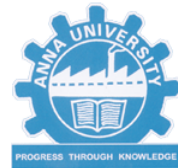




DISTRICT WISE CLIMATE CHANGE INFORMATION FOR THE STATE OF TAMIL NADU RAINFALL PROJECTIONS FOR ARIYALUR



14.1 About Ariyalur

Ariyalur district came into existence by the bifurcation of Perambalur district. It is bounded on the north by Cuddalore, south by Thanjavur, east by Cuddalore and Thanjavur and west by Perambalur and Tiruchirapalli districts. Ariyalur has been functioning as a separate district since 2007. Ariyalur district is located in central Tamil Nadu and is 265 km away from Chennai. The district has an area of 1949 sq. km. It lies between 10°53' and 11°26' North latitudes and between 78°56' and 79°31' East longitudes.^{1,2,3,4}

14.2 Climate of Ariyalur

The climate of Ariyalur district is sub-tropical. The average rainfall which the district receives during Northeast monsoon is 485 mm and during Southwest monsoon is 357 mm respectively. The normal onset of Southwest monsoon is first week of June whereas for Northeast monsoon is second week of October.^{1,2,3,4}

14.3 Rainfall Projections for Ariyalur

The annual rainfall normal (1970-2000) of Ariyalur district is 949 mm.⁵ Projections of rainfall over Ariyalur for the periods 2010-2040 (2020s), 2040-2070 (2050s) and 2070-2100 (2080s) with reference to the baseline (1970-2000) indicate a decrease of **2.0%**, **3.0%** and **3.0%** respectively.

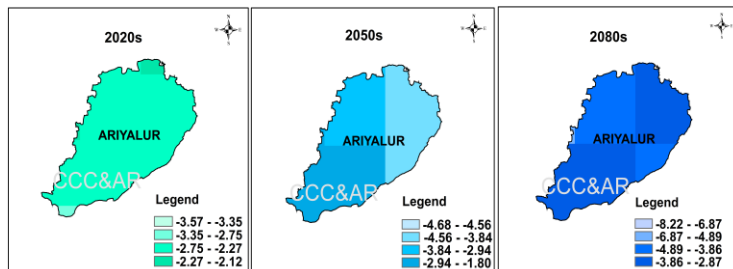


Fig 14.1 Percent change in Annual Rainfall for the period 2020s, 2050s and 2080s

Table 14.1 Percent change in Annual Rainfall

Parameter	2020s	2050s	2080s
Annual Rainfall	-2.0%	-3.0%	-3.0%

14.4 Key Findings

The annual rainfall for Ariyalur district may reduce by **3.0%** by the end of the century as per the emission scenario of A1B.

14.5 References

- <http://www.ariyalur.nic.in/ataglancepage.htm>
- http://www.twadboard.gov.in/twad/ariyalur_dist.aspx
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- IMD, 2013. Rainfall of Ariyalur District. Regional Meteorological Centre, Chennai.