



## **A Geographical Study of Various Densities of Latur District (MS)**

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### **Introduction:**

The huge concentration of population in rural society confirms the deep rooted relationship between land and people. The possibility of mechanization may be realized only when farm workers data are placed together with information of population. In national perspective the proportion of the occupied population of rural areas engaged in farming was very large, for example 74.79% in 1991, 75.40% in 1991 and about 70% in 2001.

For studying the pressure of population on agricultural land the various landuse densities such as crude, physiological, agricultural, and caloric densities are computed. If the density of population is very high, there would be abnormal pressure on land and if the land area is not sufficiently productive over population will result. A higher density will indicate a lower standard of living and less mobility of labour. A higher density of population will also imply greater economic activities and an obvious urge for an improved standard of living, a greater struggle for existence and continuous competition.

### **Various Densities of Latur District :**

Researcher has calculated various densities with the help of appropriate formula. The results has been given in table 1.

Table 1

**Statement Showing Tahsilwise Different Densities in Latur District**

Sr No	Tahsil	1991				2001			
		Crude Density	Physio-logical Density	Agri-cultural Density	Caloric Density	Crude Density	Physio-logical Density	Agri-cultural Density	Caloric Density
1	Latur	224	345	108	312	308	490	83	270
2	Ahmedpur	156	206	62	248	204	277	87	317
3	Udgir	168	219	60	228	213	357	84	306
4	Nilanga	174	212	79	184	216	284	85	294
5	Ausa	150	160	64	174	186	266	79	253
6	District Total	175	228	73	223	227	339	84	287

*Source : Computed by the Author*

**Crude or Surface density :**

Crude density expresses the general condition of population pressure on land. It is a simple arithmetic ratio between total population and total geographical area. Crude density is nothing but man and land ration and expressed as number of person per square kilometer. It is computed by dividing total population by total geographical area.

$$\text{Crude Density} = \frac{\text{Total Population}}{\text{Total Geographical Area}} \times 100$$

The crude density of population was 175 persons per square kilometers in 1991. It was 227 persons per square kilometers in 2011 in Latur district.

Table 1 indicates that below 160 crude density per Sq. Km was recorded in Ahmedpur and Ausa tahsils. About 160 to 200 crude density per Sq. Km was found in Udgir and Nilanga tahsils during 1991. Above 200 crude density per Sq. Km was



observed in Latur (224 per sq. km) tahsil in 1991.

Map 3.4-B indicates that below 200 crude density per sq. km was found in AUSA (186 per sq. km) tahsil. About 200 to 250 crude density was found in Ahmedpur (204 per sq.km), Udgir (213 per sq. km) and Nilanga tahsils (216 per sq.km). Above 250 crude density per sq. km was observed in Latur tahsil (308 per sq. km) in 2011.

#### **Physiological Density or Man-Soil Density :**

Physiological density or Man-soil density is calculated by dividing total population by total net sown area. Though it gives rather a more concrete picture, it again fails to convey true picture of population pressure. Physiological density is calculated by the following formula:

$$\text{Physiological density} = \frac{\text{Total population}}{\text{Total net sown area}} \times 100$$

(100 hectares = 1 Sq. Km)

Physiological density per square kilometer was 228 per sq. km. in 1991 and it increased up to 339 per sq. km. in 2011 in the entire study region. Below 200 physiological density per square kilometer was found in AUSA and about 200 to 250 physiological density per square kilometer was observed in Ahmedpur, Udgir and Nilanga tahsils in 1991. Above 250 physiological density per square kilometer was recorded in Latur (345) during the same period.

Map 3.5-B reveals that below 300 physiological density per square kilometer was found in Ahmedpur, Nilanga and AUSA tahsils in 2011. About 300 to 400 physiological density per square kilometer was observed in Udgir tahsil. Above 400 physiological density per square kilometer was recorded in Latur (490) during the same period.

#### **Agricultural Density :**

The ratio between agricultural population and cultivated or net sown area is called 'Agricultural Density'. In order to assess the agricultural development in the



study region the study of agricultural density pattern is necessary. Agricultural density has been worked out by the following formula:

$$\text{Agricultural Density} = \frac{\text{Total agricultural population (Agricultural Labours + Cultivators)}}{\text{Cultivated or net sown area}} \times 100$$

According to table 1 agricultural density per square kilometer was 73 in 1991 and it was increased up to 84 in 2011.

Below 75 agricultural density per square kilometer was observed in Ahmedpur (62), Udgir (60) and AUSA tahsils (64) in 1991. About 75 to 100 agricultural density per square kilometer was received from Nilanga, which was 79. Above 100 agricultural density per square kilometer was noticed from Latur and it was 108 in the same period.

Below 80 agricultural density per square kilometer was found in AUSA tahsils in 2011. About 80 to 85 agricultural density per square kilometer was observed in Latur, Udgir and Nilanga tahsils. Above 85 agricultural density per square kilometer was found in Ahmedpur (87) in 2011.

### **Caloric Density :**

The ratio between rural population and total food cropped area is called 'Caloric Density'. The caloric density is calculated by using the following formula:

$$\text{Caloric density} = \frac{\text{Total rural population}}{\text{Total food cropped area}} \times 100$$

From the analysis it is clear that caloric density per square kilometer of Latur district was 223 in 1991 whereas it has been increased up to 287 in 2011. Above 250 caloric density per square kilometer was observed in Latur tahsil in 1991. About 200 to 250 caloric density per square kilometer was recorded in Ahmedpur (248) and



Udgir tahsils (228). Below 200 caloric density per square kilometer was noted from Nilanga (184) and Ausa (174) during the same period. Below 275 caloric density per square kilometer was experienced in Latur and Ausa tahsils in 2011. About 275 to 300 caloric density per square kilometer was recorded in Nilanga and it was 294. Above 300 caloric density per square kilometer was found in Ahmedpur (317) and Udgir (306) in the same period.

**References:**

- 1) Bajaj, Nirmal (1963): "Regional study of population of Ambala District, A dissertation submitted to Punjab University, Chandigarh.
- 2) Negi, B.S.: "Agricultural Geography", Kedarnath Ramnath Publication, Meerut
- 3) Tyagi, B.P. (2000) "Agricultural Economics and Rural Development", 7<sup>th</sup> Ed., Jayprakash Nath & Co., Meerut.
- 4) Ghosh, B.N. (1985): "Fundamental of Population Geography, A reader Mc Graw Hill, Newyork.
- 5) Mammoria, C.B. (1999), "Agricultural Problems of India", Kitab Mahal, Alahabad.
- 6) Singh, Jasbir & S.S. Dhillan (1995): "Agricultural Geography", Tata McGraw Hill Publishing Co. Ltd., New Delhi.