

# Rural Housing Density and Occupancy Rate in Kolhapur District, Maharashtra

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## ABSTRACT

The study of rural houses is important in various ways. Rural dwellings can be studied by focusing their distribution, building material, general features, occupancy rate and available facilities and assets in which distribution of rural houses and occupancy rate are fundamental. The number of persons per household is simply called as occupancy rate. Present paper aims to endeavor distribution of rural housing, occupancy rate and factors affecting on them. The Kolhapur district of Maharashtra has selected as an area for the present investigation, based on Census of India's Data. To study the distribution of houses simple density houses per sq.km and houses per village has been computed. The number of persons per household has been computed to know the occupancy rate. The density of rural houses is noted high in eastern three tahsils, medium in Kagal, Panhala and Gadhinglaj tahsils and low in remaining six tahsils. It is found that, the occupancy rate is high in highly populated and compacted villages and this occupancy rate is indirectly determined by physical factors.

## 1. Introduction

The core of the Settlement Geography is the building, where are they and why they are there? (Stone, 1965). The rural settlements could study at more micro scale and meticulously by focusing on rural dwellings. Houses invariable occupy the place of prime importance in the annals of man, because the house is a minor geographical phenomenon that is closely bounded with our everyday life (Burnhes, 1952). The study of rural houses is important in various ways. The study of rural houses is important for planning purpose also. Rural dwellings can be studied by focusing their distribution, building material, general features, occupancy rate and available facilities and assets. In the words of Kumbhar (1997) house provides the evidence of complex relations between man and his environment.

## 2. Objective

In this context, present paper aims to endeavor distribution of rural housing, occupancy rate and factors affecting on them.

## 3. Study area

The Kolhapur district of Maharashtra has selected as an area of the present investigation. It is situated in the extreme southern part of Maharashtra State. It lies between 15°43' north and 17°17' north latitude and 73°40' east and 74°42' east longitude, comprising 12 tahsils. The total population of Kolhapur district was 35, 23,162. The Scheduled Caste Population is 4,49,641 (12.76%) in 2001. The district is bounded on the north by Sangli district, on the west by Ratnagiri and Sindhudurg district and on the south and east by boundary of Karnataka state.

The district has long historical and rich cultural background. From a geographical point of view the Varna in the north forms a common boundary between it and South Satara; in the north-east the rivers Krishna and Dudhaganga run between it and Belgaum; and in the west the Sahyadrian water-shed largely separates it from Ratnagiri.

## 4. Methodology

To meet the objective of present paper, the data has been compiled from secondary sources like, district census handbook, 2001, Table on houses, household amenities and assets, series 28, Maharashtra Census of India, 2001, socio-economic review and district statistical abstract, 2010. To study the distribution of houses simple density houses per sq.km and houses per village has been computed. The number of persons per household has been computed to know the occupancy rate. The standard deviation of the same has also been completed.

## 5. Distribution

Housing provides security and minimum civic facilities and privacy to the human beings for decent living and also has positive impact on the individuals, physical and mental health and happiness enhancing their productivity (Shah and Jaiswal, 2002). According to the census 2001, there are 6, 46,299 rural houses in 1196 villages of the study area in which about 24, 72,809 peoples resides. It means, there are 540.38 houses per villages and 84.10 houses per sq. However, the distribution of rural houses is uneven which can be grouped in the four categories according to their density.

### 1. Very low density (below 45 houses/ sq.km.)

The low density of rural houses observed in Bavda and Shahuwadi tahsils. In these two tahsils, the houses per villages is observed 213.54 and 348.86 respectively. This area is characterised by hilly and undulating topography with high forest cover and as well as low road density. These factors lead to low density of house and also to low number of houses per village.

### 2. Low density (46 to 90 houses/ sq.km.)

The low density of houses observed in Chandgad, Radhanagari, Ajara and Bhudargad tahsils. Also there is low number of house per village ranging from 286.93 to 407.53. This part of the study area is hilly and forested. Particularly the

Chandgad and Radhanagari tahsil are more hilly and forested with high rainfall. Comparatively, Ajara and Bhudargad tahsils are developed.

**Table 7.1**  
**Kolhapur District: Density of Rural Houses, 2001**

Sr. No.	Tahsils	Area	Rural Population	Villages	Rural Houses	Houses per Village	Density of Rural Houses
1.	Shahuwadi	1038	171355	133	46,399	348.86	44.70
2.	Panhala	564	234931	130	61,396	472.28	108.86
3.	Hatkanangle	604	354625	58	93,680	1615.17	155.10
4.	Shirol	503	294785	54	75,681	1401.50	150.46
5.	Karvir	666	358052	125	90,010	720.08	135.15
6.	Bavda	274	32525	39	8,328	213.54	30.39
7.	Radhanagari	887	188107	114	46,458	407.53	52.38
8.	Kagal	543	215257	86	56,195	653.43	103.49
9.	Bhudargad	639	144910	114	39,003	342.13	61.04
10.	Ajra	544	106581	96	30,201	314.59	55.52
11.	Gadhinglaj	476	190900	91	54,187	595.46	113.84
12.	Chandgad	947	180781	156	44,761	286.93	47.27
<b>Kolhapur District</b>		<b>7685</b>	<b>2472809</b>	<b>1196</b>	<b>646,299</b>	<b>540.38</b>	<b>84.10</b>
<b>SD</b>		<b>217</b>	<b>95,398</b>	<b>35.72</b>	<b>24,267</b>	<b>447.17</b>	<b>111.65</b>

Source: Based on District Census Handbook, Kolhapur District, 2001.

### 3. Medium density (91 to 135 houses/ sq.km.)

In fact, in this part the density of rural houses is observed above the value of the study area. The house density ranges from 103.49 in Kagal tahsil, 108.86 in Panhala tahsil to 113.84 in Gadhinglaj tahsil. Actually in these three tahsils the houses per village is more in Kagal followed by Gadhinglaj tahsil and less in Panhala tahsil. The combination of favorable and unfavorable conditions results medium density of rural houses.

### 4. High density (above 135 houses/ sq.km.)

The tahsils like Hatkangale, Shirol and Karvir are identified with very high density of rural houses. These three tahsils are having plain topography and pedological favorable conditions and agricultural development. Hence, the houses per village are also observed high in these three tahsils. It means this part has large size of villages.

It is interesting to note that, the density of houses and the number of houses per village increases from western hilly and

forested tract to eastern plain and agriculturally developed part of the study area.

### 6. Occupancy rate

The rural houses form one of the essential facts of unproductive occupation of the rural landscape (Brunches, 1952). The number of persons per household is simply called as occupancy rate. The general level of housing condition and amount of congestion in house can be understood by occupancy rate. According to Census of India 2001, about 6, 46,299 rural houses of the study area has been occupied by 24, 72,809 peoples. It means the occupancy rate of the study area is 3.83. The little spatial variations (SD = 0.18) in occupancy rate has been observed. Low occupancy rate records mostly in Ajara (3.53) and Gadhinglaj (3.52) tahsils. High occupancy rate records in Chandgad and Radhanagari tahsils where in an average per house above 4 peoples reside. The moderate occupancy rate has been observed in Shahuwadi, Bhudargad, Hatkangale, Panhala, Kagal, Shirol, Bavda and Karvir tahsils.

**Table 2**  
**Kolhapur District: Occupancy Rate, 2001**

Sr. No.	Tahsils	Rural Population	Rural Houses	Occupancy Rate
1.	Shahuwadi	171355	46,399	3.69
2.	Panhala	234931	61,396	3.83
3.	Hatkanangle	354625	93,680	3.79
4.	Shirol	294785	75,681	3.90
5.	Karvir	358052	90,010	3.98
6.	Bavda	32525	8,328	3.91
7.	Radhanagari	188107	46,458	4.05
8.	Kagal	215257	56,195	3.83
9.	Bhudargad	144910	39,003	3.72

10.	Ajra	106581	30,201	3.53
11.	Gadhinglaj	190900	54,187	3.52
12.	Chandgad	180781	44,761	4.04
<b>Kolhapur District</b>		<b>2472809</b>	<b>646,299</b>	<b>3.83</b>
<b>SD</b>		<b>95,398</b>	<b>24,267</b>	<b>0.18</b>

Source: Based on Tables on Houses, Household Amenities and Assets, Series 28, Maharashtra, Census of India, 2001.

In general the geographical factors not affect on the occupancy rate of the study area but in particular the occupancy rate is affected by the type of rural settlement. The occupancy rate is positively correlated ( $r = 0.54$ ) with the percentage of compact rural settlements and negatively correlated ( $r = -0.41$ ) with percentage of dispersed rural settlements. This correlation analysis reveals that, the occupancy rate is high where the rural dwellings are concentrated. Contrary to this in dispersed rural settlements where the rural dwellings are deconcentrated over the space, the people living per house is also low. As discussed in chapter 5 the concentration and dispersion of rural settlements of the study area are depend on the physical and cultural advantages

and disadvantages. So, the occupancy rate in the study area has been indirectly determined by the physical and cultural conditions.

## 7. Conclusion

Like population the density of rural houses is noted high in eastern three tahsils, medium in Kagal, Panhala and Gadhinglaj tahsils and low in remaining six tahsils. It is found that, the occupancy rate is high in highly populated and compacted villages and this occupancy rate in indirectly determined by physical factors.

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