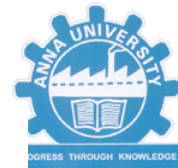




## DISTRICT WISE CLIMATE CHANGE INFORMATION FOR THE STATE OF TAMIL NADU TEMPERATURE PROJECTIONS FOR THOOTHUKUDI



### 31.1 About Thoothukudi

Thoothukudi traditionally known as “Pearl City” on account of the prevailing Pearl fish in the past. The district is situated in between latitude 8°4' and 9°27' and longitude 77°45' and 78°20' with an area of 4621 sq. km. It is a coastal district and is bounded by the districts of Tirunelveli on the north, the districts of Virudhunagar and Ramanathapuram, on the east and by Gulf of Mannar on the south-east and by Tirunelveli district on the west and south-west.<sup>1,2,3</sup>

### 31.2 Climate of Thoothukudi

The district enjoys a hot tropical climate. The annual mean minimum and maximum temperature are 23°C and 29°C respectively. The climate is conducive for Agricultural and Horticultural crops. Average temperatures of January is 27°C, February is 27°C, March is 29°C, April is 31°C, May is 31°C.<sup>2,3</sup>

### 31.3 Temperature Projections for Thoothukudi

The annual maximum and minimum temperature normal (1970-2000) of the district are 32.9 °C and 24.5°C respectively.<sup>4</sup> Projections of maximum temperature over Thoothukudi 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**, **1.9°C** and **2.8°C** respectively. Similarly, the projections of minimum temperature for the same periods indicate an increase of **1.1°C**, **2.2°C** and **3.2°C** respectively.

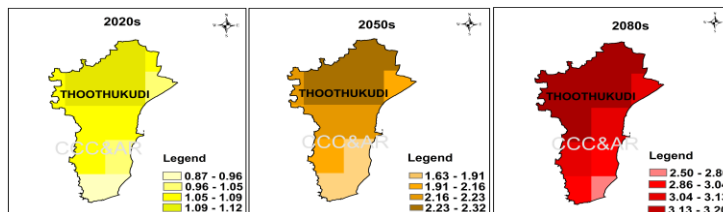


Fig 31.1 Changes in Max. Temperature for 2020s, 2050s & 2080s

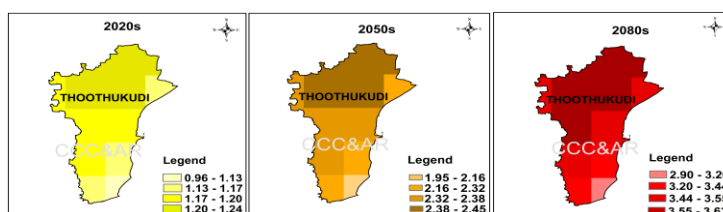


Fig 31.2 Changes in Min. Temperature for 2020s, 2050s & 2080s

Table 31.1 Changes in Temperature

Parameter	2020s	2050s	2080s
Maximum Temperature	+1.0°C	+1.9°C	+2.8°C
Minimum Temperature	+1.1°C	+2.2°C	+3.2°C

### 31.4 Key Findings

The average change of maximum and minimum temperature for Thoothukudi district are expected to increase by **2.8°C** and **3.2°C** respectively by the end of the century.

### 31.5 References

1. <http://www.mapsofindia.com/maps/tamilnadu/districts/tuticorin.htm>
2. ENVIS 2015. Thoothukudi District. ENVIS Centre Tamilnadu, Available at [tnenvis.nic.in/files/THOOTHUKUDI%20.pdf](http://tnenvis.nic.in/files/THOOTHUKUDI%20.pdf)
3. Central Ground Water Board 2009. District ground water brochure Thoothukudi district, Tamil nadu. Central Ground Water Board South Eastern Coastal Region, Chennai. Available at [cgwb.gov.in/District\\_Profile/TamilNadu/Thoothukudi.pdf](http://cgwb.gov.in/District_Profile/TamilNadu/Thoothukudi.pdf)
4. IMD, 2013. Temperature of Thoothukudi District. Regional Meteorological Centre, Chennai.