

Pune Census Case

Attached is the Pune District 2011 Census data. The data is a raw dump of the entire census data that was conducted in 2011 for all the towns, villages and district blocks that come under the Pune district.

Objective of the analysis : The district collector would like to analysis this data with the objective of evaluating the status of the Female population across the district. This statistical analysis should support in taking decisions to run government programs focusing on different areas of Female population such as female literacy, female child welfare, sex ratios, female employment etc.

Below are the inputs to be considered for your analysis:

The CD blocks need to be divided into three categories as below:

Category A : total population upto 2 lacs

Category B : total population between 2-5 lacs

Category C : total population above 5 lacs

The towns need to be divided into three categories as below:

Category T1 : total population upto 15K

Category T2 : total population between 15-25K

Category T3 : total population above 25K

The villages need to be divided into four categories as below:

Category V1 : total population upto 2500

Category V2 : total population between 2500-10,000

Category V3 : total population between 10,000-40,000

Category V4 : total population above 40,000

Using R execute a statistical analysis as per the above buckets, and help the district collector to understand the following:

sex ratio(per 1000)

Child sex ratio (0-6 age)

Average literacy rate

Female literacy rate

Child proportion(0-6 age)

Girls proportion(0-6 age)

Average percentage of worker population female

Proportion of Main : Marginal worker population female

Within female Main worker population the proportion of Main :Main cultivator :

Main agri labour: Main household industry :Main other

Average number of child(0-6) per household

Average number of girl child(0-6) per household

Average percentage non working population female

Is there a significant difference in the above parameters between the top and the lowest category levels of each of the CD block(A/C), Village(V1/v4) and Towns(T1/T3)?

Is there a significant difference in the average literacy rate, child sex ratio, Female literacy rate , average female worker population between Urban and Rural ?

Is there a relationship between the female literacy rate and the average percentage worker population female in the villages ?

Pune Census Case

Overall Rural vs Urban Sex ratio

Pune district population density: Pune district administers 15,643 square kilometers of areas.

Top 5 highest literacy rate towns, village and district blocks

Top 5 highest female literacy rate towns, village and district blocks

Bottom 5 lowest literacy rate towns, village and district blocks

Bottom 5 lowest female literacy rate towns, village and district blocks

Lowest sex ratio towns, village and district blocks in each category