



## DISTRICT WISE CLIMATE CHANGE INFORMATION FOR THE STATE OF TAMIL NADU RAINFALL PROJECTIONS FOR TIRUCHIRAPPALLI



### 20.1 About Tiruchirappalli

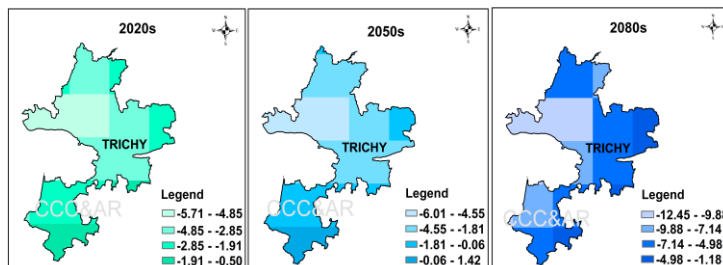
The district of Tiruchirappalli, was formerly called by the British as “Trichinopoly” and is commonly known as Trichy. It is the fourth largest city in the State of Tamil Nadu. It is located at 10° 48' 18" N and 78° 41' 7" E. The average elevation is 88 metres (289 ft). It is located almost at the geographic centre of the State of Tamil Nadu. The topology of Tiruchirappalli is almost flat with a few isolated hillocks rising above the surface, the highest of which is the Rockfort. The district covers an area of 4403.83 sq. km.<sup>1,2,3</sup>

### 20.2 Climate of Tiruchirappalli

The district enjoys a tropical climate. The average rainfall over the district varies from about 730 mm to about 900 mm. It is the minimum around Musiri (731.9 mm) in the western part. It gradually increases towards north, east and south and reaches a maximum around Manapparai (908.5 mm).<sup>3</sup>

### 20.3 Rainfall Projections for Tiruchirappalli

The annual rainfall normal (1970-2000) of Tiruchirappalli district is 761 mm.<sup>4</sup> Projections of rainfall over Tiruchirappalli for the periods 2010-2040 (2020s), 2040-2070 (2050s) and 2070-2100 (2080s) with reference to the baseline (1970-2000) indicate a general decrease of **4.0%**, **3.0%** and **8.0%** respectively.



**Fig 20.1** Percent change in Annual Rainfall for the period 2020s, 2050s and 2080s

**Table 20.1** Percent change in Annual Rainfall

Parameter	2020s	2050s	2080s
Annual Rainfall	-4.0%	-3.0%	-8.0%

### 20.4 Key Findings

The annual rainfall for Tiruchirappalli district may reduce by **8.0%** by the end of the century as per the emission scenario of A1B.

### 20.5 References

- <http://www.tiruchirappalli.nic.in/trichynew/district/distnew.html>
- <http://ecourts.gov.in/tn/tiruchirappalli>
- Central Ground Water Board 2009. District ground water brochure Tiruchchirappalli district, Tamil nadu. Central Ground Water Board South Eastern Coastal Region, Chennai. Available at [cgwb.gov.in/District\\_Profile/TamilNadu/Trichy.pdf](http://cgwb.gov.in/District_Profile/TamilNadu/Trichy.pdf)
- IMD, 2013. Rainfall of Trichy District. Regional Meteorological Centre, Chennai.