



DISTRICT WISE CLIMATE CHANGE INFORMATION FOR THE STATE OF TAMIL NADU

RAINFALL PROJECTIONS FOR KRISHNAGIRI



5.1 About Krishnagiri

It is located between 11° 12' to 12° 49' North latitudes, 77° 27' to 78° 38' East longitudes. Krishnagiri district is bounded by Vellore and Thiruvannamalai districts in the east, Karnataka State in the west, State of Andhra Pradesh in the north and Dharmapuri district in the south. Its area is 5143 sq. km. This district is elevated from 300 m to 1400 m above the mean sea level.^{1,2}

5.2 Climate of Krishnagiri

The district receives the rain under the influence of both Southwest and Northeast monsoons. July - November is Rainy Season and between December - February winter prevails. The annual rainfall over the district varies from about 750 to about 900 mm. It is the minimum around Hosur (767.7 mm) and Rayakottai (768 mm) in the northern and central parts of the district. It gradually increases towards west and east and is the maximum around Denkanikotai (910.7 mm) in the western part.^{1,2}

5.3 Rainfall Projections for Krishnagiri

The annual rainfall normal (1970-2000) of Krishnagiri district is 863 mm.³ Projections of rainfall over Krishnagiri 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 **5.0%** respectively.

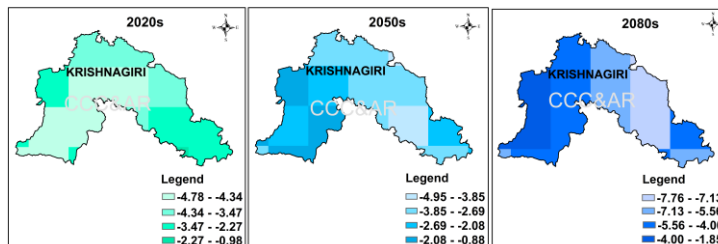


Fig 5.1 Percent change in Annual Rainfall for the period 2020s, 2050s and 2080s

Table 5.1 Percent change in Annual Rainfall

Parameter	2020s	2050s	2080s
Annual Rainfall	-4.0%	-3.0%	-5.0%

5.4 Key Findings

The annual rainfall for Krishnagiri district may reduce by **5.0%** by the end of the century as per the emission scenario of A1B.

5.5 References

- <http://www.krishnagiri.tn.nic.in/profile.htm>
- Central Ground Water Board 2009. District groundwater brochure Krishnagiri District Tamil nadu. Central Ground Water Board South Eastern Coastal Region, Chennai. Available at cgwb.gov.in/District_Profile/TamilNadu/Krishnagiri.pdf
- IMD, 2013. Rainfall of Krishnagiri District. Regional Meteorological Centre, Chennai.