
		Kavannur		
		Kuzhimanna		
		Cheekode		
		Vazhakkad		
6	Names & Census Code of Villages covered	Kizhuparamba		'00032700
		Urungattiri		00033401
		Perakamanna		00033500
		Edavana		00033600
		Mambad		00036100
		Kavanoor		00033800
		Kuzhimanna		'00033900
		Muthuvallur		'00034000
		Cheekode		'00033200

		Arekkode	00033300
7	Names & Codes of the micro-watersheds	Kizhuparamba	24C10a
		Pathanapuram	24C12a
		Chaliyapuram-Edavazhikadavu	24C15a
		Kanjirakkundu	24C15b
		Keyilanthodu	24C15c
		Eliyakkottupara	24C16a
		Muthirottithodu	24C17a
		Nadakkerambu	24C18a
		Pannippara	24C60a
		Panarkund	24C61b
		Areacode	24C64a
		Ugrapuram	24C65a
		Kadungallur	24C66a
		Asharithodu	24C66b
		Vilayil	24C66q
		Poonkudipadam	24C66r
		Vavoor thodu	24C67a
Chaliyapuram-Edavazhikadavu	24C68a		
Edasserikkadavu	24C9au		
8	Four major reasons for selection of watershed	Dilapidated traditional irrigation systems	
		Low productivity of land	
		Strong presence of SC/ST, BPL families and marginal farmers	
		Poor adaptation to climate change	
9	Area of the Project (ha.)	9466	
10	Area proposed to be treated (ha.)	9466	
11	Project Cost (Rs. in Lakhs)	1419.90	
12	Name and Address of proposed PIA	Arekkode	Block Panchayats
		Kondotty	

Table-PPR 8: Details of previously identified DPAP/ DDP areas proposed under IWMP (ha) during the financial year*

There are no DPAP/DDP blocks identified in Kerala

Table-PPR 9: Land Use pattern of the project*

(Area in ha)

1 No	2 Name of watersheds	3 Names of villages	4 Geographical Area of the watershed	5 Forest Area	6 Land under agricultural use	7 Rain fed area	8 Permanent pastures	9 Wasteland	
								Cultivable	Non-cultivable
1	Kizhuparamba	Kizhuparamba, Cheekode	539	0	518	539	0	6	16
2	Pathanapuram	Kizhuparamba	265	0	264	265	0	0	1
3	Chaliyapuram-	Urungattiri	585	0	255	585	0	253	77
4	Kanjirakkundu	Perakamanna, Edavana	791	85	269	791	0	434	2
5	Keyilanthodu	Perakamanna	198	0	129	198	0	60	9
6	Eliyakkottupara	Perakamanna	271	0	140	271	0	106	24
7	Muthirottithodu	Edavana	625	0	238	625	0	342	44
8	Nadakkerambu	Mambad	714	114	399	714	0	173	28
9	Pannippara	Perakamanna	518	0	481	518	0	0	37
10	Panarkund	Edavana	501	0	473	501	0	21	7
11	Areacode	Areekode	373	0	348	373	0	0	25
12	Ugraparam	Areekode	334	0	303	334	0	0	31
13	Kadungallur	Areekode	846	0	838	846	0	0	8
14	Asharithodu	Kavanoor	976	0	969	976	0	0	7
15	Vilayil	Muthuvallur, Kuzhimanna	873	0	859	873	0	0	14
16	Poonkudipadam	Muthuvallur	195	0	189	195	0	0	7
17	Vavoor thodu	Cheekode	300	0	272	300	0	0	29
18	Chaliyapuram-	Kizhuparamba	387	0	321	387	0	0	66
19	Edasserikkadavu	Kizhuparamba	173	0	152	173	0	0	21
		Total	9466	200	9466	200	9466	200	9466

Source of data:

Kerala state land use board and Panchayat resource map

IV. AGRO-CLIMATIC CONDITION

Details about soil types, land uses etc. are given as additional tables

Table – PPR 10: Details of Agro-climatic condition*					
1	2	3	5	7	8
No	Name of the watershed	Name of the Agro-climatic zone covers project area	Names of the villages	Topography#	Average rainfall in mm
1	Kizhuparamba	Northern zone	Kizhuparamba, Cheekode	Moderate	2871 mm
2	Pathanapuram	Northern zone	Kizhuparamba	Undulating	
3	Chaliyapuram-Edavazhikadavu	Northern zone	Urungatti	Undulating	
4	Kanjirakkundu	Northern zone	Perakamanna, Edavana	Undulating	
5	Keyilanthodu	Northern zone	Perakamanna	Undulating	
6	Eliyakkottupara	Northern zone	Perakamanna	Undulating	
7	Muthirottithodu	Northern zone	Edavana	Undulating	
8	Nadakkerambu	Northern zone	Mambad	Undulating	
9	Pannippara	Northern zone	Perakamanna	Moderate	
10	Panarkund	Northern zone	Edavana	Flat	
11	Areacode	Northern zone	Areekode	Moderate	
12	Ugrapuram	Northern zone	Areekode	Moderate	
13	Kadungallur	Northern zone	Areekode	Moderate	
14	Asharithodu	Northern zone	Kavanoor	Moderate	
15	Vilayil	Northern zone	Muthuvallur, Kuzhimanna	Moderate	
16	Poonkudipadam	Northern zone	Muthuvallur	Moderate	
17	Vavoor thodu	Northern zone	Cheekode	Moderate	
18	Chaliyapuram-Edavazhikadavu	Northern zone	Kizhuparamba	Flat	
19	Edasserikkadavu	Northern zone	Kizhuparamba	Moderate	

Table – PPR 10 a: Details of soil types and major crops

1	2	6					9				
No	Name of the watershed	Major soil types					Major crops				
		Brown hydromorphic soil	Lateritic soil	Riverine alluvium	0	Total	Coconut	Paddy	Mixed	Rubber	Total
1	Kizhuparamba	0	312	227	0	539	0	134	296	88	518
2	Pathanapuram	0	237	28	0	265	0	0	250	14	264
3	Chaliyapuram-Edavazhikadavu	0	585	0	0	585	0	46	187	22	255
4	Kanjirakkundu	0	792	0	0	792	0	30	84	155	269
5	Keyilanthodu	0	198	0	0	198	0	11	100	18	129
6	Eliyakkottupara	0	271	0	0	271	0	0	140	0	140
7	Muthirottithodu	0	625	0	0	625	0	0	178	60	238
8	Nadakerambu	0	714	0	0	714	0	0	296	102	399
9	Pannippara	0	518	0	0	518	0	12	336	133	481
10	Panarkund	0	502	0	0	502	0	11	320	143	473
11	Areacode	0	78	295	0	373	0	53	283	12	348
12	Ugraparam	0	0	334	0	334	0	36	247	20	303
13	Kadungallur	0	572	274	0	846	0	108	427	303	838
14	Asharithodu	0	975	0	0	975	0	153	773	44	969
15	Vilayil	0	838	35	0	873	0	159	529	171	859
16	Poonkudipadam	0	0	196	0	196	0	49	62	78	189
17	Vavoor thodu	0	0	300	0	300	0	36	172	63	272
18	Chaliyapuram-Edavazhikadavu	0	0	388	0	388	0	29	292	0	321
19	Edasserikkadavu	0	86	88	0	173	0	39	114	0	152

Table-PPR 11: Details of flood and drought in the project area*

1	2	3	4		5
No	Particulars	Villages	Periodicity		Not affected
			Annual	Any other - once in 4 years	
1	Flood	No. of villages	0	6	4
		Name(s) of villages	0	Kizhuparamba, Urungattiri, Perakamanna, Edavana, Kuzhimanna, Muthuvallur	
2	Drought	No. of villages	0	6	4
		Name(s) of villages	0	Kizhuparamba, Urungattiri, Perakamanna, Edavana, Kuzhimanna, Muthuvallur	
Total			0	12	4

Table-PPR 12 : Details of soil erosion in the project area

1	2	3	4	5
Cause	Type of erosion	Area affected (ha)	Run off (mm/ year)	Average soil loss (Tons/ ha/ year)
Water erosion				
a	Severe	3907	NA	NA
b	Moderate	4355	NA	NA
c	Slight	1206	NA	NA
Sub-Total		9468	NA	NA
Wind erosion		0	NA	NA
Total		9468	NA	NA

V. DEMOGRAPHY AND LAND DISTRIBUTION

Details about population is given as table

Key features of population in Table

No	Watershed Name	Area (In Ha)	Total Families	Population			BPL Families	Land holding/Family (In Ha)
				Total	SC	ST		
				9466	17240	99522		
1	Kizhuparamba	539	1247	6700	619	1	465	0.43
2	Pathanapuram	265	603	3239	298	1	225	0.44
3	Chaliyapuram-Edavazhikadavu	585	595	3300	331	54	220	0.98
4	Kanjirakkundu	791	1095	6403	750	51	327	0.72
5	Keyilanthodu	198	265	1542	178	13	81	0.75
6	Eliyakkottupara	271	376	2199	258	17	112	0.72
7	Muthirottithodu	625	856	4935	545	64	278	0.73
8	Nadakkerambu	714	935	5144	451	155	378	0.76
9	Pannippara	518	716	4185	490	34	214	0.72
10	Panarkund	501	699	4052	497	30	216	0.72
11	Areacode	373	1010	5956	595	1	384	0.37
12	Ugrapuram	334	911	5377	536	1	347	0.37
13	Kadungallur	846	2291	13532	1354	2	871	0.37
14	Asharithodu	976	1559	9099	1059	8	534	0.63
15	Vilayil	873	1821	10853	1153	1	676	0.48
16	Poonkudipadam	195	399	2389	257	0	171	0.49
17	Vavoor thodu	300	612	3664	395	0	263	0.49
18	Chaliyapuram-Edavazhikadavu	387	847	4798	542	0	349	0.46
19	Edasserikkadavu	173	400	2154	201	0	150	0.43

VI. LIVELIHOODS

The existing scenario and the opportunities are described in the tables. One more word about capacity building activities. There is tremendous scope of these activities can be organized in the field level in a participatory manner. Of extreme importance is adaptation to climate change. How an effective strategy can be developed is the very question of survival. Then comes the hands on exposure to modern agriculture practices, technologies and machines. Trainings should be imparted in such a manner that new social institutions can be created at grass root level to sustain these initiatives.

Table-PPR 13 Summary of livelihoods

1	2	3	4	5	6
No	Names of the watersheds	Existing livelihood activities	Possible livelihood interventions under the project	Current status of migration (No. of people)	Main reasons for migration
1	Kizhuparamba	Employment in construction sector, wage labour in semi skilled and unskilled activities, trading etc. are the major livelihood of the poor people now. Middle and upper class are employed in service sector, government and large private enterprises. Agriculture is not the soul income anymore. Agricultural labour is part of the employment of the poor. For the poor families another major chunk is the income from MNREGS . Lower income people also attempt animal husbandry with mixed results. More often the cash income from such activities is not sufficient due to a number of factors	Animal husbandry with strong forward and backward linkages and supporting infrastructure and initiatives at the homestead is the main possibility. High yield cows which can be milked in tandem, scientifically constructed cowshed and biogas tank, grass cultivation, training to the concerned, ensuring the availability of milking machines, soft finance, hand holding for the first few years, providing functional insurance etc. are essential for the success of the programme. Food processing at household level using locally available banana, jack fruit, mango etc. is another possibility. Rearing of backyard chicken, quail, rabbit etc. can be explored.	67	Lack of job opportunities in the agriculture sector due to low productivity and poor income from land. This is inducing the farmer to fallow the land and search for better alternatives. As more and more people move to the urban areas seeking employment, whatever rural economic activities remain gets weakened and faces a gradual demise. Only the people with ensured income or people who are unable to move remain in the villages.
2	Pathanapuram			32	
3	Chaliyapuram-Edavazhikadavu			33	
4	Kanjirakkundu			64	
5	Keyilanthodu			15	
6	Eliyakkottupara			22	
7	Muthirottithodu			49	
8	Nadakkerambu			51	
9	Pannippara			42	
10	Panarkund			41	
11	Areacode			60	
12	Ugrapuram			54	
13	Kadungallur			135	
14	Asharithodu			91	
15	Vilayil			109	
16	Poonkudipadam			24	
17	Vavoor thodu			37	
18	Chaliyapuram-Edavazhikadavu			48	
19	Edasserikkadavu			22	
	19			50	

VII. EXPECTED PROJECT OUTCOMES

VII. (i). Expected employment related outcomes:

Table-PPR 14: Employment generation

1 No.	2 Names of the watersheds	3 Wage employment										4 Self employment				
		No. of man-days in '00 s					No. of beneficiaries					No. of beneficiaries				
		SC	ST	Others	Women	Total	SC	ST	Others	Women	Total	SC	ST	Others	Women	Total
1	Kizhuparamba	62	0	1315	838	2215	62	0	1315	838	2215	37	0	329	670	1036
2	Pathanapuram	30	0	636	405	1071	30	0	636	405	1071	18	0	159	324	501
3	Chaliyapuram-	33	5	645	413	1096	33	5	645	413	1096	20	3	161	330	514
4	Kanjirakkundu	75	5	1249	800	2129	75	5	1249	800	2129	45	3	312	640	1001
5	Keyilanthodu	18	1	301	193	513	18	1	301	193	513	11	1	75	154	241
6	Eliyakkottupara	26	2	429	275	731	26	2	429	275	731	15	1	107	220	344
7	Muthirottithodu	54	6	963	617	1640	54	6	963	617	1640	33	4	241	493	771
8	Nadakkerambu	45	15	1005	643	1708	45	15	1005	643	1708	27	9	251	514	802
9	Pannippara	49	3	816	523	1392	49	3	816	523	1392	29	2	204	418	654
10	Panarkund	50	3	789	507	1349	50	3	789	507	1349	30	2	197	405	634
11	Areacode	59	0	1167	745	1972	59	0	1167	745	1972	36	0	292	596	923
12	Ugraparam	54	0	1054	672	1780	54	0	1054	672	1780	32	0	263	538	833
13	Kadungallur	135	0	2652	1692	4479	135	0	2652	1692	4479	81	0	663	1353	2098
14	Asharithodu	106	1	1777	1137	3021	106	1	1777	1137	3021	64	1	444	910	1418
15	Vilayil	115	0	2124	1357	3596	115	0	2124	1357	3596	69	0	531	1085	1686
16	Poonkudipadam	26	0	467	299	792	26	0	467	299	792	15	0	117	239	371
17	Vavoor thodu	39	0	717	458	1215	39	0	717	458	1215	24	0	179	366	569
18	Chaliyapuram-	54	0	938	600	1592	54	0	938	600	1592	33	0	234	480	747
19	Edasserikkadavu	20	0	423	269	712	20	0	423	269	712	12	0	106	215	333
	19	1051	43	19467	12440	33001	1051	43	19467	12440	33001	630	26	4867	9952	15475

Table-PPR 15: Details of migration from Project area

1	2	3	4	5	6
No	Names of the watersheds	No. of persons migrating	No. of days per year of migration	Major reason(s) for migrating	Expected reduction in no. of persons migrating
1	Kizhuparamba	67	6700	Lack of job opportunities in the agriculture and allied sectors. Low productivity and poor income from land. Rural economic activities getting weakened. Weak infrastructure and support services for agriculture. Better livelihoods, Changing life styles.	54
2	Pathanapuram	32	1911		29
3	Chaliyapuram-Edavazhikadavu	33	4059		20
4	Kanjirakkundu	64	1537		48
5	Keyilanthodu	15	1542		13
6	Eliyakkottupara	22	1297		18
7	Muthirottithodu	49	6070		44
8	Nadakkerambu	51	1235		31
9	Pannippara	42	4185		31
10	Panarkund	41	2391		34
11	Areacode	60	7326		48
12	Ugrapuram	54	1290		48
13	Kadungallur	135	13532		81
14	Asharithodu	91	5368		68
15	Vilayil	109	13349		92
16	Poonkudipadam	24	573		19
17	Vavoor thodu	37	2162		33
18	Chaliyapuram-Edavazhikadavu	48	5901		29
19	Edasserikkadavu	22	517		16
	19	50	4047		757

VII. (ii). Water related outcomes:

Table-PPR 16: Details of average ground water table depth in the project areas
(in meters)

1	2	3	4	5	6
No	Names of the watersheds	Sources	Pre-Project level	Expected post-project level	Remarks
1	Kizhuparamba	Open wells	8	6	This increase will substantially improve the drinking water availability, reduce the drudgery for fetching water and increase the irrigated areas. But substantial steps to improve water and irrigation efficiency through the application of modern and traditional technologies is essential. There must be simultaneous initiatives to reduce the contamination of surface water and ground water from the
		Bore wells	90	72	
		Others - Ponds	6	5	
2	Pathanapuram	Open wells	9	6	
		Bore wells	105	84	
		Others - Ponds	7	6	
3	Chaliyapuram-Edavazhikadavu	Open wells	7	5	
		Bore wells	95	76	
		Others - Ponds	5	5	
4	Kanjirakkundu	Open wells	6	4	
		Bore wells	85	68	
		Others - Ponds	4	4	
5	Keyilanthodu	Open wells	7	5	
		Bore wells	100	80	
		Others - Ponds	5	5	
6	Eliyakkottupara	Open wells	8	6	
		Bore wells	115	92	
		Others - Ponds	6	5	
7	Muthirottithodu	Open wells	9	6	
		Bore wells	130	104	
		Others - Ponds	7	6	
8	Nadakkerambu	Open wells	7	5	
		Bore wells	120	96	
		Others - Ponds	5	5	
9	Pannippara	Open wells	5	4	
		Bore wells	110	88	

		Others - Ponds	3	3	ground water from the residues of pesticides and fertilizers, household waste and garbage, poor sanitation facilities, waste from fish/meat stalls, vegetable markets and small teashops in the watershed area. Convergence efforts should be launched with other Govt departments and NGOs to achieve this. New agricultural practices like SRI cultivation, drip irrigation and precision farming should be promoted in tandem with high efficiency pumps, piped irrigation water, bio gas tanks etc.
10	Panarkund	Open wells	6	4	
		Bore wells	125	100	
		Others - Ponds	4	4	
11	Areacode	Open wells	7	5	
		Bore wells	140	112	
		Others - Ponds	5	5	
12	Ugrapuram	Open wells	6	4	
		Bore wells	130	104	
		Others - Ponds	4	4	
13	Kadungallur	Open wells	7	5	
		Bore wells	145	116	
		Others - Ponds	5	5	
14	Asharithodu	Open wells	8	6	
		Bore wells	135	108	
		Others - Ponds	9	8	
15	Vilayil	Open wells	6	4	
		Bore wells	125	100	
		Others - Ponds	4	4	
16	Poonkudipadam	Open wells	7	5	
		Bore wells	140	112	
		Others - Ponds	5	5	
17	Vavoor thodu	Open wells	8	6	
		Bore wells	155	124	
		Others - Ponds	6	5	
18	Chaliyapuram-Edavazhikadavu	Open wells	9	6	
		Bore wells	145	116	
		Others - Ponds	10	9	
19	Edasserikkadavu	Open wells	10	7	
		Bore wells	160	128	
		Others - Ponds	11	10	

Source of data:

Panchayat development report and resource map report

Table-PPR 17: Status of Drinking water*

1	2	3		4		5
No	Names of the watersheds	Availability of drinking water (no. of months in a year)		Quality of drinking water		Comments
		Pre project	Expected post project	Pre project	Expected post project	
1	Kizhuparamba	9	10	Turbulence, hardness, high iron and salinity are the major issues observed. High presence of e coli is observed in almost all open wells and ponds. They are also present in number of open wells as well.	Reduced concentration of dissolved salts, less incidence of turbulence, a check regarding the saline intrusion, better bacteriological quality etc. are the major expected post project benefits	The issues listed are culled from varies studies conducted in the area by other agencies. There is also a variation in quality issues during different seasons. More primary data generation before the launching of the project is recommended to create a bench mark.
2	Pathanapuram	8	10			
3	Chaliyapuram-Edavazhikadavu	11	12			
4	Kanjirakkundu	10	11			
5	Keyilanthodu	7	9			
6	Eliyakkottupara	11	12			
7	Muthirottithodu	9	10			
8	Nadakerambu	9	11			
9	Pannippara	8	9			
10	Panarkund	10	11			
11	Areacode	11	12			
12	Ugrapuram	12	10			
13	Kadungallur	12	10			
14	Asharithodu	13	11			
15	Vilayil	7	8			
16	Poonkudipadam	11	9			
17	Vavoor thodu	9	10			
18	Chaliyapuram-Edavazhikadavu	8	9			
19	Edasserikkadavu	10	11			
	19	10	10			

VII. (iii). Crop related outcomes:

Table-PPR 18- Major crops grown and their productivity in the project area

1	2	3		4	
No	Name of the Crop	Current status		Expected post project status	
		Area (ha)	Productivity (kg/ ha)	Area (ha)	Productivity (kg/ ha)
	Kharif				
	Paddy	905	1820	995	2093
	Rabi				
	Paddy	905	2130	1266	3515

VIII. MANDATORY CERTIFICATION

“It is certified that the State Government of Kerala will abide by the following mandatory conditions laid down by DoLR”

1	The area of the proposed projects are not covered under assured irrigation
2	The area of the proposed project is not covered or overlapping with any other watershed projects sanctioned by the central govt./ state govt./ autonomous bodies & others
3	The State must sign all the mandatory MoUs before implementing the project
4	The timeframes and milestones of the projects will be followed
5	The Budget requested for must follow the criteria laid down in the Common Guidelines, 2008
6	The State must release matching State Share within 15 days from release of each installment of central funds
7	Purchase of vehicles and other equipments are not permitted and nor is construction of buildings allowed. Only purchase of computers and related software is permitted
8	Savings, if any, in each component of the project cost can be utilized only for activities in the Watershed works
9	The DWDU will have one Member exclusively responsible for monitoring
10	All works will be evaluated after each phase of completion. Fund release will depend on favourable reports received from evaluators
11	Evaluators must include only institutions and agencies and not individuals

12	The State and DRDA cell will furnish monitoring reports and periodical reports as desired by DoLR
13	Composition of the WDT must be clearly spelt out and the team Members must be fully in place at the time of signing of the MoU of contract between the PIA and DRDA Cell
14	That DRDA shall release the funds to the PIAs and the watershed committees within 15 days of receipt of the funds
15	The Watershed Committee must be a registered society under the Societies Registration Act, 1860
16	At least one of the WDT Members must be a woman
17	The Gram Sabhas of the proposed project areas have passed resolutions for people's contribution towards WDF
18	Resource-use agreements on the principles of equity and sustainability must be worked out among the User Groups prior to the concerned work being undertaken
19	The DPR must give detailed justification for the proposed project duration
20	No works on private lands will be repaired/ maintained from the WDF
21	The PIA will start project work within three months of the receipt of first installment by DWDU/agency or else it can come under the purview of foreclosure
22	The State will not undertake unnecessary foreclosure of the projects. In the event of foreclosure, the State will refund the amount and furnish all necessary documents as desired by DoLR. The State shall also take administrative and legal action against any defalcation, misappropriation, mis-utilization, deliberate negligence and laxity which has caused foreclosure of the project.

Date:

Signature of officer authorized by State Govt. *

NAME OF OFFICER (IN CAPITAL LETTERS)

DESIGNATION

IX. STATUS OF ON-GOING PROJECTS (DPAP/ DDP/ IWDP)

Table- PPR 19: Details of pending UCs: Statewise* Rs in Lakhs

1	2	3	4	5	6	7	8		9		10	11	
No	District	Project	Instalment no.	Financial year of release of fund	Amount released	Amount utilized	Submission of UC		Date of submission of UC		Reasons for not submitting/ delayed submission of UC	Pending UCs	
							Due date	Amount	Date	Amount		Period	Amount
10	Malappuram												

Table- PPR 20: Details of Unspent balance as on _____: District wise*

1	2	3	4	5		6
No	District	Name of the Project	Total cost (Rs. in lakh)	Total funds released		Unspent balance
				(Rs. in lakh)		
				DoLR	State	(Rs. in lakhs)
10	Malappuram					
	14		0	0	0	0

X. ABSTRACT OF PROJECTS PROPOSED FOR SANCTION DURING 2010-11

1	Number of districts to be covered under the present proposal	Thirteen	
2	No. of Watersheds projects proposed to be taken up under IWMP	Hilly/Desert	Others
3	Total area to be covered under proposed projects (000' ha)		
	(a) Hilly & Desert areas [#]	9.47	
	(b) Others		0.00
	Total	<u>9.47</u>	<u>0.00</u>
4	Total cost of the proposed Watershed projects (Rs. in lakhs)		
	(a) Hilly & Desert areas [#]	1419.90	
	(c) Others		0.00
	Total	<u>1419.90</u>	<u>0.00</u>
5	First installment required from central funds for the proposed watershed projects	<u>255.58</u>	<u>0.00</u>

Project Abstract

1	Title of Project	Integrated Watershed Management Programme in Malappuram	
2	No. of watersheds proposed	<u>19</u>	
3	Area proposed	<u>9466</u>	<u>hectares</u>
4	Project Cost	<u>1419.90</u>	<u>in lakhs</u>
5	a Amount to be met form IWMP	<u>1277.91</u>	<u>in lakhs</u>
	b From other sources	<u>141.99</u>	<u>in lakhs</u>
6	Designation , address, e-mail and phone number of the officer in ZP/DRDA responsible for this project	Project Director, Poverty Alleviation Unit Malappuram District Panchayat	
		Phone	
		E-mail	

Certificate

Certified that the watershed proposed to be treated in this project does not overlap with any other scheme and there is no duplication of Central/external assistance.

**President
District Panchayat
Malappuram**

**Project Director
Poverty Alleviation Unit
District Panchayat
Malappuram**