



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



13.1 About Perambalur

Perambalur district came in to existence after trifurcation of Tiruchirappalli district with effect from 30.09.1995. It is bounded on the north by Cuddalore and Salem districts, south by Tiruchirappalli, east by Ariyalur district, west by Tiruchirappalli and Salem districts. The district has an area of 1,756 sq. km. spread between 10°54' and 11°30' Northern latitude and 78°40' and 79°30' of the Eastern longitude.^{1,2}

13.2 Climate of Perambalur

The district receives the rainfall under the influence of both Southwest and Northeast monsoon. The normal rainfall for the period (1901-70) ranges from 843.5 to 1123.3 mm. It is lowest in the Vembavur area and highest in the Jayankondan areas. The district experiences strong winds during the southwest monsoon season. The wind speed during June to August is more than 25 Km/hr. Thereafter there is a gradual decrease in speed reaching the lowest value 7.7 Km/hr.^{1,2}

13.3 Rainfall Projections for Perambalur

The annual rainfall normal (1970-2000) of the district is 949 mm.⁴ Projections of rainfall over Perambalur for the periods 2010-2040 (2020s), 2040-2070 (2050s) and 2070-2100 (2080s) with reference to the baseline (1970-2000) indicate a decrease of **3.0%**, **3.0%** and **7.0%** respectively.

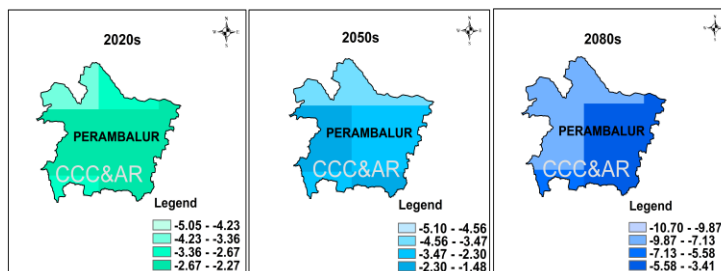


Fig 13.1 Percent change in Annual Rainfall for the period 2020s, 2050s and 2080s

Table 13.1 Percent change in Annual Rainfall

Parameter	2020s	2050s	2080s
Annual Rainfall	-3.0%	-3.0%	-7.0%

13.4 Key Findings

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

13.5 References

- http://perambalur.tn.nic.in/About_PerambalurDistrict.html
- Central Ground Water Board 2008. District groundwater brochure Perambalur district, Tamil nadu. Central Ground Water Board South Eastern Coastal Region, Chennai. Available at : cgwb.gov.in/District_Profile/TamilNadu/Perambalur.pdf
- http://perambalur.nic.in/Physical_features_of_perambalur.html
- IMD, 2013. Rainfall of Perambalur District. Regional Meteorological Centre, Chennai.