



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



17.1 About Coimbatore

Coimbatore district is one of the largest districts of the State of Tamil Nadu, covering the geographical area of 7469 sq. km. It is located in between 10°10' and 11°30' North latitude and 76°40' and 77°30' East longitude. Coimbatore district is bounded by Kerala State to the west, Erode and Tiruppur district to the east and The Nilgiris district to the north. Its elevation ranges between 440 meters to 286 meters.^{1,2,3}

17.2 Climate of Coimbatore

The district receives rain under the influence of both Southwest and Northeast monsoons. The Northeast monsoon chiefly contributes to the rainfall in the district. The average annual rainfall over the district varies from about 550 mm to 900 mm. It is the minimum around Sular (550 mm) in the eastern part of the district. It gradually increases towards south and attains a maximum around Anamalai hills.^{2,3}

17.3 Rainfall Projections for Coimbatore

The annual rainfall normal (1970-2000) of Coimbatore district is 694 mm.⁴ Projections of rainfall over Coimbatore for the periods 2010-2040 (2020s), 2040-2070 (2050s) and 2070-2100 (2080s) with reference to the baseline (1970-2000) indicate an increase of **0.1%**, **4.0%** and **11.0 %** respectively.

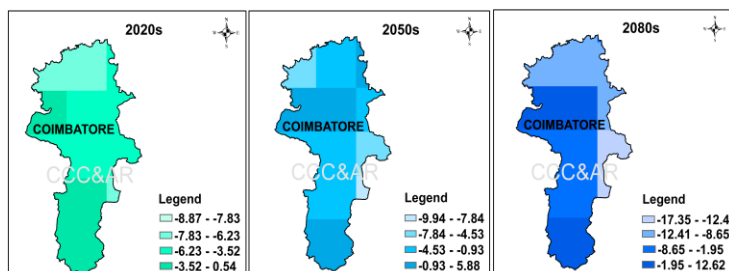


Fig 17.1 Percent change in Annual Rainfall for the period 2020s, 2050s and 2080s

Table 17.1 Percent change in Annual Rainfall

Parameter	2020s	2050s	2080s
Annual Rainfall	+0.1%	+4.0%	+11.0%

17.4 Key Findings

The annual rainfall for Coimbatore district may increase by **11.0%** by the end of the century as per the emission scenario of A1B.

17.5 References

- http://www.tn.gov.in/district_details/538
- <http://www.onefivenine.com/india/villag/coimbatore>
- Central Ground Water Board 2009. District ground water brochure Coimbatore district, Tamil nadu. Central Ground Water Board South Eastern Coastal Region, Chennai. Available at cgwb.gov.in/district_profile/tamilnadu/coimbatore.pdf
- IMD, 2013. Rainfall of Coimbatore District. Regional Meteorological Centre, Chennai.