

2.CLIMATE AND RAINFALL

2.1 Temperature Humidity and Rainfall 2010-11

Name of the Rain Gauge : Airport, Madurai.

Month/ Season	Temperature in Celsius				Humidity in %		Rainfall (in mm)		
	Mean Maximum		Mean Minimum		8.30 Hrs	17.30 Hrs	Normal	Actual	% of Deviation
	Normal	Actual	Normal	Actual					
June 2010	36.4	37.4	25.8	26.5	63	49	48.5	77.9	+ 161
July 2010	35.4	36.2	25.5	25.9	63	49	57.6	58.5	+101
August 2010	35.3	36.4	25.1	26.3	60	51	85.5	39.9	-47
September 2010	34.6	35.2	24.3	25.0	67	62	108.8	140.8	+129
South West Monsoon							300.4	317.1	
October 2010	32.4	33.9	23.4	24.1	73	63	189.9	200.1	+105
November 2010	30.1	30.6	22.4	23.2	84	72	153.1	428.3	+280
December 2010	29.4	29.4	21.0	21.9	78	64	63.5	78.4	+123
North East Monsoon							406.5	706.8	
January 2011	30.4	30.8	19.9	21.4	75	56	10.4	7.4	-71
February 2011	32.6	32.3	20.7	21.4	72	48	5.3	42.9	+809
Winter Season							15.7	50.3	
March 2011	35.2	36.8	22.5	23.6	69	40	13.3	0.4	-3
April 2011	36.6	36.2	24.9	25.2	71	51	44.3	52.5	+118
May 2011	37.3	37.7	25.9	25.7	66	45	55.1	68.9	+125
Summer Season							112.7	121.8	
Year Total							835.3	1196.0	+143

2.1 (a) RAINFALL

MONTH-WISE AND SEASON-WISE RAINFALL DURING THE YEAR 2010-11

Rainfall in mm

MONTH	ACTUAL	NORMAL	% Dev.
JUNE '10	55.1	31.0	77.7
JULY '10	48.0	53.8	-10.8
AUGUST '10	44.7	88.6	-49.5
SEPTEMBER '10	153.8	132.0	16.5
SOUTH-WEST MONSOON	301.6	305.4	-1.2
OCTOBER '10	220.3	190.3	15.8
NOVEMBER '10	395.2	128.5	207.5
DECEMBER '10	140.5	54.2	159.2
NORTH EAST MONSOON	756.0	373.0	102.7
JANUARY '11	1.6	13.6	-88.2
FEBRUARY '11	37.2	14.5	156.6
WINTER SEASON	38.8	28.1	38.1
MARCH '11	5.6	20.6	-72.8
APRIL '11	92.0	57.8	59.2
MAY '11	54.1	66.4	-18.5
HOT SEASON	151.7	144.8	4.8
WHOLE YEAR	1248.1	851.3	46.6

Source: Dept. of Economics and Statistics, Chennai-6.

2.2 Rainfall – Blockwise 2010-11

Sl. No	Name of the Block	Name of the Rain Gauge Station	South West Monsoon				North East Monsoon			Winter		Summer			Total
			June 2010	July 2010	Aug. 2010	Sep. 2010	Oct. 2010	Nov. 2010	Dec. 2010	Jan. 2011	Feb. 2011	Mar. 2011	April 2011	May 2011	
1.	Madurai East	Chittampatti	42.0	86.0	38.6	235.6	86.0	325.8	179.4	1.0	84.2	0.0	63.4	57.0	1199.0
2.	Madurai West	Tallakulam	81.3	55.6	49.0	340.0	218.1	393.4	135.6	15.0	69.0	0.0	125.2	32.9	1515.1
3.	T.P.Kundram	Madurai Airport	77.9	58.5	39.9	140.8	200.1	428.3	78.4	7.4	42.9	0.0	52.5	68.9	1095.6
4.	Melur	Melur	121.0	14.0	73.0	160.0	84.5	309.4	138.7	2.0	42.2	0.0	100.8	25.0	1070.6
5.	Kottampatti	Peria Aruvi	49.8	54.8	68.2	84.0	163.2	282.4	112.6	8.4	31.2	0.0	178.4	44.2	1077.2
6.	Vadipatti	Andipatti	47.0	47.0	34.0	244.0	292.0	446.0	55.0	0.0	60.0	0.0	114.0	48.0	1387.0
7.	Alanganallur	Mettupatti	104.0	75.8	22.3	213.4	243.0	436.8	166.8	2.0	45.0	0.0	166.0	85.0	1560.1
8.	Usilampatti	Usilampatti	52.6	37.4	19.6	130.4	232.3	478.6	88.4	0.0	6.2	3.4	63.6	91.9	1204.4
9.	Chellimpatti	Kuppanampatti **	52.6	37.4	19.6	130.4	232.3	478.6	88.4	0.0	6.2	3.4	63.6	91.9	1204.4
10.	Thirumangalam	Thirumangalam	26.0	61.0	33.6	180.4	222.8	387.4	86.8	0.0	39.8	21.4	163.8	56.2	1279.2
11.	Kalligudi	Kalligudi	17.2	74.8	29.2	162.6	137.2	286.6	54.2	0.0	78.4	5.6	76.4	47.0	969.2
12.	T.Kallupatti	Peraiyur	50.3	14.0	54.4	159.6	338.4	387.8	115.8	6.2	24.0	0.0	101.6	18.4	1270.5

** Not Functioning. So the nearest raingauge station usilampatti rainfall adopted.

2.3 Time Series Data of Rainfall by Seasons in Madurai District 1999-2011(in m.m.)

Sl. No	Year	South West Monsoon		North East Monsoon		Winter Season		Summer Season		All Monsoons		% of Deviation
		Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual	
1.	1999-2000	286.2	139.4	406.09	386.8	35.7	110.06	143.4	99.8	872.2	736.6	-15.5
2.	2000-2001	288.8	316.5	406.09	226.0	35.4	9.02	143.4	86.8	874.5	638.5	-26.9
3.	2001-2002	288.8	182.3	406.09	268.4	35.4	57.04	157.6	80.2	888.7	588.3	-33.8
4.	2002-2003	270.1	171.5	397.05	349.3	33.4	0.8	138.8	153.1	839.0	674.7	-19.7
5.	2003-2004	270.1	280.4	397.05	289.6	33.4	1.9	138.8	164.8	839.8	736.7	-12.3
6.	2004-2005	305.4	343.7	373.0	347.7	29.8	5.7	131.8	313.6	840.0	1010.7	+20.3
7.	2005-2006	305.4	250.4	373.0	689.4	29.8	8.0	131.8	230.0	840.0	1177.8	+40.2
8.	2006-2007	305.4	144.2	373.0	432.5	29.8	10.1	131.8	81.2	840.0	668.0	-20.5
9.	2007-2008	305.4	228.9	373.0	473.3	29.8	16.0	131.8	270.6	840.0	988.8	+17.7
10.	2008-2009	305.4	310.8	373.0	388.2	29.8	8.1	131.8	173.0	840.0	880.1	+4.8
11.	2009-2010	305.4	259.1	373.0	302.1	29.8	2.7	131.8	149.4	840.0	713.3	-15.1
12.	2010-2011	305.4	301.6	373.0	756.0	28.1	38.8	144.8	151.7	851.3	1248.1	+46.6