



Role of Urbanization in and Regional Development Dynamics: A Geographical study of Meerut District

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Abstract

Measuring the degree of urbanization merely entails calculating the proportion of the population living in cities and towns that meet a given standard. Villages become towns and towns become cities through this process. It signifies a radical shift in the entire social life pattern. It provides urban facilities for people and creates an area of influence. The cities' socioeconomic infrastructure provides a foundation for rural growth. Facilities for communication and transportation are crucial to the growth of rural areas and provide a foundation for a town's core.

Keywords: Cities and towns, migration, urbanization, service centers, rural, urban

1. Introduction

An umland of that certain town or city is the area where the city and the region are interconnected politically, economically, and culturally. There are several names for the area that surrounds the focal point and serves the urban center that either serves or is served by it. A city's ability to sustain itself depends on the services it provides to its tributary areas rather than to itself. Urban areas are interconnected with the surrounding region on an economic, social, cultural, and, in the majority of cases, administrative level. There are two kinds of links that exist between cities and their regions. In addition to serving as a distribution hub for items produced in the city or in neighboring cities, a city also serves as a collection point for the commodities generated in the area. Therefore, collecting and distribution tasks are typically carried out by a city.

A radical shift in the entire social life pattern is represented by urbanization. As a byproduct of basic economics and technical advancements, it tends to impact all facets of life once it is established. It is the process via which towns grow into cities and villages become towns. Not just a contemporary phenomenon, urbanization is a historic and swift shift of human social roots on a global scale, with primarily rural culture quickly giving way to primarily urban culture. Because they perceive rural areas as having challenges and a backward lifestyle, the majority of people relocate to cities and towns. Urbanization is thus the direct result of population migration to more developed locations.

Rural areas are impacted by urbanization, which also creates amenities for the neighboring communities. The rural populace is tempted by social and economic amenities. Better services and employment possibilities are provided to the rural population. Transportation infrastructure is crucial to the growth of rural communities. The difference between rural and urban environments is a guess. Through transportation, cities and towns offer medical and educational services to rural areas. Despite its apparent simplicity, the link between a city and its region is complicated when it comes to quantification. A city serves the region in a number of ways, and as a result, a variety of connections are made between the city and its surroundings.

2. Objectives of the study

1. To ascertain how metropolitan amenities affect rural communities.
2. To identify the elements that are necessary for rural development.
3. To determine the degree of socioeconomic advancement in both urban and rural regions.

3. Research Methodology: The investigation was finished using both kinds of data. The sample survey approach has been used to gather primary data from the study area. From the relevant offices, departments, documents, and reports, secondary data has been gathered. To determine the outcome, statistical techniques have been employed.

4. Review of Literature

It is crucial to review the relevant prior research on any topic of interest before starting to study it. Because it provides a wonderful understanding of the subject and allows for the closure of any gaps in the research study's inquiry. It aids in discovering new avenues for our field of study. Numerous studies on various facets of "urbanization" and its impact on rural development have been conducted in India. 'Role of urbanization in rural development' is the subject of this review of the literature.

The article "The Role of Urbanization in Economic Development; Some International Comparisons" by Burth, F. Hoselitz (1962) ^[1] summarizes the key distinctions between Indian and European urbanization. An paper titled "Pattern of Urbanization with special reference to small and medium towns in India" was published by Amitabh Kundu in 1994. He claims that there are some intriguing aspects to urban expansion in all size groups. Darshini Mahadavia (2001) ^[3] claimed in her paper "Sustainable Urban Development in India: An Inclusive Perspective" that the dominant discourse on urban development tends to overlook people-centered approaches to development in favor of either urban development or sustainable cities. The essay "Impact of Neo-Liberal Paradigm on Urban Dynamics in India" by Amitabh Kundu (2003) ^[4] claims that the pattern of urban expansion has changed. In their book "Rural Urban Migration and Rural Unemployment in India," G.V. Joshi and Norbert Lobo (2003) ^[5] examined how people migrate because they are living beings with goals and experiences. In their "Urbanization" study, Shiva Rama Krishnan and B.N. Singh (2004) ^[6] claimed that migration was not the primary or dominating cause in the expansion of cities. The article "Urbanization in India" by Pranati Datta (2006) ^[7] examines urbanization as a measure of the shift from traditional rural economies to contemporary industrial ones. In their work "Emerging Pattern of Urbanization and the Contribution of Migration in Urban Growth in India," R.B. Bhagat and Soumya Mohanty (2009) ^[8] looked at how India's economic reforms in the 1990s affected the country's urban growth.

5. Study Area

The district of Meerut has been chosen to finish the study. It is located between the Ganga Doab and the Hindan. In India's Indo-Gangetic plains, the Meerut district is located between latitudes 28°7' and 29°02' north and longitudes 77°40' and 77°45' east. Its geographical area is 2522 km². Muzaffarnagar district borders it to the north, Bulandshahr district borders it to the south, and Ghaziabad and Baghpat districts border it to the west and south. The district is divided from Amroha and Bijnor districts by the Ganga, which defines the eastern boundary. The district is divided from Baghpat by the Hindon, which serves as its western border. Its terrain lacks mountains and is not rough. Pleistocene and sub-recent alluvial sediments that were carried and deposited by river action from the Himalayan region make up the soil. The land is ideal for cultivating crops, including vegetables, wheat, and sugarcane. The research area has greater irrigation facilities, which are crucial for the growth of agriculture.

In the National Capital Region, Meerut is the second-biggest city. It consists of 667 villages, 92 nyay panchayats, 12

blocks, and 3 tehsills. Its population, according to the 2011 census, is 34.43 lakh. There are 1346 people living in the district per square kilometer. There are 886 females for every 1000 males in this species. Its literacy rate is 72.64% higher than the 69.72% state average. Its population is 48.93% rural and 51.07% urban. It serves as a center for education in Western Uttar Pradesh.

6. Urbanization in the study area

Western Uttar Pradesh is home to the medieval city of Meerut. It is rapidly expanding and has produced a sizable rural-urban fringe. It has many facilities that can be developed. Urbanization is significantly influenced by these facilities. As countries transition from rural to industrial civilizations, they go through a cyclical process known as urbanization. It is the process via which towns grow into cities and villages become towns. Measuring the degree of urbanization merely entails calculating the proportion of the population living in cities and towns that meet a given standard. The following lists the research area's urbanization trends:

Table 1: Trends of urbanization in Meerut district from 1951-2011

Year	Total Population	Rural Population	%	Urban Population	%
1951	1540065	1040389	67.56%	499676	32.44%
1961	1819523	1260729	69.29%	558794	30.71%
1971	2207877	1390971	63.00%	816906	37.00%
1981	2767246	1903280	68.78%	863966	31.22%
1991	2397099	1308623	54.68%	1088476	45.32%
2001	2973877	1521894	51.18%	1451983	48.82%
2011	3443689	1684507	48.92%	1759182	51.08%

Source: Computed by the author on the basis of census 1951-2011.

The urbanization rate was 32.44% in 1951, 30.71% in 1961, 37% in 1971, 31.22% in 1981, 45.32% in 1991, 48.82% in 2001, and currently 51.08% in 2011, as seen in the above table. The research area's urbanization rate increased by 18.64% throughout this time. The research area's urban population has dramatically changed between 1991 and 2011. Its population ratio has surpassed 50%.

7. Influence area of cities/towns in district Meerut

Studying the city's regional ties, which are reflected in the various connections that exist between the city and its region, is crucial to comprehending the social and economic nature of a city. The nomenclature employed by urban geographers to designate the area or region of linkages varies significantly, despite the fact that they all agree that social, cultural, economic, and administrative links exist. Some refer to it as "Hinterland," while others name it "Umland," possibly in honor of the German geographers. Others, however, refer to it as the "Metropolitan Region" or the "Metropolitan Dominance and Metropolitan Association" area. Naturally, the phrases "Urban Field," "Tributary Area," "Sphere of Influence," "Catchment Area," and "City Region" are also used to describe the area that a city serves and is connected to on an administrative, social, cultural, and economic level.

The city of Meerut has a wide-ranging impact. The city provides services to every block and community, with the exception of a twenty-kilometer radius around the city. The

urban facilities mostly affect the following areas: Daurala, Rajpura, Machhra, Kharkhauda, Janni Khurd, Rasulpur Rohta, Saruppur, Sardhana, and Meerut. The Meerut district is home to eighteen cities and municipalities. These towns and cities have a sphere of influence and provide services to the populace. These towns and cities are listed below:

Table 2: Cities/towns in the study area and their influence area (2011)

Sr. No.	City/Town	Urban Population	Influence Area (km ²)	Served Population
1.	Meerut municipal corporation	1305429	43.26	1363657
2.	Meerut Cantt	93312	11.57	108885
3.	Siwalkhas	24882	5.97	32918
4.	Aminagar/Bhurbaral	6141	2.97	10139
5.	Amhera	5485	2.80	9254
6.	Sindhawali	5200	2.73	8875
7.	Mawana	81443	10.80	95980
8.	Kithor	27933	6.33	36453
9.	Hastinapur	26452	6.16	34743
10.	Falawada	19908	5.34	27096
11.	Parikshit Garh	19830	5.33	27004
12.	Bahsuma	11753	4.10	17272
13.	Sardhana	58282	9.14	70584
14.	Lawar	22024	5.62	29589
15.	Daurala	19779	5.32	26940
16.	Karnawal	11663	4.09	17168
17.	Kharkhauda	14364	4.54	20475
18.	Mohiuddinpur	5200	2.73	8875

Source: Computed by the author on the basis of census 2011.

The table above indicates that Meerut Municipal Corporation has a sizable influence area and a sizable population. Of all the cities and towns, it serves 70.07 percent of the population. Mawana City serves 0.98 lakh people and has an influence area of 10.80 km². Sardhana

city has a population of 0.70 lakh and an influence area of 9.14 km². The transportation infrastructure connects every city and municipality to every individual. The future city is built on the foundation of little settlements.

8. Impact of urbanization on rural development

The impact of Meerut city on its periphery is largely determined by location and transportation, but there are other aspects as well. The following factors illustrate how Meerut City affects its periphery:

1. Place
2. Transportation
3. Leisure
4. Institutional
5. Health Care
6. Urban Life

The villages are more urbanized and have more urban features because they are closer to Meerut city. The dense population, tiny farms, high land prices, intensive land use, and nearly constant interaction with farmers act as a bridge between the lives of general farmers and city dwellers. The city's locational influence can be seen in the following ways:

1. Small farms and intensive land use;
2. Expensive land;
3. Dense population;
4. Non-agricultural workers
5. Land use change trends.

The research area's urbanization has altered the occupational structure. Because the agriculture sector offers seasonal jobs to its employees, agricultural labor has been rapidly declining and being replaced by non-agricultural jobs. The occupational structure of the research area has been used to determine the effects of urbanization on workers. The table shows the evolving occupational structure.

Table 3: Changing occupational structure of Meerut district (1991-2011)

S. No.	Workers	1991			2001			2011		
		Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
1.	Farmers	290947 (41.57%)	28217 (8.02%)	319164 (30.34%)	174535 (41.43%)	18753 (6.26%)	193288 (26.81%)	169632 (33.68%)	12135 (3.15%)	181767 (20.45%)
2.	Agricultural Labour	178800 (25.54%)	31063 (8.82%)	209863 (19.95%)	110462 (26.22%)	25188 (8.41%)	135650 (18.82%)	55230 (10.97%)	10256 (2.66%)	65486 (7.37%)
3.	Animal Husbandry	6231 (0.89%)	5391 (1.53%)	11622 (1.10%)	4367 (1.04%)	4840 (1.15%)	9207 (1.28%)	7857 (1.56%)	5467 (1.42%)	13324 (1.50%)
4.	Mining	63 (0.01%)	18 (0.01%)	81 (0.01%)	22 (0.01%)	17 (0.01%)	39 (0.001%)	178 (0.03%)	94 (0.02%)	272 (0.03%)
5.	Household Workers	11804 (1.69%)	17839 (5.06%)	29643 (2.82%)	7071 (1.68%)	16570 (5.53%)	23641 (3.28%)	8663 (1.72%)	27912 (7.25%)	36575 (4.12%)
6.	Non-Household Workers	51112 (7.30%)	68080 (19.34%)	119192 (11.33%)	31971 (7.59%)	60178 (20.08%)	92149 (12.78%)	41047 (8.15%)	79770 (20.72%)	120817 (13.60%)
7.	Construction	8882 (1.27%)	12132 (3.45%)	21014 (2.00%)	6116 (1.45%)	10384 (3.46%)	16500 (2.29%)	9368 (1.86%)	21752 (5.86%)	31813 (3.58%)
8.	Trade & Commerce	22604 (3.23%)	71615 (20.34%)	94219 (8.95%)	19694 (4.67%)	60401 (20.16%)	75045 (10.41%)	31377 (6.23%)	102292 (26.57%)	121210 (13.64%)
9.	Transportation	10728 (1.53%)	21192 (6.02%)	31920 (3.03%)	6301 (1.50%)	18105 (6.04%)	24406 (3.39%)	10929 (2.17%)	36805 (9.56%)	47808 (5.38%)
10.	Others Workers	53841 (7.69%)	88314 (25.08%)	142155 (13.51%)	32137 (7.63%)	78992 (26.36%)	111129 (15.42%)	49558 (9.84%)	109260 (28.38%)	164752 (18.54%)
11.	Total Main Workers	635012 (90.72%)	346861 (97.68%)	978873 (93.05%)	387676 (92.03%)	293428 (97.34%)	681104 (94.48%)	476044 (94.52%)	380138 (98.74%)	864196 (97.25%)
12.	Total Marginal Workers	64968 (9.28%)	8184 (2.32%)	73152 (6.95%)	33561 (7.97%)	6187 (2.66%)	39748 (5.52%)	27600 (5.48%)	4851 (1.26%)	24437 (2.75%)
13.	Total Workers	699980 (100%)	352045 (100%)	1052025 (100%)	921237 (100%)	299615 (100%)	720852 (100%)	503644 (100%)	384989 (100%)	888633 (100%)

Source: Computed by the author on the basis of 1991, 2001 and 2011 census

The aforementioned table shows how the work in the study area has changed between 1991 and 2011. The number of farmers has dropped by 7.89% in rural regions, 4.87% in urban regions, and 9.89% in districts. In the study area, agricultural labor has declined between 1991 and 2011. It has dropped by 12.58% in districts, 6.16% in cities, and 14.57% in rural areas. Numerous jobs in both fields have been made possible by animal husbandry. It has gone up by 0.67% in rural areas, down by 0.11% in urban areas, and up by 0.40% across the district over this time. In the studied area, mining has not created job possibilities. Just 0.01% of jobs in the study region have been created by it. The number of domestic workers in the study area has quickly grown between 1991 and 2011. Non-household workers have seen increases of 0.03% in rural areas, 2.19% in urban areas, and 1.30% at the district level. Now, it is 8.15% in rural areas, 20.72% in urban areas, and 13.60% in district levels, compared to 7.30% in rural areas, 19.34% in urban areas, and 11.33% in district levels in 1991. Between 1991 and 2011, the construction industry created 0.59% of jobs in rural areas, 2.41% in metropolitan areas, and 1.58% in districts.

During this time, the rural area saw the development of a trade and commerce sector. In 1991, just 3.23% of workers in the rural region, 20.34% in the urban area, and 8.95% in the district were employed in the trade and commerce sector; today, this number is 6.23% in the rural area, 26.57% in the urban area, and 13.64% in the district. The growth of rural areas is significantly influenced by the transportation sector. Only 1.53% of people in rural areas, 6.02% in urban areas, and 3.03% in the district worked in the transportation industry in 1991; today, that number is 2.17% in rural areas, 9.56% in urban areas, and 5.38% in the district. Thus, we can conclude that the study area's transportation industry is changing quickly.

9. Conclusion

The growth of socioeconomic facilities leads to urbanization. It signifies a radical shift in the entire social life pattern. It is a byproduct of both technology advancement and fundamental economics. Once it emerges, it has a tendency to impact all facets of life. Urbanization and rural development are positively correlated. The rural-urban fringe is the outcome of rural development brought about by transportation infrastructure. Due to the expansion and improvement of transportation and services, rural regions are continuously becoming part of the fringe belt. In addition to land use, agricultural techniques, and land values, the city of Meerut's influence on its periphery is evident in other aspects. For example, the population density, principal activity, eating preferences, medical facilities, and non-agricultural workers. As one gets farther away from the Meerut Municipal Corporation limit, the impact of several things diminishes. Residents of Meerut's suburbs work in the town as laborers, craftspeople, or in government and private establishments. The daily pay is expected to be very high. The town pays its workers more than the villages do. As a result, they would rather work in Meerut City than in the countryside.

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