



SPATIAL AND TEMPORAL PATTERN OF URBANISATION IN PRAYAGRAJ DISTRICT (UP) –INDIA

¹APOORV PANDEY
²ARCHANA TRIPATHI
³ABHAY PRATAP SINGH

¹ Ph.D. Research Scholar
Department of Geography, CMP, Degree College, University of Allahabad, (UP) India

² Associate Professor
(Department of Geography) CMP, Degree College, University of Allahabad, (UP) India

³ Ph.D. Research Scholar
Department of Geography) CMP, Degree College, University of Allahabad, (UP) India

Abstract : Uttar Pradesh is comparatively a less urbanized state of India i.e **21.78%** as compared to total urban population in India being **31.16%** . The district of Prayagraj forms an important geographical and cultural entity in the state. There is a presence of drastic levels of difference in the urbanization levels in different regions of the district. The district lies in the confluence of rivers Ganga and Yamuna. They divide the district into different regions. The area lying between both the rivers i.e the Doab region has seen high growth of urban population of **87.1%**. While the region in both trans-Yamuna and trans-Ganga have experience constrained growth in urban population. Specially the trans-Yamuna Region where according to 2011 census the urban population level is **5.79%** . The paper aims to study the variation in urbanisation across different sub districts and different units to chalk out a definite pattern in urban growth . the absolute growth has a linkage with the rates of growth of the town which is in the form of positive correlation in most of the cases

Key words: Urbanization, Growth, Census towns, sustainable urbanization, migration

I. INTRODUCTION

Urbanization refers to the shift of population from rural to urban areas and the increase in the proportion of people living in urban areas. This transformation is caused by factors such as natural population growth in cities, migration from rural areas, and the re-designation of rural land as urban. In the year 1950, over half of the developed world's population and nearly one-third of the global population resided in urban location¹.

The current level of urbanization across the world and the growth of its biggest cities is unlike anything we've seen before. In the early 1900s, only 16 cities, mostly located in industrialized nations, had a population of one million or more. Nowadays, there are close to 400 cities with populations exceeding one million. Urbanisation is a process that involves a change from rural-agricultural to non- agricultural occupations. It is associated with organisational and behavioural changes in the society and is the outcome of several forces. Urban centres, being nodes of settlements, are the real foci of social contacts and economic growth performing a number of important activities..

Prayagraj District is unique in the respect of site and situation, geographical setting, historical growth and population characteristics. These factors collectively affect the shaping Urban Growth well as development. Therefore it is pertinent to study the urbanization in the District across past decades and also to bring out the intra- district variation in urbanization level.

II. Objectives of the study

The main objectives of present study are:

1. To analyse the spatial and regional pattern of urbanization in Prayagraj District by Sub- District level Census data
2. To find out the changes in urbanization level across different census decades
3. To discuss the Tehsil and town level variation of urbanization.

III Methodology

The data for the present study have been taken from the census of India (1971, 1981, 1991, 2001 and 2011), Town Directory and other relevant literature. Data collected from various sources have been processed, analyzed and depicted using statistical and cartographic techniques and relevant GIS software. The Discussion on urbanization is based on the following indicators:-

1. Studying the Decadal Urban growth
2. Percentage of Urban Population to the total population
3. Growth of Urban centers both absolute and as percentage of total settlements
4. Analysis of Urban growth by studying the population size and settlement pattern
5. Comparison with national statistics, State level urbanization levels.
6. Regional Pattern of urbanization by studying the same at town level

IV Study Area

The district of Allahabad is situated at the southern tip in eastern side of Uttar Pradesh State. During the British and Mughal times Allahabad has remained an important seat of learning and administration. There are number of Central and state level offices/organizations are working here. It is the seat of High Court and headquarters of the revenue division also. The present shape of the district came into existence on April 4, 1997 when the district was bifurcated and a new district Kaushambi was created². To provide efficient administration the district is administratively divided into 08 tahsils namely, Soraon, Phulpur, Bara, Karchhana, Allahabad, Handia, Meja and Koraon.

For implementation and monitoring of development scheme the district is divided into 20 Development Blocks namely Kaurihar, Holagarh, Mauaima, Soraon, Bahria, Phulpur, Jasra, Bahadurpur, Shankargarh, Chaka, Kaudhiyara, Karchhana, Pratappur, Dhanupur, Saidabad, Handia, Meja, Uruwan, Manda and Koraon. Total area of the district is 5482.0 Sq. Km. The rural area covers 5279.1 Sq. Km. and urban recorded 202.9 Sq. Km.

Allahabad is basically an Administrative and Educational city. High Court of Uttar Pradesh, Auditor General of Uttar Pradesh, Principal Controller of Defence Accounts (Pension) PCDA, Uttar Pradesh Madhyamik Shiksha Prishad (UP BOARD)office, Police Headquarters and in education Moti Lal Nehru Regional Engg. College MNREC, Medical and Agriculture College, Indian Institute of Information Technology (IIIT) ITI Naini and IIFCO Phulpur, Triveni Glass are some of major industries here.

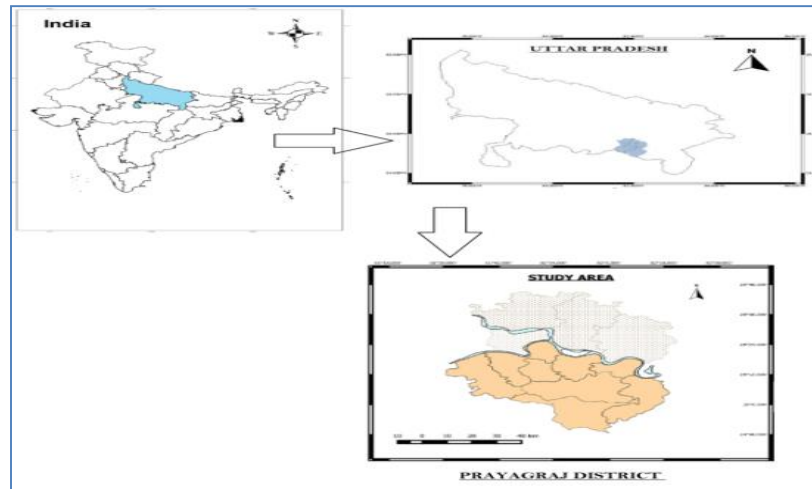


Fig 1- Location of Study Area (Prayagraj District) in the map of India and Uttar Pradesh
Source: Created by Author through ArcGIS

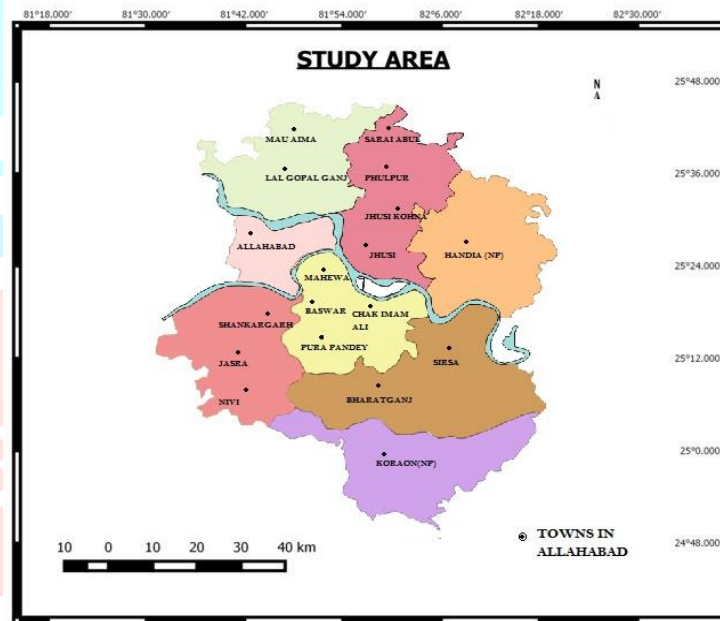


Fig 2- - Study Area and Towns of Prayagraj District

Source: Created by Author through ArcGIS

V Review of Literature

Cities have always been focal points for economic growth, innovation, and employment. Indeed, many cities grow out of some natural advantage in transport and raw material supply. UN-HABITAT mentions that Cities, are where the vast majority of modern productive activities are concentrated in the developing world and where the vast majority of paid employment opportunities are located.

Mumford (1938) had taken the city as a geographical place, an economic unit, industrial process, thereafter of social action at work and aesthetic symbol. The term urbanization also implies the movement of people to the urban areas. **Taylor (1953)** had used the term in the same way and had stated that "Urbanisation is a shift of people from villages to city".

Davis and Golden (1954) have put urbanisation in an explained manner. "urbanisation represents a revolutionary change in the whole pattern of social life and itself is a product of basic economic and technological developments". **Ehlich 1956** brings demographic attributes in relation to the Urban communities. The process of urbanisation can be defined in any number of ways including by population size, population density, administrative or political boundaries, or economic function. Some countries define their urban population as those people living within certain administrative boundaries. **Gibbs (1961)** had referred the word 'urban' in terms of demographic attributes (size/density) or economic variables (percentage of non-agricultural workers). He had also stated that in its demographic sense, urban

It has been pointed out by the **Census of India** way back in 1981 net flow of people as migrants is the leading and emerging factor for growth of urbanization besides natural growth and emergence of new statutory towns .

Ramchandran and Ramchandran (1987) had explained that the survival and growth of cities depend upon the functions they perform. In ancient times towns evolved due to surplus agricultural production and concentration of political power. Today organized commerce and manufacturing technology are the new forces resulting in the urbanization.

Sambyal (2013) . The study finds that Urban interaction is proportional to the nodality of the town. The study uses Coefficient of Variation for comparing the variability of two or more variables. In the particular topic the C.V has been used to analyze the variation in purposes of the travelers of the town . **Mitra (1992)** had analysed India's urbanisation in the light of a number of aspects such as unprecedented growth of urban areas and had pointed out the proliferation of slums in recent years. He had stated that one of the demographic features of urbanisation in several newly developing countries in the past decades was the substantial increase in labour force through the natural increase of population and rural to urban migration in particular.

On the basis of **1981 Census** data, **Gupta (1989)** has studied the relationship between industrialisation, urbanisation and rural development, in the context of the major Indian States.

Prasad (1995) in his report had pointed out that India's current position in economic development had identified its relationship with levels of urbanisation. **Bhattacharya (2002)** made an attempt to examine the urbanisation process in developing country like India .He explained the trends of urbanisation, growth of large cities, urban primacy and the role of rural urban migration in urban growth.

VI Relevance of Study

- Urbanization refers to the shift of population from rural to urban areas and the increase in the proportion of people living in urban areas. This transformation is caused by factors
- **Natural population growth in cities**
- **Migration from rural areas**
- **Re-designation of rural land as urban**

With 55 percent of the world's population living in settlements designated as urban, urbanisation is one of the most notable developments the world has witnessed in recent decades. The United Nations (UN) projects this percentage to increase to about 68 percent by the middle of the century, with indications that there will still be a scope for it to rise further

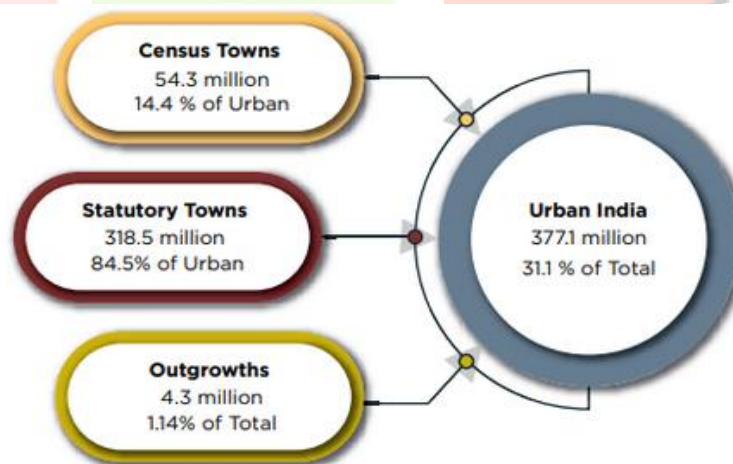


Fig3- COMPOSITION OF URBANIZATION IN INDIA

India has been an important part of the process of **world's urbanisation**. Although the rate of India's urbanization has been lower in comparison with the average for the less developed countries, its share in the world's urban population has risen consistently over the decades .However if we study the different categories of urban settlements in India there is a definite pattern that shows that growth rates have been skewed in favor of Metro cities and larger settlements

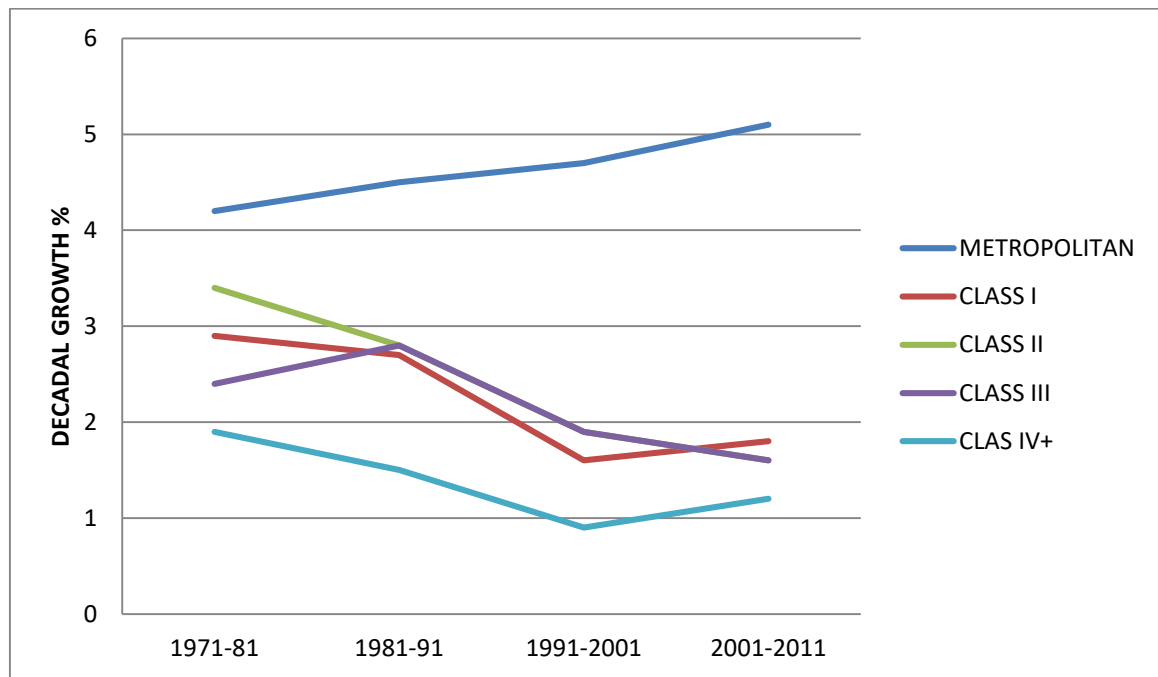


Fig 4. Decadal growth rates of different

Class of towns in india

Source ;Handbook Of Urban Statistics , Ministry Of Urban Affairs, **India**

Metropolitan cities have had a sustained annual growth rate of more than 4% since 1971 whereas towns from class I to IV have all showed decline in the growth rates .An important feature of urbanization in India is the dualism of urban growth decelerating at macro level. But in Metropolitan cities it is growing. An analysis of the distribution of urban population across size categories reveals that the process of urbanization in India has been large city oriented.

This is manifested in a high percentage of urban population being concentrated in class I cities, which has gone up systematically over the decades in the last century. (United Nations,2009) The massive increase in the percentage share of urban population in Metro and class I cities from 26.0 in 1901 to 68.7 in 2001 has often been attributed to faster growth of large cities, without taking into consideration the increase in the number of these cities

VII SUSTAINED URBAN GROWTH OF PRAYAGRAJ -

Table 1- Comparison With National And State Level Urbanization Levels(2011) Source: Computed By Author

Name	Total Population	Total Urban Pop.	Percentage of Urban Pop
India	1210193422	377128239	31.16%
Uttar Pradesh	204213237	44,495,063	21.78%
Prayagraj District(STUDY AREA)	5954391	1472873	24.73%
Trans Yamuna Block	1931247	111978	5.79%

As can be seen from Table 1 Uttar Pradesh is a less urbanized state of India i.e **21.78%** as compared to total urban population in India being **31.16%** . The district of Prayagraj forms an important geographical and cultural entity in the state. There is a presence of drastic levels of difference in the urbanization levels in different regions of the district. The district lies in the confluence of rivers Ganga and Yamuna. They divide the district into different regions.

The area lying between both the rivers i.e the Doab region has seen high growth of urban population of **87.1%**. While the region in both trans-Yamuna and trans-Ganga have experience constrained growth in urban population. Specially the trans-Yamuna Region where according to 2011 census the urban population level is **5.79%** .

1 .Growth of Urban centres

Number of towns have changed across 3 census decades, from 1991 to 2011. The number of towns in 1991 census were 18. In 2001 census the number of towns increased to 23. However the number of town in 2011 increased to 26. The most number of towns across all three census decades were in Allahabad . the major change was seen in Phulpur where town increased from 1 to 3. Karchhana with the second most number of towns increased the number of towns from 4 to 5 between 1991 and 2001.

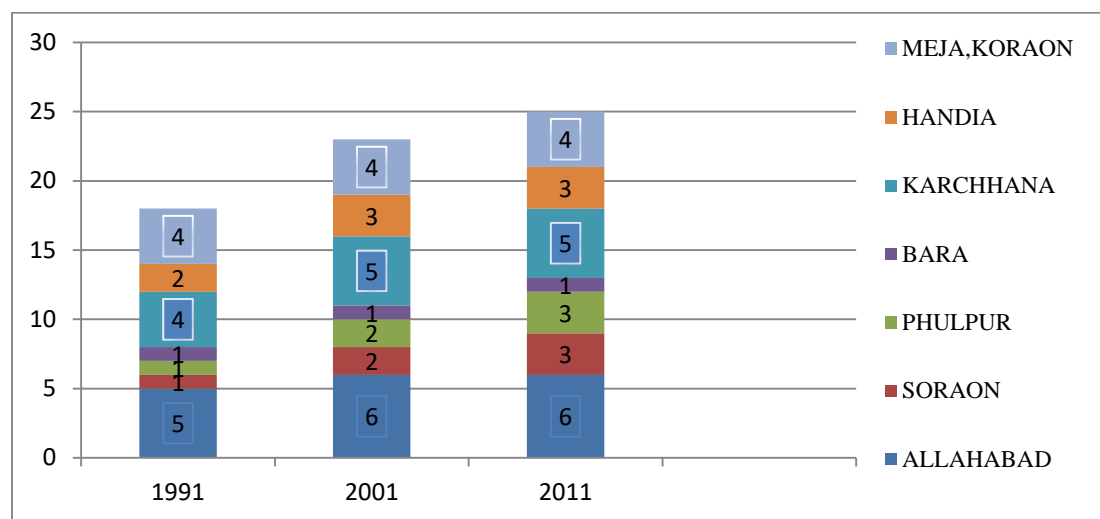


Fig 5- Changes in number. Of towns in prayagraj district by sub districts- 1991 -2011) (Census of India) Source: Computed By Author

There was transfer of Manjhanpur, Chail and Sirathu Tehsil to the Kaushambi in 2001. Thus changes were both because of increase of population (warranting the number of increase of towns) and also the census readjustments. There can be seen a variation in number of blocks but it can also be inferred that the main Allahabad Tehsil was still the main urban center despite losing area to Kaushambi

Table :2 Spatial and temporal urban growth in prayagraj district by blocks (1971-2011). Source: Computed by Author

S.N	BLOCKS	No. of towns	TOWNS	POPULATION DECADAL GROWTH RATES (%)				Population 1971	Population 2011
				1971 - 81	1981 - 91	1991 - 2001	2001 - 11		
1	SORAON	1	SORAON CT	8.0	7.1	6.9	6.9	8037	10624
2	MAUAIMA	1	MAUAIMA NP	8.3	8.1	8.1	8.0	14373	19645
3	KAURIHAR	1	LAL GOPALGANJ NINDAURA(NP)	10.6	11.1	11.7	12.2	18369	27288
4	BAHADURPUR	1	JHUSI UA	9.8	10.2	11.1	12.9	9144	13878
		2	SARAI LAHURURF LAHURPUR (CT)	8.8	9.1	9.7	10.8	3054	4406

		3	JHUNSI KOHNA CT	8.8	8.9	8.2	7.9	14475	20023
5	PHULPUR	1.	SARAI ABUL MALIK	7.5	7.4	7.1	7.0	3639	4815
		2.	Allahabad (M Corp. + OG)	8.5	9.1	10.8	14.3	779373	1168385
		3.	ALLAHABAD (CB)	12.4	12.4	11.9	11.4	17109	27944
		4.	BIHKA URF PURA MUFTI	8.5	8.9	9.3	9.8	7580	10749
		5.	Shaha Urf Pipalgaon (CT)	10.4	10.1	8.3	8.7	5830	8342
6	SHANKARGAR H	1	Shankargarh (NP)	10.1	10.2	11.3	13.1	11645	17785
		2.	Nivi (CT)	8.4	8.8	9.1	10.4	5016	7125
7.	JASRA	1.	Jasra (CT)	7.8	7.5	7.1	7.1	4125	5483
8.	CHAKA	1	Mahewa Patti Pashchim Uparhar (CT)	8.6	9.1	10.7	11.5	4382	6408
		2.	Arail Uparhar (CT)	8.9	9.1	11.5	12.2	8201	12190
		3.	Chak Babura Alimabad (CT)	6.9	7.1	7.2	8.1	3675	4876
		4.	Pura Pandey (CT)	8.6	8.4	7.1	7.3	3006	4066
		5.	Baswar (CT)	8.7	8.4	7.5	7.1	4093	5552
		6.	Chak Imam Ali (CT)	9.4	9.3	8.3	8.0	3318	4641
9	KORAON	1	Koraon (NP)	8.2	8.7	9.3	10.4	10443	15345
10	URUWAN	1	Sirsa (NP)	7.8	7.4	7.0	7.1	9562	12686
11	MANDA	1	Bharatganj (NP)	8.6	9.3	10.5	10.9	11206	14821
12	HANDIA	1	Handia (NP)	8.3	9.2	11.2	12.1	14786	21798

To understand the spatial and temporal distribution of urban population all the towns blockwise have been categorized. Table 2 shows the census wise growth rates of all the towns in the Prayagraj District. The Right most two columns of the table show the population of each town in 1971 and 2011. From the study of decadal growth rates of different towns there emerges a pattern of growth among the urban centers. All the towns in the district that have shown a growth rate of 7% and above are also the towns that show increasing growth rates as well.

The towns which have shown growth rates of 5% and below in the successive census decades are showing decreasing rates of growth as well. Therefore the gap among the larger towns and smaller towns has increased in the past census decades. The towns, Allahabad M. corp, Phulpur Np, Shankargarh, Lal Gopalganj, Arail and Mahewa uparhar have shown growth rates of 7% and above in some cases up to 13% in one decade.

Table :3 Levels of Growth Rates of Urban Centres of Prayagraj District 2011

Levels	Population growth in %	No.	Towns
High	11% & above	9	Bharatganj (NP), Handia (NP), Arail Uparhar (CT), Mahewa Patti Pashchim Uparhar (CT), Allahabad (M Corp. + OG), Shankargarh (NP), ALLAHABAD (CB), JHUSI UA, LAL GOPALGANJ NINDAURA (NP)
Medium	8-11%	8	Chak Imam Ali (CT), MAUAIMA (NP), Chak Babura Alimabad (CT), Shaha Urf Pipalgaon (CT), BIHKA URF PURA MUFTI, Koraon (NP), Nivi (CT), SARAI LAHUR URF LAHURPUR (CT)
Low	Below 8%	7	SORAON CT, SARAI ABUL MALIK, Jasra (CT), Sirsa (NP), Baswar (CT), Pura Pandey (CT), JHUNSI KOHNA (CT),

A three fold categorization of towns has been done based on their growth rates. In the category of High growth rates all the towns with growth rates above 11% have been put. This includes the towns of Bharatganj, Handia (NP), Arail Uparhar, Mahewa Uparhar, Allahabad (M. corp and OG), Shankargarh NP, Allahabad (CB), Jhusi UA and Lal Gopalganj. Therefore total 9 such towns are there. While in the medium category there are towns with 8-11% growth rate. There are 8 such towns namely Chak Imam Ali (CT), Mauaima, Chak Babura Alimabad (CT), Shah Urf Pipalgaon (CT), Pura Mufti, Koraon, Nivi and Lahurpur (CT).

In the category of low growth rate there are 7 towns that have grown less than 8% namely Soraon (CT), Pura Pandey, Jhunsu Kohna (CT), Jasra (CT), Sirsa (NP) and Baswar(CT).

Table 4 :Ranking of the Towns by population comparison of 1971 and 2011 Source: Computed By Author

RANK	1971	POPULATION	RANK	2011	POPULATION
1	Allahabad (M Corp. + OG)	779373	1	Allahabad (M Corp. + OG)	1168385
2	LAL GOPALGANJ NINDAURA(NP)	18369	2	ALLAHABAD (CB)	27944
3	ALLAHABAD (CB)	17109	3	LAL GOPALGANJ NINDAURA(NP)	27288
4	Handia (NP)	14786	4	Handia (NP)	21798
5	JHUNSI KOHNA CT	14475	5	JHUNSI KOHNA CT	20023
6	MAUAIMA NP	14373	6	MAUAIMA NP	19645
7	Shankargarh (NP)	11645	7	Shankargarh (NP)	17785
8	Bharatganj (NP)	11206	8	Koraon (NP)	15345
9	Koraon (NP)	10443	9	Bharatganj (NP)	14821
10	Sirsa (NP)	9562	10	JHUSI UA	13878
11	JHUSI UA	9144	11	Sirsa (NP)	12686
12	Arail Uparhar (CT)	8201	12	Arail Uparhar (CT)	12190
13	SORAON CT	8037	13	BIHKA URF PURA MUFTI	10749
14	BIHKA URF PURA MUFTI	7580	14	SORAON CT	10624
15	Shaha Urf Pipalgaon (CT)	5830	15	Shaha Urf Pipalgaon (CT)	8342
16	Nivi (CT)	5016	16	Nivi (CT)	7125
17	Mahewa Patti Pashchim Uparhar (CT)	4382	17	Mahewa Patti Pashchim Uparhar (CT)	6408
18	Jasra (CT)	4125	18	Baswar (CT)	5552
19	Baswar (CT)	4093	19	Jasra (CT)	5483
20	Chak Babura Alimabad (CT)	3675	20	Chak Babura Alimabad (CT)	4876
21	SARAI ABUL MALIK	3639	21	SARAI ABUL MALIK	4815
22	Chak Imam Ali (CT)	3318	22	Chak Imam Ali (CT)	4641
23	SARAI LAHUR URF LAHURPUR	3054	23	SARAI LAHUR URF LAHURPUR	4406
24	Pura Pandey (CT)	3006	24	Pura Pandey (CT)	4066

In table no.4 the towns have been arranged in descending order of the population for both 1971 and 2011 census decades. There can be seen some changes in the ranking orders. Allahabad (M Corp+OG) remained the town with most urban population. The second rank which was taken by Lal Gopal Ganj Nindaura in 1971 is occupied by Allahabad(CB) in 2011.

Bharatganj and Koraon have flipped the positions for 8th and 9th place respectively. Similarly Jasra and Baswar which held 18th and 19th place in 1971 have exchanged the places in 2011. Sirsa town was at the 10th place in 1971 and is now in the 11th position in 2011

Table:5 Tier wise classification of towns based on Population 1971 and 2011 Computed By Author

S.N.	TOWN	POPULATION 1971	CLASS	POPULATION 2011	CLASS
1	Allahabad (M Corp. + OG)	779373	II	1168385	I
2	LAL GOPALGANJ NINDAURA(NP)	18369	IV	27944	III
3	ALLAHABAD (CB)	17109	IV	27288	III
4	Handia (NP)	14786	IV	21798	III
5	JHUNSI KOHNA CT	14475	IV	20023	III
6	MAUAIMA NP	14373	IV	19645	IV
7	Shankargarh (NP)	11645	IV	17785	IV
8	Bharatganj (NP)	11206	IV	15345	IV
9	Koraon (NP)	10443	IV	14821	IV
10	Sirsa (NP)	9562	V	13878	IV
11	JHUSI UA	9144	V	12686	IV
12	Arail Uparhar (CT)	8201	V	12190	IV
13	SORAON CT	8037	V	10749	IV
14	BIHKA URF PURA MUFTI	7580	V	10624	IV
15	Shaha Urf Pipalgaon (CT)	5830	V	8342	V
16	Nivi (CT)	5016	V	7125	V
17	Mahewa Patti Pashchim Uparhar (CT)	4382	VI	6408	V
18	Jasra (CT)	4125	VI	5552	V
19	Baswar (CT)	4093	VI	5483	V
20	Chak Babura Alimabad (CT)	3675	VI	4876	VI
21	SARAI ABUL MALIK	3639	VI	4815	VI
22	Chak Imam Ali (CT)	3318	VI	4641	VI
23	SARAI LAHUR URF LAHURPUR	3054	VI	4406	VI
24	Pura Pandey (CT)	3006	VI	4066	VI

In table 5 the town have been categorized in the Census of India classification based on the population. In 1971 there was no class I (population above 1,00,000) town in the Prayagraj district. Allahabad M.corp was the only class II town (population 99,999-50,000). There were 8 class IV towns (19,999-10,000), 7 class V towns (9,999-5,0000 and 8 class VI towns (below 5,000). In 2011 Allahabad M.Corp became the first and only class I town in the district . there was no town in class II category while there were 4 towns in class III category (0 in 1971). There are 9 class IV town (8 in 1971), 5 class V towns (7in 1971) and 5 class VI towns(8 in 1971) therefore major shift in the category was in class V and VI towns which reduced in number and from 1971 to 2011 while class III and IV significantly increased by 2011

2 .REGIONAL PATTERN OF GROWTH RATES OF URBAN CENTRES IN PRAYAG

2.1 DOAB REGION

The area lying between both River Ganga and Yamuna consists of central city region of Allahabad. The region includes the towns of Allahabad Municipal Corporation, Pura Mufti and Pipalgaon. With Urban population percentage of more than 80% the towns have shown high growth rates along with consistent increase in growth rate. Allahabad Municipal corporation has grown by 14.35 in the last census decade which is the highest growth in the district. The effects can be manifested in increasing land rates, traffic issues and shortage of basic urban amenities. In Allahabad Tehsil the blue line indicates the annual and decadal growth of Allahabad Municipal corporation and out growth. It was recorded around 9% in 1981, 11.5 in 2001 and 14.35 in 2011. Whereas all other Towns have either shown decreasing growth rates or have stabilized.

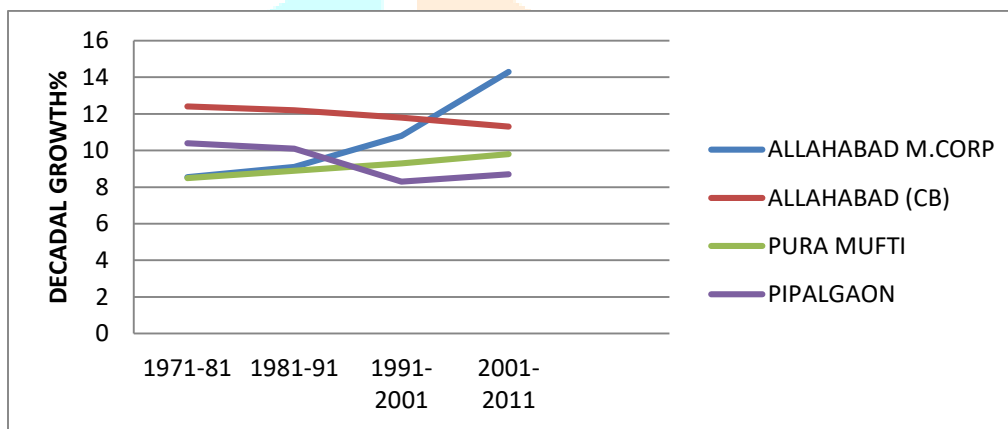


Fig: 6- Growth Rates of Towns In Doab Region (1971-2011) : Computed By Author

2.2 TRANS- YAMUNA AND SOUTHERN BLOCKS

Karchhana Tehsil has been one of the most important Tehsil after Allahabad Khaas. There has been a diverging gap amongst the towns in the Karchhana Tehsil. Arail Uparhar census town and Mahewa Uparhar census town have shown high and increasing growth rates in the successive census decades as shown in the table. Arail recorded 8.9%, 11.2% and 12.1% of decadal growth rates which was highest in the Tehsil.

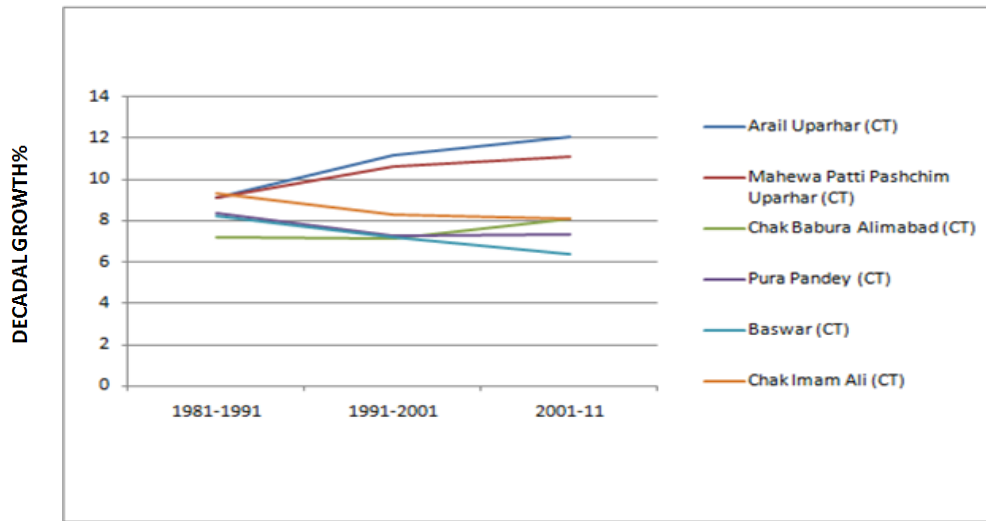


Fig: 7- Growth Rates of Towns In Trans- Yamuna And Southern Blocks(1981-1011)

Computed By Author

In Bara Tehsil Shankargarh Nagar Palika has been the leading urban centre in terms of growth . It showed 10.2%, 11.1% and 12.9% of decadal growth rates in 3 census decades from 1981 to 2011. Nivi census town was the 2nd most important urban centre in the Tehsil

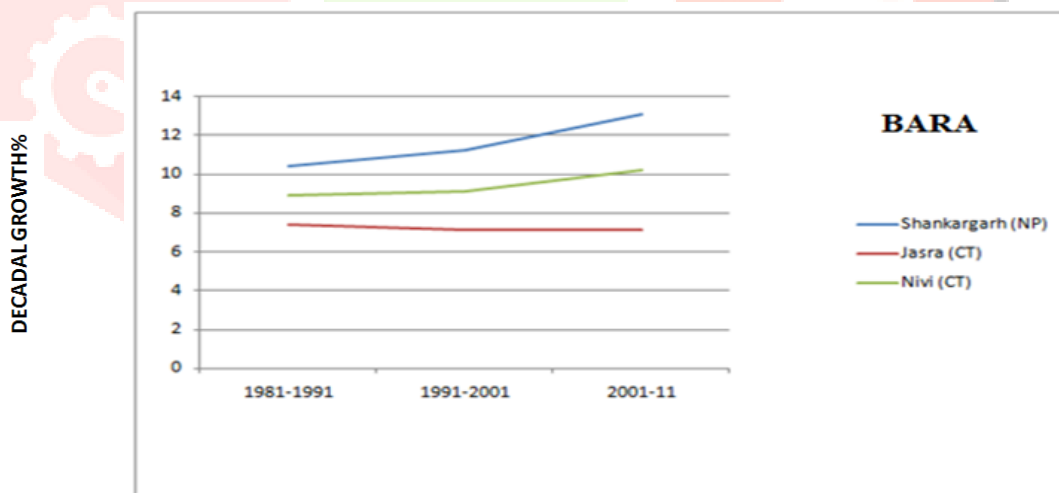


Fig: 8- Growth Rates of Towns In Bara Tehsil Computed By Author

Meja consists of Sirsa and Bharatganj towns . with low absolute share of urban population in the Meja Tehsil of 7.5% , sirsa town has shown declining growth from 7.9 % in 1971 to 7.1% in 2011. The town of Bharatganj is showing increasing trends of urban growth rate i.e 8.6% in 1971-81 to 11.65 in 2001-11. In Koraon block there is only one town which is Koraon nagar Palika. It is also showing trends of increasing

growth rates by 8.2% in 1971-81 to 10.4 in 2001-11. Therefore in the Meja Koraon region the towns of Bhratganj and Koraon (NP) hold promising trend for future urban growth

2.3 TRANS GANGA REGION- SORAON, PHULPUR HANDIA

Both Phulpur and Sarai Lahur have shown increasing decadal growth rates and emerged as main urban areas in the Tehsil along with Jhusi. Phulpur recorded 10.1, 11.3 and 13.1 % of decadal growth rates in the 3 census decades.

Handia consists of Handia (NP) which is showing promising and increasing trends of growth rates with 8.35 in 1971-81 to 12.2 in 2001-11. Therefore it is also a prospective area of future expanded urban growth despite currently having low absolute urban population

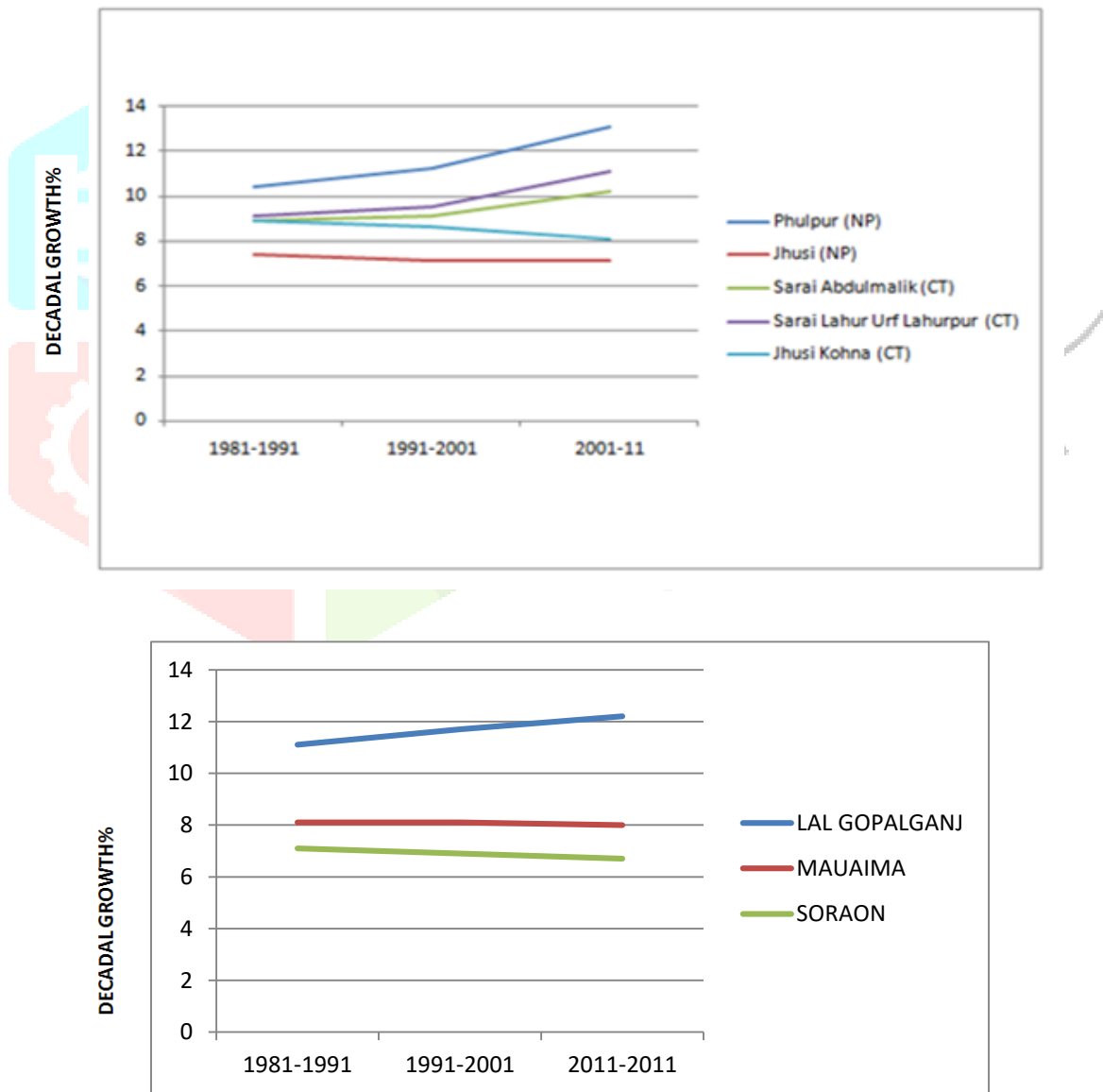


Fig: 9- Northern Blocks – Trans ganga region- Soraon, Phulpur Handia

Source: Computed By Author

In Soraon the Lal gopal ganj nagar palika shows highes decadal growth rate along with the increasing trend . It recorded growth rate of 11.1%, 11.7% and 12.2% respectively in 3 census decades, both Mauaima and Soraon census town have shown decreasing rates of growth in the same period

SUMMARY AND CONCLUSION

As can be seen from the above discussion there is pattern of unequal urban growth both temporally and spatially. The main Tehsil of Allahabad leads as the urban center in whole of he district. Also there can be seen a regional pattern in the process of urbanization that emerged after 1991

As we see in the national statistics there is skewed growth in urbanization that prefers tier 1 and tier 2 cities particularly. With the lack of intervening opportunities in the middle and lower ranges of settlement they experience decrease in the growth rates . The same trend can be observed at a district level where there is stunted growth of urbanization in areas away from the main Central Business District. This can be attributed to step up migration and skewed infrastructure growth in the main Allahabad Tehsil

From the study of decadal growth rates of different towns there emerges a pattern of growth among the urban centers All the towns in the district that have shown a growth rate of 7% and above area also the towns that show increasing growth rates as well .The towns which have shown growth rates of 5% and below in the successive census decades are showing decreasing rates of growth as well. Therefore the gap among the larger towns and smaller towns has increased in the past census decades. Interestingly this emerging gap can be explained by analysis of migration data of census decade 2011 up to some extent .The towns ,Allahabad M. corp , Phulpur Np, Shankargarh , Lal Gopalganj, Arail and Mahewa uparhar have shown growth rates of 7 % and above in some cases upto 13% in one decade .With urban to Urban migration both from within the district and from outside the district having the major share in urban migration, it has been the mjor factor behind the diverging growth rates of population growth

Such skewed pattern of urban growth should be checked by provision of intervening opportunities like Hospitals , Educational Institutes , Business centers and other economic opportunities inn the lower level town in the district This has to be the major concern for prospects of achieving Sustainable Urban growth SDG target 11 in long term

REFERENCES

- [1] Babu, K, Krishna (1997), Urbanisation and Urban Growth in Andhra Pradesh: A study of regional variations, Andhra University
- [2] Census of India (2001), Primary Census Abstract (PCA) Data Tables, of the Registrar General & Census Commissioner, India, New Delhi.
- [3] Census of India, Provisional Population Tables, Series-16, Part-1, 1981.
- [4] Davis, James C. and Henderson, J. Vernon, Evidence on the political economy of the urbanization process, Department of Economics, Brown University, Providence.
- [5] Kumar Kamlesh,(2021) Demography Urbanisation and Urban Planning in Rajasthan, JNV Rajasthan
- [6]Kundu Amitabh: (2009). Trends and Patterns of Urbanisation and their Economic Implications, working papers on urbanisation.
- [7] Mumford, Lewis , the Culture of Cities (1938). Publisher: Thomson Learning
- [8] Sharma, H.N., Elements of Urban Impact on Rural Society in India: A Spatial Analysis (Unpublished) Ph.D. dissertation submitted in the Graduate School of Syracuse University, May ,1975,p. 1 .
- [9] Singh Madhusudan (1983), Pattern of Urbanisation in Eastern Uttar Pradesh , Agra University Patil. S (2010). Analysis Of Growth And Transformation Of Rural Urban Fringe Through Dynamic Urban Matrix, RGPV, Bhopal
- [10] United Nations: (2001) World urbanization prospects: the 1999 revision. New York:
- [11] Goldstein S. Urbanization in China, 1982–87. Effects of migration and reclassification. Popul Dev Rev 1990;16: 673–701.
- [12] United Nations: (2004) human settlements programme (UN-HABITAT). The state of the world's cities 2004/2005: globalization and urban culture. Nairobi/London: UN-HABITAT/Earthscan; 2004.
- [13] United Nations:(2009) World urbanization prospects: The 2003 revision Data tables and highlights. New York: United Nations.