

Water Quality Data of Water Samples during Post Monsoon Season

Location	Well Id	Na (mg/l)	K (mg/l)	Ca (mg/l)	SO ₄ (mg/l)	Mg (mg/l)	TH (mg/l)	pH -	TDS (mg/l)	Salinity (mg/l)	Alkalinity (mg/l)	EC (µs/cm)	Chloride (mg/l)
Menamkulam	W ₁	39	6	20.04	20.11	58.30	290	6.60	353	160	50	667	55.00
	W ₂	58	25	30.06	43.98	36.41	225	7.00	555	260	45	1010	90.00
	W ₃	41	5	20.04	22.86	53.43	270	6.40	284	150	30	519	45.00
	W ₄	29	5	14.28	15.68	31.42	165	6.60	204	90	20	379	27.50
	W ₅	40	12	20.04	26.78	20.63	135	6.35	313	140	105	603	50.00
	W ₆	33	12	18.04	52.74	26.71	155	6.00	267	130	35	477	35.00
	W ₇	31	14	14.28	40.84	28.98	155	6.10	266	120	40	481	35.00
	W ₈	24	7	24.05	27.26	0.00	60	7.05	284	130	0	539	0.00
	W ₉	20	6	48.10	18.28	14.55	120	5.97	257	120	40	490	7.50
	W ₁₀	58	12	463.09	96.80	25.45	220	7.87	610	280	100	1100	57.50
Karikkakom	W ₁₁	45	6	118.24	35.78	0.00	295	6.47	670	300	170	1270	77.50
	W ₁₂	7	2	14.03	9.54	0.00	35	6.45	100	50	20	190	18.75
	W ₁₃	18	3	4.01	21.63	35.23	155	6.24	730	80	100	314	15.00
	W ₁₄	50	18	64.13	46.27	57.30	300	6.15	181	330	85	1280	112.50
	W ₁₅	73	12	78.16	88.38	40.00	360	6.31	1010	450	75	1910	65.00
	W ₁₆	65	11	64.13	84.64	24.22	260	6.77	700	310	160	1330	57.50

Location	Well Id	Na (mg/l)	K (mg/l)	Ca (mg/l)	SO ₄ (mg/l)	Mg (mg/l)	TH (mg/l)	pH -	TDS (mg/l)	Salinity (mg/l)	Alkalinity (mg/l)	EC (µs/cm)	Chloride (mg/l)
Karikkakom	W ₁₇	18	4	14.03	24.60	23.07	130	6.11	160	70	40	299	7.50
	W ₁₈	44	8	42.84	60.11	44.44	290	6.00	590	270	20	1060	87.50
	W ₁₉	126	11	40.08	54.43	53.90	340	6.52	1100	480	195	1840	332.50
	W ₂₀	36	3	10.02	8.05	19.42	105	4.98	186	80	10	350	37.50
	W ₂₁	93	24	66.13	135.70	4.78	165	5.52	328	150	60	661	53.75
Valiyathura	W ₂₂	61	18	46.09	33.43	27.89	230	6.32	830	380	55	1590	137.50
	W ₂₃	37	9	40.08	28.07	38.83	260	6.62	473	210	150	886	50.00
	W ₂₄	12	5	20.04	14.31	36.42	200	6.04	700	320	50	1410	25.00
	W ₂₅	21	60	24.05	21.24	20.63	145	5.70	283	130	40	553	37.50
	W ₂₆	54	17	58.12	44.38	40.02	310	5.92	700	320	65	1320	93.75
	W ₂₇	51	13	58.12	37.26	37.59	300	6.46	760	530	45	1460	78.75
	W ₂₈	12	3	72.14	17.98	32.72	315	5.80	195	90	20	370	20.00
	W ₂₉	33	9	62.12	43.35	30.28	305	6.60	533	240	202.5	1020	32.50
	W ₃₀	42	16	66.13	29.56	36.32	315	6.86	820	370	115	1600	77.50
Poonthura	W ₃₁	40	12	48.10	44.41	36.39	270	7.10	630	290	100.	1210	55.00
	W ₃₂	66	12	14.03	55.39	58.30	275	6.74	790	360	105	1580	110.00
	W ₃₃	43	2	80.16	159.49	35.14	345	6.20	680	310	60	1340	62.50
	W ₃₄	73	10	26.05	226.86	52.21	280	6.16	1070	480	125	2080	195.00
	W ₃₅	22.	1	48.10	23.35	40.04	285	6.78	511	230	177.5	1010	42.50

Location	Well Id	Na (mg/l)	K (mg/l)	Ca (mg/l)	SO ₄ (mg/l)	Mg (mg/l)	TH (mg/l)	pH -	TDS (mg/l)	Salinity (mg/l)	Alkalinity (mg/l)	EC (µs/cm)	Chloride (mg/l)
Poonthura	W ₃₆	38	2.	8.02	22.22	24.29	120	5.80	195	90	20	370	50.00
	W ₃₇	39	1	10.02	14.69	31.58	155	5.70	207	90	30	406	60.00
	W ₃₈	42	2	24.05	12.78	75.30	370	7.49	620	280	230	1220	67.50
Pachalloor	W ₃₉	71	25	32.06	215.39	4.36	345	7.37	1550	710	425	3040	127.50
	W ₄₀	24	1	1.02	12.21	47.37	220	5.46	222	100	40	433	32.50
	W ₄₁	17	1	10.02	9.48	21.85	115	5.53	162	70	25	323	25.00
	W ₄₂	24	1	0.00	5.85	40.01	165	5.09	196	90	17.5	384	27.50
	W ₄₃	22	0	8.02	8.09	17.00	90	4.74	122	60	10	236	37.50
	W ₄₄	40	1.	8.02	7.52	24.29	120	4.57	195	90	5	374	52.50
Vizhinjam	W ₄₅	106	13	73.44	64.41	18.56	260	6.25	1570	710	85	3140	228.00
	W ₄₆	114	16	51.00	32.29	18.83	205	6.21	1230	560	110	2430	187.50
	W ₄₇	123	6	48.96	13.47	33.44	260	6.58	1380	630	170	2740	285.00
	W ₄₈	125	6	51.00	65.55	30.98	255	6.76	1350	620	180	2700	292.50
	W ₄₉	54	1	6.12	8.62	6.00	40	5.44	263	120	20	527	52.50
	W ₅₀	61	3	26.52	17.98	8.19	100	6.10	453	210	50	911	73.75
	W ₅₁	100	13	18.36	40.20	43.52	225	5.90	1160	530	50	2280	200.00
	W ₅₂	66.	1.00	8.02	8.09	6.07	45.00	5.25	357.00	160.00	40	711.00	72.50
	W ₅₃	22	0	4.08	6.88	8.46	45.00	4.80	94.10	40	25	192	22.50
Pulluvila	W ₅₄	51	4	30.60	38.57	10.57	120.00	5.96	507.00	320	80	992	62.50

Location	Well Id	Na (mg/l)	K (mg/l)	Ca (mg/l)	SO ₄ (mg/l)	Mg (mg/l)	TH (mg/l)	pH -	TDS (mg/l)	Salinity (mg/l)	Alkalinity (mg/l)	EC (µs/cm)	Chloride (mg/l)
Pulluvila	W ₅₅	82	9	32.64	29.50	17.84	155	6.04	700	320	30.00	1410	103.75
	W ₅₆	51	3	38.76	9.16	12.90	150	5.75	494	320	80.00	980	58.75
	W ₅₇	43	0	12.24	24.72	8.36	65	5.42	275	130	45.00	559	48.75
	W ₅₈	47	6	18.36	14.21	13.15	100	5.52	328	150	60.00	661	53.75
	W ₅₉	30	1	4.08	7.78	4.45	30	7.05	102	50	90.00	204	12.50
Poovar	W ₆₀	115	21	0.00	68.82	109.35	450	7.40	1700	780	367.50	3400	202.50
	W ₆₁	92	16	668.13	77.59	23.49	265	6.60	1130	510	137.50	2240	122.50
	W ₆₂	151	21	92.18	159.12	43.05	240	6.20	1980	900	162.50	3900	401.25
	W ₆₃	550	50	52.10	230.04	76.48	445	6.70	3740	1700	480.00	7450	792.50
	W ₆₄	129	6	36.07	28.74	26.77	200	6.20	1240	560	66.00	2470	307.50
	W ₆₅	94	3	50.10	84.81	26.67	235	6.40	940	430	125.00	1880	175.00
	W ₆₆	132	9	96.19	125.61	26.53	350	6.90	1620	740	190.00	3240	325.00
	W ₆₇	52	1	16.03	26.64	9.07	85	5.70	372	170	45.00	733	57.50
Pozhiyur	W ₆₈	28	1	4.01	8.66	8.50	45	4.90	146	70	5.00	290	30.00
	W ₆₉	144	14	124.25	73.27	27.79	425	7.40	1940	880	315.00	3860	375.00
	W ₇₀	56	4	16.03	15.17	3.86	60	6.10	360	160	25.00	710	65.00
	W ₇₁	24	1	44.09	8.71	0.00	110	6.10	296	130	65.00	588	42.50
	W ₇₂	20	1	6.01	8.50	8.50	50	5.50	102	50	7.50	205	25.00
	W ₇₃	25	2	6.01	10.38	6.07	40	5.20	151	70	7.50	292	27.50

APPENDIX A2

Water Quality Data of Water Samples during Pre Monsoon Season

Location	Well Id	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Cl (mg/l)	Alkalinity (mg/l)	TH (mg/l)	PH (mg/l)	TDS (mg/l)	EC (μs/cm)	Salinity (mg/l)	SO ₄ (mg/l)
Menamkulam	W ₁	70.14	48.57	560	40	260	70	270	6.69	890	1370	870	22.01
	W ₂	28.06	29.63	88	34	40	60	150	7.22	267	418	260	27.83
	W ₃	18.04	15.06	61	14	27.5	20	80	6.64	158	267	150	22.98
	W ₄	16.03	14.33	51	18	15	15	75	6.3	132	213	130	18.09
	W ₅	18.04	15.06	61	42	22.5	15	80	6.51	171	257	170	31.87
	W ₆	30.06	18.21	16	39	27.5	15	105	6.15	239	377	230	17.56
	W ₇	14.03	56.13	54	29	22.5	15	245	6.36	153	242	150	19.25
	W ₈	16.03	26.48	81	28	40	40	125	7.32	209	311	200	27.98
	W ₉	38.08	33.27	15	41	30	60	175	6.5	338	602	330	25.87
Karikkakom	W ₁₀	78.16	38.11	118	32	80	192.5	235	6.56	750	1500	340	54.18
	W ₁₁	22.04	21.37	104	45	56.25	90	110	6	451	898	200	28.97
	W ₁₂	52.1	32.29	260	130	85	67.5	185	5.82	860	1710	380	19.19
	W ₁₃	60.12	32.78	310	12	102.5	72.5	195	5.92	900	1860	410	28.17

Location	Well Id	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Cl (mg/l)	Alkalinity (mg/l)	T H (mg/l)	PH (mg/l)	TDS (mg/l)	EC (μ s/cm)	Salinity (mg/l)	SO ₄ (mg/l)
Karikkakom	W ₁₄	42.08	21.36	85	47	55	62.5	130	6.19	97	206.5	230	27.72
	W ₁₅	14.03	16.03	42	34	32.5	15	80	5.16	10	211	90	26
	W ₁₆	36.07	39.83	74	36	33.75	62.5	200	5.69	378	774	170	31.02
	W ₁₇	82.16	51.72	114	44	72.5	100	295	6.31	820	1730	390	27.9
	W ₁₈	22.04	11.65	61	9	30	15	70	4.29	176	351	80	48.01
Valiyathura	W ₁₉	15.03	56.86	62	17	170	35	240	6.6	435	841	530	43.8
	W ₂₀	185.37	33.01	78	18	85	305	210	5.8	610	1160	750	47.56
	W ₂₁	120.24	80.65	31	6	32.5	145	380	6.4	207	401	260	39.47
Poonthura	W ₂₂	152.3	111.22	980	140	734.98	67.5	610	6.23	3040	6170	1440	32.09
	W ₂₃	50.1	27.92	125	41	73.75	115	165	6.55	680	1400	310	28.34
	W ₂₄	36.07	27.68	119	47	92.5	75	150	6.09	750	125	320	24.72
	W ₂₅	40.08	48.58	140	41	115	267.5	240	6.93	900	2435	410	28.21
	W ₂₆	48.07	28.41	5800	300	20	117.5	165	6.44	327	677	150	28.13
	W ₂₇	12.02	6.8	57	11	22.5	25	40	6.2	154	328	40	32.91
	W ₂₈	8.02	10.2	50	1	15	20	50	5.29	146	368	10	41.22
Pachalloor	W ₂₉	95.19	66.08	127	5	170	320	310	7.1	610	1160	740	37.3
	W ₃₀	135.27	69.47	95	11	70	280	340	6.9	467	894	570	22.81
	W ₃₁	50.17	34.01	46	2	25	15	160	5.6	140	267	170	25.67

Location	Well Id	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Cl (mg/l)	Alkalinity (mg/l)	T H (mg/l)	PH (mg/l)	TDS (mg/l)	EC (μ s/cm)	Salinity (mg/l)	SO ₄ (mg/l)
Pachalloor	W ₃₂	40.08	14.33	25	1	17.5	15	75	5.6	70.6	134	90	29.43
	W ₃₃	5.01	26.24	24	2	15	40	110	6.2	71.3	137	90	31.31
	W ₃₄	10.02	18.47	21	0	15	5	80	5.2	83.9	161	100	28.47
	W ₃₅	40.08	36.2	31	2	17.5	5	165	5.1	91.2	174	110	31.09
Vizhinjam	W ₃₆	150.3	38.85	144	14	182.49	80	220	6.5	720	1400	890	37.3
	W ₃₇	215.43	54.39	128	18	194.99	65	310	6.4	690	1330	840	42.1
	W ₃₈	220.44	63.62	102	6	150	235	350	6.4	770	1480	940	28.1
	W ₃₉	185.37	64.6	131	7	120	230	340	6.18	780	1510	960	29.8
	W ₄₀	5.01	29.89	41	0	22.5	5	125	5.1	107	206	130	39.6
	W ₄₁	40.08	22.83	39	6	52.5	70	110	6.4	204	395	250	22.9
	W ₄₂	45.09	25.99	34	3	35	35	125	6	169	325	210	27.1
	W ₄₃	25.05	34.02	41	1	45	5	150	5.1	144	268	180	42.5
	W ₄₄	5.01	18.95	16	0	12.5	5	80	5.1	42.8	86	50	41.2
Pulluvila	W ₄₅	14.028	23.07	31	1	46.87	35	130	5.11	322	730	140	33.9
	W ₄₆	34.068	8.46	51	6	64.99	55	120	5.52	660	1310	290	32.8
	W ₄₇	32.64	6.9	33	2	52.49	45	110	5.37	459	915	220	34.9
	W ₄₈	6.012	13.34	14	1	24.99	25	70	4.26	114	230	50	41.7
	W ₄₉	18.036	1.22	30	6	70	22.5	50	4.95	332	646	150	28.4
	W ₅₀	8.016	20.14	28	1	4.37	40	105	5.2	256	512	110	23.7

Location	Well Id	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Cl (mg/l)	Alkalinity (mg/l)	T H (mg/l)	PH (mg/l)	TDS (mg/l)	EC (µs/cm)	Salinity (mg/l)	SO ₄ (mg/l)
Poovar	W ₅₁	160.32	26.54	82	19	209.99	400	510	6.84	1880	3760	850	29.7
	W ₅₂	36.072	30.33	56	13	111.25	150	215	5.79	900	1800	400	4
	W ₅₃	40.8	31.104	141	19	340	145	230	5.84	1730	3370	740	26.3
	W ₅₄	28.056	72.83	95	6	197.49	90	165	5.58	3680	7450	1680	37.2
	W ₅₅	54.11	299.73	660	70	271.24	505	435	6.57	880	1760	380	35
	W ₅₆	40.8	27.46	102	4	233.74	70	215	5.46	1090	2200	480	18.3
	W ₅₇	126.25	60.6	148	14	776.23	110	565	5.81	3120	6300	1410	21.7
	W ₅₈	28.056	6.041	37	1	58.12	55	95	5.46	356	726	160	45.8
Pozhiyur	W ₅₉	10.02	9.715	17	1	37.5	15	65	4.94	141	519	60	24.9
	W ₆₀	58.116	132.36	56	13	979.97	300	690	6.86	4590	8680	2060	14.7
	W ₆₁	18.036	7.268	45	4	89.99	45	75	5.53	404	808	190	18.4
	W ₆₂	8.016	1.205	16	1	37.5	15	25	4.84	134	260	60	43.7
	W ₆₃	10.02	19.43	14	1	35	15	105	4.62	112	218	50	46
	W ₆₄	4.008	9.715	18	3	33.75	15	50	4.81	171	332	80	51.9

APPENDIX B

GEOPHYSICAL STUDIES-WENNER ELECTRODE ARRANGEMENTS

Apparent Resistivity (ρ_a) Values at Different Depths

Location	Spacing $a, (m)$	Resistance $R, (\Omega)$	Constant $K=2\pi a$	Apparent resistivity $\rho_a (\Omega m)$
Karikkakom-I	2	23.4	12.56	293.904
	4	5.24	25.12	131.629
	6	3.37	37.68	126.982
	8	0.794	50.24	39.891
	10	0.328	62.8	20.598
	12	0.263	75.36	19.820
	14	0.203	87.92	17.848
	16	0.185	100.48	18.589
	18	0.104	113.04	11.756
	20	0.059	125.6	7.410
	22	0.035	138.16	4.836
Karikkakom-II	2	23.8	12.56	298.928
	4	59.5	25.12	1494.64
	6	0.36	37.68	13.565
	8	0.768	50.24	38.584
	10	0.283	62.8	17.772
	12	0.238	75.36	17.936
	14	0.237	87.92	20.837
	16	0.151	100.48	15.172
	18	0.153	113.04	17.295
	20	0.13	125.6	16.328
	22	0.023	138.16	3.178
Karikkakom-III	2	41.8	12.56	525.008
	4	2.18	25.12	54.762
	6	1.315	37.68	49.549
	8	0.98	50.24	49.235
	10	0.838	62.8	52.626
	12	0.743	75.36	55.992
	14	0.601	87.92	52.840
	16	0.56	100.48	56.269
	18	0.505	113.04	57.085
	20	0.381	125.6	47.854
	22	0.387	138.16	53.468

Apparent Resistivity (ρ_a) Values at Different Depths contd....

Location	Spacing a, (m)	Resistance R, (Ω)	Constant K=2 π a	Apparent resistivity ρ_a (Ω m)
Valiyathura-I	2	12.97	12.56	162.903
	4	13.08	25.12	328.570
	6	13.14	37.68	495.115
	8	13.17	50.24	661.661
	10	13.18	62.8	827.704
	12	1.097	75.36	82.670
	14	0.906	87.92	79.656
	16	0.735	100.48	73.853
	18	0.766	113.04	86.589
	20	0.449	125.6	56.394
	22	0.371	138.16	51.257
Valiyathura-II	2	12.93	12.56	162.401
	4	12.94	25.12	325.053
	6	12.95	37.68	487.956
	8	12.99	50.24	652.618
	10	13.09	62.8	822.052
	12	13.09	75.36	986.462
	14	13.07	87.92	1149.114
	16	13.06	100.48	1312.269
	18	13.05	113.04	1475.172
	20	13.1	125.6	1645.360
	22	13.12	138.16	1812.659
Valiyathura-III	2	12.94	12.56	162.526
	4	13.06	25.12	328.067
	6	13.09	37.68	493.231
	8	13.11	50.24	658.646
	10	13.11	62.8	823.308
	12	13.12	75.36	988.723
	14	13.13	87.92	1154.390
	16	13.12	100.48	1318.298
	18	13.12	113.04	1483.085
	20	13.12	125.6	1647.872
	22	13.13	138.16	1814.041

Apparent Resistivity (ρ_a) Values at Different Depths contd....

Location	Spacing a, (m)	Resistance R, (Ω)	Constant $K=2\pi a$	Apparent resistivity ρ_a (Ωm)
Poonthura	2	24.2	12.56	303.952
	4	9.11	25.12	228.843
	6	3.62	37.68	136.402
	8	2.15	50.24	108.016
	10	1.298	62.8	81.514
	12	0.865	75.36	65.186
	14	0.595	87.92	52.312
	16	0.51	100.48	51.245
	18	0.359	113.04	40.581
	20	0.289	125.6	36.298
	22	0.227	138.16	31.362
Pachalloor-I	2	0.252	12.56	3.165
	4	0.168	25.12	4.220
	6	0.102	37.68	3.843
	8	0.099	50.24	4.974
	10	0.056	62.8	3.517
	12	0.044	75.36	3.316
	14	0.009	87.92	0.791
	16	0.007	100.48	0.703
	18	0.006	113.04	0.678
	20	0.006	125.6	0.754
	22	0.005	138.16	0.691
Pachalloor-II	2	0.252	12.56	3.165
	4	0.168	25.12	4.220
	6	0.102	37.68	3.843
	8	0.099	50.24	4.974
	10	0.056	62.8	3.517
	12	0.044	75.36	3.316
	14	0.009	87.92	0.791
	16	0.007	100.48	0.703
	18	0.006	113.04	0.678
	20	0.006	125.6	0.754
	22	0.005	138.16	0.691

Apparent Resistivity (ρ_a) Values at Different Depths contd....

Location	Spacing a, (m)	Resistance R, (Ω)	Constant K=2 π a	Apparent resistivity ρ_a , (Ω m)
Kovalam	2	7.53	12.56	94.577
	4	7.42	25.12	186.390
	6	2.54	37.68	95.707
	8	0.643	50.24	32.304
	10	0.64	62.8	40.192
	12	0.501	75.36	37.755
	14	0.327	87.92	28.750
	16	0.256	100.48	25.723
	18	0.199	113.04	22.495
	20	0.151	125.6	18.966
	22	0.121	138.16	16.717
Vazhamuttom	2	0.516	12.56	6.481
	4	0.255	25.12	6.406
	6	0.143	37.68	5.388
	8	0.099	50.24	4.974
	10	0.091	62.8	5.715
	12	0.075	75.36	5.652
	14	0.073	87.92	6.418
	16	0.046	100.48	4.622
	18	0.045	113.04	5.087
	20	0.045	125.6	5.652
	22	0.11	138.16	15.198
Vizhinjam-I	2	2.85	12.56	35.796
	4	1.351	25.12	33.937
	6	1.035	37.68	38.999
	8	0.785	50.24	39.438
	10	0.504	62.8	31.651
	12	0.455	75.36	34.289
	14	0.395	87.92	34.728
	16	0.275	100.48	27.632
	18	0.205	113.04	23.173
	20	0.196	125.6	24.618
	22	0.067	138.16	9.257

Apparent Resistivity (ρ_a) Values at Different Depths contd....

Location	Spacing a, (m)	Resistance R, (Ω)	Constant $K=2\pi a$	Apparent resistivity ρ_a (Ωm)
Vizhinjam-II	2	5.16	12.56	64.810
	4	3.062	25.12	76.917
	6	2.592	37.68	97.667
	8	2.321	50.24	116.607
	10	1.965	62.8	123.402
	12	0.812	75.36	61.192
	14	0.657	87.92	57.763
	16	0.435	100.48	43.709
	18	0.218	113.04	24.643
	20	0.142	125.6	17.835
	22	0.078	138.16	10.776
Poovar-I	2	3.09	12.56	38.810
	4	0.275	25.12	6.908
	6	0.013	37.68	0.490
	8	0.132	50.24	6.632
	10	0.081	62.8	5.087
	12	0.075	75.36	5.652
	14	0.052	87.92	4.572
	16	0.034	100.48	3.416
	18	0.013	113.04	1.470
	20	0.011	125.6	1.382
	22	0.008	138.16	1.105
Poovar-II	2	4.95	12.56	62.172
	4	3.56	25.12	89.427
	6	2.405	37.68	90.620
	8	1.987	50.24	99.827
	10	1.32	62.8	82.896
	12	0.187	75.36	14.092
	14	0.15	87.92	13.188
	16	0.125	100.48	12.560
	18	0.092	113.04	10.400
	20	0.072	125.6	9.043
	22	0.064	138.16	8.842

Apparent Resistivity (ρ_a) Values at Different Depths contd....

Location	Spacing a, (m)	Resistance R, (Ω)	Constant $K=2\pi a$	Apparent resistivity $\rho_a, (\Omega m)$
Adimalathura-I	2	0.641	12.56	8.051
	4	0.478	25.12	12.007
	6	0.182	37.68	6.858
	8	0.095	50.24	4.773
	10	0.063	62.8	3.956
	12	0.048	75.36	3.617
	14	0.042	87.92	3.693
	16	0.04	100.48	4.019
	18	0.038	113.04	4.296
	20	0.029	125.6	3.642
	22	0.027	138.16	3.730
	Adimalathura-II	2	3.14	12.56
4		2.801	25.12	70.361
6		1.144	37.68	43.106
8		0.985	50.24	49.486
10		0.83	62.8	52.124
12		0.468	75.36	35.268
14		0.437	87.92	38.421
16		0.35	100.48	35.168
18		0.246	113.04	27.808
20		0.165	125.6	20.724
22		0.094	138.16	12.987

APPENDIX C

DAILY RAINFALL (IN mm) (Source: IMD)

STATION : THIRUVANANTHAPURAM CITY

YEAR : 2010

DATE	JAN	FEB	MAR	APL	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.9	0.4	9.2	0.0	0.0	2.6	0.0	4.2
2	0.0	0.0	0.0	0.0	0.0	trace	2.4	0.0	0.0	16.4	trace	16.4
3	0.0	0.0	0.0	0.0	0.0	0.0	8.2	1.8	0.0	14.6	1.3	18.5
4	trace	0.0	0.0	0.0	0.0	0.0	3.2	3.3	0.0	68.5	2.4	1.9
5	0.0	0.0	0.0	2.8	0.0	11.0	6.8	0.2	0.0	15.4	3.6	7.7
6	trace	0.0	0.0	7.1	0.0	8.0	0.7	trace	0.0	104.0	27.0	0.0
7	0.0	0.0	0.0	0.4	0.0	11.8	1.2	0.2	9.0	58.5	trace	0.0
8	0.0	0.0	0.0	0.9	0.0	3.5	0.0	7.9	trace	36.1	3.1	74.4
9	0.0	0.0	0.0	0.0	7.4	trace	0.0	6.2	7.7	59.7	2.8	36.6
10	124.6	0.0	0.0	trace	3.0	5.8	trace	6.2	9.2	2.2	0.0	trace
11	6.5	0.0	0.0	0.0	17.3	32.8	0.5	0.0	5.8	0.0	4.6	0.0
12	0.0	0.0	0.0	0.0	11.2	29.2	trace	1.8	trace	0.0	1.0	2.0
13	0.0	0.0	0.0	0.0	0.4	26.5	0.9	20.2	0.0	0.0	0.0	0.0
114	1.4	0.0	0.0	trace	0.0	12.0	11.4	3.4	5.2	trace	5.6	0.0
15	0.0	0.0	0.0	0.0	0.0	0.1	trace	6.5	trace	1.8	0.2	0.0
16	0.0	0.0	0.0	0.0	0.2	0.0	15.2	2.5	0.0	trace	2.7	0.0
17	0.0	0.0	0.3	34.6	0.0	0.0	8.4	5.1	trace	0.2	51.5	0.0
18	0.0	0.0	0.0	32.8	0.5	4.0	43.4	trace	9.6	2.0	trace	0.0
19	0.0	0.0	0.0	2.3	10.6	0.0	27.4	0.0	13.5	2.8	3.5	6.7

DAILY RAINFALL (IN mm) , Year:2010 contd.....

DATE	JAN	FEB	MAR	APL	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
20	0.0	0.0	0.0	0.0	3.3	0.0	44.0	0.0	0.0	2.9	0.2	0.0
21	0.0	0.0	0.0	0.0	3.2	0.0	1.6	0.2	0.0	0.0	13.2	1.0
22	0.0	0.0	0.0	0.0	7.5	1.7	16.6	0.8	0.2	2.6	35.4	trace
23	0.0	0.0	0.0	0.0	0.7	20.6	trace	0.0	5.5	trace	36.2	0.0
24	0.0	0.0	0.0	1.4	12.6	12.7	3.4	3.0	2.3	0.8	2.9	0.1
25	0.0	0.0	0.0	7.6	13.8	10.4	trace	4.7	9.6	0.0	9.6	0.0
26	0.0	0.0	0.0	1.4	12.0	12.5	0.0	6.9	trace	0.0	4.1	0.0
27	0.0	0.0	183.2	16.3	12.1	2.4	3.5	0.2	trace	0.0	39.6	0.0
28	0.0	0.0	0.0	0.4	4.6	1.3	2.6	2.6	5.2	0.0	1.7	0.0
29	0.0	-	0.0	11.2	19.8	41.3	14.5	0.0	50.6	14.6	25.8	trace
30	0.0	-	1.3	0.8	52.5	3.2	1.6	18.7	2.0	7.8	trace	0.2
31	0.0	-	6.6	-	2.1	-	trace	0.3	-	0.0	-	0.0
TOTAL	132.5	0.0	191.4	120.0	195.7	251.2	226.7	102.7	135.4	413.5	278.0	169.7

DAILY RAINFALL(IN mm) (Source: IMD)

STATION : THIRUVANANTHAPURAM CITY

YEAR : 2011

DATE	JAN	FEB	MAR	APL	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	24.6	0.0	0.0	0.0	6.0	15.0	0.0	0.0	50.6	0.0	4.0	0.6
2	0.9	0.0	0.0	0.0	1.8	82.7	1.0	0.0	4.9	0.0	48.3	2.3
3	0.0	0.0	0.0	1.2	6.8	15.0	0.0	7.3	2.4	0.0	2.0	1.9
4	3.0	0.0	0.0	0.4	0.5	17.5	0.0	12.6	11.7	0.0	3.0	0.0
5	0.3	0.0	0.0	0.0	0.0	18.9	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	40.8	33.6	0.4	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	14.1	0.0	20.1	3.3	0.0	52.8	0.0
8	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.3	0.0	0.0	13.6	0.0
9	0.0	4.6	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	18.4	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	12.3	5.6	0.1	34.3	0.0	0.0	0.0
12	0.0	0.0	0.0	4.3	0.0	0.0	3.8	0.0	0.6	0.0	0.0	7.0
13	0.0	0.0	0.0	3.8	0.0	0.0	4.0	0.0	25.9	0.0	0.0	1.6
14	0.0	0.0	1.3	0.0	0.0	1.4	1.7	0.0	5.0	0.0	0.0	0.2
15	0.0	0.0	0.0	0.0	0.0	22.5	6.8	0.0	4.7	0.0	25.0	0.0
16	0.0	0.0	0.0	0.0	0.0	1.5	19.7	0.0	1.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	5.7	9.8	0.0	0.0	26.2	0.0	0.0
18	0.0	0.0	0.0	14.4	5.2	10.9	1.0	0.2	0.0	0.2	0.0	0.0
19	0.0	0.0	0.0	12.2	0.0	0.2	1.5	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	1.9	0.0	0.3	0.8	0.0	4.1	0.0	0.0	1.1
21	0.0	0.0	0.0	7.5	0.0	0.9	0.0	0.0	6.5	0.0	0.3	0.0
22	0.0	53.8	0.0	0.4	0.0	0.2	5.8	0.0	1.7	2.3	0.0	0.0
23	0.0	25.7	0.0	58.3	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0

DAILY RAINFALL (IN mm) , Year:2011 contd.....

DATE	JAN	FEB	MAR	APL	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
24	0.0	0.0	0.0	0.6	0.7	1.6	1.7	0.0	0.0	0.6	0.0	0.0
25	0.0	7.2	0.0	0.0	0.0	0.8	1.2	0.0	0.0	8.2	10.0	81.6
26	0.0	0.0	0.0	3.3	7.7	0.2	0.2	1.6	0.0	2.6	14.7	0.0
27	0.0	16.3	0.0	0.0	0.2	3.6	0.0	0.8	0.0	0.9	68.6	0.0
28	0.0	0.0	0.0	0.0	4.1	0.8	0.5	0.8	0.0	25.4	33.4	0.0
29	0.0	-	0.2	36.2	1.8	0.0	0.0	1.0	0.0	3.4	0.0	0.0
30	0.0	-	0.0	0.0	5.9	0.0	0.0	5.5	0.0	13.7	0.2	0.0
31	0.0	-	0.0	-	1.1	-	0.0	17.4	-	25.7	-	182.0
TOTAL	28.8	107.6	1.5	162.9	41.8	271.1	101.7	69.1	156.7	109.2	275.9	278.3