(a) Mean Annual Rainfall


Figure 1: Mean Annual Rainfall (Island of Mauritius and Rodrigues)
(Source: National Climate Change Adaptation Policy Framework, 2012)

Figure 1 illustrates data series on mean annual rainfall in the islands of Mauritius and Rodrigues. Changes in mean annual temperature have certainly contributed to rainfall fluctuations that have been recorded in both islands in the recent years. In particular, the most considerable drop in mean annual rainfall was registered in Mauritius between 2009 and 2010, going from $2,397 \mathrm{~mm}$ to 1806 mm . Interestingly, Rodrigues experienced an increase in rainfall in the same period.

## (b) Annual Rainfall Variation



Figure 2: Annual Rainfall Variation at Vacoas, 1950-2007
(Source, Second National Communication, 2010)
(c) Long Term Annual Rainfall


Figure 3: Long Term Annual Rainfall over Mauritius
(Source: Second National Communication, 2010)
The rainfall regime varies widely over the island, the Central Plateau receiving up to around 4000 mm compared to the Western region where an average of 800 mm is recorded annually. Year to year variability is high, with annual rainfall ranging from 1171 mm to 3539 mm (Figure 3). The straight line shows a slight but steady decreasing trend.


Figure 4: Rainfall distribution over Mauritius for periods 1931-1960 and 1971-2000
(Source: Second National Communication, 2010)

The average annual rainfall distribution over mainland Mauritius for the period 1971-2000 is presented in Figure 4. A comparison of the normal rainfall distribution for the periods 1931-1960 and 1971-2000 clearly shows a decline in the amount of rainfall. The highest isohyet in the central part of the island reached only 4000 mm over the 1971-2000 periods compared to 4400 mm in the earlier period. Additionally, an 800 mm isohyet has appeared in the latter period, instead of the 1200 mm one, along the West coast.

