

Abstract

The present study of comparative Studies on Temperature and Rainfall Trends of Nanded and Parbhani cities of Marathwada region of Maharashtra we have analyzed temperature and rainfall of Nanded and Parbhani. The outcomes of it are drawn after the long statistical investigation of five years from the study area.

From above summery it is evident that annual, seasonal, monthly, daily temperature and rainfall trends of Parbhani and Nanded get changed. This change in temperature and rainfall varies according to time and space. This is because the rate of urbanization is different in different places.

The present chapter is mainly deals with investigation of Comparative Studies on Temperature and Rainfall Trends of Nanded and Parbhani cities of Maharashtra state and different factor affecting these trends. In addition to these, arrangement of text of reference and annexures has been mentioned in eight and nine chapter respectively.

Nanded showed total only 60 heavy rainfall days for given period of 42 years. Maximum 7 heavy rainfall days were noticed in the year 2007. For Nanded linear trends of frequency of extreme rainfall events showed increasing trends. For Nanded 15 days were observed showing very heavy rainfall (i.e. 124.5mm to 244.5mm) and 6 day showing very extreme heavy rainfall (i.e. greater than 244.5mm).

The rate of urbanization of Parbhani is less than that of Nanded as follows. In 1971 the population of Parbhani was 108987 and in 2011 it reached to 307170. The rate of increase was 53182/decade. The population of Nanded in 1971 was 126518 and in 2011 it reached to 550439. The rate of increase in population of Nanded was 108731/decade which is double than that of Parbhani.

The Annual, seasonal, monthly, daily temperature trends and Annual, seasonal, monthly, daily rainfall trends get changed. The rate of change in these trends are different at Parbhani and Nanded.

The rate of increase in vehicular burden for Parbhani was 19920/decade. The number of vehicles of Nanded in 1971 was 2089 and in 2010 it reached to 98769 the rate of increase in vehicular burden for Nanded was 25182/decade which is more than that of Parbhani.

Parbhani in 1973 there was 0.27 % of water body, in 1990 it increases to 0.34% and later in 2010 it decreased to 0.24%. In 1973 the vegetation cover was 48.89% in 1990 it decreased to 46.94% and in 2010 it decreased to 39.26%. The rate of decrease was 2.408%/decade and total 9.630 % decrease was observed.

In 1973 the percentage of settlement was 5.32% in 1990 it increased to 7.34% and in 2010 it became 14.45%. The settlement in Parbhani is increased at a rate of 2.283/decade and total decreased 8.972 % was observed. Decrease in vegetation is due to increase in settlement.

For Nanded in 1973 there was 2.3% of water body in 1990 it reduced to 1.8% and later in 2010 it declined to 2.3%. In 1973 the vegetation cover was 29.9% in 1990 it improved to 31.40% and in 2010 it shrank to 17.10%. The rate of decline was 4.187% /decade and total reduction of 12.321 % was detected.

In 1973 the percentage of settlement was 16.42% in 1990 it increased to 19.34% and in 2010 it became 33.085%. The settlement in Parbhani is increased at a rate of 4.683 % decade and total decreased 8.972 % was observed. Decrease in vegetation is due to rise in settlement.