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## LEVELS OF URBANIZATION IN SOLAPUR DISTRICT OF MAHARASHTRA: A GEOGRAPHICAL STUDY

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### Abstract:

*The Solapur district is one of the urbanized districts in the Maharashtra state having about one third of the population in urban areas whereas about two fifth of state population lives in urban area. The Solapur district accounts for 31.83 per cent of total population concentrated in urban areas. The level of urbanization is a good indicator of level of development and also provides the base for analyzing the quality of life in spatial perspective. In this paper an attempt has been made to examine the levels of urbanization. The entire study is based on secondary data. Data is mainly derived from the District Census Handbook of Solapur and Socio economic Review and District Statistical Abstract of Solapur. Tehsil is selected as basic unit of study investigation. The year selected for study is 2001 census year. Level of urbanization is calculated by using Z score value as well as on total percentage of urban population.*

### KEYWORDS-

Level of Urbanization, Geographical Study, Solapur District, Urban Population, Socio Economic, Demographic.

### INTRODUCTION

At percent urban population explosion is found in each and every country (Ilanthirayan, 2010). Urbanization is a demographic process of population concentration. A level of urbanization is an important indicator of socio-economic and demographic condition of a region. Due to pull and push factors urbanization is occurred. Pull factors include the urban amenities like higher education, banks, wholesale and retail business, employment opportunities, recreational facilities and religious places which attract people towards urban centres, whereas retirement from job and marriage migration etc. are included in push factors. (Atteque Ahmad and Md. Julfikar Ali, 2006)

Ashish Bose (1956) has argued that, urbanization in demographic sense is an increase in the proportion of urban population (U) to total population (T) over a period of time. As long as U/T increases there is urbanization.

Population Census of India (2001) registered that only 28.3 per cent of total population living in urban area in the country. India is among the least of urbanized countries in the world. Out of the 132 countries for which data are available (world development report, 2000-2001), 109 countries have a higher proportion of urban people than India. Disparities in the levels of urbanization are an important

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topic to the geographers to know the causes for disparities and at what level the urbanization is in a study area. Urbanization is a process related to the concentration of people engaged in other than the agricultural activities concentrated in urban areas making use of different land uses in an selected area and time. The urbanization as a process involves the multiplication (Gibbs J.P. 1966)

## OBJECTIVES

The present study has its focus on urbanization in Solapur district. However the main objective of the paper is to find out level of urbanization in Solapur district for the Census year 2001.

## STUDY AREA

The Solapur district is selected as study area. It comprises of eleven tehsils viz., Karmala, Brashi, Madha, Solapur South, Solapur North, Mangalwedha, Sangole, Pandharpur, Akkalkota, Malashiras and Mohal tehsils. Solapur district is located in the southern part of Maharashtra. It is located between 170 10' north to 180 32' north latitude and 740 42' east to 760 15' east longitude. It covers an area about 14895 sq. km and it occupies 4.82 per cent total area of the Maharashtra. The district is bounded on the north by Ahmednagar and Osmanabad Districts, on the east by Osmanabad and Gulbarga districts, on the south by Sangli and Bijapur districts and on the west by Satara and Pune districts. According to 2001 census, the population of Solapur district was 38,55,383. In the urban development of southern Maharashtra Solapur city is one of the important urban centers. It is well known for cotton textile and Beedi Industry. The district ranks fourth regarding industrialization in the state. Solapur district is a table land with an average height of 550 metres above the mean sea level. Agro-climatically the entire district comes under rain shadow area. The average rainfall in the district is 545.5 mm. The maximum temperature of the district is about 44.190C and minimum 10.70C. The soil is medium to deep black soil and of rich quality.

## RESEARCH METHODOLOGY

The present study is based on secondary sources of published data for the year 2001 obtained from the District Census Handbook CD and Socio- economic Review and District Statistical Abstract of Solapur. The advanced cartographic techniques have been used in the analysis and interpretation.

In order to achieve standardization, the raw data for each variable computed into standard score (i.e. 'z' score). The score measure the departure of individual observation, expressed in a comparable form. This means it becomes a linear transformation of the original data.

$$Z_i = \frac{X_i - X}{SD}$$

Where,

Z<sub>i</sub> is the standard score of the variable

X<sub>i</sub> is the individual observation

X is the mean for variable

S.D. is the standard derivation

The values so obtained are added and average is taken to delimit the composite mean Z- score of socio-economic and demographics status. The model is thus:

$$C.S. = \frac{\sum Z_{ii}}{N}$$

## LEVELS OF URBANIZATION

The study region shows imbalance in urbanization. Generally the term level of urbanization is

taken as the per cent of population living in urban centres. The levels of urbanization have been arranged into three categories (high, medium and low) on the basis of Z-score (Table 1)

The tehsil wise spatial pattern of urbanization in 2001 are shown by Z-score and classified into high, medium and low levels of urbanization. The north Solapur tehsil with high z-score (2.53) falls in high levels of urbanization category. The Barshi (0.20), Pandharpur (-0.12) and Akkalkot (0.17) with moderate z-score value fall in the medium levels of urbanization category. While the Mangalwadha (-0.50), Sangole (-0.60) and Kamala (-0.64) having low z-score value fall in the low levels of urbanization category.

The table 1 shows a wide range of variation of levels of urbanization in Solapur district, ranging from 90.24 per cent urban population in tehsil of North Solapur to 7.78 per cent of urban population in Madha tehsil. Co-efficient of variation of level of urbanization has been calculated as 99.45 per cent.

High Levels of urbanization

Table 3 reveals that only one tehsil Viz north Solapur of the study area, is placed under highly urbanization group. In this tehsil due inclusion of Solapur city the highest urbanization (90.24 per cent) is recorded. North Solapur tehsil is located in eastern part of the district. These tehsil account the value of z-score > 0.25.

Medium Level of urbanization

The tehsils having the values of z-score between -0.25 to + 0.25 are placed under medium category of urbanization. Three theses viz. Barshi, Pandharpur and Akkalkot recorded medium level of urbanization where percentage of urban population are 30.74, 22.69 and 21.42 respectively (table 1).

Low Level of urbanization

The tehsils with the value of Z-score of - 0.25 is placed under low category of urbanization. Four tehsils of Solapur district recorded low level of urbanization. Percentage of urban population in these four tehsils are 12.67 (Mangalwedha), 10.33 (Sangola), 9.4 (Karmala) and 7.78 (Madha)

Table 1  
Level of Urbanization in Solapur District (2001)

Name of Tehsils	Total urban Population	Level of Urbanization (%) of Urban population)	Urbanization (Z- Score)
Solapur North	872478	90.24	2.53
Barshi	104785	30.74	0.20
Pandharpur	91379	22.69	-0.12
Mohol	--	--	--
Akkalkot	62115	21.42	-0.17
Solapur South	--	--	--
Madha	22777	7.78	-0.70
Karmala	21928	9.40	-0.64
Malshiras	--	--	--
Mangalwedha	21706	12.67	-0.50
Sangola	28116	10.33	-0.60
X (mean)	--	25.66	
Standard deviation (s)	--	25.52	
C.V.(Co-efficient of variation)	--	99.45	

Source: Computed from District Census Handbook – CD of Solapur 2001.

## CONCLUSION

The foregoing analysis shows that there is tehsilwise variation in urbanizations in the Solapur district. Highest (90.24 per cent) urbanization is found in north Solapur tehsil due to inclusion of Solapur city while the lowest (7.78 per cent) urbanization is found in Madha tehsil. Barsi, Pandharpur and Akkalkot tehsils have recorded moderate level of urbanization while Mangalwedha, Sangola, and Karmala, tehsils have recorded low level of urbanization.

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