"GEOGRAPHICAL STUDY OF GROWTH AND LEVEL OF URBANIZATION IN MAHARASHTRA STATE, INDIA"

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INTRODUCTION

Urbanization is the process under which population migrates from the countryside to the cities and towns, which are the major industrial centers for providing jobs. In such areas due to higher opportunities of employment and chances of higher earning many people migrates from rural areas to cities and towns. Therefore cities turned into crowded places everywhere in the world. Urbanization is a form of social transformation from traditional rural societies to modern urban societies. It is long term continuous process (T. Chandra-sekaryya, T.Parthas-rathy, 2013). In India urbanization in some states increasing rapidly. India existing cities are already

Abstract

In this paper an attempt has been made to study the growth and level of urbanization in Maharashtra from the year 1961 to 2011. The secondary data is used for the present study. The district has been taken as a unit for analysis. Mumbai, Mumbai Suburban and Thane districts are highly urbanized in the study region. There are ample job opportunities in mega cities therefore village people frequently migrate to the cities therefore in future also urbanization will be continues in such cities. Especially Pune, Nagpur, Nashik and Aurangabad have potential to absorb the population in future. But proper planning is important. Without the right design and planning it is highly impossible to minimize the burden of urban centers on mega cities, otherwise it creates enormous stress on the local system.

Degree of urbanization is low and very low in those areas where uneven topography and lack of industrialization is found. Such areas are observed in eastern, northern, Konkan and some part of central and south Maharashtra. Medium urbanization is mainly found in those districts where industrialization is growing slowly and agro-based industries are developing.

To control the intensity of urbanization problems in urban area decentralization of some industries towards rural area is important. Due to such decentralization of industries rural to urban migration can be control at some extent and other hand it will control the increasing population pressure on urban. So government and local bodies must do proper planning to create more employment opportunities, which can generates more jobs and services. There is also need to give emphasis to development of agro-based industries, agro tourism, and other agriculture allied areas as per available local resources and infrastructure.

Keywords : Urbanization, Population Density, Decentralization, Economic Growth, Mega city and MIDC.

Short Profile

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suffering from a lack of sufficient infrast-ructure investment (M.Husain, 2011). The present urbani-zation in India is not evenly distributed. At the state level the pattern of urbani-zation is very dive-rse, but economi-cally advanced state more or less show higher level of urbanization. All the southern states, along with Punjab, Haryana, Gujrat, Maharashtra and West Bengal, have higher urbanization level than the national average (R.B.Bhagat, 2011). Like national level at state and district level also such variation is obser-ved.

Generally, urban phenomenon is supposed to be the consequences of economic growth.

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The bases for urbanization very from time to time. In recent times, industrialization and economic development are found predominantly responsible for urbanization (L.N.Verma, 2008).In case of Maharashtra it true because urbanization is found more in those areas where industrialization is more. In other hand it is very low in those areas where industrialization not developed too much. Especially in eastern, northern, Konkan and some part of south and central Maharashtra. In some cities it is increasing very rapidly and created tremendous problems. Especially in Mumbai, Thane, Pune, Nagpur, Nashik & Aurangabad are major cities where intensity of such problems are too much. Contribution of these cities to increasing urbanization in their district is also very much. In rest part of Maharashtra urbanization is growing very slowly. In such condition, the study of urbanization of Maharashtra state is very important. Through such study it is possible to highlight the problem and potential regions (districts) of Maharashtra as urbanization is concerned.

Such study also useful to frame the future planning related to urbanization. Rural-urban disparities have for long been one of the causes of concern for policymakers (Suhas Avhad,2014).The planner, policymaker, local authorities, government and concerned authorities gets some clues for making final draft of policy to minimize the burden of urbanization from highly urbanized areas and diver the population through decentralization in potential areas of the state. For this purpose people and administration must work corporation and with positive attitude. It is necessary that studies should be undertaken on the patterns of urbanization observe the process. Taking into consideration the above aspects, here an attempt has been made to highlight the urbanization growth and present pattern of urbanization in the Maharashtra State.

2]STUDY AREA:

Maharashtra State came into existence on 1st May,1960.it extends between 15° 33'46" N to 22° 02'13" N latitudes and 72° 38'45" E to 80° 53'17" E Longitudes. Maharashtra state known to be progressive state of India. Its geographical area is 3.08 lakh Sq.k.m. It is located along the western coast of Peninsular India.

Maharashtra state is bordered by Gujarat to its northwest, Madhya Pradesh its north, Chhatisgarh to its east and Goa, Karnataka and Telangana are located to the south of Maharashtra. Maharashtra State had population 11, 23,72,972 as per the 2011 census. The average population density of the state is 365 persons per sq.km. and literacy is 82.34 percent as per 2011 census. Location of the study area is showed in Map No.1.

Map No.1

The district is divided into 355 tahsils and 36 districts and grouped them into 6 administrative divisions. It includes Konkan, Pune, Nashik, Aurangabad, Amaravati and Nagpur. The Maharashtra State divided into three major physiographic divisions namely the Western Ghats (Sahyadri), The Deccan Plateau and the coastal lowland of Konkan. Godavari, Krishna, Tapi and Pirna are major the rivers of Maharashtra. The climate of Maharashtra is monsoon type. Agriculture is major occupation in rural areas of Maharashtra. The state receives

rainfall from the southwest monsoon winds during the periods from June to September.

3) DATA AND METHODOLOGY:

Present paper is based on the secondary source of data. Secondary data is obtained from the Maharashtra Census Handbook (1981 to 1991 and CD Rom 2001 & 2011) & Economic Survey of Maharashtra State (2002-03, 2012-13 and 2014-15). The district has been taken as a unit for analysis of urbanization in the study region. Statistical tools like percentage, average etc. have been used in the study. The result have been shown with the help of line graph, Bar graph & Choropleth map by using GIS software. For the calculation of degree of urbanization, following formula is used.

$$DUP = \frac{UP}{TP} * 100$$

Where, DUP = Degree of Urbanization (%)

UP = Urban Population
TP = Total Population

Urbanization is the proportion of urban population to the total population. It is expressed in percentage.

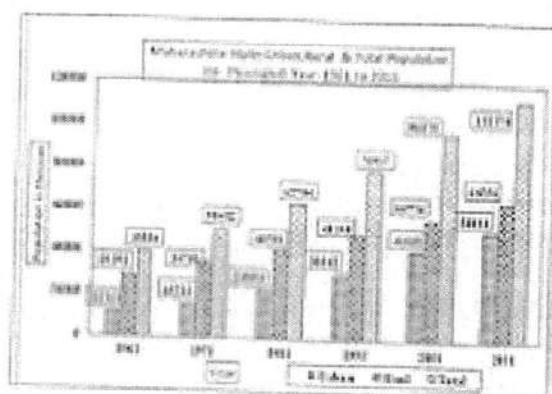## 4) RESULTS & DISCUSSION:
Population and Urbanization Growth:

The population of Maharashtra has grown by 72820 thousand during a span of 50 years from the year 1961 to 2011.Table No.1 and Graph No.1 present the population growth of study region from 1961 to 2011.Table No.1 also indicates that the total population of Maharashtra in 1961 was 39554 thousand and it increased to 112374 thousand in the year 2011.It means during the fifty years span it is increased by 72820 thousand. During the same periods the rural population increased form 28391 thousand to 61556 thousand. Urban population also increased by 4.55 times in the same periods. Which is shown in the table No.1 and Graph No.2.The percent of

urbanization was 28.20 in 1961, which increased upto 45.22 percent in the year 2011.Which is indicates in the Graph No.2.It is more than the India's urbanization. The pressure of population on land has been steadily increasing and with it, land man ratio is becoming increasingly adverse. According to 2011 census the density of population in Maharashtra was 365 persons per sq.km. as against the 129 persons per sq.km. in 1961. The density of population during five decades is increased by 236 persons per sq.km.

Table No.1: Maharashtra State: Major Demographic Characteristics-1961 to 2011

Year	Rural Pop. (000)	Urban Pop. (000)	Total Pop. (000)	Decadal Growth	Urbanization (%)	Decadal Growth	Pop. Density Per Sq.Km.
1961	28391	11163	39554	--	28.29	--	129
1971	34701	15711	50412	27.45	31.17	12.15	164
1981	40791	21989	52780	24.54	35.03	12.31	214
1991	48395	30541	78937	25.73	38.70	15.44	257
2001	55778	41101	96879	22.73	42.40	30.26	314
2011	61556	50818	112374	15.99	45.22	23.63	365
Change 1961-2011	33165	39655	72820	-	17.02	-	236

Source: Compiled by Author, 2015, based on Maharashtra State Census Handbook and CD Rom (1971 To 2011)
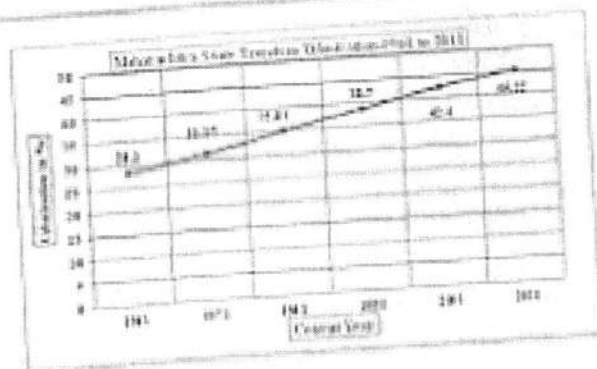

Graph No.1

Level of Urbanization:

The level of urbanization indicates the proportion of total population residing in urban places. For the detail analysis of level of urbanization, all districts are arranged in to five categories.

Graph No.2

Table No.3: Maharashtra State: Level of Urbanization-2011

Sr. No.	Degree of Urbanization (%)	Level of Urbanization	Name of Districts
1	More than 80	Very High	Mumbai City, Mumbai Suburban and Thane
2	60-80	High	Pune and Nagpur
3	40-60	Medium	(illegible)
4	20-40	Low	(illegible)
5	Less than 20	Very Low	(illegible)

Source: Compiled by Author, 2015

These categories are based on the degree of urbanization of the year 2011. All categories are shown in the Table No.3 and Map No.2.

1.Very High Urbanization:

This category includes those districts, where degree of urbanization is more than 80 percent. Mumbai City, Mumbai Suburban and Thane districts are included in

Table No.2: Maharashtra Major Demographic Characteristics-2011

Sr. No.	Name of District	Total Population	Rural Population	Urban Population	Urbanization (%)	Density Sq.km
1	Mumbai City	3,085,411	000	3,085,411	100.00	(illegible)
2	Mumbai Suburban	9,356,962	000	9,356,962	100.00	(illegible)
2	Thane	11,060,148	1,545,478	9,514,670	76.99	(illegible)
4	Raigad	2,634,200	1,664,664	976,197	16.35	(illegible)
5	Ratnagiri	1,615,069	1,351,749	263,320	16.33	(illegible)
6	Sindhudurg	849,651	562,685	201,966	13.49	(illegible)
7	Satara	6,000,109	5,500,914	0,605,573	40.40	(illegible)
8	Sindhudurg	(illegible)	1,670,804	571,008	27.99	(illegible)

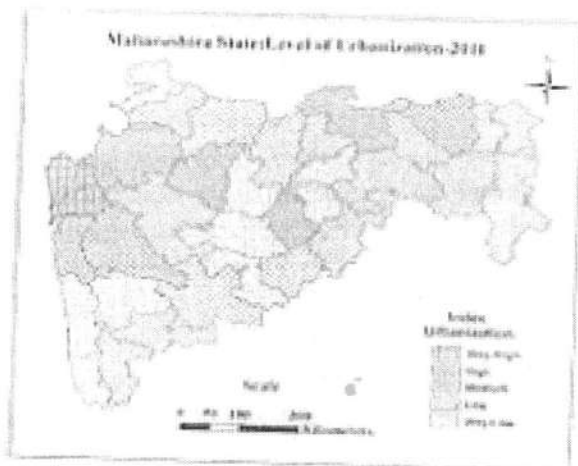| | | (illegible) | (illegible) | 115,479 | 35.75 | 111 |
9	Nandurbar	1,648,295	1,272,822	(illegible)	(illegible)	206
10	Jalgaon	4,229,917	2,867,744	1,112,714	35.74	306
11	Ahmednagar	4,543,159	3,656,342	911,507	20.06	601
12	Pune	9,429,408	3,673,256	5,711,162	60.99	287
13	Satara	3,003,741	2,473,364	556,378	18.60	323
14	Beed	2,622,165	2,302,784	719,597	28.83	300
15	Solapur	4,317,756	2,534,668	1,799,901	41.60	504
16	Kolhapur	3,876,001	2,445,995	1,750,889	31.91	505
17	Aurangabad	3,701,282	2,061,112	1,690,174	41.11	314
18	Jalna	1,958,496	1,863,577	375,439	16.05	200
19	Parbhani	1,836,090	1,263,040	504,406	31.68	244
20	Hingoli	1,177,345	998,632	178,733	21.18	242
21	Beed	2,585,049	2,079,951	504,396	16.40	314
22	Nanded	3,361,292	2,460,744	571,606	27.12	319
23	Osmanabad	1,657,576	1,396,659	231,977	16.95	342
24	Latur	1,454,196	1,824,396	524,990	28.81	343
25	Beed	1,566,116	2,851,679	411,869	21.51	143
26	Washim	1,611,396	1,296,169	718,746	19.48	133
27	Yavatmal	1,107,560	985,765	211,453	17.66	244
28	Amravati	2,888,445	1,851,158	1,037,287	34.94	217
29	Wardha	2,772,548	2,274,393	598,155	21.56	206
30	Nagpur	1,300,174	871,474	428,548	32.94	476
31	Bhandara	1,611,470	1,474,411	3,176,759	68.30	109
32	Gondia	1,899,914	986,607	211,865	19.88	273
33	Gondia	1,922,807	1,494,411	353,209	20.08	253
34	Chandrapur	3,204,307	1,828,929	718,178	21.18	606
35	Gadchiroli	5,572,942	951,900	118,011	31.98	267
	Total	115,374,333	60,056,974	50,814,199	43.31	367

Source: Compiled by Author, 2015, based on Maharashtra census CD Rom 2011

this category. These districts are highly urbanized. Mumbai and Mumbai Suburban had recorded 100 percent urbanized and Thane was 76.99 percent urbanized districts of the study region in the year 2011. These three region are located very close to each other and provided more employment opportunity to people, therefore mostly people migrated not only from other district of the state but also from others states of India. Therefore population density of these districts also increased too much. High urbanization creates many problems in urban areas. They are related to transport, water and electricity supply, drainage, waste disposal, traffic jam, public hygiene overcrowding, garbage disposal, sewerage problems, increase in crime rate and various pollution. The intensity of such problems are more in Mumbai and Mumbai Suburban areas.

2.High Urbanization:

Pune and Nagpur districts includes in this category, where urbanization was recorded

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more than 60 percent and less than 80 percent. Both districts are developing very fastly due to their potentials and favourable condition for urbanization.

Map No.2

Nagpur is the sub capital of Maharashtra and the most important urban center in the district. All types of development is concentrated here and it is sources for various type of jobs and services. In eastern Maharashtra no other cities offered such facilities to people therefore large people migrated here. Pune is second important district, where urbanization if recorded more. Pune and its sub urban area absorbed more population of the district. It is an industrial, educational, commercial and administrative center not only for Pune district but for the Maharashtra also. Therefore population in the district increased naturally as well as due to outside migration. Industrialization is major factor which leads to raise the urbanization in these districts. In both urban places transportation, traffic jam, crime and increasing slums area major problems. With the growing population in urban areas, slums are becoming a major problems for governing bodies to control its intensity.

3. Medium Urbanization:

Degree of urbanization is medium has

identified Raigad, Nashik, Aurnagabad, Parbhani and Amarawati districts, where degree of urbnalzation is between 40 to 60 perecent. All districts are attracting rural population since last two decades in large scale. Intensity of urbanization is more in Aurangabad (43.77 %) and Nashik (42.53) district. In all these five districts urban centers are not more. Role of MIDC is very important in these districts to rise the urbanization. Mostly urban population is concentrated in the headquarter place. Problems of urbanization are increasing rapidly in these districts also. It is right time to do proper planning for minimize their intensity otherwise it will create more complication in the future.

4. Low Urbanization:

Low urbanization is recorded in those districts where degree of urbanization is from 20 to 40 percent. This category consisted of districts namely, Dhule, Jalgaon, Nagar, Sangli, Solapur, Kolhapur, Nanded, Latur, Buldhana, Akola, Yavatmal, Wardha and Chandrapur. Geographical condition of these districts is not too much suitable for industrialization. Only few places are having small patches of industrial units. Most part of Dhule, Jalgaon, Nagar, Nanded and Buldhana is dry and basic infrastructure for economic growth is not available in large scale which may help to increase urbanization. Most part of Chandrapur, Akola and Yavatmal is undeveloped and covered by forest and rugged topography. Agriculture is major activity of these districts. Therefore many people engaged in agriculture and setted in rural area.

5. Very Low Urbanization:

Last category of very low urbanization is observed in 12 districts of Maharashtra where degree of urbanization is less than 20 percent. In these category Sindhudurga, Ratnagiri Nandurbar, Satara, Jalana, Hingoli, Beed, Osmanabad, Washim, Bhandara, Gondiya and Gadchiroli districts are included. In these district

degree of urbanization is found very low due to uneven topography and absence of industrialization or other sources of jobs. Mostly people are engaged in animal husbandry and in other primary occupation like agriculture, which are spread in rural areas.

5. CONCLUSION:

The attempt has made to examine the growth and level of urbanization of Maharashtra State and reveals the uneven pattern of urbanization of the study region. Mumbai, Mumbai Suburban and Thane districts are highly urbanized in the study region. There are ample job opportunities in mega cities therefore village people frequently migrate to the cities therefore in future also urbanization will be continues in such cities. Especially Pune, Nagpur, Nashik and Aurangabad have potential to absorb the population in future. But proper planning is important. Without the right design and planning it is impossible to minimize the burden of urban centers on mega cities, otherwise it creates enormous stress on the local system.

Degree of urbanization is low and very low in those areas where uneven topography and lack of industrialization is found. Such areas are observed in eastern, northern, Konkan and some part of central and south Maharashtra. Medium urbanization is mainly found in those districts where industrialization is growing slowly and agro-based industries are developing. MIDC also established therefore industries are developing in these areas.

To control the intensity of urbanization problems in urban area decartelization of some industries towards rural area is important. Like Wine Park at vinchur (Nashik) and Sangli other big companies must be shifted towards rural areas by conducting survey at each district, it will be helpful to localize the new industries at suitable places. Due to such decentralization of industries rural to urban migration can be control at some extent and other hand it will control the increasing population pressure on urban. Making

minimum level of services and facilities in rural areas also reduce the flow of migration from rural to urban areas, because many people migrates in cities only due to city life attractions. So government and local bodies must do proper planning to create more employment opportunities, which can generates more jobs and services in some rural areas like tahsil places or any other big settlement. There is also need to give emphasis to development of agro-based industries, agro tourism, and other agriculture allied areas as per available local resources and infrastructure.

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