

Spatio-Temporal Variation of Density of Population in Haveri District Karnataka a Geographical Analysis

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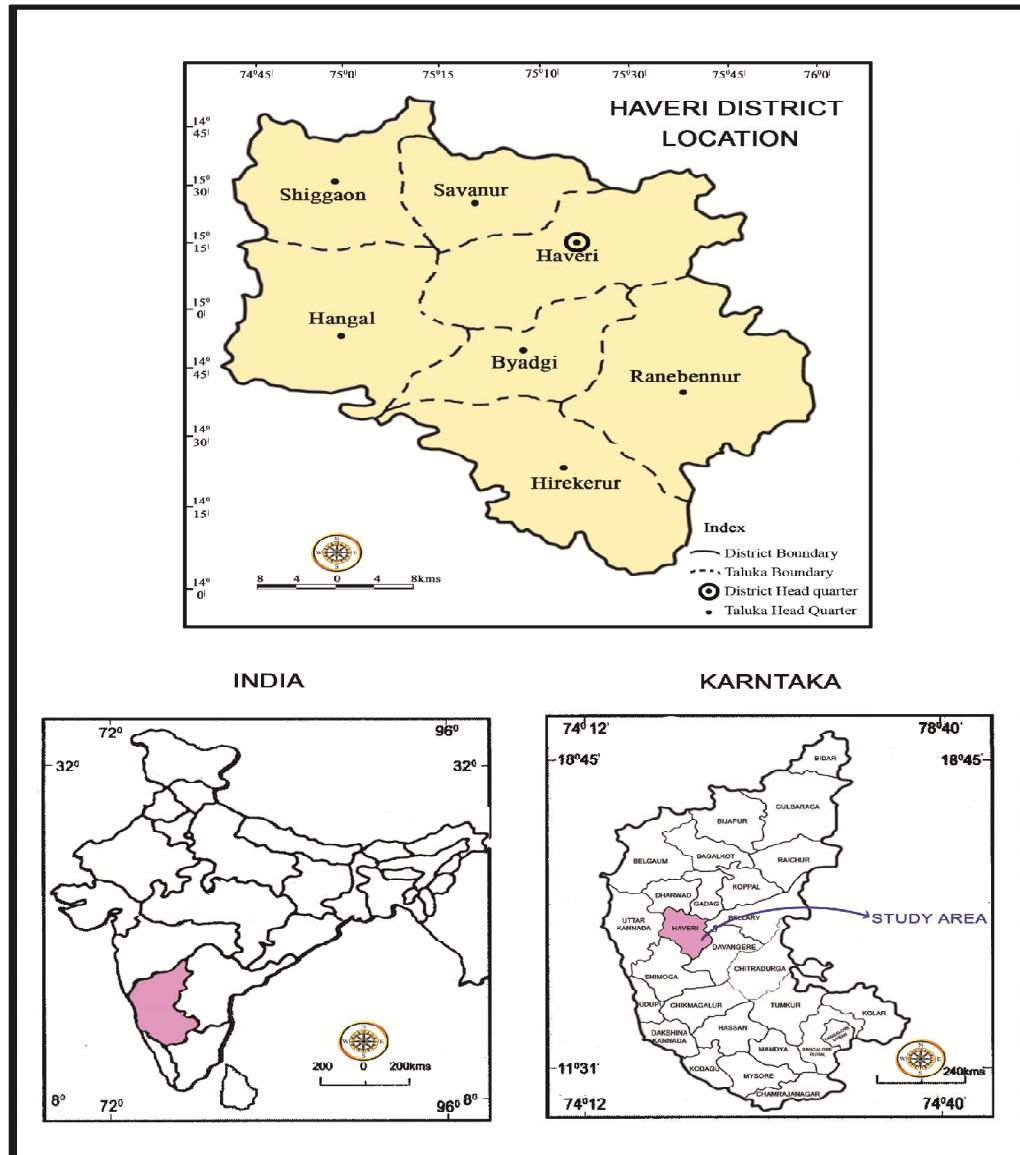
Abstract

The density is an indicator of human concentration and gives some measures of the extent of population pressure. The term “Density of Population” refers to the number persons per sq kilometer. In other words, it indicates the man-land ratio i.e. the quantitative relationship between total population and total geographical area. This concept was true in olden days. It is true even today, but to some extent the concept has changed and density and growth of population are influenced not only in the rainfall factor, but also by urbanization and industrialization. The Geographical area of Haveri District is 4,823 sq.km. The total population in the district is about 1598506 persons in 2011.

Introduction: The studies pertaining to spatial distribution of population and density of population have been made by geographers much before the formal development of population geography. Not only the geographers but demographers, sociologists, statisticians have made contributions in developing the means to describe the population distribution and its density.

G.T.Trewartha (1989) in his case for population geography had suggested three types of density calculations, arithmetic, nutritional and agricultural densities. The simple ratio between total population and the total land area expressed in terms of persons per sq kilometer unit of area was designed as arithmetic or general density. Hence, it is very interesting to study the density and distribution of population of the study area. Generally the density of population distribution is based on the ratios of the number of people in a unit area. The density of an area may be expressed by various methods, few of them have been reviewed in the present study analysis.

Location and Extent: The Haveri District popularly known for Byadagi Chilly variety and its market in south East Asia is almost in the center of Karnataka state. The district lies between North latitudes $14^{\circ}, 28'$ to $14^{\circ}, 39'$ and East longitude $75^{\circ}, 07'$ to $75^{\circ}.38'$. The Varada, Tungabhadra, Dharma and Kumadvati, rivers flow in the district. These rivers are provides the Irrigational facilities in the district. Agriculture is the main occupation in the district. The Geographical area of Haveri District is 4,823 sq.km falling in the survey of India Topsheet NO S48M/4,48M/ 8,48M/ 12,48N / 1,48N / 2,48N / 5,48N / 6,48N / 9,48N / 10,48N / 11,48N /13, 48N / 14, and 48n /15. The total population in the district about 1598506 persons in 2011.



Spatial Pattern of Density 1981-2011. Land and people constitute the two vital elements of an area and ratio between the two is dominant importance in all population studies. The choropleth map has been used for interpreting the spatial distributional pattern of density of population by applying arithmetic density.

The Haveri district as whole the density of population per sq km. area has increased during the study period. In the period of 1981, the density of population was about 217 persons per sq km. In the next decade 1991, the density of Population was increased to 262 persons per sq km, and the third decade 2001 again it was increased to 297 persons per sq km, and in the year 2011 the density was found 329 persons per sq km, which was continuously increased from 1981 to 2011 during the study period, Therefore the net increased of density of population was +112 persons per sq km.

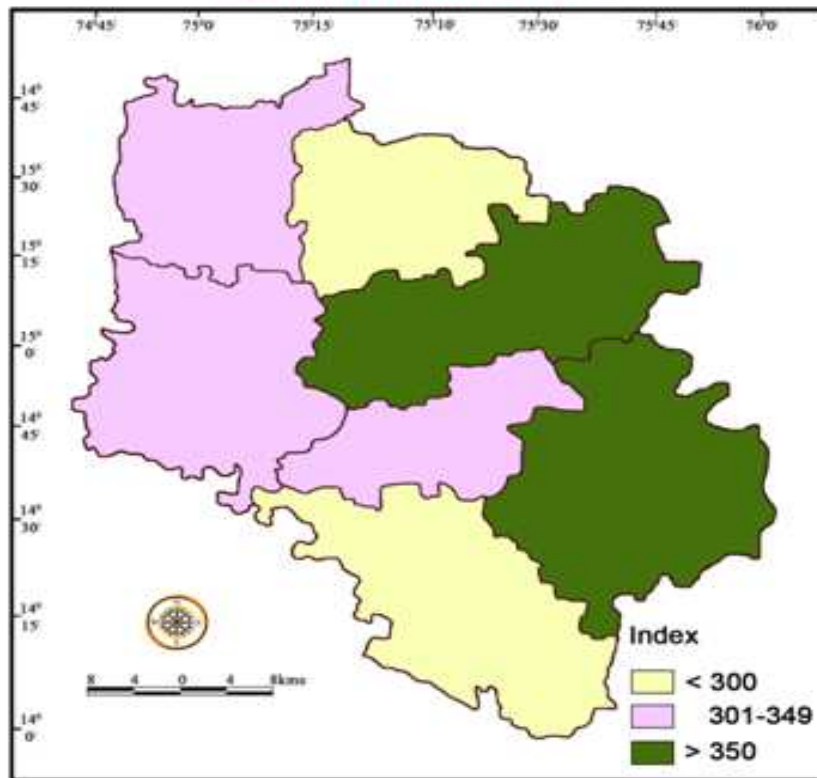
The increasing density of population in Haveri district was mainly due to the improvement of socio-economic conditions, introduction of new industries, irrigation facilities and educational institutions and others.

Decadal Variation of Population Density (1981-2011).

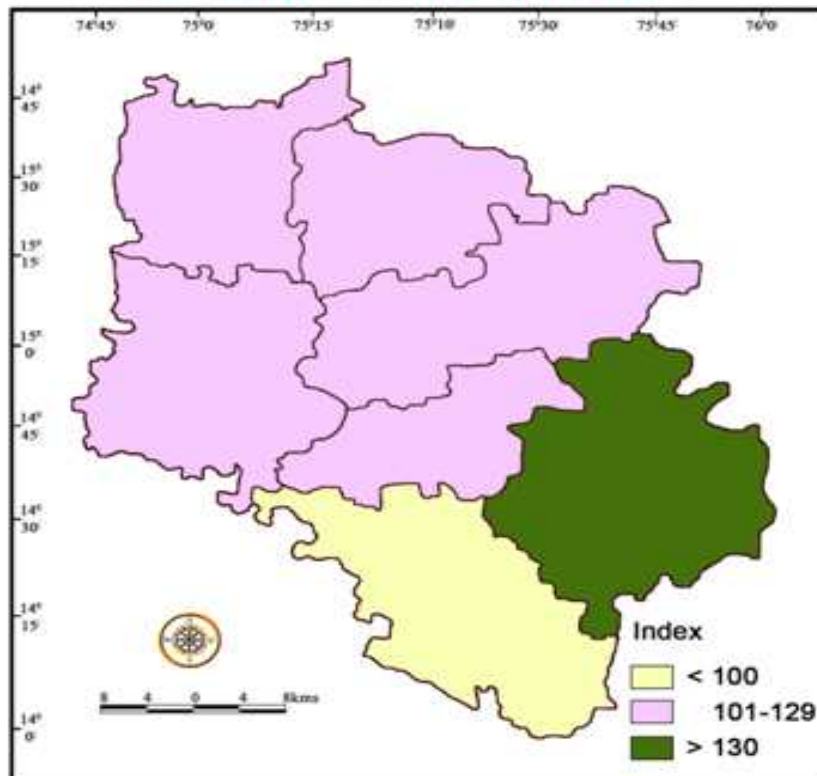
S. No.	Talukas	Area in sq kms	Total Population				Density of population				Decadal change in density of population.			
			1981	1991	2001	2011	1981	1991	2001	2011	1981-1991	1991-2001	2001-2011	1981-2011
1	Byadagi	43656	93407	111900	127944	141040	213	256	293	323	+43	+37	+30	+110
2	Hanagal	77525	170476	204400	230750	261920	219	264	297	338	+45	+33	+41	+119
3	Haveri	79985	181700	220500	252347	280090	227	276	316	350	+49	+40	+34	+104
4	Hirekerur	80694	162240	191900	212458	231005	201	238	263	286	+37	+25	+23	+85
5	Ranebennur	90475	218845	269300	304990	335084	240	297	337	370	+56	+40	+30	+130
6	Savanur	53901	104477	123700	143885	160966	194	229	267	299	+35	+38	+32	+105
7	Shiggaon	58920	121844	147500	166742	188401	207	250	283	320	+43	+33	+37	+113
	Total		105989	1269200	1439116	1598506	217	262	297	329	+45	+35	+32	+112

Decadal Variation of Population Density (1981-2011)

Current Pattern -2011



Volume of Change - 1981-2011



Current Pattern. 2011.The decadal variation of density of population is clearly indicated that, the increased ratio of density from 1981 to 2011 about +112 persons per sq km during the study period.

During 2011, the current pattern of density was shown in taluka level variation in the study period.

Pattern of Population Density in Haveri District.2011.

Sl,No	Category	Index	No of Taluka	Name of the Talukas
1	High	>350	2	Haveri, Ranebennur.
2	Medium	301-349	3	Byadgi, Hangal, Shiggaon.
3	Low	<300	2	Hirekerur. Savanur.

High Density (>350). In 2011 the high density of population was observed in two talukas namely Haveri (350) and Ranebennur (370).The high density of population is due to irrigation facility, large & small scale agro based industries development of trade &commerce and Educational institutions.

Medium Density (301-345).The medium of density was seen in three talukas, respectively Byadagi, (323), Hanagal (338) and Shiggaon (320) persons per sq km, there was mainly due to irrigational facilities of Varada River and other facilities.

Low Density (<300). The low density of category was confirmed mainly in two talukas i.e Hirekerur (286)and Savanur (299) persons per sq km, due to lack of infrastructure facilities lowest irrigational development and lowest development of secondary & tertiary activities .

VOLUME OF CHANGE (1981-2011):

The Volume of change in the density of Population in Haveri District has registered a Phenomenal increased during the study period. In the year 1981-91 the district has a whole the density was observed + 45 persons per sq. km, Which was increased to + 35 persons during next period 1991-2001, and during the period of 2011 again it was increased to + 32 persons per sq.km. Hence the net increased of density in the study period about +112 persons per sq. km. from 1981 to 2011.

The taluka wise percentage of change in density of population during the study period 1981-2011. The high (> 130) persons per sq. km. was observed in Ranebennur (+130) taluka only and medium density was found in Byadagi (+110), Hanagal (+119), Haveri (+104), Savanur (+105) and Shiggova (+113) talukas respectively. Whereas the lowest density of population was seen in only Hirekerur (+85) taluka, during the study period 1981-2011.

CONCLUSION:

The density of population in Haveri district has attracted increasing attention from geographers and Planners in India during the past three decades. In the present study an attempt has been made to know the spatio – temporal variation of density of populations in Haveri district, Specially to examine the pattern of population density and its variation in the present study.

Haveri district was only 217 persons per sq. km. density in 1981 and it was increased to 329 persons per sq. km. during 2011. Hence the net increased of density of population in Haveri district + 112 persons per sq. km. during the study period. It is because of irrigational facilities from Thungbhadra and Varadha rivers, Small scale and large scale Industries and Educational institution.

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