



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



27.1 About Sivaganga

The geographical position of Sivaganga district is between 9°32' and 10°18' North latitude and between 78°08' and 79°01' East longitude. It is bounded by Madurai district to the west, Pudukkottai district and Tiruchirappalli district to the north and Ramanathapuram district to the south. Sivaganga district occupies an area of approximately 4189 sq. km. Its in the 95 meters to 106 meters elevation range. ^{1,2,3}

27.2 Climate of Sivaganga

The average annual rainfall over the district varies from about 861.8 mm. to about 988.6 mm. The normal Southwest monsoon rainfall varies from 275.8 to 401.1 mm while during Northeast monsoon the normal seasonal rainfall varies from 382.5 to 442.8 mm. A perusal of the rainfall pattern shows that in general the rainfall increases towards east. ^{3,4}

27.3 Rainfall Projections for Sivaganga

The annual rainfall normal (1970-2000) of Sivaganga district is 876 mm.⁵ Projections of rainfall over Sivaganga 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 **2.0%**, **1.0%** and **2.0%** respectively.

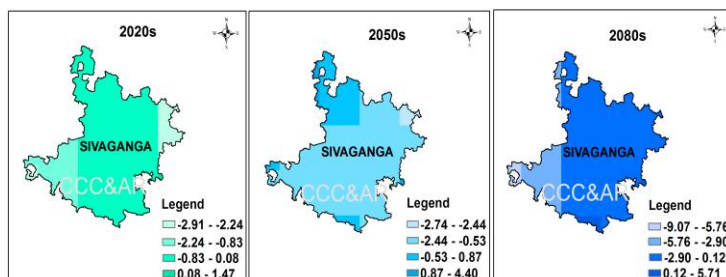


Fig 27.1 Percent change in Annual Rainfall for the period 2020s, 2050s and 2080s

Table 27.1 Percent change in Annual Rainfall

Parameter	2020s	2050s	2080s
Annual Rainfall	-2.0%	-1.0%	-2.0%

27.4 Key Findings

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

27.5 References

- <http://ecourts.gov.in/sivaganga/history-sivagangai>
- Central Ground Water Board 2009. District ground water brochure Sivaganga district, Tamil nadu. Central Ground Water Board South Eastern Coastal Region, Chennai. Available at cgwb.gov.in/District_Profile/TamilNadu/Sivaganga.pdf
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