

## SECTION - 17: CLIMATE AND ENVIRONMENT

**Table 17.1 - Monthly average minimum temperature by region, 2007**

(Degrees Celcius)

Region - Mont	North		South		East		West		Centre		All sugar zones	
	Mean Amount	Difference from normal	Mean Amount	Difference from normal	Mean Amount	Difference from normal	Mean Amount	Difference from normal	Mean Amount	Difference from normal	Mean Amount	Difference from normal
January	23.4	+ 1.5	24.0	+ 1.1	23.5	+ 1.5	24.6	+ 2.1	21.8	+ 1.4	23.5	+ 1.5
February	23.0	+ 0.8	24.3	+ 1.2	23.8	+ 1.4	24.5	+ 1.8	22.0	+ 1.4	23.5	+ 1.3
March	21.8	+ 0.0	23.2	+ 0.4	22.3	+ 0.3	22.9	+ 0.6	21.0	+ 0.6	22.2	+ 0.4
April	21.3	+ 0.5	23.1	+ 1.2	22.4	+ 1.2	22.4	+ 1.1	20.5	+ 0.9	21.9	+ 1.0
May	19.3	+ 0.8	21.2	+ 1.0	20.3	+ 0.9	20.9	+ 1.4	18.8	+ 1.1	20.1	+ 1.0
June	16.4	- 0.3	19.1	+ 0.4	18.2	+ 0.4	18.2	+ 0.5	16.4	+ 0.3	17.7	+ 0.3
July	16.7	+ 0.7	19.1	+ 1.0	18.0	+ 0.8	18.3	+ 1.2	16.4	+ 1.1	17.7	+ 1.0
August	16.3	+ 0.1	18.5	+ 0.6	17.4	+ 0.3	17.7	+ 0.7	15.7	+ 0.5	17.1	+ 0.4
September	16.6	+ 0.1	19.3	+ 1.3	18.0	+ 1.0	18.2	+ 0.7	16.3	+ 0.8	17.7	+ 0.8
October	18.2	+ 0.3	20.2	+ 1.0	19.1	+ 1.1	19.5	+ 0.9	17.1	+ 0.6	18.8	+ 0.8
November	18.8	- 0.3	21.5	+ 1.1	20.0	+ 0.6	20.6	+ 0.6	18.4	+ 0.7	19.9	+ 0.5
December	21.4	+ 0.5	23.5	+ 1.6	22.1	+ 1.2	22.5	+ 0.9	20.2	+ 0.8	21.9	+ 1.0
<b>Year</b>	<b>19.5</b>	<b>+ 0.4</b>	<b>21.4</b>	<b>+ 1.0</b>	<b>20.4</b>	<b>+ 0.9</b>	<b>20.9</b>	<b>+ 1.0</b>	<b>18.7</b>	<b>+ 0.8</b>	<b>20.2</b>	<b>0.8</b>

Source: Meteorological Services

**Table 17.2 - Monthly average maximum temperature by region, 2007**

(Degrees Celcius)

Region Month	North		South		East		West		Centre		All sugar zones	
	Mean Amount	Difference from normal	Mean Amount	Difference from normal	Mean Amount	Difference from normal	Mean Amount	Difference from normal	Mean Amount	Difference from normal	Mean Amount	Difference from normal
January	31.8	+ 0.7	30.3	+ 0.5	29.1	+ 0.2	32.1	+ 1.7	28.3	+ 0.6	30.3	+ 0.7
February	31.0	+ 0.2	30.0	+ 0.5	29.0	+ 0.2	31.2	+ 0.9	27.7	+ 0.2	29.8	+ 0.4
March	30.4	- 0.2	29.6	+ 0.4	28.2	- 0.4	30.5	+ 0.2	27.3	- 0.1	29.2	+ 0.0
April	30.1	+ 0.4	28.6	+ 0.3	27.3	- 0.4	31.0	+ 1.5	26.2	- 0.1	28.6	+ 0.4
May	28.9	+ 0.8	27.3	+ 0.5	26.3	+ 0.0	29.7	+ 1.7	25.3	+ 0.4	27.5	+ 0.7
June	26.4	- 0.1	25.3	+ 0.1	24.4	- 0.2	26.8	+ 0.3	22.9	- 0.1	25.2	+ 0.0
July	26.4	+ 1.0	25.2	+ 0.9	24.1	+ 0.4	27.1	+ 1.3	22.9	+ 1.0	25.1	+ 0.9
August	26.7	+ 0.8	24.8	+ 0.6	23.7	- 0.1	26.7	+ 0.8	22.5	+ 0.7	24.9	+ 0.6
September	27.9	+ 1.0	25.5	+ 0.4	24.2	- 0.1	27.9	+ 1.3	22.8	+ 0.1	25.7	+ 0.5
October	28.5	+ 0.1	25.8	- 0.6	24.7	- 0.7	28.4	+ 0.5	23.4	- 0.7	26.2	- 0.3
November	29.7	- 0.4	28.2	+ 0.2	27.0	+ 0.0	30.6	+ 1.5	26.5	+ 0.6	28.4	+ 0.4
December	32.6	+ 1.9	29.6	+ 0.4	28.3	+ 0.1	31.4	+ 1.6	27.4	+ 0.3	29.9	+ 0.8
<b>Year</b>	<b>29.2</b>	<b>+ 0.5</b>	<b>27.5</b>	<b>+ 0.4</b>	<b>26.3</b>	<b>- 0.1</b>	<b>29.4</b>	<b>+ 1.1</b>	<b>25.3</b>	<b>+ 0.3</b>	<b>27.6</b>	<b>+ 0.4</b>

Source: Meteorological Services

**Table 17.3 - Mean rainfall 2004-2007**

*Millimetres*

Period	Long Term Mean (1971-2000)	2004		2005		2006		2007		Long Term Mean (1971-2000)	2004		2005		2006		2007	
		Mean	% of Long Term Mean	Mean	% of Long Term Mean	Mean	% of Long Term Mean	Mean	% of Long Term Mean		Mean	% of Long Term Mean	Mean	% of Long Term Mean	Mean	% of Long Term Mean	Mean	% of Long Term Mean
	<b>Island of Mauritius</b>									<b>Island of Rodrigues</b>								
<b>Year</b>	<b>2,010</b>	<b>2,270</b>	<b>113</b>	<b>2,372</b>	<b>118</b>	<b>1,914</b>	<b>95</b>	<b>1,961</b>	<b>98</b>	<b>1,105</b>	<b>1,134</b>	<b>103</b>	<b>1,275</b>	<b>115</b>	<b>1,189</b>	<b>108</b>	<b>945</b>	<b>85</b>
<b>Jan</b>	<i>261</i>	443	<b>170</b>	148	<b>57</b>	372	<b>142</b>	342	<b>131</b>	<i>150</i>	208	<b>139</b>	68	<b>45</b>	43	<b>29</b>	73	<b>49</b>
<b>Feb</b>	<i>336</i>	316	<b>94</b>	407	<b>121</b>	331	<b>99</b>	566	<b>168</b>	<i>185</i>	55	<b>30</b>	179	<b>97</b>	207	<b>112</b>	315	<b>170</b>
<b>Mar</b>	<i>242</i>	252	<b>104</b>	727	<b>300</b>	459	<b>189</b>	169	<b>70</b>	<i>131</i>	110	<b>84</b>	143	<b>109</b>	377	<b>287</b>	54	<b>41</b>
<b>Apr</b>	<i>226</i>	297	<b>131</b>	117	<b>52</b>	83	<b>37</b>	123	<b>54</b>	<i>117</i>	264	<b>225</b>	230	<b>197</b>	91	<b>78</b>	47	<b>40</b>
<b>May</b>	<i>159</i>	203	<b>128</b>	126	<b>79</b>	53	<b>33</b>	145	<b>91</b>	78	164	<b>209</b>	105	<b>134</b>	67	<b>85</b>	35	<b>44</b>
<b>Jun</b>	<i>115</i>	131	<b>114</b>	139	<b>121</b>	100	<b>87</b>	140	<b>122</b>	78	66	<b>86</b>	135	<b>174</b>	78	<b>101</b>	30	<b>39</b>
<b>Jul</b>	<i>120</i>	93	<b>78</b>	174	<b>145</b>	177	<b>147</b>	132	<b>110</b>	<i>81</i>	41	<b>51</b>	130	<b>161</b>	159	<b>196</b>	75	<b>93</b>
<b>Aug</b>	<i>122</i>	46	<b>38</b>	106	<b>87</b>	80	<b>66</b>	63	<b>52</b>	<i>59</i>	83	<b>139</b>	76	<b>128</b>	55	<b>93</b>	43	<b>72</b>
<b>Sep</b>	<i>81</i>	120	<b>148</b>	233	<b>288</b>	72	<b>89</b>	72	<b>89</b>	<i>44</i>	56	<b>127</b>	96	<b>219</b>	29	<b>67</b>	46	<b>104</b>
<b>Oct</b>	<i>70</i>	36	<b>51</b>	64	<b>91</b>	56	<b>80</b>	99	<b>141</b>	<i>41</i>	19	<b>47</b>	23	<b>56</b>	48	<b>118</b>	38	<b>94</b>
<b>Nov</b>	<i>80</i>	139	<b>174</b>	48	<b>60</b>	85	<b>106</b>	49	<b>61</b>	70	31	<b>45</b>	43	<b>61</b>	12	<b>17</b>	7	<b>10</b>
<b>Dec</b>	<i>199</i>	194	<b>97</b>	83	<b>42</b>	46	<b>23</b>	61	<b>31</b>	<i>71</i>	37	<b>52</b>	47	<b>66</b>	23	<b>32</b>	182	<b>259</b>

Source: Mauritius Meteorological Services

**Table 17.4 - Forest area by category, 1998 - 2007**

Category	Hectares									
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
<b>State - owned</b>	<b>22,519</b>	<b>22,492</b>	<b>22,089</b>	<b>22,089</b>	<b>22,089</b>	<b>22,068</b>	<b>22,200</b>	<b>22,185</b>	<b>22,181</b>	<b>22,176</b>
Plantations	12,609	12,608	12,359	12,362	12,418	12,256	11,816	11,828	11,848	11,878
Nature reserves	799	799	799	799	799	799	799	799	799	799
<i>on mainland</i>	200	200	200	200	200	200	200	200	200	200
<i>islets</i>	599	599	599	599	599	599	599	599	599	599
National Park <sup>1</sup>	6,574	6,574	6,574	6,574	6,574	6,574	6,574	6,574	6,574	6,574
Islet National Park <sup>2</sup>							134	134	134	134
Bras D'Eau & Poste La Fayette Reserves <sup>3</sup>							472	472	472	472
Unplantable, protective or to be planted	1,885	1,859	1,705	1,702	1,646	1,804	1,770	1,743	1,719	1,688
Pas Geometriques	652	652	652	652	652	635	635	635	635	631
<i>Plantations</i>	224	225	224	230	243	226	226	226	226	227
<i>Leased for grazing and tree planting</i>	230	230	230	230	230	230	230	230	230	230
<i>Unplanted, protective or to be planted</i>	198	197	198	192	179	179	179	179	179	179
<b>Privately - owned lands</b>	<b>34,540</b>	<b>34,540</b>	<b>34,540</b>	<b>34,540</b>	<b>34,540</b>	<b>34,540</b>	<b>25,000</b>	<b>25,000</b>	<b>25,000</b>	<b>25,000</b>
Reserves	6,553	6,553	6,553	6,553	6,553	6,553	6,553	6,553	6,553	6,553
<i>Mountain reserves</i>	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800
<i>River reserves</i>	2,740	2,740	2,740	2,740	2,740	2,740	2,740	2,740	2,740	2,740
<i>Nature reserves</i>	13	13	13	13	13	13	13	13	13	13
Other <sup>4</sup>	27,987	27,987	27,987	27,987	27,987	27,987	18,447	18,447	18,447	18,447
<b>Total</b>	<b>57,059</b>	<b>57,032</b>	<b>56,629</b>	<b>56,629</b>	<b>56,629</b>	<b>56,608</b>	<b>47,200</b>	<b>47,185</b>	<b>47,181</b>	<b>47,176</b>

Source : Forestry Service, Ministry of Agro Industry and Fisheries

<sup>1</sup> Black River Gorges National Park was proclaimed in 1994 and data on the area enclosed by the boundaries of the park were not available until 1997.

<sup>2</sup> Islet National Park was proclaimed in 1994.

<sup>3</sup> Bras D'Eau & Poste La Fayette Reserves were proclaimed in 2002 and data of the area is included as from the year 2004..

<sup>4</sup> Includes Plantations, forest lands, scrub and grazing lands. Forest area was decreasing gradually. New estimates in private lands worked out in 2004.

**Table 17.5 - Ambient air quality monitoring by mobile stations, Island of Mauritius, 2006**

Pollutant	Aapravasi Ghat, port Louis				Terre rouge, Richfield Textile			Valentina, Phoenix				Cassis			
	Unit	Minimum	Maximum	24 hour Average for the year	Minimum	Maximum	24 hour Average for the year	Minimum	Maximum	24 hour Average for the year	Ambient air quality standard <sup>2</sup>	Minimum	Maximum	24 hour Average for the year	Ambient air quality standard <sup>2</sup>
Dust ( PM <sub>10</sub> )	µg/m <sup>3</sup>	43.0	59.0	52.0	13.0	27.0	18.0	11.0	69.0	25.8	100.0	43.0	59.0	52.0	100.0
Ozone ( O <sub>3</sub> )	ppb	1.0	3.0	1.8	7.0	23.0	14.8	1.0	9.0	2.6	46.7	1.0	3.0	1.8	46.7
Sulphur dioxide ( SO <sub>2</sub> )	ppb	0.3	1.4	0.7	0.1	3.2	1.1	0.1	89.4	18.0	70.0	0.3	1.4	0.7	70.0
Nitrogen dioxide ( NO <sub>2</sub> )	ppb	26.0	27.0	28.0	1.0	4.0	1.8	-	-	-	-	26.0	27.0	28.0	28.0
Carbon monoxide ( CO )	ppm	0.2	0.7	0.4	0.0	0.4	0.3	0.1	0.6	0.3	8.0	0.2	0.7	0.4	8.0

**Table 17.6 - Consumption of controlled ozone-depleting substances by type of substances, 1997 - 2007**

Metric Tonnes

Type of substances	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007 <sup>1</sup>
Chlorofluorocarbon (CFC's)	27.12	39.69	19.47	19.26	14.71	7.4	4.07	3.4	-	1.0	-
Hydrochlorofluorocarbon (HCFC's)	50.66	59.83	89.54	63	100.49	128.9	222.73	168.45	165.64	138.13	156.62
Carbon tetrachloride	0.01	0.02	0.01	0.01	0.01	0.02	0.03	0.02	0.03	-	-
Methyl chloroform	0.03	1.1	1.01	1.1	-	-	-	-	-	-	-
Methyl bromide	0.6	0.7	0.7	...	0.7	-	-	-	-	-	-
Others	0.64	1.82	1.72	1.11	0.71	0.02	0.03	0.02	0.03	-	-
<b>Total</b>	<b>78.42</b>	<b>101.34</b>	<b>110.73</b>	<b>83.37</b>	<b>115.91</b>	<b>136.32</b>	<b>226.83</b>	<b>171.87</b>	<b>165.67</b>	<b>139.13</b>	<b>156.62</b>

<sup>1</sup> Provisional

**Table 17.7 - Solid waste input by type at Mare Chicose landfill site, 2002 - 2007**

Waste type	2002	2003	2004	2005	2006	2007 <sup>1</sup>
Commercial	1,843	-	-	-	-	-
Construction	6,404	7,199	6,097	3,756	1,109	502
Domestic	325,006	352,915	365,528	363,776	387,751	365,824
Industrial ( inc. textile )	6,429	4,421	3,097	2,340	2,619	2,157
Tuna/Sludge	48	120	189	5,913	8,056	13,077
Poultry	3,615	3,236	3,962	3,930	3,752	3,387
Rubber tyres	240	378	423	394	465	223
Asbestos	34	71	36	85	14	260
Condemned goods	1,626	2,754	1,770	2,114	3,265	2,036
Difficult and hazardous	...	...	12	22	8	4
Others	...	...	...	...	...	6,648
<b>TOTAL</b>	<b>345,244</b>	<b>371,094</b>	<b>381,114</b>	<b>382,330</b>	<b>407,039</b>	<b>394,118</b>

Source: Ministry for Local Government

<sup>1</sup> Provisional

**Table 17.8 - Main environment indicators, Republic of Mauritius, 1998 and 2007**

Indicator	Units	1998	2007 <sup>1</sup>
1. Total land area	000 ha	186.5	186.5
2. Irrigated land	ha	18,379.0	21,321.0
3. Total forest area (as a % of total land area)	%	30.6	25.3
4. Land Protected Areas	ha	13,973.0	14,579.0
5. Marine Protected Areas (MPA's)	ha	7,190.0	7,190.0
6. Threatened plant species (IUCN Red List)	Number	...	88
7. Threatened animal species (IUCN Red List)	Number	...	65
8. Total fish catch	tons	9,786.0	7,411.0
9. Mean catch per fisherman day	kg	5.3	4.4
10. Total Carbon dioxide emission	000 tons	...	3,450.0
11. Per capita carbon dioxide emission	tons	...	2.7
12. Mean annual rainfall	millimetres	1,676.8	1,961.0
13. Annual fresh water abstraction	Mm <sup>3</sup>	639.0	...
14. Daily per capita domestic water consumption	litres	168.4	162.0
15. Daily per capita solid waste generated ( <i>estimate</i> )	Kg	0.7	0.9
16. Total electricity generated	GWh	1,538.9	2,465.0
17. Per capita primary energy requirement	toe	0.9	1.1
18. Per capita final energy consumption	toe	0.6	0.7
19. Energy intensity	toe per Rs 100,000 GDP	2.0	1.6

**Table 17.9 - Main socio-economic indicators, Republic of Mauritius, 1998 and 2007**

Indicator	Units	1998	2007 <sup>1</sup>
1. Gross Domestic Product (GDP) at market prices	Rs mn	100,042	206,934
2. Sectoral contribution to GDP			
<i>Agriculture</i>	%	9.3	4.7
<i>Manufacturing</i>	%	24.0	19.8
<i>Construction</i>	%	5.4	6.4
<i>Wholesale and retail trade</i>	%	12.7	12.4
<i>Hotels and restaurants</i>	%	6.2	9.4
<i>Transport and communications</i>	%	11.8	12.0
<i>Financial intermediation and business services</i>	%	7.4	21.4
<i>Other</i>	%	23.2	14.0
3. GDP annual growth rate (basic prices)	%	5.8	5.4
4. Per capita GDP at market prices	Rs	86,199	186,831
5. Per capita GDP in US dollars	US\$	3,595	5,956
6. Investment (GDFCF)	Rs mn	22,870	59,170
7. Exports (f.o.b) (include ship's stores and bunkers)	Rs mn	40,051	69,482
8. Imports (c.i.f)	Rs mn	49,742	121,081
9. Population (mid year)	000	1,160.4	1,260.4
10. Population annual growth rate	%	1.0	0.6
11. Population density (per kilometre square)	Number	572	620
12. Total labour force <sup>2</sup>	000	517.0	570.5
13. Total employment <sup>2</sup>	000	487.2	523.7
<i>Agriculture (as a % of total)</i>	%	11.8	9.0
<i>Manufacturing (as a % of total)</i>	%	29.5	23.4
14. Unemployment rate <sup>2</sup>	%	6.9	8.5
15. Inflation rate	%	6.8	8.8
16. Tourist arrivals	000	558.2	907.0

<sup>1</sup> Provisional<sup>2</sup> Labour force, employment and unemployment, 16 years and over.

**Table 17.10 - Total emissions and removals of greenhouse gases, 2003 - 2007**

Gg or thousand tonne

<b>Greenhouse gas</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007<sup>1</sup></b>
<b>Emissions</b>					
Carbon Dioxide	2,783.5	2,795.7	2,996.0	3,348.9	3,450.0
Methane	12.0	12.3	12.5	13.0	12.6
Oxide of Nitrogen	15.1	15.2	15.4	16.6	16.8
Nitrous Oxide	1.5	1.5	1.3	1.2	1.3
Carbon Monoxide	65.7	66.9	66.4	64.8	65.1
NMVOC <sup>2</sup>	17.5	16.5	18.3	17.7	18.6
Sulphur Dioxide	32.1	32.7	33.0	33.0	33.0
<b>Removals</b>					
Carbon Dioxide	237.9	223.7	223.7	193.2	195.0
<b>Net emissions</b>					
Carbon Dioxide	2,545.6	2,572.0	2,772.3	3,155.6	3,792.4