

Population Ageing and Dependency Trends in India, Uttar Pradesh and Prayagraj (1991-2031)

Anjali Umarvaishya^{1*}, Prof. Azizur Rahman Siddiqui²

¹Ph.D. Research Scholar, Department of Geography, University of Allahabad, Prayagraj, India

²Professor, Department of Geography, University of Allahabad, Prayagraj, India

Abstract

Demographic change in India is unfolding a structural shift that is characterized by falling fertility, declining child dependency, and a gradually rising share of the elderly population, which indicates the onset of aging in India. This study analyses the trend in the elderly population and age structure in India, Uttar Pradesh and Prayagraj from 1991 to 2031. The data is collected from secondary sources such as the Census of India and the Elderly in India 2021 report to measure and analyse key indices such as the percentage of the elderly population, old age dependency ratio (OADR), and the aging index. The analysis of data shows that there is a continuous decline in the share of the child population (0-14 years), a gradual rise in the elderly population (60+ years), and a relatively expanding working-age population (15-59 years). This trend is observed across all the geographies, though at a different pace. The findings highlight that the ageing and dependency pressure are increasing at a faster rate in India in comparison to Uttar Pradesh and Prayagraj. This structural change in the demography has several implications for traditional family-based care, health care demand and social protection policy formulations. The study suggests a proactive age-sensitive planning for the present as well as for the future in order to harness the demographic dividend while managing the challenges of aging in India, Uttar Pradesh, and districts like Prayagraj at the same time.

Keywords: Demographic transition, dependency ratio, ageing index, ageing population

1. Introduction

India's age profile is undergoing a change due to declining fertility, falling mortality and rising life expectancy which together lead to an increase in the population of the elderly (aged 60 years and above (Elderly in India, 2021; World Population Prospects 2022: Summary of Results, 2022). One of the most visible outcomes of this demographic shift is the gradual increase in the proportion of older persons within the total population (Madan Gopal et al., 2024; Malik et al., 2021). In 1991, the older population stood at only about 24 million but by 2021 it had grown to over 100 million. The future population projections suggest it may reach nearly 194 million by 2031 (Women & Men in India 2021 (A Statistical Compilation of Gender Related Indicators in India), 2021) These figures indicate that India is gradually moving away

*Corresponding Author Email: anjali_phd2023@allduniv.ac.in

Published: 07 May 2026

DOI: <https://doi.org/10.70558/COSMOS.2026.v3.i2.25454>

Copyright © 2026 The Author(s). This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0).

from being a predominantly young country to one in which older adults will form a more prominent share of the age structure.

As the proportion of elderly individuals rises, the country's age-dependency structure will also be reshaped. The old-age dependency ratio (OADR), which is defined as the number of persons aged 60 years or above per 100 persons in the working-age group (15–59 years). OADR has increased from about 10.9 in 1961 to 14.2 in 2011, with further increases projected in the coming decades (Elderly in India, 2021). This means that the working-age group of the population now has to support more older dependents often parents and grandparents within the same household. In a developing country like India, where the traditional family setup still forms the backbone of social and emotional security, it is usually the family that provides the basic needs of older adults, including food, money and day-to-day care, often without the support of formal pensions or institutional arrangements ((NITI Aayog Releases Position Paper– Senior Care Reforms in India: Reimagining the Senior Care Paradigm, 2024). As the OADR rises and the share of elderly increases, this household-based care system is coming under greater strain, especially in families where working-age members are dealing with multiple economic and social pressures. Similarly, the Ageing Index is defined as the number of elderly persons (60+) for every 100 children under 15. Ageing Index has also gone up, showing that there are now more people in the 60+ age group compared to the younger population. These changes are slowly reshaping the lives of people, their work, the kind of health care services they use and the government social-security schemes across India (Lekha & Bansod, 2011).

At the national level, Uttar Pradesh stands out as India's most populous state, yet it still has a relatively lower share of the older population in comparison to states like Kerala, Tamil Nadu, or Himachal Pradesh. Nevertheless, the share of elderly people in Uttar Pradesh is gradually rising. In the 1990s, only about 5–6 percent of the total population was aged 60 or above, by 2011 this had increased to roughly 8 percent, and future population projections from the National Commission on Population and the Government of India suggest it may rise to about 11–12 percent by 2036 (Census Of India 2011 Population Projections For India And States 2011-2036 Report Of The Technical Group On Population Projections, 2019). These trends show that Uttar Pradesh is still in the early stages of population ageing, but at the same time it is moving toward an older age structure. The overall dependency ratio in the state has declined, mainly because the proportion of children has fallen faster than the share of the elderly has grown. However, demographic studies caution that this state of equilibrium may not continue so long, as the old-age dependency ratio is expected to go up slowly in the coming years, especially in large-population states like Uttar Pradesh (India - Age Dependency Ratio: Percentage of Working-Age Population, 2026).

This study focuses on the Prayagraj district, which lies in the middle Ganga plain of India. The district has a combination of urban centre and large rural area, where joint families have lived together across generations, and informal family-based care systems are still very common among older adults. Recent work on health-related aspects in Prayagraj shows that more and more people are entering the 60+ age group. Many of them are suffering from serious chronic illnesses such as high blood pressure, diabetes, joint pain, etc. The situation becomes more

wretched as only a small proportion of them have regular access to health care services, government social security schemes, or pensions, which together make them more vulnerable (Verma et al., 2021).

The present study looks at how ageing has developed in Prayagraj district over more than four decades, from 1991 to 2031. Using population data from the Census of India and the Elderly in India 2021 Report for India, Uttar Pradesh, and Prayagraj. The paper measures important demographic indices such as the old-age dependency ratio and the aging index for this period. In this way, it attempts to show how the age structure of Prayagraj is changing, how the burden of dependency on the working-age population is growing, and what this means for family life, health-care needs, and local social-policy planning in the district. The main aim is to move beyond national averages and to understand aging in Prayagraj as a clear, place-based process rooted in actual households, real relationships, and the specific demographic paths of India, Uttar Pradesh, and the district itself.

2. Objectives

1. To analyse trends in the elderly population in India, Uttar Pradesh and Prayagraj during 1991–2031.
2. To calculate and analyse key indicators such as the percentage of elderly, old-age dependency ratio, and aging index.
3. To compare the age structure of Prayagraj with Uttar Pradesh and India

3. Database and Methodology

3.1 Database

This study is entirely based on secondary data gathered from official sites, government reports, and existing literature. The main source is the Census of India, which is conducted every ten years by the Office of the Registrar General and Census Commissioner and provides detailed, age-wise population data at national, state, and district levels.

Population data for the years 1991, 2001 and 2011 have been collected from the census tables using the age group categories of 0-14 years (children), 15-59 years (working age) and 60 + (elderly). For the years 2021 and 2031, data have been collected from the “Elderly in India 2021” report published by the Ministry of Statistics and Programme Implementation for India. Since district-level projections are not directly available for the years 2021 and 2031, the future population has been estimated using the decadal growth rate method

3.2 Methodology

In order to examine the ageing pattern and its impact on dependency, the study is based on a set of selected demographic indicators. These indicators help in understanding the structural change in population along with the extent of burden on the working-age population. This study is based on four measures: percentage of elderly population, old-age dependency ratio, ageing index and age structure analysis. These indicators, when compared across levels, provide a clear picture of how ageing and dependency vary at the national (India), state (Uttar Pradesh), and local (Prayagraj) scales. This comparative approach helps to understand the differences in demographic patterns and the specific burden of ageing in each context.

1. Percentage of Elderly Population:

The percentage of the elderly population is the elderly (60+) population per 100 total population. This indicator shows the share of the elderly population in the total population

$$\%60 + \text{population} = \frac{\text{Population}_{60+}}{\text{Total Population}} \times 100$$

2. Old Age Dependency Ratio (OADR)

The old-age dependency ratio is defined as the number of elderly persons per 100 working-age individuals. It is an important indicator of the economic and social burden on the productive population

$$OADR = \frac{\text{Population}_{60+}}{\text{Population}_{15-59}} \times 100$$

3. Ageing Index

The ageing index is defined as the number of elderly persons (usually 60+) per 100 children under 15 years. It shows how much older the population is becoming relative to the child population.

$$\text{Ageing Index} = \frac{\text{Population}_{60+}}{\text{Population}_{0-14}} \times 100$$

4. Age Structure Analysis

The population is broadly categorized into 3 groups based on dependent and independent aspect

1. Child- 0-14 years (dependent)
2. Working-age – 15-59 (working)
3. Elderly- 60+ (dependent)

This classification helps in understanding the structural transformation of the population over time.

4. Results

4.1 Trends in Total Population: India, Uttar Pradesh and Prayagraj (1991–2031)

The trend in total population is presented in the Table 1., indicates that there is a continuous increase in the absolute number of populations across India, Uttar Pradesh, and Prayagraj from 1991 to 2031, though the magnitude is different.

Table 1: Trends in Total Population (in Millions): India, Uttar Pradesh and Prayagraj (1991–2031)

YEAR	INDIA	UTTAR PRADESH	PRAYAGRAJ
1991	846.40	132.10	4.92
2001	1028.70	166.20	4.94
2011	1210.98	199.80	5.95

2021 (PROJECTED)	1363.35	234.80	6.58
2031 (PROJECTED)	1475.39	255.40	7.26

When examined in terms of growth rate as shown in Graph 1., a different trend can be observed where both India and Uttar Pradesh show a declining trend in population growth rate over time, despite experiencing an increase in total population. This shows that the population is increasing but at a slower pace than in earlier decades. In contrast, Prayagraj experiences a more fluctuating trend where a drastic increase is seen in 2001, a decrease and then again, an increase.

These suggest that though there is an increase in absolute population, the rate of growth is gradually declining

Graph 1: Trends in Total Population (in Millions)

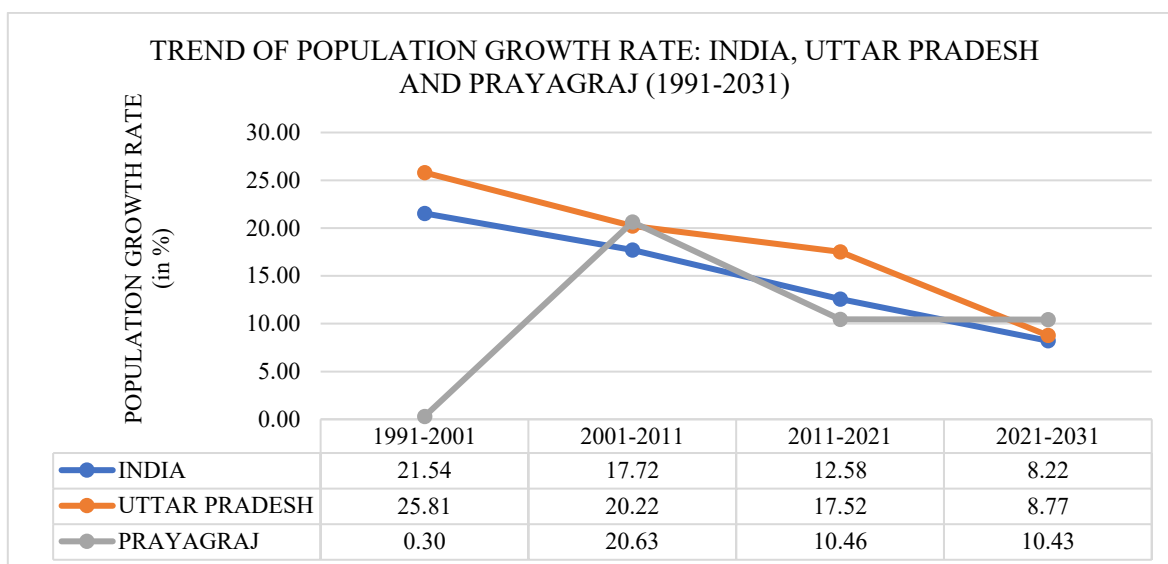


Figure 1 source: Census of India and Elderly in India 2021 report

4.2 Trends of the Elderly Population: India, Uttar Pradesh and Prayagraj (1991–2031)

From Table 2., it can be deciphered that the number of elderly populations has continuously increased from 1991 to 2031. In 1991, the elderly population of India was 56.7 million, which became 103 million in 2011 and is expected to increase to approximately 193.8 million by 2031. This means that at the national level, the share of the elderly population has almost tripled within four decades.

Similarly, in Uttar Pradesh, the elderly population grew from 9.5 million in 1991 to 15 million in 2011 and is projected to increase to 25.85 million by 2031. Uttar Pradesh follows the national pattern but the pace was slower which is in line with relatively young age structure and high fertility (PIB, 2025).

At the local level, Prayagraj shows a similar trend where the share of the elderly population has grown from .30 million in 1991, 0.45 million in 2011 and is projected to grow .69 million

by 2031. Though the absolute numbers are smaller than the national and state levels, the growth pattern is the same.

Thus, at all three levels, India, Uttar Pradesh, and Prayagraj, the share of the female elderly population is larger than the male elderly population, especially in later decades. These trends at all levels indicate the feminization of the elderly because they have higher life expectancy than their male counterparts. This gender difference has several implications for the care needs, health care, social security and welfare schemes in the coming years.

Table 2: Elderly population (in Millions): India, Uttar Pradesh and Prayagraj (1991–2031)

YEAR	INDIA			UTTAR PRADESH			PRAYAGRAJ		
	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
1991	56.7	27.3	29.4	9.5	5.3	4.20	0.30	0.18	0.13
2001	76.6	38.9	37.8	11.65	5.48	6.18	0.31	0.17	0.14
2011	103.8	52.8	51.1	15.44	7.40	8.04	0.45	0.24	0.21
2021 (PROJECTED)	137.9	66.8	71.1	18.77	9.54	9.24	0.56	0.28	0.28
2031 (PROJECTED)	193.8	92.9	100.9	25.85	13.34	12.51	0.69	0.33	0.36

Graph 2, below, shows that the percentage of the elderly population in the total population has increased at all levels – India, Uttar Pradesh, and Prayagraj from 1991 to 2031. At the national level, the growth was from 6.7% in 1991 to 13.14% in 2031; at the state level, the increase was from 7.23% to 10.12%, while Prayagraj went up from 6.15% to 9.51%.

Graph 2: Elderly population (in Millions)

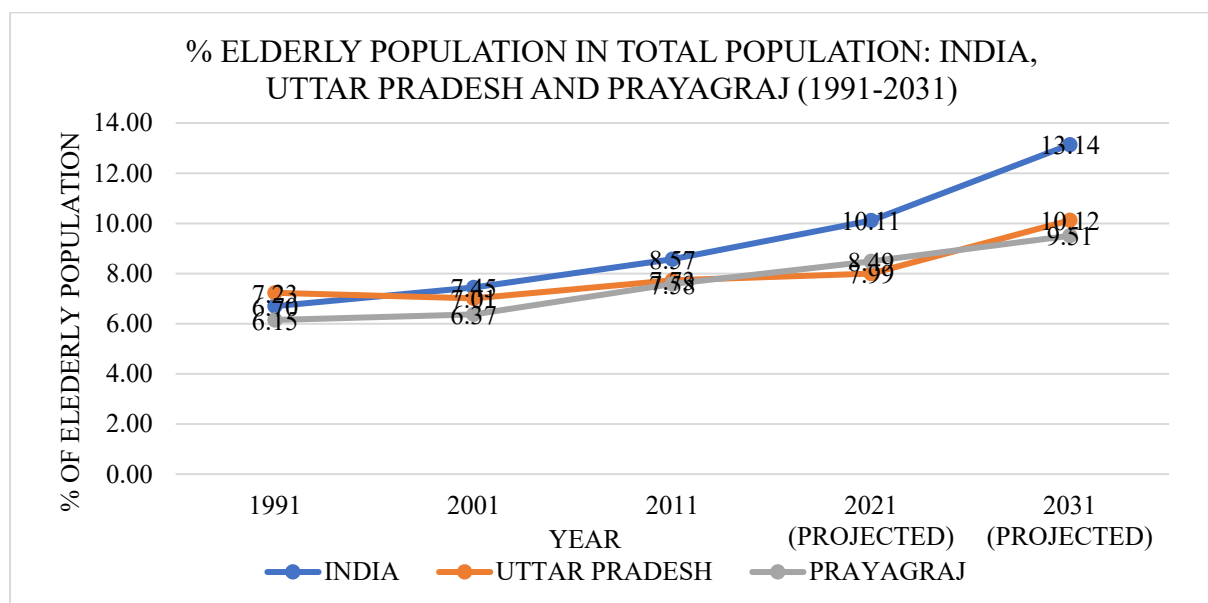


Figure 2 Source: Census of India and Elderly in India 2021

This means that the share of older people is growing year by year. India shows the strongest rise among the three, which suggests faster aging at the national level. Uttar Pradesh and Prayagraj are also aging, but at a slower pace, which means their population is still relatively younger than the country as a whole.

4.3 Trends in Old Age Dependency Ratio (OADR): India, Uttar Pradesh and Prayagraj (1991-2031)

The old-age dependency ratio from Graph 3, below, indicates that in India, the OADR was 12.03 in 1991 and is projected to increase to 20.10 by 2031. In Uttar Pradesh, the ratio was 13.85 in 1991, then stayed around the same level in 2001 and 2011, before rising to 13.2 in 2021 and 15.8 in 2031. This shows that Uttar Pradesh is also undergoing aging but at a slower pace than the national level. In Prayagraj, OADR remained high throughout the period, moving from 13.74 in 1991 to 14.37 in 2011, and then to 15.10 in 2031. This suggests that Prayagraj already has a fairly strong burden of older dependents, even though the increase is not as sharp as in India as a whole.

Table 3: Old Age Dependency Ratio: India, Uttar Pradesh and Prayagraj (1991-2031).

YEAR	INDIA	UTTAR PRADESH	PRAYAGRAJ
1991	12.03	13.85	13.74
2001	13.00	13.6	14.49
2011	14.26	13.9	14.37
2021 (Projections)	15.69	13.2	14.17
2031(Projections)	20.10	15.8	15.10

Graph 3: Trends in Old Age Dependency Ratio (OADR)

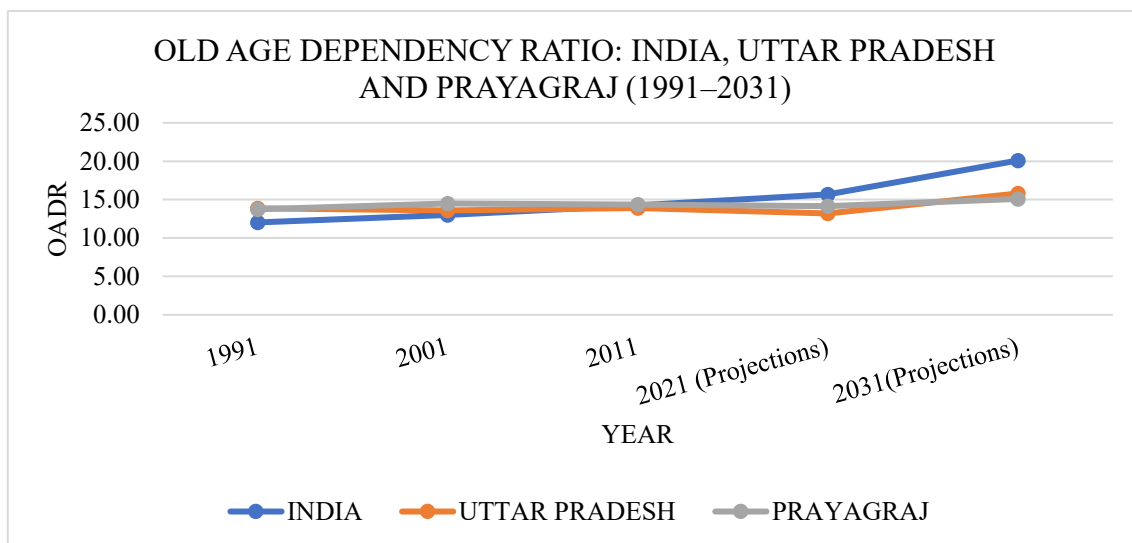


Figure 3. Census of India and Elderly in India 2021 report

The table shows that the old-age dependency burden is rising everywhere. India is ageing faster in the later years, while Uttar Pradesh and Prayagraj show a slower but steady increase. This

means the working-age population will have to support more elderly people in the future, which will affect families, health care, and social support systems.

4.4 Trends in Ageing Index: India, Uttar Pradesh and Prayagraj (1991-2031).

The ageing index shows that the population is becoming older at all levels but the pace is not the same everywhere. Table 4, indicates that in India, the ageing index rose from 17.82 in 1991 and is projected to rise to 60.37 in 2031. This suggests that the number of the elderly is increasing much faster than the number of children, which shows that India is moving towards an older age structure.

Table 4: Ageing Index: India, Uttar Pradesh and Prayagraj (1991-2031).

YEAR	INDIA	UTTAR PRADESH	PRAYAGRAJ
1991	17.82	16.26	17.44
2001	20.96	16.06	19.20
2011	27.92	20.29	23.53
2021 (Projections)	39.61	27.80	26.53
2031(Projections)	60.37	37.45	32.33

Similarly, Uttar Pradesh also shows a rise from 16.26 in 1991 to 37.45 in 2031, though the increase is steady, but is still lower than the national level, which can be inferred as Uttar Pradesh is aging more slowly than India as a whole. Prayagraj follows the same pattern, rising from 17.44 to 32.33. Its ageing index remains below the national average, but the rise is still important because it shows that the district is also moving toward an older population.

Thus, the number of children is shrinking in comparison to the elderly population. India is aging faster, while Uttar Pradesh and Prayagraj are following the same path but at a slower pace.

Graph 4: Trends in Ageing index

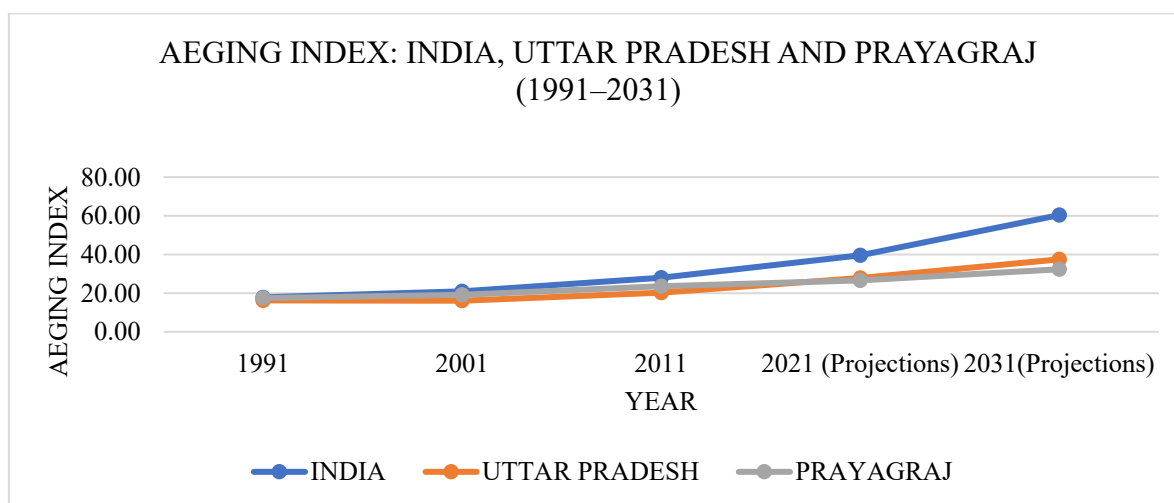


Figure 4 Source: Census of India and Elderly in India, 2021

4.5 Trends in Age Structure: India, Uttar Pradesh and Prayagraj (1991-2031)

In the child age group (0–14 years), there is a continuous decrease in population at the national level, in Uttar Pradesh, and in Prayagraj. At the national level, the share of the 0–14 years age group has decreased from 37.60% in 1991 to 30.80% in 2011, and it is projected that it will be around 21.70% in 2031. A similar trend can be seen in Uttar Pradesh and Prayagraj, although both had a high percentage of population (Uttar Pradesh with 40.6% and Prayagraj with 40.93%) in 1991 and have experienced a continuous decline over time. This indicates a continuous decline in the child population over time, which is in line with the demographic transition. The notable point is that, nationally, the share of children has decreased at a much faster pace than at the Uttar Pradesh and Prayagraj levels.

In the working-age group (15–59 years), there is a continuous increase in the share of the population at the national level, in Uttar Pradesh, and in Prayagraj. At the national level, the share of the 15–59 years age group has increased from 55.70% in 1991 to 60.30% in 2011, and it is projected to reach 64.40% in 2021 and 65.20% in 2031. A similar rising trend is visible in Uttar Pradesh and Prayagraj, although both started from lower shares. In Uttar Pradesh, the working-age share rose from 52.80% in 1991 to 57.90% in 2011, and is projected to reach 60.00% in 2021 and 63.00% in 2031. In Prayagraj, it increased from 51.93% in 1991 to 52.65% in 2001 and 56.99% in 2011, then to 59.68% in 2021 and 61.81% in 2031. This shows that there is a steady increase in the working-age population relative to the child (0–14) and elderly (60+) groups, reflecting the ongoing demographic transition. At the national level, the increase in the working-age share occurs at a slightly faster pace than in Uttar Pradesh and Prayagraj, highlighting the gradual narrowing down of regional demographic differentials.

Table 5. Age Structure: India, Uttar Pradesh and Prayagraj (1991-2031)

YEAR	INDIA			UTTAR PRADESH			PRAYAGRAJ		
	0-14	15-59	60+	0-14	15-59	60+	0-14	15-59	60+
1991	37.60	55.70	6.70	40.60	52.80	6.60	40.93	51.93	7.14
2001	35.30	56.90	7.40	41.10	52.90	6.60	39.73	52.65	7.63
2011	30.80	60.30	8.60	35.00	57.90	7.10	34.81	56.99	8.19
2021 (PROJECTED)	25.50	64.40	10.10	31.30	60.00	8.70	31.87	59.68	8.45
2031 (PROJECTED)	21.70	65.20	13.10	27.50	63.00	10.30	28.86	61.81	9.33

Graph 5: Trends in Age Structure

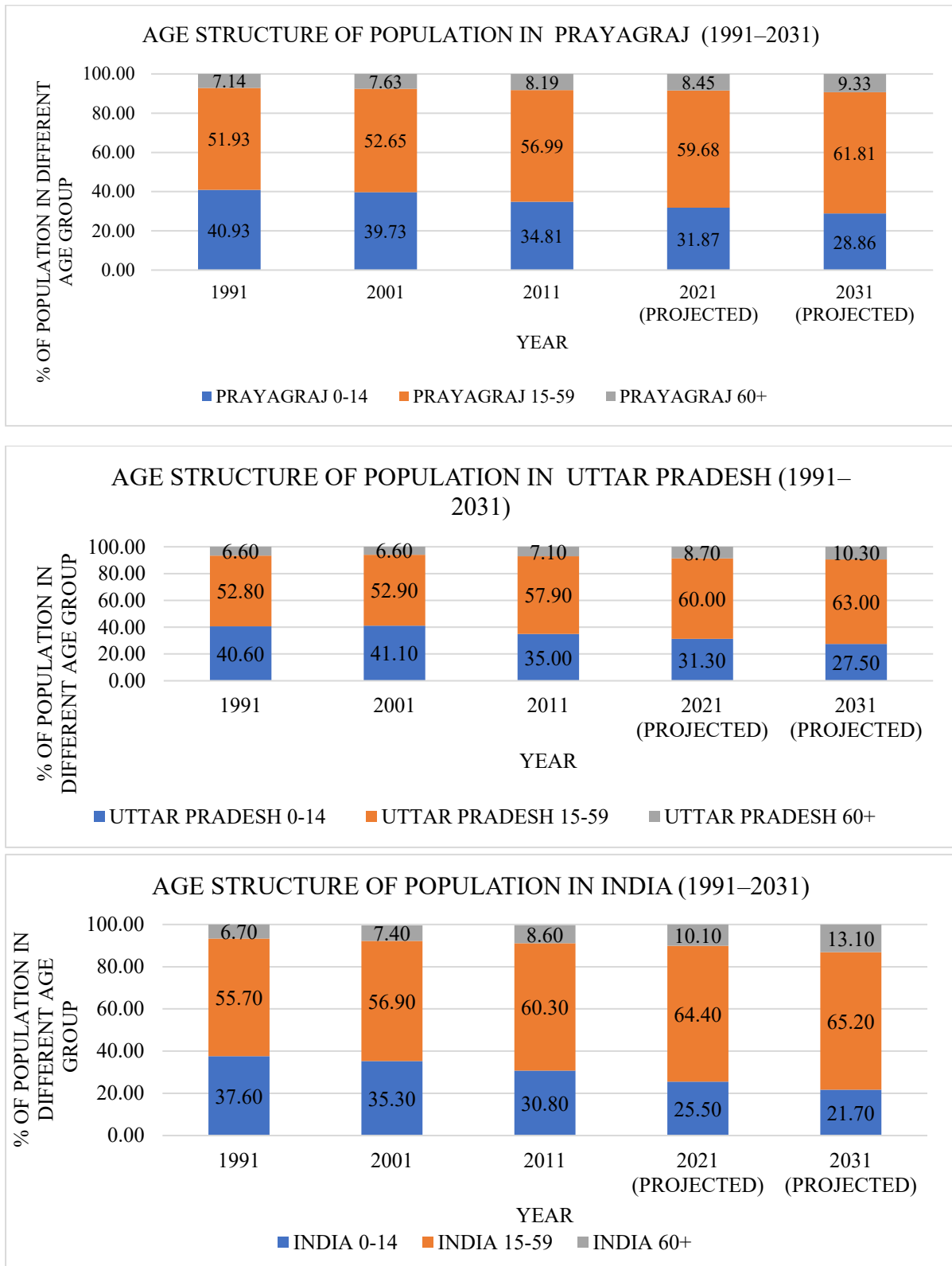


Figure 5 Source: Census of India and Elderly in India, 2021

In the elderly age group (60+ years), there is a continuous increase in the share of the population at the national level, in Uttar Pradesh, and in Prayagraj. At the national level, the share of the 60+ age group has risen from 6.70% in 1991 to 8.60% in 2011, and it is projected to

reach 10.10% in 2021 and 13.10% in 2031. A similar upward trend is observed in Uttar Pradesh and Prayagraj, although both started from lower levels. In Uttar Pradesh, the elderly share increased from 6.60% in 1991 to 7.10% in 2011, and is projected to rise to 8.70% in 2021 and 10.30% in 2031. In Prayagraj, it grew from 7.14% in 1991 to 7.63% in 2001 and 8.19% in 2011, then to 8.45% in 2021 and 9.33% in 2031. This shows a steady ageing of the population, with the elderly share expanding over time at all three levels. National-level ageing appears somewhat faster than in Uttar Pradesh and Prayagraj, but the broader pattern of rising 60+ populations across all three geographies is consistent with the ongoing demographic transition and falling fertility

5. Discussion

5.1 Trends in Total Population: India, Uttar Pradesh and Prayagraj (1991–2031)

There is a continuously increasing trend in total population growth across India, Uttar Pradesh, and Prayagraj, but there is also a continuous decline in the growth rates of the population. This trend shows that India's ongoing demographic transition is characterized by declining fertility and mortality (National Family Health Survey and Census of India, 2011; Sample Registration System and Population Projections Report, 2019). A similar trend is also observed in earlier studies, indicating a transition from high growth to stabilization (Bongaarts, 2009). Slight inconsistencies are observed in Prayagraj, which is due to district-level dynamics such as rural-urban migration, administrative changes, and service sector growth.

5.2 Trends of the elderly population (in Millions): India, Uttar Pradesh and Prayagraj (1991–2031)

There is a gradual rise in the share of the elderly population across India, Uttar Pradesh, and Prayagraj, which confirms that ageing is not only driven by population growth but also by the structural change in the age composition mainly due to declining fertility and increasing life expectancy (Census Of India 2011 Population Projections For India And States 2011-2036 Report Of The Technical Group On Population Projections, 2019; Elderly In India 2021, N.D.; Mason & Lee, 2012) India's elderly population is projected to increase twice between 1991 and 2031, which is in line with the national projections that show that the growing elderly population is the result of a sustained decline in fertility and increased life expectancy (Sanderson & Scherbov, 2010; *World Population Ageing 2023: Challenges and Opportunities of Population Ageing in the Least Developed Countries*, 2024) Similar trends are observed in Prayagraj and Uttar Pradesh, indicating that aging is experienced at all levels, though the pace may differ.

At the same time, it is observed that the increase in the female elderly population is more than that of males, which supports the concept of feminization of aging, where females have higher life expectancy than men (Bloom et al., 2015; *World Population Ageing 2023: Challenges and Opportunities of Population Ageing in the Least Developed Countries*, 2024) This continuous increase in female elderly often creates more challenges as they are more socio-economically vulnerable than elderly men due to lower access to pension, asset ownership, higher risk of widowhood, and chronic illness (Elderly In India, 2021). Thus, both elderly women and men

experience distinct but overlapping vulnerabilities, which highlights the need for gender sensitive, age-inclusive social and welfare schemes and health care policies.

5.3 Trends in Old Age Dependency Ratio (OADR): India, Uttar Pradesh and Prayagraj (1991-2031)

There is an increasing trend in the OADR across India, Uttar Pradesh and Prayagraj, which shows that there is an increasing burden on the working- age (15-59 years) population as the share of the elderly population is growing at a faster pace than working age. This kind of trend has a significant impact on countries like India, where the traditional family-based support system still remains the central and formal pension coverage is limited (*NITI Aayog Releases Position Paper– Senior Care Reforms in India: Reimagining the Senior Care Paradigm*, 2024). Earlier studies suggest that increasing dependency ratios will have a strain on household resources and the healthcare system because the working-age cohort must support a huge number of dependent elderly people (Bloom et al., 2015; Mason & Lee, 2012).

At the Uttar Pradesh level, OADR is also increasing due to a decline in fertility, but at the same time, the pace is slower than in the southern states. This increase implies that in the coming decades, the pressure on the working age will increase (State-wise demographic and aging-dependency studies, 2023–2025). A similar trend is observed in Prayagraj also, which indicates the pressure is also going to increase at the district level, where the formal social network is weak and the elderly population is dependent on family-based care (Abhay B & Sanjay V, 2014; Alam M, 2006) These trends highlight the need for coordinated policies that strengthen the pension coverage, geriatric health services, and informal family support, particularly in high OADR geographies like Uttar Pradesh and Prayagraj.

5.4 Trends in Ageing Index: India, Uttar Pradesh and Prayagraj (1991-2031).

The sudden increase in the ageing index highlights the major shift in the population structure where the elderly (60+) population is growing faster than the children (0-14 years) at all levels. This shows the dual process of declining fertility and increasing longevity, which is the core of demographic transition and is visible across India, Uttar Pradesh, and Prayagraj. The rising index at all levels highlights that the population is becoming older and moving towards a mature age structure. Where Uttar Pradesh and Prayagraj show a similar trend but at a slower pace than the national level (Verma et al., 2021).

5.5 Trends in Age Structure: India, Uttar Pradesh and Prayagraj (1991-2031)

The age-structure analysis shows a decline in the proportion of children (0-14 years) and at the same time an increase in the elderly (60+) population, while the working age (15-59 years) population remained stable. This indicates the narrowing down of the base and broadening of the middle part of the population pyramid (Madan Gopal et al., 2024).

At the national level, the share of children falls from 37.60 % in 1991 to 21.70 % by 2931 while the share of the elderly rises from 6.70 % to 13.10%, and the working age group expands from 66.70 to 65.20. A similar pattern is also observed in Uttar Pradesh and Prayagraj, though ageing is somewhat slower than the national level. This transformation in the population pyramid has important implications on the health care demand, labour force and long-term policy formulations as the growing elderly population increases the pressure on the health and social

protection system, while the working age group population is high now but eventually begins to age, thus resulting in the closing of the window of demographic dividend (Bloom et al., 2015; Malik et al., 2021; Verma et al., 2021).

6. Conclusion

The demographic analysis of India, Uttar Pradesh, and Prayagraj is in line with the ongoing demographic transition, which is characterized by a declining share of children (0-14 years), an increasing share of elderly (60+ years), and a relatively expanding and stabilizing working age (15-59) population by 2031. This transition is linked with declining fertility and increasing life expectancy, which together result in a rising old-age dependency ratio. This rise intensifies the pressure on the health-care and social protection system, especially at the state and district level

At the national level, the share of the child population has declined from 37.60 in 1991 to 21.70 in 2031, while the proportion of the elderly has risen from 6.70% to 13.10%. Uttar Pradesh and Prayagraj follow a similar trajectory but at a slower pace. These findings emphasize the urgent need for age-sensitive multilevel planning in terms of geriatric health care services, labor market policies, and various government services so that the challenges of the elderly population can be proactively managed and demographic dividends can be harnessed.

References

- Abhay B, M., & Sanjay V, K. (2014). India's Ageing Population: Geriatric Care Still in Infancy. *Journal of Gerontology & Geriatric Research*, 03(05). <https://doi.org/10.4172/2167-7182.1000186>
- Alam, M., & (India), I. of E. G. (2006). *Ageing in India: Socio-economic and Health Dimensions*. Academic Foundation.
- Bloom, D. E., Canning, D., & Lubet, A. (2015). *Global Population Aging: Facts, Challenges, Solutions & Perspectives*. <https://www.jstor.org/stable/24711220?seq=1>.
- Bongaarts, J. (2009). Human population growth and the demographic transition. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 364, 2985–2990. <https://doi.org/10.1098/rstb.2009.0137>
- Caring for Our Elders Institutional Responses*. (n.d.).
- Census Of India 2011 Population Projections for India and States 2011-2036 Report Of The Technical Group on Population Projections*. (2019).
- Elderly In India 2021*. (n.d.). Retrieved <https://mospi.gov.in/web/mospi/reports-publications>.
- India - Age Dependency Ratio (% Of Working-age Population)2026 Data 2027 Forecast 1960-2024 Historical*. (n.d.). <https://tradingeconomics.com/india/age-dependency-ratio-percent-of-working-age-population-wb-data.html>.
- Madan Gopal, K., Mukherjee, R., Kumar, S., Hazra, M. S., Global, I., Sinha, M. A., Dipika, M., Himanshu, J. M., & Disclaimer, S. (n.d.). *Senior Care Reforms in India-Reimagining the Senior Care Paradigm: A Position Paper*.

- Malik, C., Khanna, S., Jain, Y., & Jain, R. (2021). Geriatric population in India: Demography, vulnerabilities, and healthcare challenges. *Journal of Family Medicine and Primary Care*, 10, 72–76. https://doi.org/10.4103/jfmpe.jfmpe_1794_20
- Mason, A., & Lee, R. (2012). *Demographic Dividends and Aging in Lower-Income Countries*. www.ntaccounts.org.
- National Commission on Population. (2019). *Population projections for India and states 2011–2036: Report of the Technical Group on Population Projections*. Ministry of Health and Family Welfare, Government of India.
- NITI Aayog Releases Position Paper– Senior Care Reforms in India: Reimagining the Senior Care Paradigm. (2024, February 19). <https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=2006983®=3&lang=2>.
- Office of the Registrar General & Census Commissioner. (2021). *Sample Registration System (SRS) Bulletin 2019, Volume 54, Part I*. New Delhi.
- Sanderson, W. C., & Scherbov, S. (2010). Remeasuring aging. In *Science* (Vol. 329, pp. 1287–1288). <https://doi.org/10.1126/science.1193647>
- Subiaya Lekha, & Dhananjay W. Bansod. (2011). *Demographics of Population Ageing in India*.
- Verma, V., Prakash, S., Parveen, K., & Shaikh, S. (2021). A comparative study of health seeking behaviour of elderly in rural and urban area of prayagraj. *National Journal of Community Medicine*, 12, 246–251. <https://doi.org/10.5455/njcm.20210713022806>
- Women & Men in India 2021 (A statistical compilation of Gender related Indicators in India). (2021). In <https://ruralindiaonline.org/mr/library/resource/women-men-in-india-2021-a-statistical-compilation-of-gender-related-indicators-in-india/>.
- World Population Ageing 2023: Challenges and opportunities of population ageing in the least developed countries*. (2024, January). <https://desapublications.un.org/publications/world-population-ageing-2023-challenges-and-opportunities-population-ageing-least>.
- World Population Prospects 2022: Summary of Results*. (2022). <https://www.un.org/development/desa/pd/content/world-population-prospects-2022>.