

Spatio-Temporal Analysis Of Urban-Rural Population Ratio In Majha Region Of Punjab

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Abstract

Urbanization occurs with the natural increase in the population living in urban areas and migration of people from rural to urban areas. The expansion of industrial and commercial sector creates employment opportunities, which act as a pull factor for people to migrate to cities in search of better standard of living. It further leads to increase in urban population and ultimately to urban-rural population ratio. The increase in urban population leads to economic development in the region. In the present study, urbanization has been analysed by examining the urban-rural population ratio of Majha region of Punjab.

Key words- *Urbanization, Industrial expansion, Economic growth, Urban-Rural Population Ratio.*

Introduction

Urbanization denotes the migration of people from rural to urban areas as well as the expansion and growth of urban settlements. Based on data from the United Nations, the world's urban population increased by more than four times, from an estimated 0.8 billion to an estimated 4.2 billion, between 1950 and 2018 (UNDESA-PD, 2019). According to Saraswat et al (2024), urbanization causes population growth in urban settlements. An area consequently becomes more urbanized. They added that the creation of multiple cities with a population of one million or more was a result of the substantial increase in India's urban population brought about by economic opportunities. According to Sovani (1966), the process of urbanization in India over the past century has led to an increasing trend in the urban-rural ratio. In India, there were roughly 45 urban residents for every 100 rural residents in 2011. This indicates that the rate of urbanization in India is rising. According to Sharma and Abay (2022), Delhi has seen a 15 million increase in its urban population since gaining its independence. This growth has been especially quick over the last 20 years, with 97.5% of the city now being urban.

Tripathi and Mahey (2017) have explained that while Punjab's urbanization process was initially slow, in recent decades, it has accelerated as a result of industrialization and decreased agricultural opportunities, which are driving people from rural to urban areas. From the 2001 to 2011 census, Punjab's urban population grew from 33.9% to 37.5%. Punjab had a total population of 2,77,43,338 people as of the 2011 Indian Census, of which 1,03,99,146 lived in urban areas and 1,73,44,192 in rural ones. The urban-rural population ratio of Punjab in 1971 was 3.21 rural persons, 2.61 in 1981, 2.38 in 1991, 1.94 in 2001 and 1.66 rural persons for each urban person in 2011.

Study Area

Between the Beas and Ravi rivers is the Majha region. Pakistan borders it to the north and west, the River Satluj to the southwest, the River Beas to the east, and the River Ravi to the northwest. It extends from latitude 31° 4' to 32° 35' North and from longitude 74° 29' to 75° 56' East, as shown on map 1. Despite its flat and elongated shape, the northeastern parts of the Majha region are situated in the foothills of the Shivalik range.

Situated in the districts of Tarn Taran, Amritsar, Gurdaspur, and Pathankot, the Majha region covers an area of 8671 sq. km. The area accounts for about 17.2% of the total land area of Punjab State. In 2011, Majha region of Punjab had four districts and fifteen tehsils.

Objectives

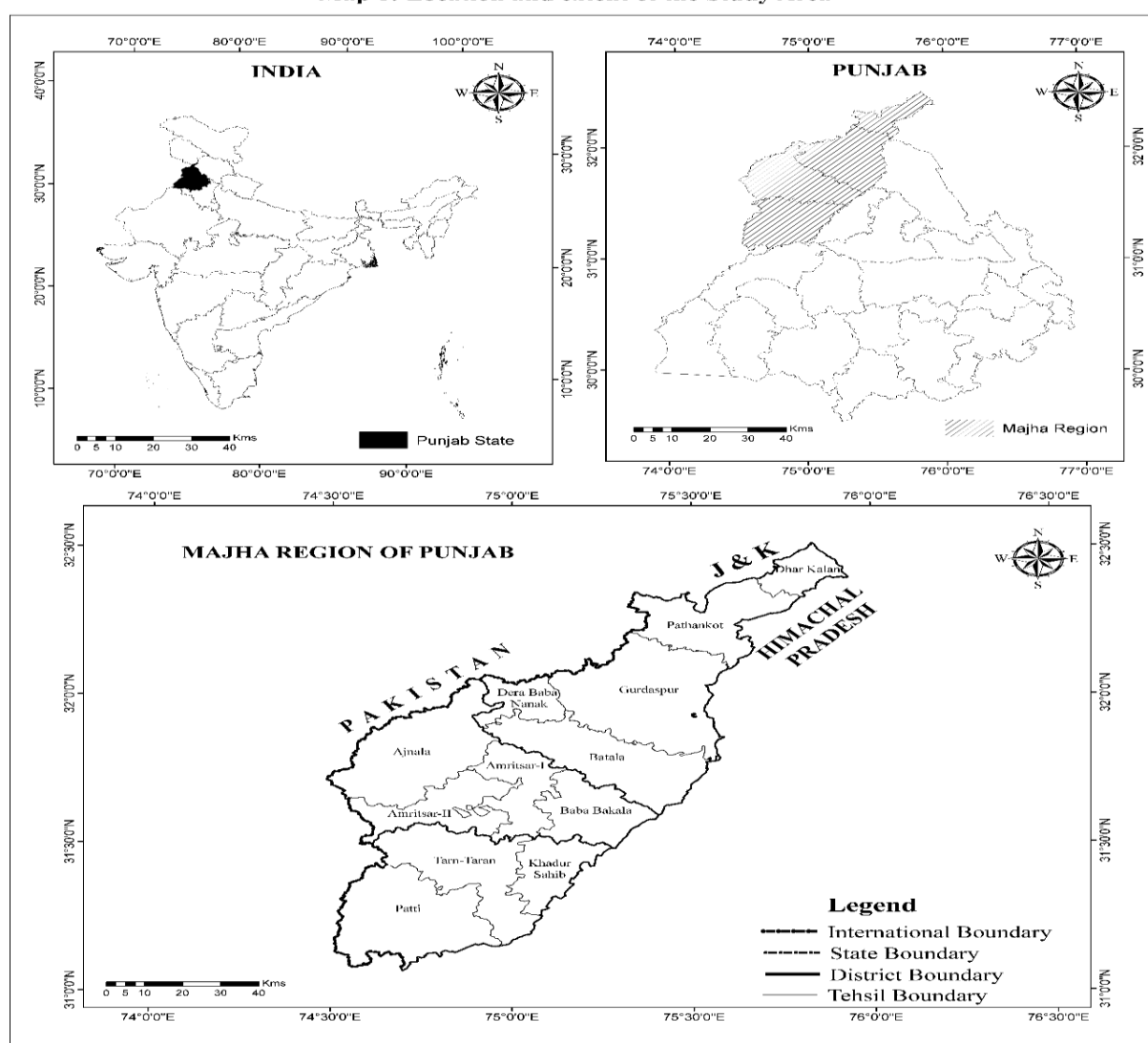
The present study was carried out with the following objectives in mind:

- i. To examine urban-rural population ratio in Majha region of Punjab from 1971 to 2011.
- ii. To analyse the reasons for the study of urban-rural population ratio and its variance.

Database and Methodology

- i. The study is mainly based on secondary data, extracted from Census of India, 1971 to 2011.
- ii. Tehsils have been employed as a study unit and tehsil level analysis has been carried out in the Majha region of Punjab from 1971 to 2011.
- iii. The primary field survey was conducted to study the factors leading to growing urbanization.
- iv. The maps have been prepared for the same using the program ArcGIS. Graphs are also used to help visualize urban-rural population ratio.

Map 1: Location and extent of the Study Area



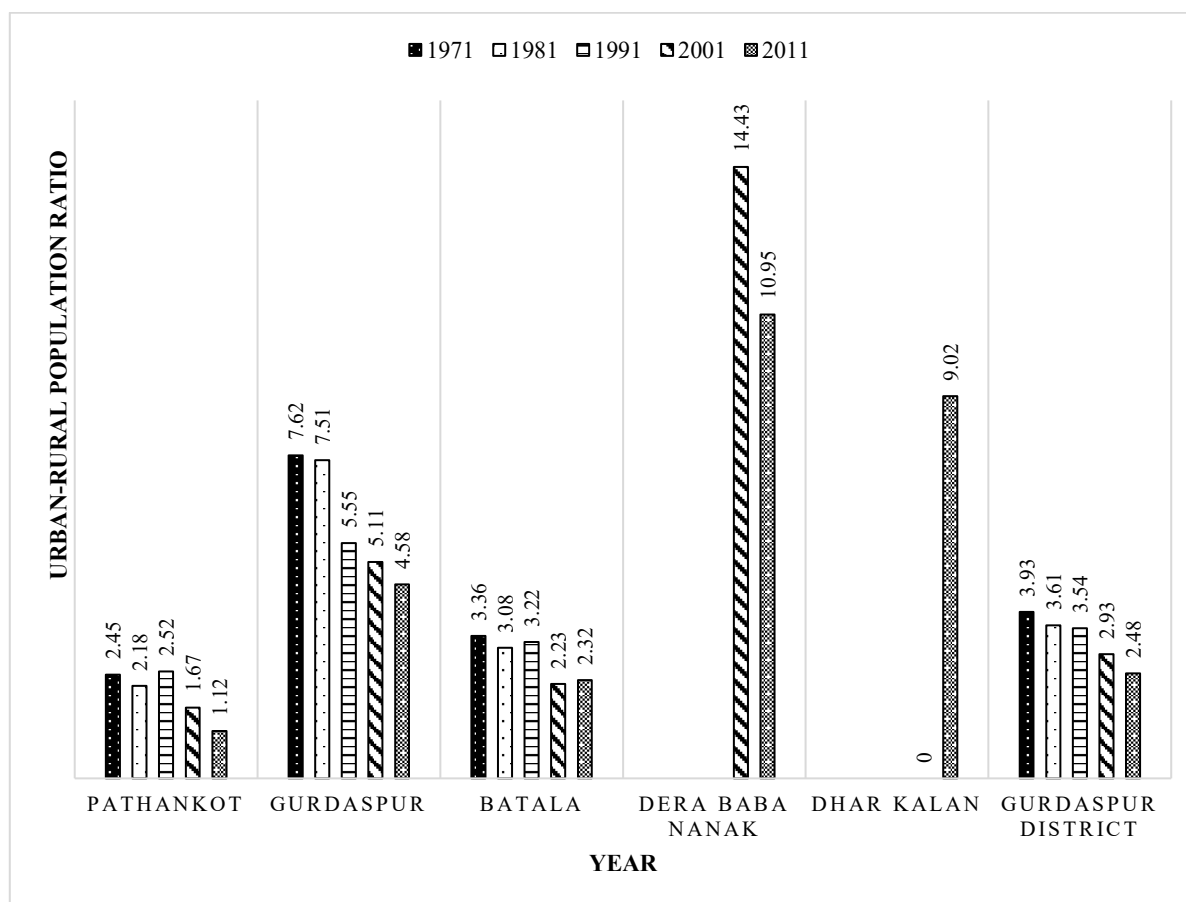
SOURCE: CENSUS OF INDIA, 2011(A)

Tehsil Level Analysis of Urban-Rural Population Ratio in 1971

Majha region of Punjab had two districts, namely, Gurdaspur and Amritsar, and seven tehsils in 1971. A total of 12,29,249 persons lived in Gurdaspur district in 1971, of which 2,49,084 were urban and 9,80,165 were rural. This indicates that for each urban person, there were 3.93 rural people. As agriculture was the main source of income in the district, a large proportion of the population lived in rural areas in 1971 due to the dominance of primary activities in the area. Pathankot tehsil had the total population of 3,14,698 persons in 1971, of which 90,975 were urban and 2,23,723 were rural. In 1971, there were 2.46 rural people for each urban person. In 1971, there were 4,53,914 people living in Gurdaspur tehsil; 52,656 of them were urban and 4,01,258 were rural. For every urban resident, there were 7.62 rural residents. The total population of Batala tehsil in 1971 was 4,60,637, of which 3,55,184 lived in rural areas and 1,05,453 in urban areas. There were 3.37 rural people for every urban person.

Figure 1

Tehsil Level Analysis of Urban-Rural Population Ratio in Gurdaspur District from 1971 to 2011

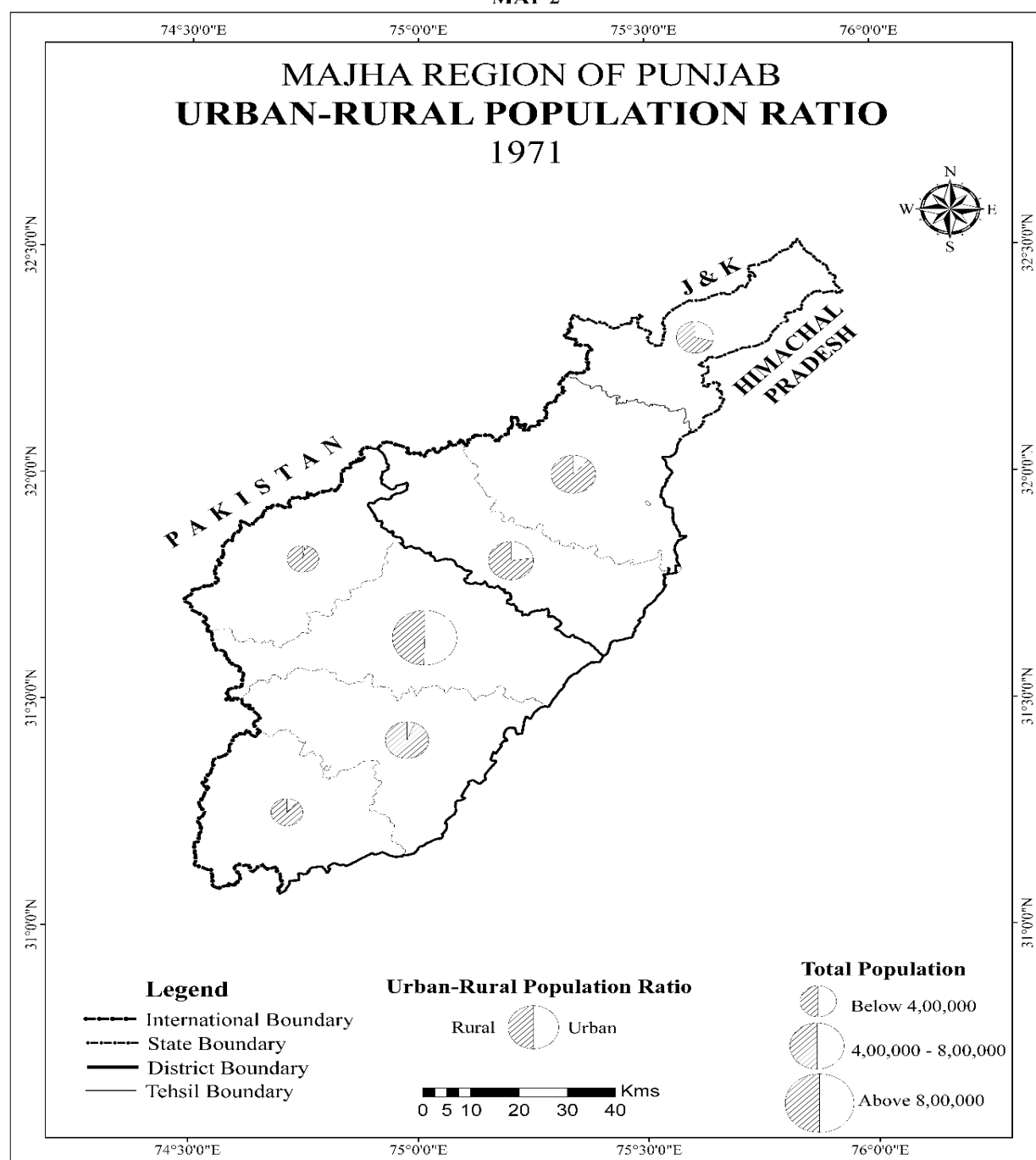


Source: Census of India 1971(a), 1981(a), 1991(a), 2001(a) and 2011(a).

The Amritsar district had a total population of 18,35,500 in 1971, of which 5,35,470 were urban and 13,00,030 were rural. In 1971, the district's urban-rural population ratio was 1:2.43. In 1971, the total population of Ajnala tehsil was 2,24,749, of which 2,20,427 were rural and 4,322 were urban. The urban-rural population ratio of the tehsil was 51 rural people for each urban person. Due to their reliance on agriculture, the people in this area favoured living in rural areas. Amritsar is the economic hub of both Punjab's Majha

region and the state of Punjab as a whole. It is one of the fastest growing cities of Punjab, ranking as the second largest.

MAP 2



Source: Census of India, 1971(a)

9,50,748 people made up the Amritsar tehsil's total population in 1971; 4,80,314 of them lived in urban areas and 4,70,434 in rural ones. In 1971, the tehsil's urban-rural population ratio was 0.97 rural people for every urban resident. In 1971, there were 4,28,549 people living in Tarn-Taran tehsil, 24,116 of whom were urban and 4,04,433 of whom were rural. In 1971, the tehsil's urban-rural population ratio was 16.77 rural people for each urban person. The total population of Patti tehsil was 2,31,454 persons, of which 26,718 were living in urban areas and 2,04,736 were living in rural areas. There were 7.6 rural persons for each urban person in the tehsil in 1971.

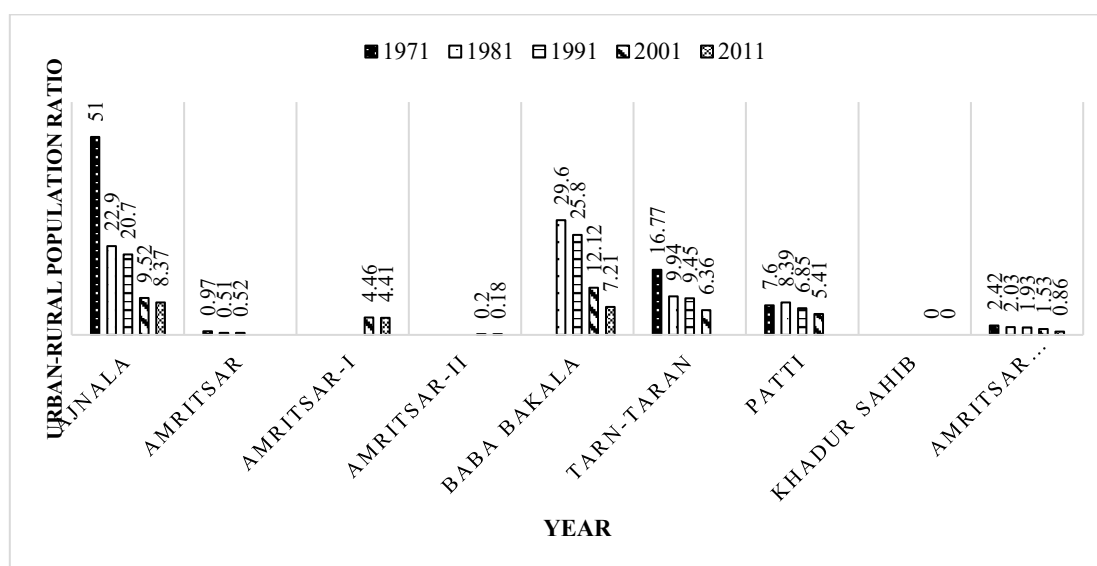
Tehsil Level Analysis of Urban-Rural Population Ratio in 1981

In 1981, Majha region of Punjab had two districts and eight tehsils. Baba Bakala tehsil was formed out of the areas of Amritsar tehsil on April 12, 1979. In 1981, the total population of the Gurdaspur district increased to 15,13,435; of these, 3,28,268 resided in urban areas and 11,85,167 in rural ones. The population ratio between urban and rural areas declined and reach 3.61 rural persons for every urban person in 1981. This was caused by an increase in the urban population as a result of district-wide development in the industrial, educational, and economic domains. With 1,26,260 people living in the urban areas and 2,75,467 in the rural areas, the total population of Pathankot tehsil increased to 4,01,727 in 1981, yielding a 1:2.18 urban-rural population ratio. Because of the tehsil's ongoing development, the number of urban residents increased. The Gurdaspur tehsil had a total population of 5,51,704 in 1981, made up of 4,86,885 people living in rural areas and 64,819 people in urban areas. Hence, there were 7.51 rural people for every one urban person. With 1,37,189 urban and 4,22,815 rural residents, the total population of Batala tehsil grew to 5,60,004. There were 3.08 rural residents for each urban resident.

The Amritsar district had a total population of 21,88,490, of which 14,66,861 lived in rural areas and 7,21,629 in urban areas. Therefore, in 1981, the ratio of urban-rural population was 1:2.03. The total population of Ajnala tehsil increased to 2,78,110 in 1981, with 2,66,481 people living in rural areas and 11,629 people living in urban areas. For every urban resident, there were 22.9 rural residents. In 1981, the total population of the Amritsar tehsil was 9,57,625; this figure included 3,26,013 rural residents and 6,31,614 urban residents. In 1981, the ratio of urban population to rural population was 0.51. The total population of Tarn-Taran tehsil increased to 4,68,577, consisting of 42,816 urban people and 4,25,761 rural. The urban population ratio rose to 9.94 rural persons. Due to agriculture's dominance in the tehsil, even though the ratio of urban-rural population increased, rural population still outnumbered urban population. Patti tehsil had a total population of 2,67,914 people in 1981, of which 2,39,392 were rural and 28,522 were urban. There were 8.39 rural persons for every urban person. There were 2,16,263 people living in Baba Bakala tehsil overall in 1981, of which 7,049 of them were urban and 2,09,214 were rural. There were 29.6 rural persons for every urban person.

Figure 2

Tehsil Level Analysis of Urban-Rural Population Ratio in Amritsar District from 1971 to 2011



Source: Census of India 1971(a), 1981(a), 1991(a), 2001(a) and 2011(a).

Tehsil Level Analysis of Urban-Rural Population Ratio in 1991

In 1991, there were two districts and eight tehsils in Majha region of Punjab. Gurdaspur district had the total population of 17,56,732 persons, of which 3,86,412 persons were living in urban areas and 13,70,320 persons were living in rural areas. The urban-rural population ratio of the district in 1991 was 3.54 rural persons for each urban person. There were 5,07,944 persons living in Pathankot tehsil in 1991, of which 1,44,288 persons were urban while 3,63,656 persons were rural. For each urban person, there were 2.52 rural people in 1991. There was decrease in urban-rural population ratio in 1991 as one of the towns was declassified. The total population of Gurdaspur tehsil was as high as 6,34,920 in 1991, with 5,38,104 living in rural areas and 96,816 living in urban areas. For every urban resident, there were 5.56 rural residents. There were 6,13,868 people living in the Batala tehsil in 1991; 1,45,308 of them were urban residents, and 4,68,560 were rural. In 1991, the urban-rural population ratio was 1:3.22.

In 1991, Amritsar district had the total population of 25,04,560 persons living in the district. In the district, there were 8,53,831 urban residents and 16,50,729 rural residents. The migration of people from surrounding areas in search of better employment opportunities was contributing to the gradual increase in the urban population. The ratio of urban-rural population increased as well, reaching 1.93 in 1991. Ajnala had a total population of 3,21,583 in 1991, with 3,06,810 living in rural areas and 14,773 in urban areas. In 1991, the proportion of urban population grew even more, reaching 20.7 rural residents. The total population of Amritsar tehsil rose to 11,29,194 persons in 1991. The urban population was 7,42,673 and 3,86,521 persons consisted of rural population. The urban population ratio in the tehsil in 1991 was 0.52 rural person. Due to its rapid industrial and commercial development, the majority of people in Amritsar lived in urban areas. Furthermore, the tourism sector drew individuals to relocate here for professional reasons. Tarn-Taran tehsil had the overall population of 4,97,098 persons in 1991, of which the share of urban population was 47,529 persons and 4,49,569 were rural. For each urban person, there were 9.45 rural persons. Further, the total population of Patti tehsil in 1991 was 3,12,182 persons, comprising of 39,734 urban residents and 2,72,448 rural residents. There were 6.85 rural persons for each urban person. In 1991, there were 2,44,503 people living in the tehsil of Baba Bakala. There were 2,35,381 rural residents and 9,122 urban residents. The urban-rural population ratio of the tehsil was 1:25.8.

Tehsil Level Analysis of Urban-Rural Population Ratio in 2001

In 2001, there were twelve tehsils and two districts in the Majha region of Punjab. A total of four tehsils were added. August 26, 1995 saw the formation of Dera Baba Nanak in the Gurdaspur district from the parts of Batala tehsil. On February 20, 1996, parts of the Pathankot tehsil were merged to form the Dhar Kalan tehsil in the Gurdaspur district. There were no urban residents in the Dhar Kalan tehsil in 2001. On July 20, 1995, the Amritsar tehsil was split into Amritsar-I and Amritsar-II. After being separated from the Tarn-Taran tehsil on July 20, 1995, Khadur Sahib of the Amritsar district became the fourth tehsil to be formed in 2001. Khadur Sahib, with no urban population, was a rural tehsil.

The overall population of Gurdaspur district rose to 21,04,011 persons in 2001, of which the share of urban population was 5,35,223 persons and rural population was 15,68,788 persons. Further, the urban population ratio also increased in 2001 and reached to 2.93 rural persons for every urban person. Owing to the development of industrial as well as commercial sectors, people were attracted to move to urban area, which led to increase in urban population of the district. Pathankot tehsil had the total population of 5,73,998 persons, of which 2,14,907 persons were urban and 3,59,091 persons were rural. The urban population ratio in the tehsil in 2001 was 1.67 rural people. In 2001, there were 7,44,092 persons living in Gurdaspur tehsil, of which,

the share of urban population was 1,21,584 persons, while 6,22,508 persons were rural. For each urban person, there were 5.12 rural people. The tehsil had a total population of 6,18,105 in 2001, of which 1,91,238 lived in urban areas and 4,26,867 in rural ones. For every urban resident, there were 2.23 rural residents. Dera Baba Nanak tehsil had a total population of 1,15,660 in 2001, of which 1,08,166 lived in rural areas and 7,494 in urban areas. The majority of the people living here were involved in agriculture. This explains why there was a significantly smaller proportion of urban population than rural population. In 2001, the urban-rural population ratio was 1:14.43. Dhar Kalan was a rural tehsil in 2001; there were no towns or urban population. 52,156 people made up the tehsil's total population, all of whom lived in rural areas.

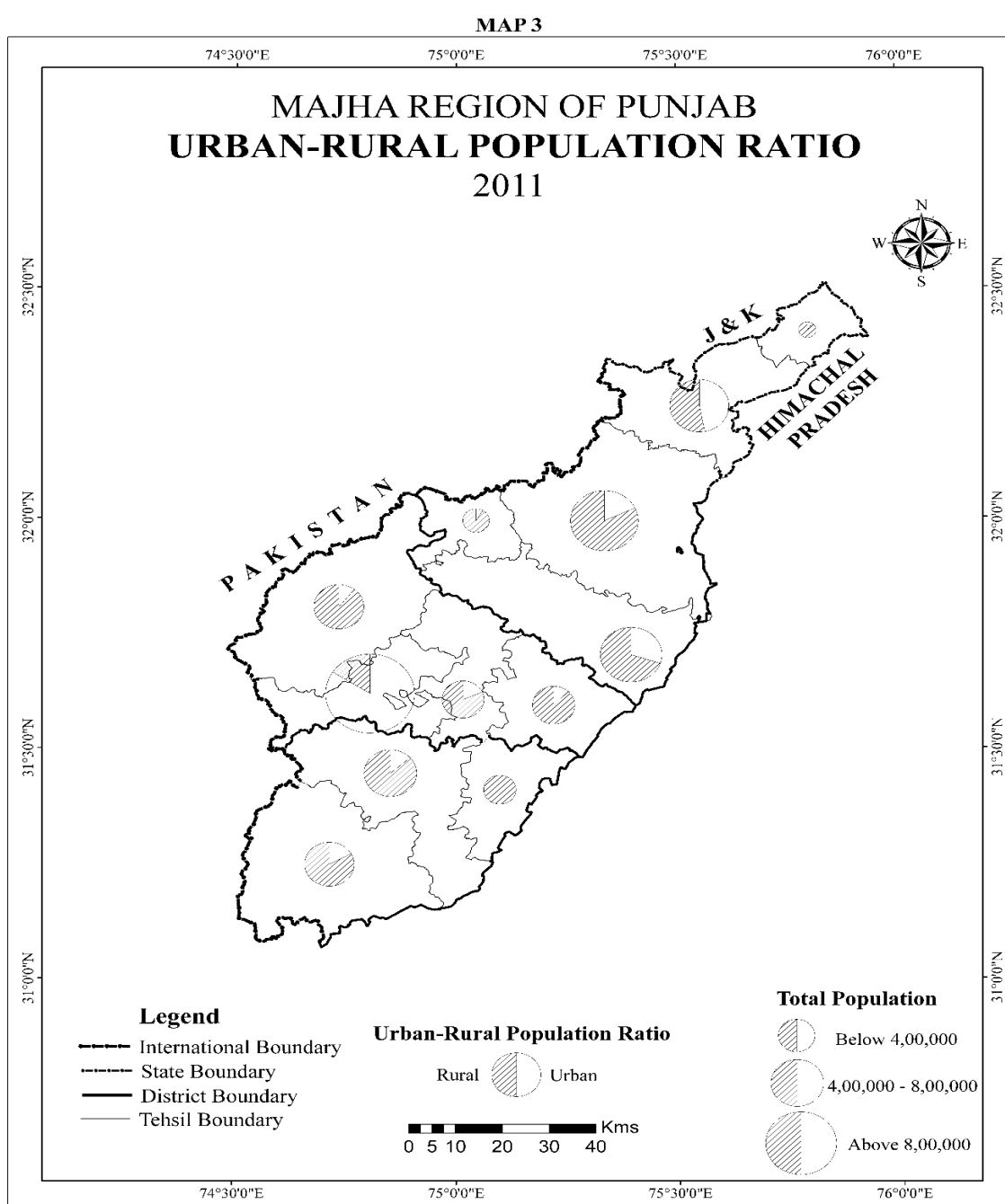
Amritsar district had the total population of 30,96,077 persons in 2001. The number of people living in cities increased quickly, reaching 12,23,275, while the number living in rural areas was 18,72,802. There were 1.53 rural people for each urban person in the district. Ajnala tehsil had 3,84,566 persons living in 2001, of which 36,544 people were urban and 3,48,022 were rural. The urban-rural population ratio was 1:9.52. The overall population of Amritsar-I tehsil in 2001 was 2,85,981, of which the share of urban population was 52,369 persons and rural population was 2,33,612 persons. There were 4.46 rural persons for each urban person in 2001. Amritsar-II had 12,06,203 people living in the tehsil, of which 10,00,536 people were living in urban areas and 2,05,908 were living in rural areas. The urban-rural population ratio of the tehsil in 2001 was 1:0.20. Due to the creation of a new tehsil of Khadur Sahib from the areas of Tarn-Taran tehsil, the total population of Tarn-Taran tehsil dropped to 4,10,761. There were 3,54,974 rural residents and 55,787 urban residents. The population ratio between urban and rural areas was 1:6.36 in 2001. The urban-rural population ratio improved between 1971 and 2001, but Tarn-Taran lagged behind in the urbanization process. Patti tehsil's overall population grew to 3,63,619, of which 3,06,942 were rural and 56,677 were in urban areas. For every urban resident, there were 5.41 rural residents. In the Baba Bakala tehsil, there were 2,80,270 residents, of whom 2,58,908 were rural and 21,362 were urban. The urban population ratio in the tehsil in 2001 was 12.12 rural persons. Khadur Sahib has the total population of 1,64,677 persons, all of whom are rural residents. Since the majority of the territory under the tehsil was rural and made up of villages, it had no urban population. Agriculture predominated, and the tehsil contained no notified towns.

Tehsil Level Analysis of Urban-Rural Population Ratio in 2011

Majha region of Punjab had three districts and twelve tehsils in 2011. Out of the areas of Amritsar district, Tarn-Taran was formed as a separate district on June 8, 2006. Gurdaspur district had the total population of 22,98,322 persons in 2011, comprising of 6,59,319 urban and 16,39,004 rural people. The urban population ratio in 2011 was 2.48 rural people. The overall population of Pathankot tehsil in 2011 was 6,22,412 persons, of which, 2,92,760 were urban and 3,29,652 were rural. The urban-rural population ratio was 1:1.12. The total population of Gurdaspur tehsil in 2011 was 8,21,539 persons, of which the share of urban population was 1,47,194 and of rural population was 6,74,345. The urban population ratio of the tehsil in 2011 was 4.58 rural people. Batala tehsil had total number of 6,75,891 persons living in 2011, of which 2,03,564 were living in urban areas and 4,72,327 in rural areas. Thus, the ratio of each urban person was 2.32 rural people. Dera Baba Nanak had 1,24,295 persons living in it, comprising of 10,395 urban population and 1,13,900 rural people, thus, giving the ratio of 10.96 rural people for each urban person. In 2011, due to the formation of one town, Dhar Kalan tehsil recorded urban population. The total of 54,186 persons were living in the tehsil, of which 48,780 were rural and 5,406 were urban. The urban population ratio of the tehsil in 2011 was 9.02 rural persons.

Amritsar district recorded the overall population of 24,90,656 persons, of which the share of urban population was 13,34,611 and rural population was 11,56,045. Owing to the development of industrial and

commercial sector in Amritsar, people were migrating here for better quality of life. The urban-rural population ratio in 2011 was 1:0.87. Ajnala tehsil had a total population of 4,42,711 in 2011, of which 3,95,492 were rural and 47,219 were urban residents. In 2011, the tehsil's urban-rural population ratio was 1:8.37. From 1971 to 2011, there was a noticeable improvement in the urban population ratio. Still, Ajnala is primarily a rural tehsil with the majority of its population living in rural areas because agricultural activities predominate and there is little commercial or industrial development. Amritsar-I tehsil had the total population of 3,12,240 people in 2011, comprising of 57,708 urban and 2,54,532 rural people. For each urban person, there were 4.41 rural persons. In 2011, the total population of Amritsar-II tehsil was 14,15,214 persons, of which 11,90,665 were urban and 2,24,549 were rural. The urban population ratio was 0.18 rural people. Over 80% of the people in Amritsar-II Tehsil lived in urban areas, making it a highly urbanized tehsil. The tehsil's urban population is steadily increasing as a result of advances in industry, commerce, education, and medicine.

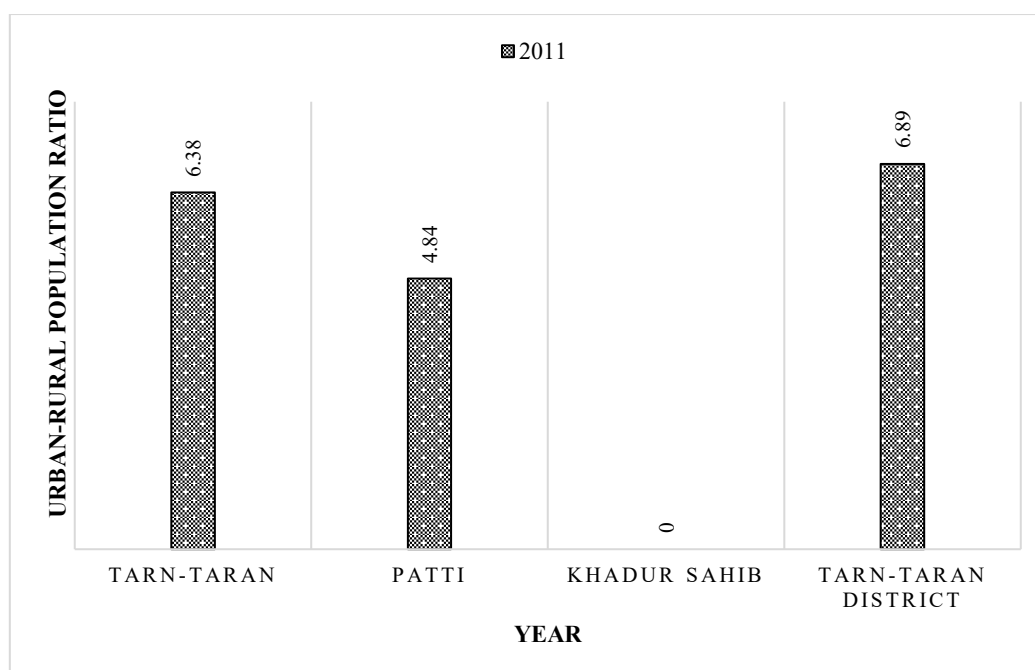


Source: Census of India, 2011(a)

The total population of Baba Bakala tehsil in 2011 was 3,20,491 persons, comprising of 39,019 urban and 2,81,472 rural people. The urban population ratio of the tehsil was 7.21 rural persons.

Figure 3

Tehsil Level Analysis of Urban-Rural Population Ratio in Tarn-Taran District in 2011



Source: Census of India 2011(a).

Tarn-Taran had the overall population of 11,19,627 persons in 2011, of which, 1,41,795 were urban and 9,77,832 were rural. For each urban person, there were 6.90 rural people. In 2011, the total population of Tarn Taran tehsil was 4,93,625 persons, of which the share of urban population was 66,847 and 4,26,778 were rural. The urban population ratio was 6.38 rural persons. There were 4,38,190 people living in Patti tehsil as of 2011. There were 3,63,242 rural residents and 74,948 urban residents in the tehsil. For every urban person, there were 4.85 rural people. People lived in villages here because agriculture was the main economic activity. The tehsil of Khadur Sahib was rural and devoid of urban inhabitants. The tehsil had the total population of 1,87,812 persons in 2011, all of whom lived in rural areas.

Conclusions

It can be concluded that, between 1971 and 2011, the Majha region of Punjab saw a gradual increase in its urban population ratio as a result of migration and industrialization. The Majha region of Punjab had 2.91 rural persons for every 1 urban person in 1971; 2.52 rural persons in 1981; 2.43 rural persons in 1991; 1.95 rural persons in 2001; and 1.76 rural persons in 2011. In 1971, the Majha region of Punjab had 7,84,554 urban residents; by 2011, that number had risen to 21,35,725. This demonstrates that the region's development efforts were responsible for the urban population's steady increase. Urbanization was happening, but we can't say that it was at a particularly high degree. Although the number of people living in cities is growing over time, agriculture continues to be the dominant industry. The region's economy expanded as a result of the urbanization process. The urbanization process was sparked by the following factors, which raised the ratio of the urban population:

- i. Urbanization was aided by developments in the commercial and industrial sectors.

- ii. Employment opportunities were created as industries developed. The business owners were looking for workers. This was provided by the rural areas nearby. They supplied the labour for them. Thus, this quickened the process of rural-urban migration, which in turn contributed to the population growth in cities.
- iii. The lack of resources in villages contributed to the migration of people from rural to urban areas, in addition to the employment opportunities found in cities. It was difficult for those with little or no agricultural land to maintain a high standard of living. They therefore began moving to cities in order to raise their standard of living.
- iv. Despite the establishment of industries and commercial sectors in a number of cities of Majha region of Punjab, including Amritsar, Pathankot, Batala, and others, Amritsar is the most urbanized of these cities. The oldest and largest city in Punjab's Majha region, Amritsar, has advanced further in the industrial and commercial spheres. For this reason, there are more people living in urban areas of the Amritsar district than in rural ones.
- v. Advancements in the fields of education and medicine also cause a migration of people from rural to urban areas, which accelerates the process of urbanization.
- vi. The standard of living is now more important to people. So, despite having productive agricultural land in their villages, they would rather move to the city to take advantage of the better job, educational, and recreational opportunities.

In 2011, the Amritsar-II tehsil had the highest recorded urban population ratio. Two more heavily urbanized tehsils in Punjab's Majha region are Pathankot and Batala. There is a commonality among tehsils with substantial urban populations. In the commercial, industrial, educational, and service sectors, they have advanced significantly. It can be said that the population of cities is steadily increasing as time goes on and we shift our focus to developmental activities. The growing urban population and the emergence of industries in the area are indicators of the region's economic growth, which is also encouraging for the Majha region of Punjab's development.

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