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Manuscript ID:
IJWGAFES-2025-021005

DOI: 10.5281/zenodo.18106273

DOI Link:
https://doi.org/10.5281/zenodo.18106273

Volume: 2

Issue: 10

October

Year: 2025

E-ISSN: 3066-1552

Submitted: *02 Sept.2025*

Revised: *08 Sept.2025*

Accepted: *05 Oct. 2025*

Published: *31 Oct. 2025*

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How to cite this article:
Ghalake, H. B. (2025). A Study of Population Growth in Pandharpur City and Solapur District. International Journal of World Geology, Geography, Agriculture, Forestry and Environment Sciences, 2(10), 17–19.
https://doi.org/10.5281/zenodo.18106273

A Study of Population Growth in Pandharpur City and Solapur District

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Abstract

Urban sprawl has now become a universal phenomenon. In 1900, only 9.2% of the world's population lived in settlements with more than 20,000 inhabitants (Davis Hartz, 1957), while by 1990 this had increased to 45.7%. It is estimated that by 2025, about 65.2% (approximately 5.3 billion) of the world's population will live in urban areas (Diwakar, 1991). Rapid urban growth generally occurs on prime agricultural lands around cities and towns, leading to continued encroachment on productive rural land. Thus, suburban lands form the foundation of urban sprawl. Land, being an important natural resource, supports major developmental initiatives (Kumar, 2011). Population growth, which refers to the increase in the number of inhabitants, is currently increasing by about 83 million people annually globally, at a rate of 1.1% per annum. India alone is home to one-sixth of the world's population. According to the 2001 census, Maharashtra's population reached 96.7 crore, the second largest among all states and union territories in India. The present study reviews the decade-wise population growth of Solapur district and Pandharpur city from 1901 to 2011. The analysis shows that the decade-wise growth trend of urban population of Pandharpur city and Solapur district is highly volatile.

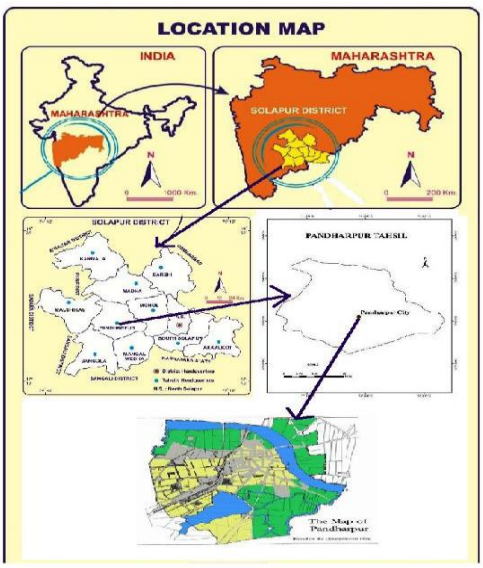
Keyword: *Population, decadal, Growth, growth rate, census, Urban Population*

Introduction

Population growth is the increase in the number of people living in a particular area. Globally, the human population is increasing by an estimated 83 million people each year, which corresponds to an annual growth rate of about 1.1%. The world population, which was about 1 billion in 1800, has grown to 7.9 billion in 2020 and is expected to continue to grow, according to United Nations estimates, to 8.6 billion by 2030, 9.8 billion by 2050 and about 11.2 billion by 2100. India, which is home to one in every six people on Earth, has experienced a significant decline in population growth in recent decades, mainly due to increasing urbanization, poverty reduction and improvements in education - especially among women. Although the pace has slowed, India is still growing faster than China and is expected to overtake it by 2026 to reach about 1.46 billion people, after which India will remain the most populous country. Maharashtra, one of the major states in India, had a population of 96.7 crore in the 2001 census, the second largest among all states and union territories. The decadal growth rate in Maharashtra has declined significantly over time - from 25.7% during 1981-1991 to 23.37% in 1991-2001 and 16.01% in 2001-2011 - indicating a gradual but consistent demographic transition.

Study Region:

Solapur district is located in the southeastern part of Maharashtra and its administrative headquarters is under the city of Solapur. Geographically, the district is entirely situated in the valley of the Bhima and Sina rivers, with a total area of about 14,895 square kilometers. According to the census records, the district has a population of 4,53,364. Pandharpur, an important religious and cultural urban centre of Solapur district, is situated at 17°11' north latitude and 75°11' east longitude. It is governed as a municipal council and is a part of Pandharpur taluka. The total population of Pandharpur city is recorded as 98,923.



Objective:

1. To understand Population growth of Pandhapur city during the period of 1901 to 2011.

Material and Methods:

Research study is based on the census records of Solapur district and Pandharpur city for the period 1901 to 2011, obtained from the Census of India reports. The data collected has been systematically analyzed to assess the overall decadal population growth and its percentage variation over time. For this purpose, population change has been calculated using the most common demographic measure - population growth expressed as a ratio - which enables comparison of population growth or decline from one decade to another in a standardized manner.

The percent change from one decade period to another is calculated from the formula:

$$PR = \frac{(V_{Present} - V_{Past})}{V_{Past}} x100$$

Where:

PR = Percent Rate
VPresent = Present or Future Value
VPast = Past or Present Value
The annual percentage growth rate is simply the percent growth divided by N, the number of years.

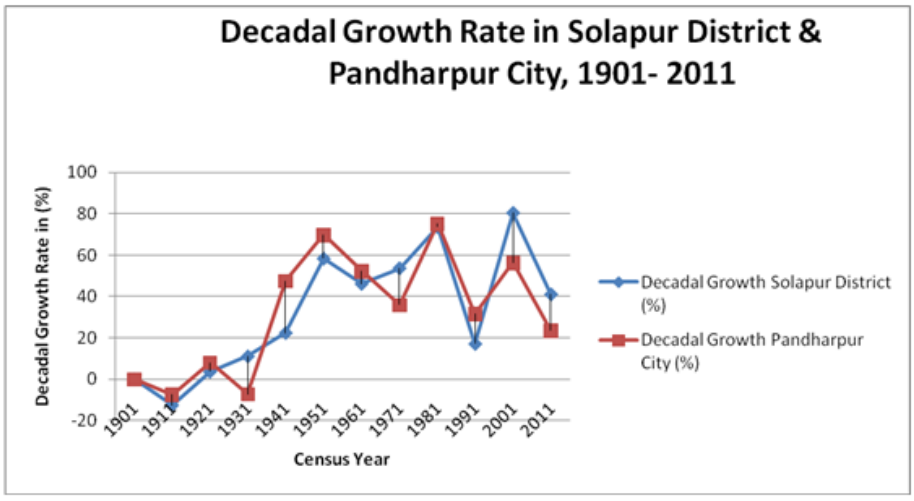
Growth and expansion of Solapur District and Pandharpur City:

In the case of Solapur, the urban population was 19,957 in 1901, which fell to 17,452 in 1911, i.e. a decrease of 2,505 persons. However, the following decade (1911-1921) recorded a slight increase, as the urban population increased by 636 persons - from 17,452 in 1911 to 18,088 in 1921. The gradual upward trend continued and by 1951 the urban population reached 38,965, indicating a continuous increase in the urban nature of the district over time.

Table 1.2 Urban Populations and its Growth Rate in Solapur District and Pandharpur City, 1901- 2011

Solapur District				Pandharpur City		
Census Year	**Total Urban Population**	**Variation in Population**	**Decadal Growth (Per cent)**	**Total Urban Population**	**Variation in Population**	**Decadal Growth (Per cent)**
1901	19,957	------	------	12,990	------	------
1911	17,452	-2,505	-12.55	12,014	-976	-7.51
1921	18,088	636	3.64	12,981	967	8.05
1931	20,095	2,007	11.09	12,050	-931	-7.17
1941	24,599	4,504	22.41	17,781	5,731	47.56
1951	38,965	14,366	58.4	30,189	12,408	69.78
1961	56,958	17,993	46.18	45,882	15,693	52.31
1971	87,546	30,588	53.7	62,393	16,511	35.99
1981	1,52,046	64,500	73.68	1,09,369	46,973	75.29
1991	1,78,025	25,979	17.09	1,43,922	34,553	31.59
2001	3,21,375	1,43,350	80.52	2,25,074	81,152	56.39
2011	4,53,364	1,31,989	41.07	2,78,149	53,075	23.58

Sources: *Census of India, District Gazetteer Solapur 1990, Mumbai, Maharashtra, Primary Census Abstract, 1991, 2001 and 2011, Mumbai, Maharashtra*



During the two decades from 1961 to 1981, the urban population of Solapur district increased significantly, from 56,958 to 1,52,046 persons. As per the 2011 census, the urban population reached 4,53,364, which represents an increase of 1,31,989 persons over the 2001 census figures. A similar pattern is observed in Pandharpur city, where till 1941 there was little variation in the urban population, fluctuating between 12,990 in 1901 and 17,781 in 1941. However, after 1951, the pace of urbanization remained steady and the population increased from 30,189 in 1951 to 1,09,369 in 1981, finally reaching 2,78,149 by 2011. The growth trend during the decade shows significant fluctuations in both Solapur district and Pandharpur city, indicating an irregular pattern of urban population growth over the past few decades (Table 1.2).

Table 1.2 shows Urban Populations and its Growth Rate in Solapur District and Pandharpur City, 1901- 2011

Results: The demographic analysis shows that the urban population of Solapur district has increased significantly over time. During the twenty-year period from 1961 to 1981, the urban population increased dramatically from 56,958 to 1,52,046 persons, indicating rapid urban growth. Moreover, the 2011 census recorded an urban population of 4,53,364, indicating an increase of 1,31,989 persons over the 2001 figures. In the case of Pandharpur city, the population showed minimal variation till 1941, fluctuating between 12,990 in 1901 and 17,781 in 1941. However, after 1951, the city continued to experience urban expansion, with the population increasing from 30,189 in 1951 to 1,09,369 in 1981 and 2,78,149 in 2011. The decadal growth pattern of both Solapur district and Pandharpur city shows a highly irregular and fluctuating trend, indicating different intensities of urbanization in different decades (Table 1.2).

Conclusion:

Research study clearly shows that the urban population of Pandharpur has changed significantly over the past century, from a modest and relatively stable population in the early decades to a rapid and sustained growth in recent times. The sharp increase in population after 1951 reflects increasing urbanization, expansion of economic activities, and the growing socio-cultural importance of the city, especially as a major pilgrimage site. This demographic transition is consistent with the broader patterns of urban growth observed across India, where medium and small cities are experiencing rapid urban expansion. Overall, the population growth of Pandharpur reflects a progressive shift from a slowly growing settlement to a dynamic urban center with increasing population pressures and development demands.

Acknowledgment

The authors express their sincere gratitude to the Census of India for providing invaluable secondary data that formed the backbone of this research. We are thankful to the Department of Geography, Deshbhakta Sambhajirao Garad College, Mohol, for academic guidance and support throughout the study.

Special thanks are due to the college administration and library staff for providing access to necessary references and research facilities.

Financial support and sponsorship

Nil.

Conflicts of interest

The authors declare that there are no conflicts of interest regarding the publication of this paper.

References and Bibliography:

1. Credit Rating Information Services of India Limited 1996: Credit Raing of Municipal Bonds: Rating Report on Mumbai Municipal Corporation, Mumbai.
2. Socio-Economic analysis Of Slums in Solapur City by B.P. Rajguru.
3. Sule B. M., Barakade A. J.(2011) "Growth of Population Change in Maharashtra." Geoscience Research ISSN: 0976–9846 & E-ISSN: 0976–9854, Vol. 2, Issue 2, 2011, pp-70-75.
4. Dr. Krishne Gowda, Dr. Chandrasekhar M. N, Prof. Sridhara M. V., Dr. Hemalatha B. N. (2013) „Solid Waste Management in the Slums and Squatter Settlements in the City of Bangalore" International Journal of Scientific and Research Publications, Volume 3, Issue 2, ISSN 2250-3153.
5. Ghosh S, Shah D. (2004) "Nutritional problems in urban slum children." Indian Pediatr. 2004 Jul; 41(7):682-96.
6. M. S. Deshmukh(2013) "Conditions of slum population of major sub-urban wards of Mumbai in Maharashtra" Voice of Research,Vol. 2 Isue 2, ISSN No. 2277-7733.
7. National Sample Survey Organisation (2004) "Housing Condition In India."
8. Pimpri Chinchwad City Development Plan 2006-2012 (2006), Volume I.
9. Rajesh T. Birajdar and Dr. Arun D. Andhale (February- 2014) "Integrated Water Resource Management (IWRM-2014)" Allied Publishers Private Limited. ISBN No. 978-81-8424-907-1 Volume- II Page no. 1168-1184.
10. https://en.m.wikipedia.org/wiki/Population_growth
11. http://catalog.ihsn.org/citations/40004
12. http://catalog.ihsn.org/citations/40004
13. Awate S.J. And Todkari G.U. "Population Growth in Solapur District Of Maharashtra A Geographical Analysis." Geoscience Research 2.1 (2011):45-48.
14. D.S. Harwalka "Spatio Temporal Variations Of Population Density In Solapur District" Golden Research Thoughts