



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



11.1 About Erode

Erode district lies on the extreme north of Tamil Nadu. It is bounded mostly by Karnataka State and also River Palar covers pretty long distance. To the east lies Namakkal and Karur districts. Dindigal district is its immediate neighbour to the south and on the west, it has Coimbatore and Nilgiri districts, as its boundaries. Thus Erode district is essentially a land-locked area having no sea-coast of its own. Erode district situated at between 10° 36' and 11° 58' North latitude and between 76° 49' and 77° 58' East longitude.^{1,2,3}

11.2 Climate of Erode

The district in general is characterised with a scanty rainfall and a dry climate. The normal annual rainfall over the district varies from about 575 mm to about 833 mm. It is the minimum in the southern and southeastern parts of the district around Kodumudi (575.3 mm) Mulanur (581 mm) and Dharapuram (593 mm). It gradually increases towards north and northwest and reaches a maximum around Talavadi (833 mm). The western part of the Erode district enjoys a salubrious climate because of the hilly region.^{1,2,3}

11.3 Rainfall Projections for Erode

The annual rainfall normal (1970-2000) of Erode district is 711 mm.⁴ Projections of rainfall over Erode for the periods 2010-2040 (2020s), 2040-2070 (2050s) and 2070-2100 (2080s) with reference to the baseline (1970-2000) indicate a decrease of **5.0%**, **2.0%** and **7.0%** respectively.

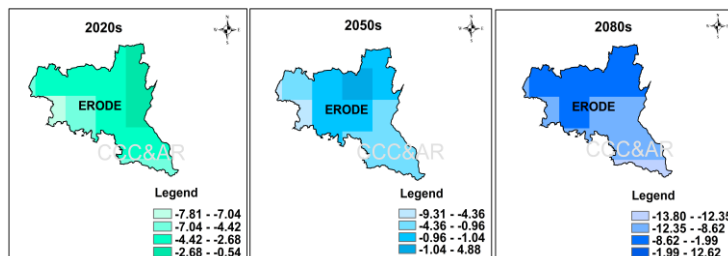


Fig 11.1 Percent change in Annual Rainfall for the period 2020s, 2050s and 2080s

Table 11.1 Percent change in Annual Rainfall

Parameter	2020s	2050s	2080s
Annual Rainfall	-5.0%	-2.0%	-7.0%

11.4 Key Findings

The annual rainfall for Erode district may reduce by **7.0%** by the end of the century as per the emission scenario of A1B.

11.5 References

- <http://www.erode.tn.nic.in/aboutdist.htm>
- http://www.tn.gov.in/district_details/564
- <http://www.erode.tn.nic.in/profile.htm>
- Central Ground Water Board 2008. District groundwater brochure Erode district, Tamil nadu. Central Ground Water Board South Eastern Coastal Region, Chennai. Available at : cgwb.gov.in/District_Profile/TamilNadu/Erode.pdf
- IMD, 2013. Rainfall of Erode District. Regional Meteorological Centre, Chennai.