



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



### 23.1 About Pudukkottai

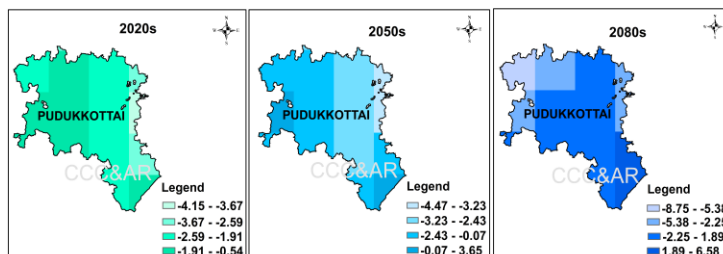
Pudukkottai district was carved out of Tiruchirappalli and Thanjavur districts in January 1974. The district has an area of 4663 sq. km. with a coast line of 39 kms. The district lies between 78°25' and 79°16' of the Eastern longitude and between 9°51' and 10°44' of the Northern latitude. It is bounded by Tiruchirappalli district in the north and west, Sivaganga district in the south, Bay of Bengal in the east and Thanjavur district in the north east.<sup>1,2,3</sup>

### 23.2 Climate of Pudukkottai

The normal annual rainfall of Pudukkottai district is 821 mm. During Northeast monsoons this district receives the highest rainfall of 397 mm followed by, Southwest monsoon with 303 mm of rainfall. The summer and winter rainfalls are 81 mm and 40 mm respectively. There is a gradual increase in precipitation from east to Southwest over the district.<sup>2,3</sup>

### 23.3 Rainfall Projections for Pudukkottai

The annual rainfall normal (1970-2000) of Pudukkottai district is 921 mm.<sup>4</sup> Projections of rainfall over Pudukkottai 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%**, **0.1%** and **1.0%** respectively.



**Fig 23.1** Percent change in Annual Rainfall for the period 2020s, 2050s and 2080s

**Table 23.1** Percent change in Annual Rainfall

Parameter	2020s	2050s	2080s
Annual Rainfall	-2.0%	-0.1%	-1.0%

### 23.4 Key Findings

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

### 23.5 References

1. <http://www.pudukkottai.tn.nic.in/glance.htm>
2. ENVIS 2015. Pudukkottai District. ENVIS Centre Tamilnadu, Available at [tnenvis.nic.in/files/PUDUKOTTAI%20.pdf](http://tnenvis.nic.in/files/PUDUKOTTAI%20.pdf)
3. Central Ground Water Board 2009. District ground water brochure Pudukkottai district, Tamil nadu. Central Ground Water Board South Eastern Coastal Region, Chennai. Available at [cgwb.gov.in/District\\_Profile/TamilNadu/Pudukkotai.pdf](http://cgwb.gov.in/District_Profile/TamilNadu/Pudukkotai.pdf)
4. IMD, 2013. Rainfall of Pudukkottai District. Regional Meterological Centre, Chennai.