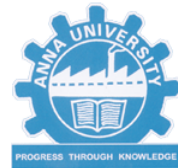




DISTRICT WISE CLIMATE CHANGE INFORMATION FOR THE STATE OF TAMIL NADU RAINFALL PROJECTIONS FOR KARUR



19.1 About Karur

Karur Taluk, which was once a part of Coimbatore district, was merged with Tiruchirappalli district during 1910. A separate Karur district was formed on 30th September 1995 by trifurcating Tiruchirappalli district. Karur district is bounded by Namakkal district in the north, Dindigul district in the south, Tiruchirappalli district on the east and Erode district on the west. Karur is located between 10°37' N to 11°12' N of latitudes and between 77°46' E to 78°15' E of longitudes. It is spread over an area of 2,895.57 sq. km.^{1,2,3}

19.2 Climate of Karur

The district receives the rain under the influence of both Southwest and Northeast monsoons. The Northeast monsoon chiefly contributes to the rainfall in the district. Most of the precipitation occurs in the form of cyclonic storms caused due to the depressions in Bay of Bengal. The Southwest monsoon rainfall is highly erratic and summer rains are negligible. The average annual rainfall over the district varies from about 620 mm to 745 mm.³

19.3 Rainfall Projections for Karur

The annual rainfall normal (1970-2000) of Karur district is 742 mm.⁴ Projections of rainfall over Karur 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 **11.0%** respectively.

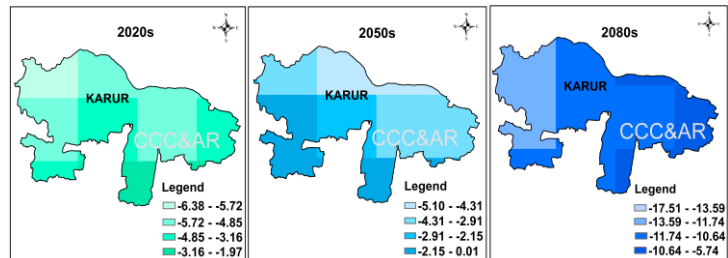


Fig 19.1 Percent change in Annual Rainfall for the period 2020s, 2050s and 2080s

Table 19.1 Percent change in Annual Rainfall

Parameter	2020s	2050s	2080s
Annual Rainfall	-4.0%	-3.0%	-11.0%

19.4 Key Findings

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

19.5 References

1. <http://www.karur.tn.nic.in>
2. http://www.tn.gov.in/district_details/575
3. Central Ground Water Board 2009. District ground water brochure Karur district, Tamil nadu. Central Ground Water Board South Eastern Coastal Region, Chennai. Available at cgwb.gov.in/District_Profile/TamilNadu/Karur.pdf
4. IMD, 2013. Rainfall of Karur District. Regional Meteorological Centre, Chennai.