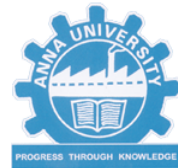




DISTRICT WISE CLIMATE CHANGE INFORMATION FOR THE STATE OF TAMIL NADU RAINFALL PROJECTIONS FOR RAMANATHAPURAM



29.1 About Ramanathapuram

Ramanathapuram is one of the coastal districts of bounded on the north by Sivaganga and Pudukottai districts, on the east and south by the Bay of Bengal, and on the west by Thoothukudi and Virudhunagar districts. The district headquarters is located at Ramanathapuram. The district lies between 90°05' and 90°5' North latitude and 78° 1' and 79°27' East longitude.^{1,2}

29.2 Climate of Ramanathapuram

The district receives 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 is 827 mm with the maximum around Pamban and all along the coast and it decreases towards inland.^{1,2}

29.3 Rainfall Projections for Ramanathapuram

The annual rainfall normal (1970-2000) of Ramanathapuram district is 821 mm.³ Projections of rainfall over Ramanathapuram for the periods 2010-2040 (2020s), 2040-2070 (2050s) and 2070-2100 (2080s) with reference to the baseline (1970-2000) indicate an increase of **0.1%**, **1.0%** and **1.0%** respectively.

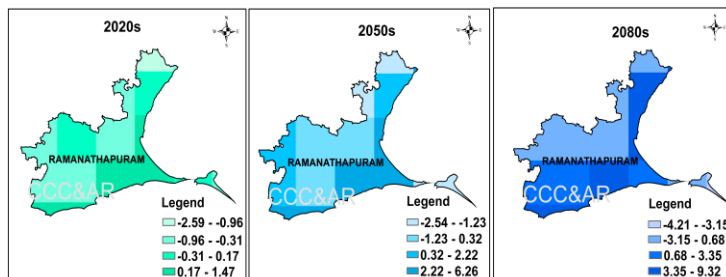


Fig 29.1 Percent change in Annual Rainfall for the period 2020s, 2050s and 2080s

Table 29.1 Percent change in Annual Rainfall

Parameter	2020s	2050s	2080s
Annual Rainfall	+0.1%	+1.0%	+1.0%

29.4 Key Findings

The annual rainfall for Ramanathapuram district may increase by **1.0%** by the end of the century as per the emission scenario of A1B.

29.5 References

1. ENVIS 2015. Ramanathapuram District. ENVIS Centre Tamilnadu, Available at tnenvis.nic.in/files/RAMANATHAPURAM.pdf
2. Central Ground Water Board 2009. District ground water brochure Ramanathapuram district, Tamil nadu. Central Ground Water Board South Eastern Coastal Region, Chennai. Available at cgwb.gov.in/district_profile/tamilnadu/ramanathapuram.pdf
3. IMD, 2013. Rainfall of Ramanathapuram District. Regional Meteorological Centre, Chennai.