



## DISTRICT WISE CLIMATE CHANGE INFORMATION FOR THE STATE OF TAMIL NADU TEMPERATURE PROJECTIONS FOR VELLORE



### 3.1 About Vellore

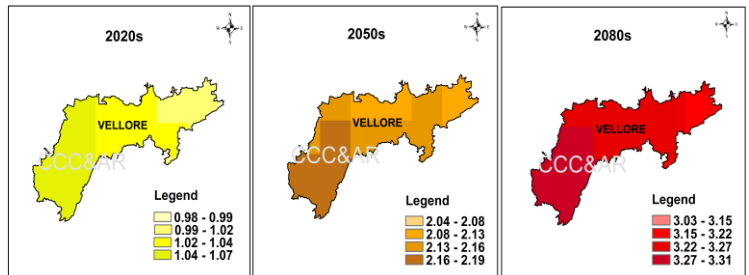
**Vellore** is one of the biggest districts in Tamil Nadu. The district is primarily agrarian with majority of its population involved in agriculture. Leather based industry is the main industry in this district. Vellore district has an area of 6077 km<sup>2</sup>. Vellore district lies between 12° 15' to 13° 15' North latitudes and 78° 20' to 79° 50' East longitudes in Tamil Nadu State.<sup>1,2</sup>

### 3.2 Climate of Vellore

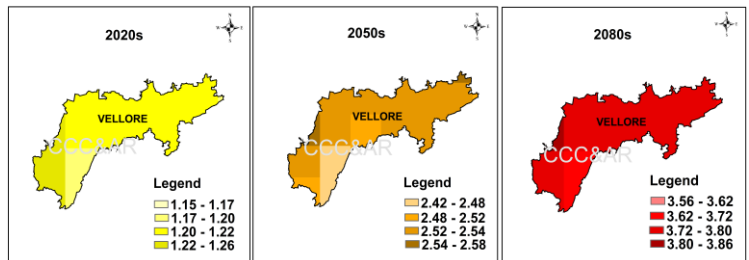
Vellore experiences a moderately tropical climate. Summer arrives in the month of April and persists till June. The days are hotter. Nights are relatively cooler with a sudden drop in temperature in the evening due to the sea breeze. Vellore experiences hot and dry weather throughout the year. During summer maximum temperature is 39.8°C and minimum is 29.4°C, During winter the maximum temperature is 27.3°C and minimum is 17.9°C.<sup>1,2</sup>

### 3.3 Temperature Projections for Vellore

The annual maximum and minimum temperature normal (1970-2000) of Vellore district are 33.5°C and 23.0°C respectively.<sup>3</sup> Projections of maximum temperature over Vellore for the periods 2010-2040 (2020s), 2040-2070 (2050s) and 2070-2100 (2080s) with reference to the baseline (1970-2000) indicate an increase of **1.0°C**, **2.1°C** and **3.3°C** respectively. Similarly, the projections of minimum temperature for the same periods indicate an increase of **1.2°C**, **2.5°C** and **3.8°C** respectively.



**Fig 3.1** Changes in Max. Temperature for 2020s, 2050s & 2080s



**Fig 3.2** Changes in Min. Temperature for 2020s, 2050s & 2080s

**Table 3.1** Changes in Temperature

Parameter	2020s	2050s	2080s
Maximum Temperature	+1.0°C	+2.1°C	+3.3°C
Minimum Temperature	+1.2°C	+2.5°C	+3.8°C

### 3.4 Key Findings

The average change of maximum temperature and minimum temperature for Vellore are expected to increase by **3.3°C** and **3.8°C** respectively by the end of the century.

### 3.5 References

- <http://www.velloreonline.com/Geologicalinfo.php>
- Central Ground Water Board 2009. District groundwater brochure Vellore district, Tamil nadu. Central Ground Water Board South Eastern Coastal Region, Chennai. Available at [cgwb.gov.in/district\\_profile/tamilnadu/vellore.pdf](http://cgwb.gov.in/district_profile/tamilnadu/vellore.pdf)
- IMD, 2013. Temperature of Vellore District. Regional Meteorological Centre, Chennai.