



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



28.1 About Virudhunagar

Virudhunagar district occupies an area of 4243 km². It is bounded by Madurai district on the north, Sivaganga district on the northeast, Ramanathapuram district on the southeast, Thoothukudi district to the south, Tirunelveli district to the southwest, Kerala State to the west, and Theni district to the northwest. It lies between 09°12' and 09°47' North latitude and 77°20' and 78°26' East longitude.^{1,2,3}

28.2 Climate of Virudhunagar

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 average annual rainfall over the district varies from about 724 to 913 mm. It is minimum around Sathur in the southeastern part of the district. It gradually increases towards west, north and northwest and attains a maximum around Watrap.^{3,4}

28.3 Rainfall Projections for Virudhunagar

The annual rainfall normal (1970-2000) of Virudhunagar district is 829 mm.⁵ Projections of rainfall over Virudhunagar for the periods 2010-2040 (2020s) and 2070-2100 (2080s) show a general decrease of **2.0%** and **2.0%** and for 2040-2070 (2050s), it indicate an increase of **4.0%** respectively.

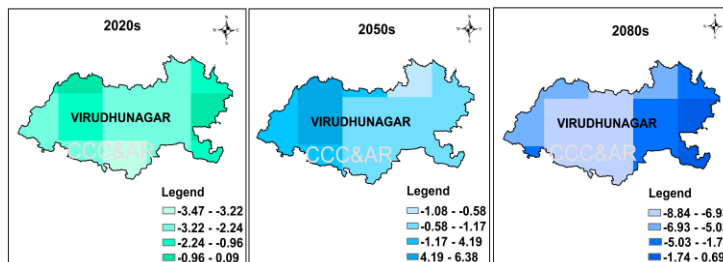


Fig 28.1 Percent change in Annual Rainfall for the period 2020s, 2050s and 2080s

Table 28.1 Percent change in Annual Rainfall

Parameter	2020s	2050s	2080s
Annual Rainfall	-2.0%	+4.0%	-2.0%

28.4 Key Findings

The annual rainfall for Virudhunagar district may reduce by **2.0%** by the end of the century as per the emission scenario of A1B.

28.5 References

- <http://virudhunagar.tn.nic.in/>
- <http://www.virudhunagar.in/district.php>
- Central Ground Water Board 2009. District ground water brochure Virudhunagar district, Tamil nadu. Central Ground Water Board South Eastern Coastal Region, Chennai. Available at cgwb.gov.in/District_Profile/TamilNadu/Virudhunagar.pdf
- <http://www.onefivenine.com/india/villag/virudhunagar>
- IMD, 2013. Rainfall of Virudhunagar District. Regional Meteorological Centre, Chennai.