

UNRAVELLING INDIA'S DEMOGRAPHIC FUTURE

Population Projections for States and Union Territories
2021-2051



About Population Foundation of India

Founded in 1970 by the late J.R.D. Tata, Population Foundation of India is a leading non-governmental organisation (NGO) working in the field of population dynamics, gender equity, and sexual and reproductive health (SRH). It addresses population issues within the context of empowering women, men, and youth, enabling them to make informed decisions about their fertility, health, and well-being.

The organisation's approaches include strategic engagement with policymakers, media, and other key stakeholders; knowledge generation and dissemination; leveraging technology; scaling up pilot projects; and social and behaviour change communication. Population Foundation of India collaborates closely with and provides technical support to national and state governments, as well as other NGOs.

About The International Institute of Migration and Development (IIMAD)

The IIMAD is a non-profit research think tank based in Kerala, India and primarily works on the intersection of migration and development. IIMAD was established in 2019 by Professor K C Zachariah, President and Professor S Irudaya Rajan, Chair. IIMAD collaborates with government and NGOs that deal with refugees, diasporic migrants, and migrant workers in the region.

The IIMAD tries to serve as a node in the domain of migration with excellence in cutting edge academic scholarship that fosters practice-oriented research and policy formulation pertaining to international migration. The IIMAD, with its distinguished scholar community, works to develop a new thematic pathway and facilitate the future scholars to disseminate knowledge through academic publications, data banks and conferencing.

Suggested Citation

International Institute of Migration and Development and Population Foundation of India. (2025). "Unravelling India's Demographic Future – Population Projections for States and Union Territories 2021-2051", New Delhi. India

Map Disclaimer

This map of India has been drawn for illustrative and artistic purposes only. It may not accurately reflect the current official boundaries, names, or territories of Indian states or union territories. No part of this map is intended to infringe upon the legal, territorial, or political integrity of India as defined by the Government of India. If any inaccuracies exist, no offence or claim of authority is intended by this depiction. For any official use or reference, please consult maps issued by the Survey of India and other authorised agencies.

All illustrations used on the cover are representative and purely artistic. They are not indicative of any specific individual, community, or demographic group.

UNRAVELLING INDIA'S DEMOGRAPHIC FUTURE

Population Projections for States and Union Territories
2021–2051

S Irudaya Rajan

J Retnakumar

International Institute of Migration and Development [IIMAD], Kerala
Population Foundation of India [PFI], New Delhi

ACKNOWLEDGEMENTS

The research team is deeply grateful to Population Foundation of India [PFI], New Delhi, for our collaboration on the project '*Unravelling India's Demographic Future: Population Projections for States and Union Territories, 2021–2051*'. We extend our sincere thanks to Ms Poonam Muttreja, Executive Director, PFI; Dr Sanghamitra Singh, Chief of Programmes; Mr Alok Vajpeyi, Lead-Core Grants and Knowledge Management; Dr Varun Sharma, Senior Specialist, Monitoring and Evaluation; and Mr Martand Kaushik, Senior Specialist, Media and Communications. This research would not have been materialised without their unwavering encouragement, insightful guidance, and steadfast commitment to strengthen the evidence-driven policy-making initiatives in India.

We are highly indebted to members of the Expert Advisory Committee constituted for this project, whose wisdom and guidance were instrumental in shaping this work at every stage. We sincerely acknowledge their valuable insights and constructive feedback offered by Prof. K Srinivasan [former Executive Director, PFI and former Director, International Institute of Population Sciences, Mumbai], Prof. Leela Visaria [former Director, Gujarat Institute of Development Research, Ahmadabad], Prof. Faujdar Ram [former Director, International Institute for Population Sciences, Mumbai], Prof. Sulabha Parasuraman [former Professor, International Institute for Population Sciences, Mumbai], Prof. P M Kulkarni [former Professor, Jawaharlal Nehru University, New Delhi], Prof. U S Mishra [Professor, International Institute for Population Sciences, Mumbai], Dr Amrita Datta [Assistant Professor of Development Studies, Department of Liberal Arts, Indian Institute of Technology, Hyderabad], and Dr Chinmay Tumble [Associate Professor, Indian Institute of Management, Ahmedabad]. Their long-standing contributions to the field of population sciences, together with thoughtful and incisive suggestions have immensely elevated the quality and the scientific rigour of this study.

We greatly acknowledge the support received from Dr Gopal Aggarwal, Deputy Director, Office of the Registrar General of India, New Delhi, Dr K K Hari Kurup, Advisor, Seventh Finance Commission, Government of Kerala; Dr Mahesh Ramachandran, Senior Consultant and Economist, Asian Development Bank; Dr John Stover, Vice President, Avenir Health, USA; Dr Mahesh Kumar T, Assistant Professor, Dr B R Ambedkar School of Economics, Bengaluru, Dr Benoy Peter, Executive Director, Centre for Migration and Inclusive Development, Ernakulam; Prof. Nandita Saikia, Professor in Public Health and Mortality Studies, International Institute for Population Sciences, Mumbai; and Prof. R B Bhagat, Visiting Professor, Institute for Human Development, New Delhi. Their expertise—ranging from technical guidance to constructive reviews at sequential stages of this work—have substantively enriched the depth and quality of this work in enduring ways.

Special thanks to our colleagues and research team at the International Institute for Migration and Development, in particular, Dr Krishnakumar CS, and Dr Sunitha S played a pivotal role in all the stages of this project from conceptualising to refining the methodological assumptions of the population projections, that laid a strong foundation to this research. Dr Rakesh Ranjan Kumar and Dr CV Irshad provided dedicated support in facilitating the research work with commitment and efficiency. We gratefully acknowledge the invaluable contributions of Mr Ajay P Karuvally, Ms Parvathy J, Ms Varsha Joshi and Ms Sneha Najeeb in preparing the graphs, charts using R Studio, editing the drafts which substantially enhanced the clarity and coherence in the visual presentation of the data. On a personal note, I extend my heartfelt gratitude to my Co-Principal Investigator, Dr J Retnakumar, for his constant collaboration, critical insights, and untiring support throughout this project. His partnership has been indispensable in successfully completing this initiative.

Finally, we place on record our sincere gratitude to all individuals and institutions who, directly or indirectly, contributed to this study. This collective effort reflects the spirit of collaboration in the field of population studies, and we hope the findings will serve as a useful resource for planning among policymakers, researchers, and practitioners engaged in shaping India's future.

Professor S Irudaya Rajan

Principal Investigator and Chair

International Institute of Migration and Development

EXECUTIVE SUMMARY

The entire world has been closely observing India's demographic trajectory, as we have become the most populous nation on the planet, surpassing China. This gives India an instrumental role in shaping global demographic trends, owing to its large youth population. Over the coming decade, it has the potential to effectively leverage its demographic and gender dividends for sustained economic development through both internal and international migration. This encompasses an important demographic benchmark, wherein India's population growth is sustained by significant population momentum arising from its large base.

Currently, there is a lack of reliable population projections, not only for the national level but also for the states and Union Territories [UTs]. Most of the existing projections are based primarily on the data from the old censuses. At present, policymakers largely rely on the population projections published in 2019 by the Registrar General of India, based on the 2011 Census, which provide estimates only up to 2036. Over time, population projections have become obsolete, rendering the input data used in their formulation potentially extraneous. Secondly, a sustained flow of migrants from the labour-surplus to labour-deficit states may have reshaped the demographic profiles of both the sending and receiving destinations. Thirdly, the demographics of most nations, including India, have changed due to the pandemic, which disrupted age structures and smooth trajectories of life expectancies. Finally, most projections are made at the national level and do not cover all states, especially the smaller ones and UTs. This might have aggravated data voids in accurate population estimates, and these estimates are often serving multiple and divergent purposes. Against this backdrop, a new set of population projections has been prepared extending to the middle of this century, with the objective of providing the most reliable and updated population estimates for India under the changed circumstances.

This exercise draws on a range of demographic datasets, including the Census, the Sample Registration System [SRS], the National Family Health Survey [NFHS], the Civil Registration System [CRS], and the National Sample Survey [NSS]. The Cohort Component Method has been applied to 22 states with a population in excess of six million, as enumerated in the 2011 Census. The smoothed age-sex distribution from the 2011 Census was carried forward to 2021 with fertility, mortality inputs from the SRS and migration data from the NSSs.

A new set of population projections has been prepared extending to the middle of this century, with the objective of providing the most reliable and updated population estimates for India under the changed circumstances.

These data sources were then used to project the demographic inputs, which were subsequently used as the basis for population projections till 2051. Appropriate adjustments have been made for Andhra Pradesh, Telangana, Jammu and Kashmir [UT], Ladakh [UT], and Dadra and Nagar Haveli and Daman and Diu [UT] to account for boundary changes since the 2011 Census. Mathematical models—specifically the curve estimation regression model—were employed to project the populations of the rest of the smaller states and UTs.

This study posits the Gompertz Curve [GC] for projecting future fertility patterns at both national and state level. These were classified and assumed different set of lower asymptotes to project the future population. Life expectancies at birth were projected using the Logistic Curve [LC] method. Gender-specific life tables were created to encompass the bearing of pandemic on life expectancy at birth using the Age-Specific Death Rates obtained from SRS data for 2020 and 2021. These rates were subsequently transformed into nMx values for constructing life tables at the state level. Migration patterns and sex ratio at birth [SRB] were projected using logarithmic convergence models.

The findings highlight that the demographic transition over the next three decades will be characterised by a steady decline in fertility and constant improvements in life expectancy at birth.

The findings highlight that the demographic transition over the next three decades will be characterised by a steady decline in fertility and constant improvements in life expectancy at birth. The Total Fertility Rate [TFR] is projected to decline from the current level of two children per woman in 2021 to 1.67 by 2051 under medium-variant assumptions. Fertility is anticipated to decline in all parts of the country, though at varying pace. Northern states are now expected to play a leading role in shaping India's demographic trajectory, as southern states—having largely completed their fertility transition phase—exhibit fertility rates at or below replacement level, leaving limited scope for further decline. The Crude Birth Rate [CBR] is expected to decline appreciably from 17 per 1000 population in 2021 to 10.8 by 2051. Consequently, the annual number of births will fall from the current level of 23 million to 17.1 million during the same period. The primary driver of such demographic changes is the expected reduction in fertility rates over the next three decades. Crude Death Rate [CDR] on the other hand, will show a modest increase from 7.7 to 8.6 over the same period—reflecting an increase in the ageing population and its consequences. As a result, life expectancy at birth is projected to increase moderately, with male life expectancy rising from 66.6 years in 2021 to 75.4 years in 2051, and female life expectancy from 70.9 to 81.4 years. Thus, the rate of natural increase in the population would fall to 0.22 percent from the current level of 0.8 percent.

India's total population is expected to reach 1590.1 million by 2051 from the 2021 base population of 1355.8 million, indicating an increase

of 17.3 percent or a 0.5 percent annual increase. Our projected figures are much lower than the medium-variant assumptions adopted in other recent projections, including those by the United Nations [2025] and by Kulkarni [2021]. This can be attributed mainly to two reasons—the use of updated fertility trends and the inclusion of latest data in the core assumptions behind the population projections. The proportion of the child population [0–4] dwindles from 9.3 percent to 5.4 percent in a span of the next three decades. The population in ages 15–59 years, comprising workers, peaks at 65.8 percent in 2031 before declining to 62.7 percent by 2051. The proportion of the elderly population [aged 60 and above] rises substantially from one in ten persons in 2021 [9.6%] to two in ten persons [20.4%] by the end of the projected horizon. This demographic shift is further reflected in an increase in the median age of the population from 29 to 40 years, reinforcing the ongoing demographic transition reflected in terms of an ageing population. Urban–rural population projections using the revised UN [2018] method suggest that, by the mid-21st century, one out of every two persons in the country will be residing in urban agglomerations.

The study classifies India into six geographical regions for analytical purposes¹. Population projections suggest that regional demographic patterns across the country are expected to become more varied in the years to come. As these states in various regions are at different stages of demographic transition, they require tailored policy and programme interventions for their socio-economic development. While large-scale demographic shifts are underway, our population projections suggest that the country will fall short of achieving population stabilisation even by the middle of the 21st century. Given the current demographic trajectories, it may take another half a decade to achieve this target. On the other hand, most of the southern states are projected to see population decline beginning around 2036, with the region as a whole expected to reach this stage by 2041. The projected results also suggest that India’s demographic dividend window might close by 2031, underscoring the importance of harnessing its benefits before its influence on economic growth begins to wane. The education and skill development systems in our country must be fine-tuned to ensure that they can effectively respond to and absorb the available opportunities before they disappear.

Urban–rural population projections using the revised UN [2018] method suggest that, by the mid-21st century, one out of every two persons in the country will be residing in urban agglomerations.

¹ 1: Northern region [Jammu and Kashmir [UT], Ladakh [UT], Himachal Pradesh, Punjab, Uttarakhand, Haryana, National Capital Territory [NCT] of Delhi, Rajasthan and Chandigarh]

2: Central region [Uttar Pradesh, Bihar, Madhya Pradesh and Chhattisgarh]

3: Eastern region [Odisha, West Bengal and Jharkhand].

4: Western region [Gujarat, Maharashtra, Dadra and Nagar Haveli and Daman and Diu]

5: Southern region [Andhra Pradesh, Telangana, Tamil Nadu, Karnataka, Kerala, Goa, Puducherry, Andaman Nicobar Islands and Lakshadweep]

6: North-eastern region [Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Meghalaya and Assam].

UNRAVELLING INDIA'S DEMOGRAPHIC FUTURE: KEY HIGHLIGHTS

India is on the threshold of a profound demographic transformation. Between 2021 and 2051, India is set for a transition from a predominantly young and rapidly growing population to a country experiencing slower population growth, signalling the onset of a more balanced and ageing demographic structure. As India heads towards population stabilisation, the proportion of children in the population is projected to decline sharply, while the elderly population will see a substantial increase—both changing by nearly 50 percent by the end of the projection horizon. India's demographic dividend is expected to wane over the next one decade and may taper off after 2031. By the middle of this century, over half of the country's population is projected to live in urban agglomerations.

National-level demographic projections [2021–2051]

- As per the medium-variant population projections, India's population is expected to increase from 1355.8 million in 2021 to 1590.1 million in 2051 with the overall growth rate of 17.3 percent. With the annual population growth rate projected to touch 0.5 percent, India is all set to experience a marked slowdown in population growth in the near future.
- Fertility in India is projected to decline from 2.0 [2021] to 1.67 [2051], with the states in north expected to contribute most to the decline, while the states in the south have already experienced significant demographic transition.
- Life expectancy at birth is projected to improve, with male life expectancy increasing from 66.7 years to 75.4 years, and female life expectancy from 71.0 years to 81.4 years. This trend suggests that current gender gap in life expectancy at birth is expected to persist throughout the projection period.
- CBR will taper off from 17 per 1000 to 10.8, while the total number of annual births is expected to decline from 23 million to 17.1 million.
- CDR will rise slightly from 7.7 to 8.6 per 1000, indicating the deepening of the ageing population.
- A significant decline in the proportion of children [0–4] from 9.3 percent to 5.4 percent reflects the continuing contraction of the population in the base of population pyramid.
- The working-age population [15–59] is expected to reach a peak level of 65.8 percent in 2031 and decline subsequently, marking the beginning of the tapering off of India's demographic dividend.
- The elderly [60+] will make up 20.4 percent of the total population by 2051; more than double their 9.6 percent share in 2021.

- Urban Rural Growth Difference [URGD] projections highlight a historic demographic turning point in India, with more than half the population projected to live in urban centres by mid-century, while the rural share drops to less than half.

Regional variations [2021–2051]

- The population share of the northern region remains constant at 14 percent, while the share of the central region increases from 34.6 percent to 38.8 percent.
- With their combined population share rising from 48.6 percent to a projected 52.7 percent, these regions—north and central—continue to serve as the centre of demographic gravity.
- The share of the southern region will fall from 20 percent to 17 percent, and the entire region is anticipated to experience population decline after 2041.
- The eastern region will experience a slow decline in its population share from 2021 onwards.
- The share of the western region mirrors the trend in eastern region, but records a decline of more than one percentage point over the projected period.
- The north-eastern region will record a modest increase in their demographic share.
- In all regions, the share of children [0–14] will decline by more than one-third; with the steepest drop happening in the southern region, reflecting its advanced position in terms of fertility transition.
- The total working-age population [15–59] is projected to grow in the central and northern regions through the mid-century, as it has already peaked in the south.
- The central region is expected to see an expansion in its working-age population from 62.9 percent in 2021 to close to 65 percent, positioning it as a key source of workforce for the rest of the country, and potentially supporting balanced regional development through internal migration between regions.
- A decline in the working-age population from 67 percent to close to 58 percent in the southern region, marks the earliest onset of the demographic dividend loss in the country.
- The elderly population [60+] is expected to rise in all the regions, increasing by close to 100 percent in the central region and nearly 140 percent in the northern region.
- The oldest-old population [80+] will grow much faster than the elderly in general, rising by 171 percent in the central region and nearly 300 percent in the eastern region.

State-wise variations [2021–2051]

- Bihar had the highest TFR of 3.0 in 2021, while West Bengal and the NCT of Delhi [1.4 each] had the lowest. Although TFR will be declining, Bihar is projected to remain the state with the highest TFR of 1.9 in 2051. Besides the lowest fertility states in 2021, Andhra Pradesh, Tamil Nadu, Kerala, Maharashtra, and Punjab are also projected to touch the floor TFR limit of 1.4 by 2051.
- Kerala reported the highest male and female life expectancies at birth—70.4 and 75.9 years, respectively, in 2021. These are projected to rise to 80.0 and 85.7 years by 2051. In contrast, Chhattisgarh had the lowest life expectancies at birth in 2021—60.5 years for males and 65.8 years for females—expected to increase to 66.6 and 75.2 years, respectively, by the end of the projection horizon.
- In 2021, the gender gap in life expectancy at birth favoured women by 5.9 years in Maharashtra, compared to 1.6 years in Jharkhand and Bihar. By 2051, this gap is projected to widen further—reaching 8.6 years in Chhattisgarh and 2.4 years in Assam.
- The proportion of child population [0–14] was the largest in Bihar [30.3%] and lowest in Kerala [19.3%] in 2021. By the mid of this century, Bihar will continue to have the highest share of children at 22.6 percent, while Kerala's share will decline to 12.8 percent, the lowest share in the country.
- In 2021, the share of the working-age population [15–59 years] was highest in NCT of Delhi [70.0 percent] and lowest in Bihar [61.6 percent]. By the culmination of the projection timeframe, Bihar and Uttar Pradesh [65.3% each] are expected to have the highest proportions, while Kerala and Tamil Nadu [56.6% each] will have the lowest.
- Kerala had the highest percentage of the elderly population [60+] at 16.1 percent, while Uttar Pradesh had the lowest at 8.0 percent. By 2051, the share of the aged is projected to rise to 31.1 percent in Tamil Nadu, followed by 30.7 percent in NCT of Delhi, while Bihar will have the lowest share at 15.3 percent.
- In 2021, Kerala had the largest percentage of the oldest-old [80+] at close to 2 percent, while Assam and Bihar had the lowest [0.6%]. It is presumed that by 2051, Kerala will continue to have the largest share of them, at 6.4 percent, followed by Tamil Nadu at 5.2 percent. The lowest percentage of oldest-old will be found in Uttar Pradesh [1.8%].
- According to our projections, Bihar will remain the youngest state in India, while Kerala will remain the oldest.

Policy signals

- India will experience a shift from a youthful to an ageing population, with the elderly share doubling and the proportion of children shrinking sharply.

- The decline in the total number of annual births will open opportunities to reallocate resources toward improving the quality of maternal and child healthcare services across all life stages.
- The northern and central regions will remain relatively younger and more populous, while the southern region will experience rapid ageing and a subsequent decline in population. This calls for necessitating urgent policy interventions in social security, healthcare, and elderly care infrastructure in addition to empowering and engaging senior citizens through additional skills and creating new avenues to harness the silver dividend and spur economic growth.
- Bihar and Uttar Pradesh, with large populations that are either working age or about to enter working age, need more investments in education, skill development, and job creation to fully harness the potential of their demographic dividend before it diminishes. The government should ensure safe and orderly migration between states and regions as internal migrants play a key role in the development of the urban sector.
- As India's demographic dividend is expected to taper off after 2031, it is critical to accelerate skill development, women's workforce participation rate, and create avenues for better employment.
- India's economic future depends on how effectively it harnesses the potential of its large female population. Investing in care infrastructure, such as affordable childcare, eldercare, and safe transport, can ease the unpaid work burden on women and increase their participation in formal, productive employment.
- The emerging labour market mismatch between labour surplus states in the north and central region and deficit states in the southern region is set to intensify, highlighting the need for more effective internal migration and labour mobility policies.
- Sustained financing for family planning and sexual and reproductive health is essential to prevent early and unintended pregnancies, improve maternal and child health outcomes, and secure the country's demographic dividend. Integrating family planning services with primary healthcare and education systems, while ensuring access to diverse contraceptive options and comprehensive sexuality education, will enable young people to make informed choices and contribute to economic and social progress.
- Rising numbers of the oldest-old [80+] will strain healthcare systems, especially in demographically advanced states, calling for focused policies and programmes on geriatric care and social security systems.
- With fertility rates touching below replacement levels, India is on course to stabilize its population—not within the projected timeframe, but probably after 2055—thereby underscoring a pressing need for comprehensive and forward-looking population management policies.

- ➡ India's states are at different stages of demographic transition, from high fertility to below-replacement levels. Reproductive health and family planning policies and programmes have historically focused on pregnancy and contraception. As cohorts age and marriage/childbearing are delayed, new needs are emerging: infertility, reproductive cancers, perimenopause/menopause, endometriosis/ Polycystic Ovary Syndrome [PCOS] management, Sexually Transmitted Infections [STI]-related sequelae, male reproductive health, and psycho-social care. A life-course approach is now essential, tailored to each state's demographic profile, without sliding into coercive or pronatalist measures.

CONTENTS

<i>Acknowledgements</i>	v
<i>Executive Summary</i>	vii
<i>Unravelling India's Demographic Future: Key Highlights</i>	x
Glossary	1
Abbreviations	5
Section 1: Unravelling India's Demographic Future: Population Projections for States and Union Territories, 2021–2051	7
1.1 Introduction	8
1.2 A review of existing population projections for national and state levels	8
1.3 Rationale for a fresh population projection for India	10
1.4 Organisation of the report	12
1.5 Methodological approaches to population projections	13
1.6 Sources of data	15
1.7 Methodological tribulations	15
1.8 Data quality considerations	16
1.9 A word of caution	17
1.10 The dynamics of demographic variations	17
1.11 Key insights from the national population projections [2021–2051]	18
1.11.1 Projected trends in elderly population	24
1.11.2 Major insights from the regional population projections	25
1.11.3 When parts don't equal the whole: Comparative assessment of the projected populations	28
1.11.4 Validation of the population projection	29
1.12 Population projections for the smaller states and UTs	30
1.13 Summary results from urban-rural population projections	30
1.14 Policy implications	32
Section 2: Detailed Methodological Framework	39
2.1 Approaches to population projection for major states	40
2.2 Establishing the base year population	41
2.3 Assumptions on fertility	41
2.3.1 Assumptions on age-specific fertility rates	46
2.4 Mortality assumptions	49
2.4.1 Life expectancy trends in India: An analytical overview	49
2.4.2 Pandemic and life expectancy	50
2.4.3 Fitting the model	51
2.4.4 Projected trends in life expectancies	52
2.5 Assumptions on migration trends	54
2.5.1 Magnitude of migration in India	54
2.5.2 Complexities in measuring migration	56

2.5.3	Three datasets, divergent approaches and compatibility issues	57
2.5.4	Approaches in estimating net-migrants	59
2.5.6	Modelling of net migrant population in projections	61
2.6	Estimates of sex ratio at birth	62
2.6.1	Is it possible for the sex ratio at birth to converge?	63
2.6.2	Projection of Sex ratio at birth	65
2.7	Issues in projecting urban-rural population	66
2.8.	Methodologies for urban-rural population projections	67
2.9	Approach to population projection for smaller states	69

SECTION 3-10: Appendix: I–VIII

71–251

References	255
------------	-----

List of figures

Section 1	Figure 1.1: Projected population under different variants, 2021–2051	21
	Figure 1.2: Population pyramid for India, 2011 and 2051	22
	Figure 1.3: Ranking of states by population size [medium-variant], 2011 and 2051 [in million]	23
	Figure 1.4: Projected population of India using four different projection methods, 2021–2051	28
	Figure 1.5: Projected percentage of urban-rural population for India, 2011–2051	31
Section 2	Figure 2.1: Classification of the states based on TFR [2021] and their year of replacement level of fertility status	43
	Figure 2.2: Age-specific fertility profiles corresponding to a TFR equals 2.40	47
	Figure 2.3: Projected patterns of age-specific Fertility Rate [2011–2051]	48
	Figure 2.4: Projected life expectancy trends by gender with and without pandemic, 2011–2051	53

List of tables

Section 1	Unravelling India's Demographic Future: Population Projections for States and Union Territories, 2021–2051	7
	Table 1.1: Projected population for India by various sources, 2026–2300 [In million]	9
	Table 1.2: Detailed description of inputs and outputs related to population projections	15
	Table 1.3: Projected summary of demographic indicators for India, [medium-variant] 2026–2051	19
	Table 1.4: Regional percentage share of population by broad age groups, 2021–2051	27
	Table 1.5: Population projections of IIMAD and PFI versus other selected sources, 2026–2051 [in million]	29
Section 2	Detailed Methodological Framework	39
	Table 2.1: State-wise range of asymptote values used to fit the Gompertz Curve	44
	Table 2.2: Expected timeframe for attaining below-replacement fertility	45

Appendix tables, figures and maps

Section 3	APPENDIX: I	
	Appendix Tables: Statistical Inputs for Model Estimation	71
	Appendix Table 1.1: State-wise trends and absolute decline in TFR, 2011–2021	72
	Appendix Table 1.2: Life expectancy at the national and state level by gender in India, 2011–2021 [in years]	73
	Appendix Table 1.3: Total number of interstate migrants reported in various surveys, 2007–08 and 2021–22	74
	Appendix Table 1.4: Comparison of inter-state net migrants reported in various surveys [2007–08 to 2021–22 and the Census [2001–2011]]	75
	Appendix Table 1.5: Estimated annual net male migrants, 2011–2021	76
	Appendix Table 1.6: Estimated annual net female migrants, 2011–2021	77
	Appendix Table 1.7: State-level trends in sex ratio at birth, 1991–2011	78
	Appendix Table 1.8: Age-sex distribution of the state-level base population used for population projections, 2021	79
	Appendix Table 1.9: Percentage distribution of population by age and gender at the state level, 2021	88
Section 4	APPENDIX: II	
	Figures and Maps: Statistical Inputs for Model Estimation	97
	Appendix Figure 2.1: Gender-wise projected total population of India with and without the impact of pandemic, 2011–2051 [in Million]	98
	Appendix Figure 2.2: Projected proportion of child population [0–14] by region, 2021–2051	99
	Appendix Figure 2.3: Projected proportion of working-age [15–59] population by region, 2021–2051	99
	Appendix Figure 2.4: Projected proportion of elderly population [60 +] by region, 2021–2051	100
	Appendix Figure 2.5: Projected proportion of oldest old [80 +] by region, 2021–2051	100
	Appendix Figure 2.6: Observed and estimated population for Arunachal Pradesh, 1971–2021	101
	Maps	
	Appendix Map 2.1: Net migration across states, NSSO 2007–08	101
	Appendix Map 2.2: State-wise net male migrants, NSSO 2007–08	102
	Appendix Map 2.3: State-wise net female migrants, NSSO 2007–08	102
	Appendix Map 2.4: Net migration across states, Census 2011	103
	Appendix Map 2.5: State-wise net male migrants, Census 2011	103
	Appendix Map 2.6: State-wise net female migrants, Census 2011	104
	Appendix Map 2.7: Net migration across states, MIS 2020–21	104
	Appendix Map 2.8: State-wise net male migrants, MIS 2020–21	105
	Appendix Map 2.9: State-wise net female migrants, MIS 2020–21	105
	Appendix Map 2.10: Net migration across states, PLFS 2021–22	106
	Appendix Map 2.11: State-wise net male migrants, PLFS 2021–22	106
	Appendix Map 2.12: State-wise net female migrants, PLFS 2021–22	107

	APPENDIX: III	
Section 5	Tables of major Output Indicators from the Population Projections	109
	Appendix Table 3.1: Projections of Total Fertility Rates across Indian States, 2026–2051	110
	Appendix Table 3.2: Projected percentage of fertility levels for India under alternative variants, 2011–2051	112
	Appendix Table 3.3: Projected life expectancy at the national and state levels in India by gender, 2026–2051 [in years]	113
	Appendix Table 3.4: Projected annual net migrants [males], 2022–2051	114
	Appendix Table 3.5: Projected annual net migrants [females], 2022–2051	116
	Appendix Table 3.6: Projected sex ratio at birth, 2016–2051	118
	Appendix Table 3.7: Summary of projected demographic indicators for India, [low-variant], 2026–2051	119
	Appendix Table 3.8: Summary of projected demographic indicators for India, [high-variant], 2026–2051	120
	Appendix Table 3.9: State-wise projected population by gender [low-variant], 2026–2051 [in million]	121
	Appendix Table 3.10: State-wise projected population by gender [medium-variant], 2021–2051 [in million]	123
	Appendix Table 3.11: State-wise projected population by gender [high-variant], 2021–2051 [in million]	125
	Appendix Table 3.12: State-wise percentage change and average annual growth rate of population, 2021–2051	127
	APPENDIX: IV	
	State-wise Detailed Report–Medium-variant Assumptions	129
	Appendix Table 4.1: Projected summary of demographic indicators for Andhra Pradesh, 2026–2051	130
	Appendix Table 4.2: Projected age structure of Andhra Pradesh, 2026–2051	131
	Appendix Table 4.3: Projected percentage distribution of population by age and gender for Andhra Pradesh, 2026–2051	133
	Appendix Table 4.4: Projected summary of demographic indicators for Assam, 2026–2051	134
	Appendix Table 4.5: Projected age structure of Assam, 2026–2051	135
Section 6	Appendix Table 4.6: Projected percentage distribution of population by age and gender for Assam, 2026–2051	137
	Appendix Table 4.7: Projected summary of demographic indicators for Bihar, 2026–2051	138
	Appendix Table 4.8: Projected age structure of Bihar, 2026–2051	139
	Appendix Table 4.9: Projected percentage distribution of population by age and gender for Bihar, 2026–2051	141
	Appendix Table 4.10: Projected summary of demographic indicators for Chhattisgarh, 2026–2051	142
	Appendix Table 4.11: Projected age structure of Chhattisgarh, 2026–2051	143
	Appendix Table 4.12: Projected percentage distribution of population by age and gender for Chhattisgarh, 2026–2051	145

Appendix Table 4.13: Projected summary of demographic indicators for NCT of Delhi, 2026–2051	146
Appendix Table 4.14: Projected age structure of NCT of Delhi, 2026–2051	147
Appendix Table 4.15: Projected percentage distribution of population by age and gender for NCT of Delhi, 2026–2051	149
Appendix Table 4.16: Projected Summary of demographic indicators for Gujarat, 2026–2051	150
Appendix Table 4.17: Projected age structure of Gujarat, 2026–2051	151
Appendix Table 4.18: Projected percentage distribution of population by age and gender for Gujarat, 2026–2051	153
Appendix Table 4.19: Projected summary of demographic indicators for Haryana, 2026–2051	154
Appendix Table 4.20: Projected age structure of Haryana, 2026–2051	155
Appendix Table 4.21: Projected percentage distribution of population by age and gender for Haryana, 2026–2051	157
Appendix Table 4.22: Projected summary of demographic indicators for Himachal Pradesh, 2026–2051	158
Appendix Table 4.23: Projected age structure of Himachal Pradesh, 2026–2051	159
Appendix Table 4.24: Projected percentage distribution of population by age and gender for Himachal Pradesh, 2026–2051	161
Appendix Table 4.25 for Jammu and Kashmir, [Undivided], 2026–2051	162
Appendix Table 4.26: Projected age structure of Jammu and Kashmir [Undivided], 2026–2051	163
Appendix Table 4.27: Projected percentage distribution of population by age and gender for Jammu and Kashmir [Undivided], 2026–2051	165
Appendix Table 4.28: Projected age structure of Jammu and Kashmir [UT], 2026–2051	166
Appendix Table 4.29: Projected percentage distribution of population by age and gender for Jammu and Kashmir [UT], 2026–2051	168
Appendix Table 4.30: Projected summary of demographic indicators for Jharkhand, 2026–2051	169
Appendix Table 4.31: Projected age structure of Jharkhand, 2026–2051	170
Appendix Table 4.32: Projected percentage distribution of population by age and gender for Jharkhand, 2021–2051	172
Appendix Table 4.33: Projected summary of demographic indicators for Karnataka, 2026–2051	173
Appendix Table 4.34: Projected age structure of Karnataka, 2026–2051	174
Appendix Table 4.35: Projected percentage distribution of population by age and gender for Karnataka, 2026–2051	176
Appendix Table 4.36: Projected summary of demographic indicators for Kerala, 2026–2051	177
Appendix Table 4.37: Projected age structure of Kerala, 2026–2051	178
Appendix Table 4.38: Projected percentage distribution of population by age and gender for Kerala, 2026–2051	180
Appendix Table 4.39: Projected age structure of Ladakh [UT], 2026–2051	181
Appendix Table 4.40: Projected percentage distribution of population by age for Ladakh [UT], 2026–2051	182

Appendix Table 4.41: Projected summary of demographic indicators for Madhya Pradesh, 2026–2051	183
Appendix Table 4.42: Projected age structure of Madhya Pradesh, 2026–2051	184
Appendix Table 4.43: Projected percentage distribution of population by age and gender for Madhya Pradesh, 2026–2051	186
Appendix Table 4.44: Projected summary of demographic indicators for Maharashtra, 2026–2051	187
Appendix Table 4.45: Projected age structure of Maharashtra, 2026–2051	188
Appendix Table 4.46: Projected percentage distribution of population by age and gender for Maharashtra, 2026–2051	190
Appendix Table 4.47: Projected summary of demographic indicators for Odisha, 2026–2051	191
Appendix Table 4.48: Projected age structure of Odisha, 2026–2051	192
Appendix Table 4.49: Projected percentage distribution of population by age and gender for Odisha, 2026–2051	194
Appendix Table 4.50: Projected summary of demographic indicators for Punjab, 2026–2051	195
Appendix Table 4.51: projected age structure of Punjab, 2026–2051	196
Appendix Table 4.52: Projected percentage distribution of population by age and gender for Punjab, 2026–2051	198
Appendix Table 4.53: Projected summary of demographic indicators for Rajasthan, 2026–2051	199
Appendix Table 4.54: Projected age structure of Rajasthan, 2026–2051	200
Appendix Table 4.55: Projected percentage distribution of population by age and gender for Rajasthan, 2026–2051	202
Appendix Table 4.56: Projected summary of demographic indicators for Tamil Nadu, 2026–2051	203
Appendix Table 4.57: Projected age structure of Tamil Nadu, 2026–2051	204
Appendix Table 4.58: Projected percentage distribution of population by age and gender for Tamil Nadu, 2026–2051	206
Appendix Table 4.59: Projected summary of demographic indicators for Telangana, 2026–2051	207
Appendix Table 4.60: Projected age structure of Telangana, 2026–2051	208
Appendix Table 4.61: Projected percentage distribution of population by age and gender for Telangana, 2026–2051	210
Appendix Table 4.62: Projected summary of demographic indicators for Uttar Pradesh, 2026– 2051	211
Appendix Table 4.63: Projected age structure of Uttar Pradesh, 2026–2051	212
Appendix Table 4.64: Projected percentage distribution of population by age and gender for Uttar Pradesh, 2026–2051	214
Appendix Table 4.65: Projected summary of demographic indicators for Uttarakhand, 2026– 2051	215
Appendix Table 4.66: Projected age structure of Uttarakhand, 2026–2051	216
Appendix Table 4.67: Projected percentage distribution of population by age and gender for Uttarakhand, 2026–2051	218
Appendix Table 4.68: Projected summary of demographic indicators for West Bengal, 2026–2051	219
Appendix Table 4.69: Projected age structure of West Bengal, 2026–2051	220
Appendix Table 4.70: Projected percentage distribution of population by age and gender for West Bengal, 2026–2051	222

	Appendix Table 4.71: Ranking of states by their population size, 2011 and 2051 [in millions]	223
	Appendix: Table 4.72: Projected state-wise dependency ratios for India, 2021–2051	224
	Appendix Table 4.73: Share of regional population by gender and their contribution to India's total population, 1971–2011	228
	Appendix Table 4.74: Projected regional distribution of total population and percentage share by gender, 2021–2051	229
	Appendix Table 4.75: Projected percentage distribution of population by region and age groups, 2021–2051	231
	Appendix Table 4.76: Projected age distribution of the regional population by age groups within the total regional population, 2021–2051	232
	Appendix Table 4.77: Projected regional distribution of population by gender, 2021–2051 [In million]	233
	Appendix: Table 4.78: Projected regional percentage distribution of population within the total regional population by gender, 2021–2051	235
	Appendix Table 4.79: Comparison of results from the current population projections with selected projections, 2021–2051 [in million]	236
Section 7	APPENDIX: V Output Tables for Urban Rural Population Projections	239
	Appendix Table 5.1: State-level population projections and percentage distribution by urban–rural population, 2011–2051	240
Section 8	APPENDIX VI Output Figures for Urban-rural Population Projections	245
	Appendix Figure 6.1: Projected urban-rural population, 2011–2051	246
Section 9	APPENDIX: VII Maps Of Projected Urban-Rural Population 2011–2051	247
	Appendix Map 7.1: Share of urban population, 2011	248
	Appendix Map 7.2: Share of rural population, 2011	248
	Appendix Map 7.3: Projected percentage share of urban population, 2051	249
	Appendix Map 7.4: Projected percentage share of rural population, 2051	249
Section 10	APPENDIX: VIII Projected Population Figures for Smaller States	251
	Appendix Table 8.1: Projected population of smaller states and Union Territories, 2016–2051	252
	Appendix Table 8.2: Projected population, percentage change in population and annual growth rate of population in smaller states and Union Territories, 2011–2051	254

GLOSSARY

Ageing Index: An index that measures the ratio of the elderly population [aged 60 years and above] to the child population [aged 0–14 years], expressed per 100. It indicates the number of elderly persons per 100 children in a given population.

Age-Sex Structure: The composition of a population as determined by the number or proportion of males and females in each age category. The age-sex structure of a population is the cumulative result of past trends in fertility, mortality, and migration.

Age-Specific Rate: Rate obtained for specific age groups.

Ageing of Population: A process in which the proportion of adults and the elderly increase in a population, while the proportion of children and adolescents decrease. This process results in a rise in the median age of the population. Ageing occurs when fertility rates decline while life expectancy at birth remains constant or improves at older ages.

Birth Rate [or CBR]: The number of live births per 1000 population in a given year.

Census: A canvass of a given area, resulting in an enumeration of the entire population and often the compilation of other demographic, social, and economic information pertaining to that population at a specific time.

Childbearing Years: The reproductive age span of women, assumed for statistical purposes to be 15–49 years of age.

Child-Woman Ratio: The number of children under age 5 per 1000 women aged 15–44 or 15–49 in a population in a given year. This crude fertility measure, based on basic Census data, is sometimes used when more specific fertility information is not available.

Cohort: A group of people sharing a common temporal demographic experience who are observed through time.

Crude Rate: Rate of any demographic event computed for an entire population.

Death Rate [or CDR]: The number of deaths per 1000 population in a given year.

Demographic Transition: The historical shift of birth and death rates from high to low levels in a population. The mortality decline usually precedes the fertility decline, resulting in rapid population growth during the transition period.

Dependency Ratio: Dependency ratio is the ratio of people in a dependent age group [those under age 15 or age 65 and older] to those in the economically productive age group [age 15 to 64] of a population.

Depopulation: The state of population decline.

Emigration: The process of leaving one country to take up permanent or semi-permanent residence in another.

Family Planning: The conscious effort of couples to regulate the number and spacing of births through artificial and natural methods of contraception. Family planning connotes conception control to avoid pregnancy and abortion, but it also includes efforts of couples to induce pregnancy.

Gender: Refers to the economic, social, political, and cultural attributes, constraints and opportunities associated with being a woman or a man. The social definitions of what it means to be a woman or a man vary among cultures and change over time. Gender is a socio-cultural expression of particular characteristics and roles that are associated with certain groups of people with reference to their sex and sexuality.

Gross Reproduction Rate [GRR]: The average number of daughters that would be born alive to a woman [or group of women] during her lifetime if she passed through her childbearing years conforming to the age-specific fertility rates of a given year.

Growth Rate: The number of people added to [or subtracted from] a population in a year due to natural increase and net migration expressed as a percentage of the population at the beginning of the time period.

Infant Mortality Rate: The number of deaths of infants under age 1 per 1000 live births in a given year.

In-migration: The process of entering one administrative subdivision of a country from another subdivision to take up residence.

Life Expectancy at Birth: The average number of additional years a person could expect to live if current mortality trends were to continue for the rest of that person's life.

Life Table: A tabular display of life expectancy and the probability of dying at each age [or age group] for a given population, according to the age-specific death rates prevailing at that time.

National Population Projection: Refers to all-India population projections.

Median Age: The age that divides a population into two numerically equal groups; that is, half the people are younger than this age and half are older.

Urban Agglomerations: A large concentration of population, usually an area with 100000 or more people.

Migration: The movement of people across a specified boundary for the purpose of establishing a new or semi-permanent residence and divided into international migration [migration between countries] and internal migration [migration within a country].

Net Migration Rate: The net effect of immigration and emigration on an area's population, expressed as an increase or decrease per 1000 population of the area in a given year.

Net Reproduction Rate [NRR]: The average number of daughters that would be born to a woman [or a group of women] if she passed through her lifetime conforming to the age-specific fertility and mortality rates of a given year.

Out-migration: The process of leaving one subdivision of a country to take up residence in another.

Population: A group of objects or organisms of the same kind.

Population Distribution: The patterns of settlement and dispersal of a population.

Population Explosion [or Population Bomb]: Expressions used to describe the 20th century worldwide trend of rapid population growth, resulting from a world birth rate much higher than the world death rate.

Population Increase: The total population increase resulting from the interaction of births, deaths, and migration in a population in a given period of time.

Population Momentum: The tendency for population growth to continue beyond the time that replacement-level fertility has been achieved because of the relatively high concentration of people in the childbearing years.

Population Policy: Explicit or implicit measures instituted by a government to influence population size, growth, distribution, or composition.

Population Projection: Computation of future changes in population numbers, given certain assumptions about future trends in the rates of fertility, mortality, and migration.

Population Pyramid: A bar chart, arranged vertically, that shows the distribution of a population by age and sex. By convention, the younger ages are at the bottom, with males on the left and females on the right.

Population Stabilisation: It denotes a demographic condition wherein the population size remains steady over time, typically occurring when births and in-migration are balanced by deaths and out-migration, resulting in zero population growth.

Public-funded Schools: Schools that rely primarily on government funding for their day-to-day operations. This category includes [1] government schools—fully owned and operated by the state governments—and [2] government-aided schools—privately managed institutions where infrastructure and staff appointments are handled by private entities, but teacher salaries and operational grants are provided by the government.

Rate of Natural Increase [RNI]: The rate at which a population is increasing [or decreasing] in a given year due to a surplus [or deficit] of births over deaths, expressed as a percentage of the base population.

Replacement-level Fertility: The level of fertility at which a couple has only enough children to replace themselves, or about two children per couple.

Reproductive Age: The reproductive age span of women, assumed for statistical purposes to be 15-44 or 15-49 years of age.

Sex Ratio at Birth: The number of girls born per 1000 boys in a given population.

Total Fertility Rate [TFR]: The average number of children that would be born alive to a woman [or group of women] during her lifetime if she were to pass through her

childbearing years conforming to the age-specific fertility rates of a given year.

Urbanisation: Growth in the proportion of a population living in urban areas.

URGD Method: Urban Rural Growth Difference refers to a method used in population projections to account for the different growth rates of urban and rural populations within a region.

Vital Statistics: Demographic data on births, deaths, fatal deaths, marriages and divorces.

Sources: Population Reference Bureau: <https://www.prb.org/resources/glossary/>. The term public-funded schools are adopted from the source cited in Reference 26.

ABBREVIATIONS

AFSR	Age-Specific Fertility Rates
AI	Ageing Index
ANMt	Annual Net Migrant
ASDR	Age-Specific Death Rates
ASER	Annual Status of Education Report
CBR	Crude Birth Rate
CCM	Cohort Component Method
CD	Crude Death Rate
CMM	Cohort-based Migration Metric
CRS	Civil Registration System
GC	Gompertz Curve
GRR	Gross Reproduction Rate
IMR	Infant Mortality Rate
LC	Logistic Curve
LCM	Logistic Converging Growth Model
MEA	Ministry of External Affairs
MIS	Multiple Indicator Survey
NFHS	National Family Health Survey
NHM	National Health Mission
NMR	Net Migration Rate
NRIs	Non-Resident Indians
NRR	Net Reproduction Rate
NSO	National Statistical Office
NSS	National Sample Survey
NSSO	National Sample Survey Organization
ODR	Old Dependency Ratio
PCOS	Polycystic Ovary Syndrome
PCPNDT	Pre-Conception and Pre-Natal Diagnostic Techniques
PFI	Population Foundation of India
PIOs	Persons of Indian Origin
PLFS	Periodic Labour Force Survey
PRB	Population Reference Bureau

RNI	Rate of Natural Increase
SDGs	Sustainable Development Goals
SRB	Sex Ratio at Birth
SRS	Sample Registration System
STIs	Sexually Transmitted Infections
TFR	Total Fertility Rate
TRAI	Telecom Regulatory Authority of India
UN	United Nations
UPR	Usual Place of Residence
URGD	Urban Rural Growth Difference
URR	Urban-Rural Ratio
UTs	Union Territories
WHO	World Health Organization
YDR	Young Dependency Ratio

SECTION
1

UNRAVELLING INDIA'S DEMOGRAPHIC FUTURE: POPULATION PROJECTIONS FOR STATES AND UNION TERRITORIES, 2021-2051



1.1 Introduction

The mortality transition in India commenced much earlier than the fertility transition, primarily driven by improvements in healthcare and our enhanced ability to combat both communicable and non-communicable diseases.

The increase in India's population from 238.4 million at the dawn of the 20th century to 1028.7 million by its close represents an unprecedented demographic surge over the span of a century. In the first half of the 20th century [1901–1951], the population of the country increased from 238.4 million to 361.6 million, with an average annual exponential growth rate of 0.8 percent. In the second half of the 20th century [1951–2001], India's population grew to 1028.7 million, driven by an annual exponential growth rate of 2.1 percent. After the peak annual growth rate of 2.2 percent between 1971 and 1981, population growth has significantly declined in the subsequent decades. To put it differently, population grew by over 1.4 times in the first half of the century, whereas the second half witnessed a more than 2.8 times increase. In the first decade of the 21st century [2001–2011], the average annual growth rate of population decreased to 1.6 percent, signalling a pronounced acceleration in the demographic transition of the nation. As demonstrated by the decrease in TFR and the increase in longevity, this trend shows a more pronounced progression of India's demographic transition. The pattern exhibits not only a slowing down in population growth rates, but also a transition towards a more symmetrical demographic structure, largely driven by the collective advancements in our socio-economic and health sectors.

The mortality transition in India commenced much earlier than the fertility transition, primarily driven by improvements in healthcare and our enhanced ability to combat both communicable and non-communicable diseases. In contrast, the fertility transition in India which began after 1971, gained substantial momentum during the 1981–1991 period, and has continued steadily in the decades that followed, persisting into the present. India has attained a significant demographic milestone, as indicated by the 2019 SRS report, achieving a fertility rate below the replacement level of 2.1 children per woman [$TFR \leq 2.1$]. Barring half a dozen states—Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Rajasthan, and Uttar Pradesh—most states in India have attained fertility rates below the replacement level by 2021. Even though modern-day couples both desire and have fewer children than the earlier generations, the population will continue to grow for some time due to population momentum.

1.2 A review of existing population projections for national and state levels

The population of India has been projected by a number of organisations and individual demographers for various time periods, with the end year being 2300 [Technical group 2006; 2019, Natarajan

and Jayachandran 2001, Srinivasan and Shastri 2001, Visaria and Visaria 2003, Dyson 2004, Bhat 2004, PFI and Population Reference Bureau [PRB] 2007, United Nations, 2004; 2005; 2024, Kulkarni 2021, Rajan and Retnakumar 2025]. Only those projections that project the population through 2026 and beyond were taken here for close review.

Table 1.1: Projected population for India by various sources, 2026–2300 [In million]					
Authors/Institutions	Types of projections	2026	2051	2101	2300
1. Registrar General of India [2006]		1399	-	-	-
2. Registrar General of India [2019]		1423	-	-	-
3. Natarajan and Jayachandran [2001]		1414	1646	-	-
4. Srinivasan and Shastri [2001]	Alternative-1	1409	1628	-	-
	Alternative-2	1340	1295	-	-
	Alternative-3	1330	1416	-	-
5. Visaria and Visaria [2003]	Standard variant	-	1619	1812	-
6. Dyson [2004]	High-variant	1455	1730	-	-
	Standard variant	1419	1578	-	-
	Low-variant	1391	1458	-	-
7. Bhat [2004]	Optimistic scenario	1380	-	-	-
	Realistic scenario	1403	-	-	-
8. PFI and PRB [2007]	Scenario A	1464	1823	2181	-
	Scenario B	1449	1751	1853	-
9. United Nations [2004]	Medium-variant	-	1531	1458	1372
10. United Nations [2005]	Low-variant	1314	1332	-	-
	Medium-variant	1395	1592	-	-
	High-variant	1476	1889	-	-
11. United Nations [2024]	Standard projection	1470	1681	1509	-
12. United Nations [2024a]	Probabilistic method [median]	1476	1683	1505	-
13. Kulkarni [2021]	Scenario-C [TFR=1.74]	-	1640	1492	-
14. Rajan and Retnakumar [2025]		1431	1605		

Note: The projection horizon of the probabilistic method extends only until the year 2100. The IIMAD and PFI [2025] projections differ from those reported by the same authors [14].

Sources: 1 and 2 Technical Group 2006; 2019, 3. Natarajan and Jayachandran 2001, 4. Srinivasan and Shastri 2001, 5. Visaria and Visaria 2003, 6. Dyson 2004, 7. Bhat 2004, 8. PFI and PRB 2007; 9,10, 11 and 12 United Nations, 2004; 2005; 2024; 2024a 13. Kulkarni 2021, 14. Rajan and Retnakumar 2025.

Some of these population projections are exclusive to the national level, while others include estimates of the population at the national [All India] and state level. In this report, national refers to India as an aggregate unit. Table 1.1 exhibits a comprehensive overview of the main population projections and their outcomes. These projections, considering the various scenarios [alternatives/variants], indicate that the population of India will be between 1314 and 1476 million in 2026. In 2051, India is predicted to have a population of 1295–1889 million.

1.3 Rationale for a fresh population projection for India

The rationale for a fresh population projection for India is driven by several critical factors. The entire world has been closely following India's demographic trajectory, as the country has become the most populous nation, surpassing China. India's population was expected to touch 1425.8 million in April 2023, thereby matching and subsequently surpassing the population of mainland China [15]. As per the United Nations [UN] estimate India's population in 2025 is projected at 1457 million under the medium-variant, representing 17.7 percent of the global total of 8231 million [16]. The working-age population [15–59] constitutes 947.4 million—close to 65 percent of the total population. India is witnessing a progressive shift towards old-age structures, indicative of a rapidly ageing society. In 2022, the country had an estimated 149 million persons in the 60 and above category—roughly one in ten persons. By 2050, the proportion of older persons is expected to double to more than two in ten or 20.8 percentage of the population, with their absolute number soaring to 347 million [17]. Thus, India is positioned to assume a central role in shaping global demographic trends, underpinned by its youth-dominant age structure and the potential to effectively leverage demographic, gender and silver dividends for sustained economic development. This accounts for an essential demographic milestone, wherein India's population growth is sustained by population momentum arising from its underlying base population. Therefore, a nuanced understanding of the likely structure, composition, and growth trajectories of national- and state-level demographics is becoming increasingly vital. Given their ability to anticipate future demographic changes, population projections offer valuable insights for shaping medium-term planning and policy-making strategies—a fact well documented in the scientific literature.

India is positioned to assume a central role in shaping global demographic trends, underpinned by its youth-dominant age structure and the potential to effectively leverage demographic, gender and silver dividends for sustained economic development.

Most importantly, many population projections currently in use are based primarily on data from old censuses. Thus, it fails to reflect recent demographic changes, including shifts in fertility, mortality,

and migration patterns. Although projections such as those by Kulkarni [13] utilise data from the 2011 Census, their scope is limited to only 21 states with populations exceeding five million. Thus, the exclusion of several states diminishes the relevance of these projections for formulating region-specific policies.

Migration is likely to play a pivotal role in structuring demographic patterns at both ends of the migration corridor, yet its significance has remained underexplored for close to one and half decade, notably in the context of missing census data. As per the Periodic Labour Force Survey [PLFS] [2020-21], the overall migration rate in India was 28.9 percent, with the rural population reporting a migration rate of 26.5 percent. Among all the migrants, 10.8 percent account for employment driven motivations as the reason for their migration [18]. Extensive evidences illustrate that significant migration flows have persisted from the labour surplus northern states to the southern states in the country [19, 20, 21]. There are demographic impacts of large-scale migration on both sending and receiving states, yet they are often inadequately addressed in population projections. With the exception of the projections prepared by the Technical Group [2], PFI [8] and Rajan and Retnakumar [14], all other population projections have disregarded migration, treating it as an insignificant component of demographic change. Most of them argue that in all the censuses, data on duration of residence 0–9 years and the place of last residence indicate that state-wise net-migration rates are insignificant. In the backdrop of ongoing demographic transition, migration appears to have become a key driver of population change, as reflected in the substantial movement of in-migrants to the southern states and to states such as Punjab, Maharashtra, and Gujarat from labour surplus states across the country.

In several existing population projections extending to 2051, the anticipated pace of fertility decline at both national and state level has not materialised as expected. For example, Natarajan and Jayachandran [3] projected that the national TFR would reach 1.7 by 2021, alongside a TFR of 3.7 for Uttar Pradesh in the same year. Contrary to the projections, the national TFR in 2021, as reported by SRS, stood at 2, considerably higher than the estimated TFR. Likewise, projections estimated a TFR of 3.7 in Uttar Pradesh for 2021; however, actual fertility levels fell to 2.7 children per woman, exactly one child less than the estimated figure. Misapprehending fertility levels—whether through overestimation or underestimation—can significantly twist the projected population figures, especially in the heavily populated states, often leading to substantial irregularities

Migration is likely to play a pivotal role in structuring demographic patterns at both ends of the migration corridor, yet its significance has remained underexplored for close to one and half decade, notably in the context of missing census data.

A fresh population projection has been undertaken, incorporating the revised demographic assumptions and improved methodologies to facilitate evidence-based decision-making and forward-looking strategic planning.

from the actual demographic outcomes. Similarly, the assumptions underlying the PFI and PRB projections [8] are increasingly at odds with empirical evidence. Scenario-A posited that fertility levels in India and most of its states would remain marginally below replacement for an extended period, while Scenario-B set 1.85 as the lower limit over a prolonged duration. Recent SRS data indicate that fertility rates have already declined to an average of around 1.5 in nearly half a dozen Indian states. Evidence from global studies highlights that India's TFR has declined to 1.9, with more developed regions recording an average of approximately 1.5, while less developed regions report a higher average of 2.4 children per woman [22]. This largely calls for an updated population projection for India and states for better planning and policy implementation.

Many nations, including India, postponed their census operations due to the pandemic, leaving huge gaps in accurate population estimates at the national and state level. This may have introduced significant uncertainty into the demographic trends, especially in longevity and age structure of the population. These projections are essential to inform tailored policy interventions across sectors such as healthcare, education, infrastructure development, sustainable development, skills, migration, and governance, among others. The current population projection is anticipated to deliver the most robust assessment of India's demographic dynamics over the next three decades. For the most accurate and current population estimates, the latest available death rates from the SRS were taken into account, to reflect their influence on life expectancy at birth. In light of these developments, a fresh population projection has been undertaken, incorporating the revised demographic assumptions and improved methodologies to facilitate evidence-based decision-making and forward-looking strategic planning.

1.4 Organisation of the report

The report comprises ten broad thematic sections, each addressing a key aspect of the population projection. The first two sections present the report's main theme, and the remaining sections are Appendix Tables. More specifically, the first section exhibits the context, rationale, data sources, a brief overview of the methodologies, and key findings. In addition, this section also addresses the broader policy implications arising from the population projections. The second section outlines a comprehensive overview of the methodology and its application within the context of this exercise. Sections three through ten consist of Appendix Tables detailing the inputs used and outputs generated from the projections.

1.5 Methodological approaches to population projections

To project the population of 22 states, each with a population exceeding six million as per the 2011 Census, the cohort-component method was employed. This approach enables systematic modelling of future population change by incorporating fertility, mortality, and migration components to the mid-21st century, specifically up to the year 2051. The basic requirement for population projection is the availability of a reliable base-year population. In the absence of a more recent census, the smoothed age sex structure of 2011 Census provided by the Technical Group [2], were carried forward to 2021 and used as the starting point in the projections. Subsequently, the procedure entails the application of robust methodologies for the formulation of future assumptions on each of the key demographic inputs—fertility, mortality, migration, and SRB.

Mostly these assumptions were grounded in the principles of historical trends, recent empirical evidences, and the judgement based on the experience from the rest of the world. By adopting these procedures, it is expected that population projections become methodologically sound and provide estimates closely aligned with future demographic realities. Fertility was projected using the SRS data in conjunction with the Gompertz Curve—a parametric function widely employed in modern demographic research. Most state-level population projections, which account for varying levels of fertility, typically assume zero net migration. However, when it comes to mortality, most projections adopt only a single set of assumptions regarding life expectancy. Most models continue to apply a uniform convergence trajectory for fertility, despite marked regional disparities in both current fertility levels and the pace of their decline. For instance, in 2021, India has displayed stark regional disparities in fertility levels, with rates ranging from 1.4 children per woman in West Bengal and NCT of Delhi to 3.0 in Bihar. Such wide variations in demographic inputs, especially fertility, introduce an added layer of uncertainty to population projections.

Therefore, depending on uniform assumptions in population projections can be problematic, as it overlooks regional heterogeneity and may result in inaccurate estimates. To overcome this limitation, the model employed in the present population projection uses differentiated fertility assumptions that reflect the observed variation in fertility transitions across states. To project the future pattern of age-specific fertility rates, the percentage distribution of age-specific fertility observed in the 2021 SRS data was applied to the projected

The model employed in the present population projection uses differentiated fertility assumptions that reflect the observed variation in fertility transitions across states.

Migration patterns were projected using multiple datasets and a variety of methodologies, including convergence models that capture the dynamics of internal migration in the country.

TFR for 2051. This method largely ensures that the estimated age-specific fertility rates align with the overall fertility decline expected over the projection period.

Life expectancies were projected using both the existing and newly generated abridged life tables derived from the SRS data, complemented by the application of the Lee-Carter mortality forecasting model. Model life tables were selected based on a careful assessment of the prevailing demographic scenario in the states under study, following a systematic evaluation of its suitability. Migration patterns were projected using multiple datasets and a variety of methodologies, including convergence models that capture the dynamics of internal migration in the country. The SRB was projected using convergence models, employing a methodology similar to that applied for projecting the migration trends.

At both national and state level, population projections are presented in three variants—low, medium, and high—to capture the range of demographic scenarios to acknowledge the inherent uncertainties in population projections. The low- and high-variants delineate the lower and upper limits of the projected population, thereby offering a range of the possible projected population. In contrast, the medium-variant is expected to provide the realistic estimate of the future population, reflecting demographic trends that are most consistent with current trends. The distinction among the low, medium, and high-variants is determined solely by the application of three different sets of fertility assumptions, while assumptions pertaining to mortality and migration remain constant across all three scenarios. This is because fertility levels tend to be more volatile and are shaped by policy interventions and shifts in societal behaviour. Conversely, improvements in life expectancies occur slowly and typically follow the predictable trajectories. One of the primary challenges in formulating alternative population projection scenarios is the lack of reliable migration data.

Projections of the rural and urban populations were conducted using the census data from 2001 to 2011 and UN revised URGD method [2018] to capture the distinct dynamics of spatial demographic change. In contrast to the three variant national and state-level population projections, the urban-rural projections use only a single set of scenarios to illustrate the potential changes in the urban-rural mix. A summary of each component in table below will enable the readers to quickly identify the methodology and locate the corresponding outputs generated from the population projections [Table 1.2].

Table 1.2: Detailed description of inputs and outputs related to population projections

Sl. No.	Concepts/inputs used in the projections	Detailed description [Section]	Output tables
1.	Approach to population projection for major states	Section [2.1]	National projections [low variant and high variant] [Appendix Tables 3.7 and 3.8]
2.	Establishing base year population	Section [2.2]	State-level projection tables [medium-variant] [Appendix Tables 4.1 to 4.70]
3.	Assumptions on fertility	Section [2.3]	Appendix Table 3.1
4.	Assumptions on mortality	Section [2.4]	Appendix Table 3.3
5.	Assumptions on migration	Section [2.5]	Appendix Tables 3.4 and 3.5
6.	Assumptions on SRB	Section [2.6]	Appendix Table 3.6
7.	URGD projection	Section [2.8]	Appendix Table 5.1
8.	Approach to population projection for smaller states	Section [2.9]	Appendix Table 8.1

1.6 Sources of data

The main demographic data inputs used for population projections are drawn from the Census, SRS, NFHS, National Sample Survey Organisation [NSSO] or National Statistical Office [NSO], Multiple Indicator Survey [MIS], CRS and various other secondary sources such as state-level migration surveys conducted in 2023 in Kerala, Odisha and Jharkhand. SRS provides time series data on the two main demographic measures, such as fertility and mortality, at the national and state levels. Data from the census and the PLFS serve as the primary sources for assessing future migration trends. NFHS data has been used in this study to understand the fertility preferences of the women of reproductive age to assess how these preferences may evolve in the future. It is also used to examine prospective trends in the SRB in selected states. Data from these sources have been used at various time points, depending on their availability and accessibility.

1.7 Methodological tribulations

In actual practice, population projections are carried out independently at the national and state level, using distinct demographic assumptions. This parallel approach, while necessary to apprehend the local heterogeneity and national trends respectively, often results in incongruity between the aggregated state-level projections and the independently derived national population totals. However, although state-level population estimates should

The accuracy of population projections is contingent upon the availability of reliable demographic inputs, which are equally indispensable for tracking progress in health outcomes and the broader human development indices.

theoretically sum to the national total, this alignment rarely occurs in practice—a common issue encountered and seldom addressed in population projections. Consequently, the wide variation in state-level differences in demographic indicators may be obscured when viewed through national-level aggregates, especially given the implications of divergent future trends in demographic inputs. Such conflicting results arise from multiple factors, notably variations in assumptions about the demographic components. The national-level population projections often neglect internal or international migration, whereas state-level projections tend to incorporate inter-state migration, contributing to the mismatch between the two estimates of the population. Consequently, we hypothesise that the national population figures diverge significantly from the totals derived by summing the projected populations of all the states and the UTs, and we evaluate the magnitude of such deviation. In order to mitigate this inconsistency, the national-level population estimates are computed by aggregating the projected population figures of all the states and UTs and compared with the national-level projections to measure the magnitude of deviation.

1.8 Data quality considerations

Prior to developing the population projections, it is crucial to evaluate the quality, reliability, and robustness of the underlying data and the assumptions underpinning them. The accuracy of population projections is contingent upon the availability of reliable demographic inputs, which are equally indispensable for tracking progress in health outcomes and the broader human development indices. The SRS system has lacked a systematic mechanism to evaluate the quality of key demographic inputs—such as fertility and mortality—since the beginning of this century. For instance, between 2001 and 2010, the SRS is estimated to have missed reporting around three percent of births—accounting for nearly 0.8 million cases—an omission with serious implications for demographic estimates. Over this period, the SRS is estimated to have omitted approximately four percent of male deaths and 11 percent of the female deaths among those aged five and above, underscoring the magnitude of under-reporting and the considerable variation across states in the completeness of the very important vital rates [23]. The margin of error in data inputs holds significant implications for policy and planning decisions, as well as for the reliability of projected outcomes—a major limitation often driven by factors beyond our control. Due to the unavailability of consistent and reliable time-series data on demographic indicators from alternative sources, SRS data remains the primary basis for population projections. In certain contexts, within the study, data from other reliable sources have also been utilised.

1.9 A word of caution

It is essential to frame realistic assumptions about demographic trends that will influence future population size. Although we are unable to foresee the magnitude of each variable's influence on future population size, we may be able to develop reasonably well and good approximations of demographic inputs of historical data to arrive at future trends. Fertility would be the most critical variable influencing future population growth. It is important to keep in mind that the population for the projected period, especially in a medium-term projection, may differ from the actual population, given how rapidly the socio-economic landscape is changing globally, including in India. The assumptions could undergo dramatic changes due to unforeseen events such as economic crises, migration, or political unrest. As noted in the preceding section, data quality—such as the timeliness and accuracy of the information—fundamentally shapes the veracity of the projected outcomes.

Projecting demographic trajectories presents considerable challenges, given that they are guided by a complex web of socio-economic and cultural factors, whose cumulative and often nonlinear interactions render such projections highly uncertain. Unforeseen events—such as pandemics, conflict-induced displacement, and climate change—can also profoundly shape future population and introduce considerable uncertainties into population projections. Hence, caution must be exercised when interpreting projected demographic outcomes, as they are contingent upon various underlying assumptions made during the projection process. In sum, this population projection involves a degree of uncertainty in the formulation of assumptions.

1.10 The dynamics of demographic variations

Assessing the future demographic trends across India's regions is critically significant, given our vast geographical scale and pronounced demographic diversity. Characterised by these heterogeneous traits—embracing densely populated million+ cities to the thinly inhabited remote rural villages and tribal inhabitants—our country presents a highly complex web of geographic and demographic dynamics. A layered understanding of regional dynamics of population growth, demographic composition, age structures, and migration patterns are pivotal for informed policy-making and for the pursuit of sustainable development goals. In addition, it accentuates multiple transformative constraints—such as the devolution of central government funds, political representation, and balanced infrastructure development—all of which increasingly hinge on demographic weight as a critical variable in decision making.

It is important to keep in mind that the population for the projected period, especially in a medium-term projection, may differ from the actual population, given how rapidly the socio-economic landscape is changing globally, including in India.

Region-wise demographic assessments are necessary for advancing equitable and efficient management within India's diverse context, especially as demographic factors become increasingly important in policy decisions.

In short, region-wise demographic assessments are necessary for advancing equitable and efficient management within India's diverse context, especially as demographic factors become increasingly important in policy decisions. For instance, as we have seen earlier, states—particularly those in the southern region—which invested in early family planning initiatives, girls' education and women's empowerment were able to reduce population growth rates. Subsequently, these states witnessed a gradual decline in their relative share of the national population. Consequently, a pronounced demographic divergence has emerged across various regions in the country, driven by different trajectories of fertility and mortality decline, and the population momentum. Demographic disparities have continued to widen and are expected to persist, especially between these regions, which are at different stages of the demographic transition. It is widely acknowledged that the full implications of demographic variations for socio-economic and demographic frontiers are yet to be realised, as their long-term effects on development, labour markets, and population dynamics continue to unfold.

Variations in the trajectory of demographic transition across the country have resulted in pronounced disparities between states, situating them within markedly different demographic brackets. Such a regional assessment is important since the regions are at different stages of demographic transition. As an initial step, the states were grouped into regions on the basis of their geographical location to facilitate a regional assessment. A large number of studies have classified India into regions comprising different states, and there exists a great extent of unanimity in categorising states. For categorising regions, India has been divided into six regions, such as north, central, east, west, south, and north east. The classification of states into regions follows the delineation provided in footnote 1 of the executive summary.

1.11 Key insights from the national population projections [2021–2051]

This section examines the projected population results of medium-variant projections for the period 2026–2051. India's demographic transition over the next three decades will be characterised by a steady decline in fertility and constant improvements in life expectancy. The TFR is projected to decline from the current level of two children per woman in 2021 to 1.67 by 2051 under medium-variant assumptions [Table 1.3]. A summary of the state-wise projected population by gender under the low, medium, and high variants are presented in Appendix Tables 3.9, 3.10, and 3.11. These

results corroborate the broader fertility trajectories foreseen for the majority of developing countries on the planet. Fertility is projected to decline in all parts of the country, though at a varying pace. In contrast to historical trends, northern states are expected to drive the next phase of fertility decline in the country, given that most of the southern states have already entered advanced stages of fertility transition.

Table 1.3: Projected summary of demographic indicators for India, [medium-variant] 2026–2051

Indicators	2026	2031	2036	2041	2046	2051
Fertility indicators						
Total Fertility Rate	1.85	1.75	1.70	1.68	1.67	1.67
Gross Reproduction Rate	0.88	0.83	0.81	0.80	0.80	0.80
Net Reproduction Rate	0.85	0.81	0.79	0.79	0.79	0.79
Mean Age of Childbearing	26.70	26.80	26.90	26.90	27.00	27.10
Child-Woman Ratio	0.29	0.26	0.24	0.23	0.23	0.24
Mortality indicators						
Male Life Expectancy	68.1	69.7	71.2	72.7	74.1	75.4
Female Life Expectancy	72.9	74.9	76.6	78.3	79.8	81.4
Total Life Expectancy	70.5	72.2	73.8	75.4	76.9	78.4
Infant Mortality Rate	27.4	21.4	16.6	12.7	9.2	6.0
Under 5 Mortality Rate	33.1	25.1	19.1	14.5	10.3	6.4
Vital rates						
Crude Birth Rate per 1000	15.5	13.8	12.6	11.9	11.3	10.8
Crude Death Rate per 1000	7.5	7.5	7.5	7.7	8.1	8.6
Natural Increase [percent]	0.79	0.63	0.51	0.42	0.32	0.22
Annual births and deaths [in million]						
Births	21.90	20.18	18.96	18.35	17.79	17.11
Deaths	10.68	10.96	11.30	11.91	12.76	13.64
Population [in million]						
Total	1415.1	1465.3	1506.7	1541.6	1569.6	1590.1
Male	726.2	750.6	770.1	786.0	798.3	806.8
Female	688.9	714.7	736.6	755.6	771.3	783.3
Percent 0–4	7.67	6.96	6.33	5.94	5.68	5.43
Percent 5–14	16.1	15.0	13.9	12.7	11.9	11.4
Percent 15–24	16.8	15.5	15.1	14.3	13.3	12.3
Percent 15–49	55.1	54.9	54.1	52.7	50.7	47.9
Percent 15–59	65.4	65.8	65.7	65.5	65.4	62.7
Percent 60 and above	10.8	12.9	14.0	15.8	18.0	20.4
Percent Females 15–49	54.7	54.2	53.1	51.6	49.7	46.8
Sex Ratio	105.4	105.0	104.5	104.0	103.5	103.0
Overall Dependency Ratio	52.8	52.0	52.2	52.8	55.3	59.3
Median Age	30.0	32.0	34.0	37.0	38.0	40.0

Source: Projected results

By 2051, six in ten individuals will remain in the working-age group, providing considerable scope for harnessing human capital for national development.

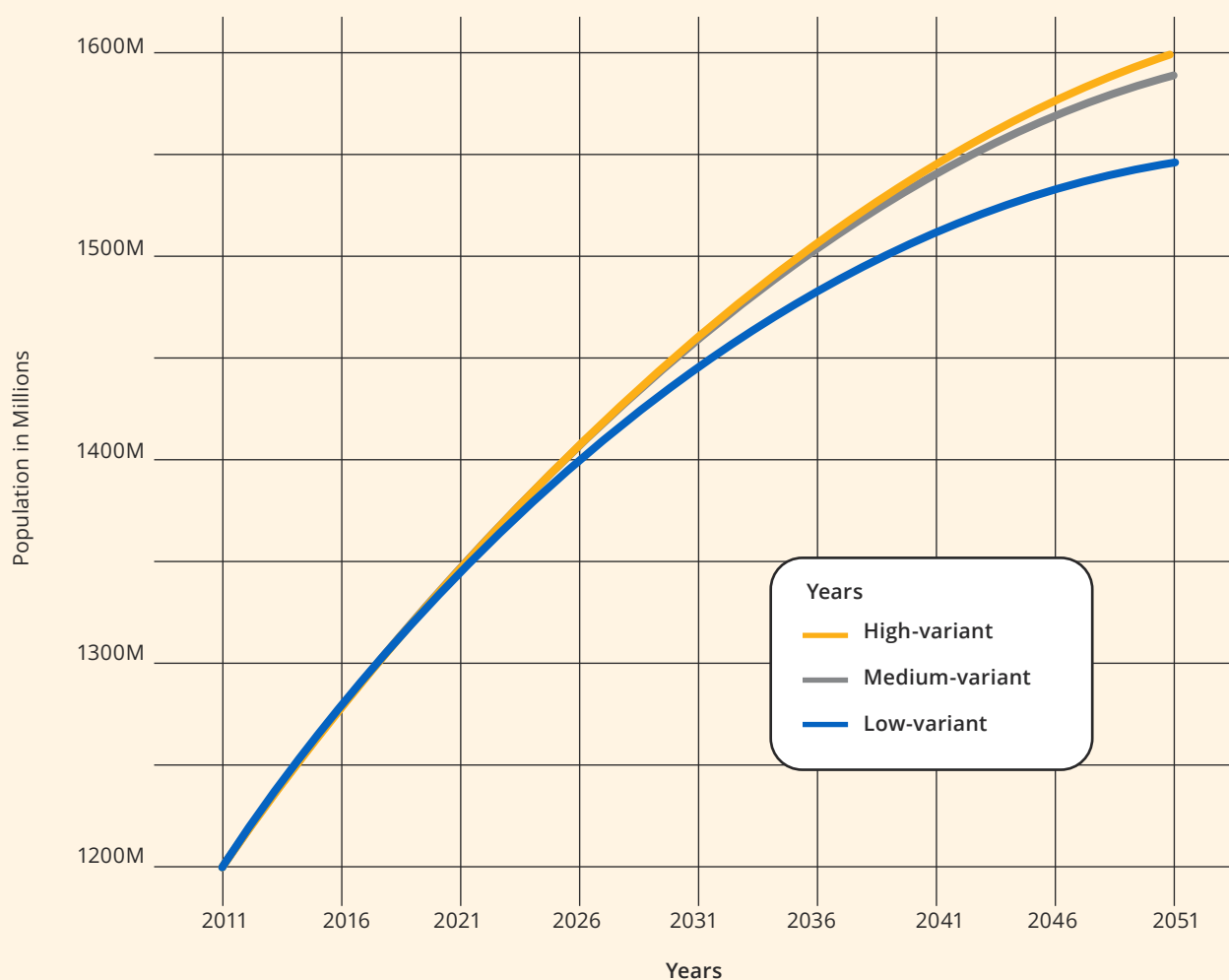
The average number of daughters born per woman, technically termed as the NRR, is expected to shrink from 0.85 in 2026 to 0.79 in 2036, stabilising at that level thereafter. The CBR, another key indicator of population growth, is projected to decline appreciably from 15.5 per 1000 population in 2026 to 10.8 by 2051. Consequently, the annual number of births will fall from the current level of 21.9 million to 17.1 million during the same period. The primary driver behind such demographic changes is the expected reduction in fertility rates likely to happen over the next three decades. CDR, on the other hand, will show a modest increase from 7.5 to 8.6 over the same period, reflecting an increase in the ageing population and its consequences. As a result, life expectancy is projected to record a modest increase, with male life expectancy rising from 68.1 years in 2021 to 75.4 years in 2051, and female life expectancy from 72.9 to 81.4 years. As a result, the rate of natural increase in the population would fall from the current level of 0.79 percent to 0.22 percent [Table 1.3].

The share of children in ages 0–4 in the total population is projected to decline from 9.3 percent in 2011 to 8.4 percent in 2021, and further to 5.4 percent by 2051. Over the next three decades, the population in the youngest age group will shrink more than 50 percent, reflecting a sharp contraction at the base of the population pyramid. There will also be a sharp decline in the proportion of children in the school-age [5–14 years] from 21.4 percent to 16.8 percent and 11.4 percent respectively. Beginning at 60.5 percent in 2011, the working population [15–59] is projected to increase to the peak level of 65.8 percent in 2031, then gradually declining to 62.7 percent by the close of the projection period. This will mark the beginning of decline of the demographic dividend ushering in a new phase of demographic transition with implications for the working-age population. Still, by 2051, six in ten individuals will remain in the working-age group, providing considerable scope for harnessing human capital for national development.

India's total population is expected to reach 1590.1 million [2051] from the current population [2021] of 1355.8 million, indicating an increase of 17.3 percent or a 0.5 percent annual growth rate. This would be more than three times lower than the 1.6 percent yearly population growth recorded in 2001–2011 Census period. As a result, the population projections we estimate for 2051 are considerably lower than the medium-variant assumptions adopted in several other projections, including those by Natarajan and Jayachandran [3], Visaria and Visaria [5], PFI and PRB [8], and the United Nations [11]. A key observation is that our current projected figures [IIMAD and PFI-2025] are even lower than those of the latest estimates of the

United Nations [12], which employed probabilistic methodology², and Kulkarni [13], who used the traditional deterministic approach³. Relative to our medium-variant projection of 1590.1 million for 2051, these projections are higher by 93 million and 50 million, respectively.

Figure 1.1: Projected population under different variants, 2021–2051



Source: Projected results

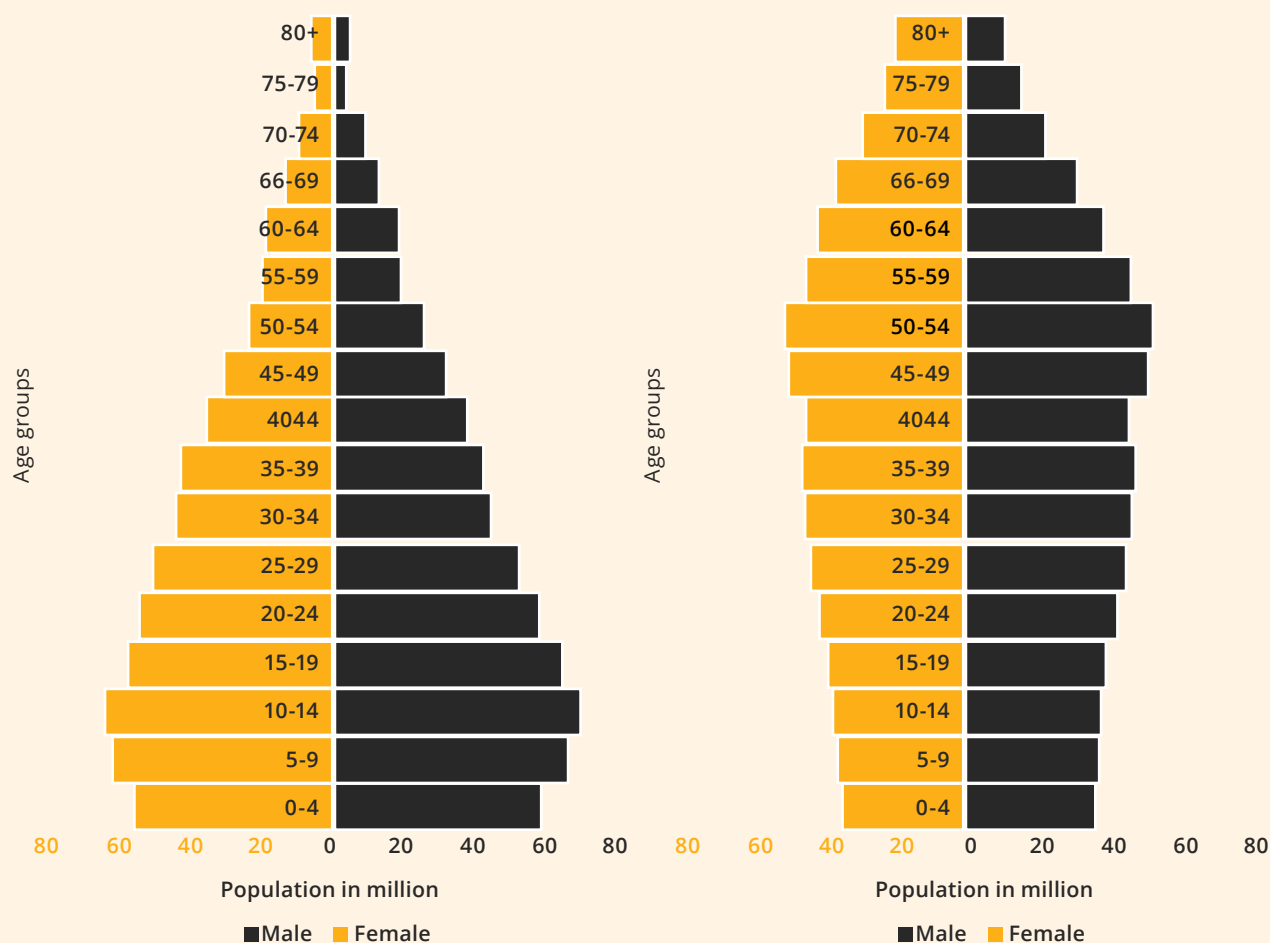
² Probabilistic population projections take a different approach from conventional deterministic approach by building uncertainty directly into the key demographic inputs used for population projections. Rather than offering a single set of estimates, they generate multiple possible outcomes, expressed through probability intervals that indicate the likelihood of different future scenarios. Applying Bayesian models or other stochastic techniques, this method blends country-specific trends with global patterns, giving a more nuanced and realistic view of demographic change.

³ The deterministic approach to population projection is the conventional cohort component method applied in this report using the fixed assumptions regarding demographic inputs, producing a single trajectory of population change without incorporating the element of uncertainty in the demographic behaviour. For further discussion see Section: II [2.1].

This can be largely attributed to the use of updated fertility assumptions. In contrast, our medium-variant projections are relatively higher than the corresponding estimates by Srinivasan and Shastri [4] and the United Nations [9]. A striking feature of our population projections is that our estimates are broadly consistent with those of Dyson [6], the United Nations [10], and Rajan and Retnakumar [14]. Despite a significant divergence between the low and high-variant population projections, the difference between medium- and high-variants appears to be very minimal [Figure 1.1]. Appendix Figure 2.1 exhibits India's projected total population by gender from 2011 to 2051, assessing scenarios with and without the impact of the pandemic.

Figure 1.2 presents the age structure of India's population in 2011 and the projected age distribution for 2051, highlighting significant demographic transitions over the four-decade period. In 2011, the population pyramid had a classic youthful shape—wide at the base and narrow at the top—reflecting high birth rates and a large number of children, with relatively few elderly citizens. This pyramid reflects the composition of a relatively young population—a hallmark of the most developing nations across the globe. In contrast, by 2051,

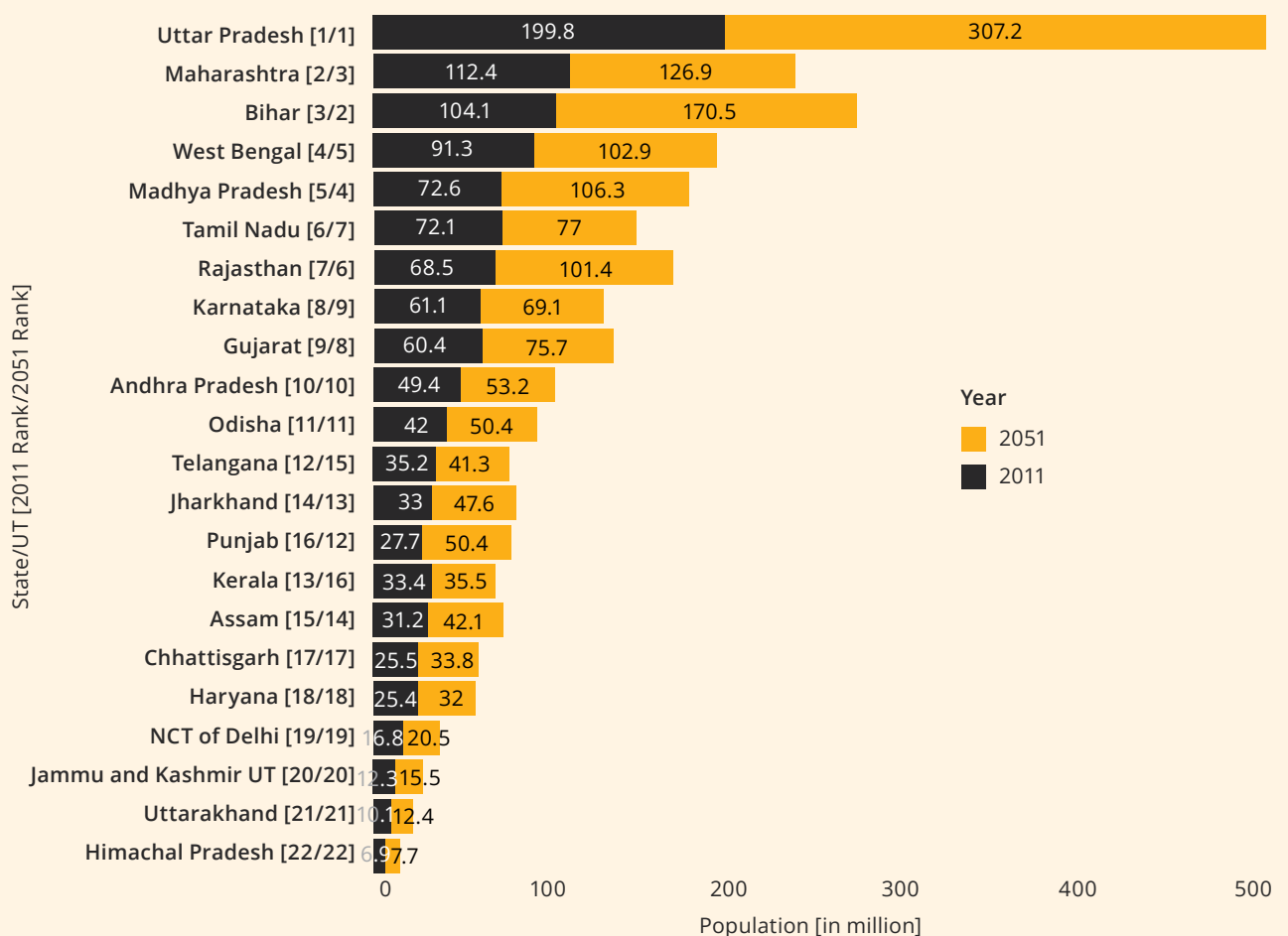
Figure 1.2: Population pyramid for India, 2011 and 2051



the population pyramid is expected to attain a more rectangular or columnar shape. This anticipated age structure is an indication of a fall in birth rate, resulting in a narrower base, while the middle segment—representing the working-age adult population—becomes more prominent. Additionally, the widening upper segment of the pyramid signals a substantial increase in the elderly population. Overall, the emerging demographic pattern exhibits a transformation from an overwhelmingly young population to one increasingly characterised by ageing, as a consequence of declining fertility rates and rising longevity contributing to a more balanced, yet progressively older, age distribution.

Based on the projected demographic trends, Uttar Pradesh is expected to remain the most populous state in the country, consistently maintaining this ranking from 2011 over the course of the subsequent four decades. With a population share of close to 17 percent in 2011, the state is projected to expand its demographic contribution to 19.3 percent over the next 40 years, corresponding to an estimated population size of more than 307 million. [Figure 1.3].

Figure 1.3: Ranking of states by population size [medium-variant], 2011 and 2051 [in million]



By 2051, the population rankings of the states are expected to change dramatically compared with their positions in 2011, primarily due to differences in population growth. With the exception of Uttar Pradesh, the remaining four states among the five most populous—Maharashtra, Bihar, West Bengal, and Madhya Pradesh—are expected to alter their positions in terms of population rankings. Maharashtra, which was the second most populous state in 2011, is projected to drop to third place by 2051. Conversely, Bihar, which was third in 2011, is expected to rise to the second position in terms of population size by the end of the projection period. West Bengal, ranked fourth in 2011, is expected to drop to fifth position, whereas Madhya Pradesh, which held the fifth spot, is projected to rise to fourth place in the years ahead. Appendix Table 4.71 presents the ranking of states based on their demographic weight in 2011 as well as on projected population figures up to 2051.

Appendix Tables 3.9 to 3.11 present the state-wise gender-specific population projections under the low, medium, and high-variants. Appendix IV presents detailed state and gender-wise population projections up to the mid of this century [2026–2051], based on the medium-variant approach, presented in 70 tables numbered Appendix Tables 4.1 to 4.70. Projections corresponding to the low-and high-variant scenarios are not presented in comparable detail, given their relatively limited use in policy and planning contexts.

Appendix Table 3.12 reviews the state-level population growth projections over the coming decades, revealing stark contrasts among them. All the southern states, along with Maharashtra and West Bengal, are projected to record the lowest population growth rates over the next three decades. As a result, they are nearing population stabilisation—largely driven by the historically low and the below-replacement fertility levels coupled with ageing population. Starting in 2036, all major southern states are expected to enter a phase of depopulation. In contrast, states such as Bihar, Uttar Pradesh, Rajasthan and Madhya Pradesh are projected to maintain average annual growth rates of 0.8 percent or higher. India's annual population growth is expected to plummet—dropping from 1.9 percent during 1981–2011 to just 0.5 percent over the projected period, falling to roughly a quarter of its previous value. However, population momentum will ensure a slow march toward population stabilisation, as the existing legacy of the age structure continues to drive the population growth for ages.

1.11.1 Projected trends in elderly population

The proportion of the elderly population [aged 60 and above] rises substantially from 9.6 percent in 2021 to 20.4 percent in 2051, almost double the proportion of elderly within the next 30 years. Additionally, another indicator of ageing, the median age [divides the population

equally in terms of age] will increase from the 2021 level of 28 years to 40 years, reinforcing the ongoing advanced stages of demographic transition in the country [Table 1.3]

Three basic demographic indices are used to measure the ageing process in the country: i] Ageing Index [AI] ii] Young Dependency Ratio [YDR] and iii] Old Dependency Ratio [ODR]. AI measures the comparative size of the elderly population to the young population in a country. YDR measures the economic burden imposed by the young population depending on the working-age group, while the ODR assesses the magnitude to which the elderly population relies on working-age population for economic support. In 2021, India's AI score was less than 40, indicating that there were approximately 40 elderly persons [60+] for every 100 children [0–14]. This ratio is projected to increase to 55 in 2031 and touch 122 by the end of the projection period, indicating a transition from a skewed elderly-child population ratio to a more balanced demographic structure between the two age groups [Appendix Table 4.72]. In 2021, the YDR for India was 40, closely corresponding with AI, pointing out that there were nearly 40 children per every 100 persons in the working-age groups. This ratio is expected to decline to 33.5 in 2031, 28.6 in 2041 and 26.7 at the end of the projection period, implying a sustained reduction in the child dependency burden on the working segment. Conversely, the ODR in 2021 showed that approximately 15 elderly persons were supported by every 100 persons in the working ages. This figure is estimated to rise to 18.5 by 2031 and further increase to 33 by the end of the projection period, reflecting a growing burden of elderly dependents on the working-age population. Throughout the period under analysis, all dependency ratios remain more favourable in the northern region compared to the southern region, largely because the latter has progressed at a more advanced point of the demographic transition.

As an illustration, in 2021, Kerala—widely recognised as the most demographically advanced state in the country—recorded an AI of 82, YDR of 31, and ODR of 25. These figures are projected to change to 239, 23, and 54, respectively, by the end of the projection period. In comparison, Bihar, which is advancing to the evolving stages of demographic transition, reported significantly lower values in 2021, with an AI of 27, YDR of 49, and ODR of 13. By the end of the projection period, these figures are expected to change to 79, 30, and 24, respectively.

1.11.2 Major insights from the regional population projections

Region-specific population projections yield a granular view of demographic shifts, providing indispensable guidance for equitable growth, effective regional planning and resource sharing, among others. Such an assessment reveals that the demographic composition

Three basic demographic indices are used to measure the ageing process in the country: i] Ageing Index ii] Young Dependency Ratio and iii] Old Dependency Ratio.

of the regions has undergone notable transformations over the past four decades [1971–2011]. As the northern and central regions gained, the eastern and southern regions correspondingly exhibited a decline in their shares. Nevertheless, the western and north-eastern regions registered only a marginal increase in their proportions. The central region saw the largest demographic shift, with its share increasing from 30.6 percent in 1971 to 33.2 percent in 2011, in contrast to the southern region, whose share declined from 24.9 percent to 21 percent during the same period [Appendix Table 4.73]. By the end of the projection horizon, the eastern region is set to slip from 13.4 percent to 12.6 percent, the southern region from 20.1 percent to 17.7 percent, while the central region's share is poised to climb from 34.6 percent to 38.8 percent [Appendix Table 4.74].

Looking ahead, the gap is expected to widen considerably: the central region is expected to expand its share, while the share of the southern states is projected to shrink steadily. By the closure of the projection period, the northern and central regions together will account for more than half of India's population. Owing to its enduring demographic dynamics, these regions continue to serve as the principal centre of demographic gravity—a position it has historically held and is projected to maintain in the coming decades.

The future age composition of a population is largely shaped by its present position in the demographic transition as well as the pace at which it converges toward the more advanced phases of that transition.

Understanding the regional age structure of the future population is also important in many respects to governments, programme implementing agencies and business organisations in multiple ways. In addition to the overarching goals of regional assessment described earlier, a systematic assessment of the age-cohorts enables us to evaluate current needs and anticipate emerging challenges—particularly in the areas of education, labour market dynamics, economic stability, and the social well-being of the citizens. The future age composition of a population is largely shaped by its present position in the demographic transition as well as the pace at which it converges toward the more advanced phases of that transition. In practice, age-specific regional population tables yield marginally lower population totals compared to the aggregate regional figures, since age distributions are not estimated for the smaller states and the UTs.

Population projections for the next three decades [from 2021 to 2051] indicate a clear demographic transition unfolding across India's regions, as evidenced by evolving population structures across broad age cohorts [Table 1.4]. The proportion of children [0–14] falls significantly nationwide, most sharply in the central and northern regions, while the south—at a more pronounced demographic transition stage—sees only a relatively smaller decline. In all cases, however, the decline is expected to be more than 35 percent [Appendix Figure 2.2].

Table 1.4: Regional percentage share of population by broad age groups, 2021–2051

Region	Share of 0–14		Share of 15–59		Share of 60+	
	2021	2051	2021	2051	2021	2051
North	24.6	14.8	65.8	62.1	9.6	23.1
Central	28.9	18.6	62.9	65.0	8.2	16.4
East	22.5	13.9	66.9	61.1	10.6	25.0
West	22.2	13.4	66.7	59.9	11.1	26.6
South	20.4	13.0	67.0	58.2	12.6	28.8

Notes: No age-specific estimates have been computed for the north-eastern states.

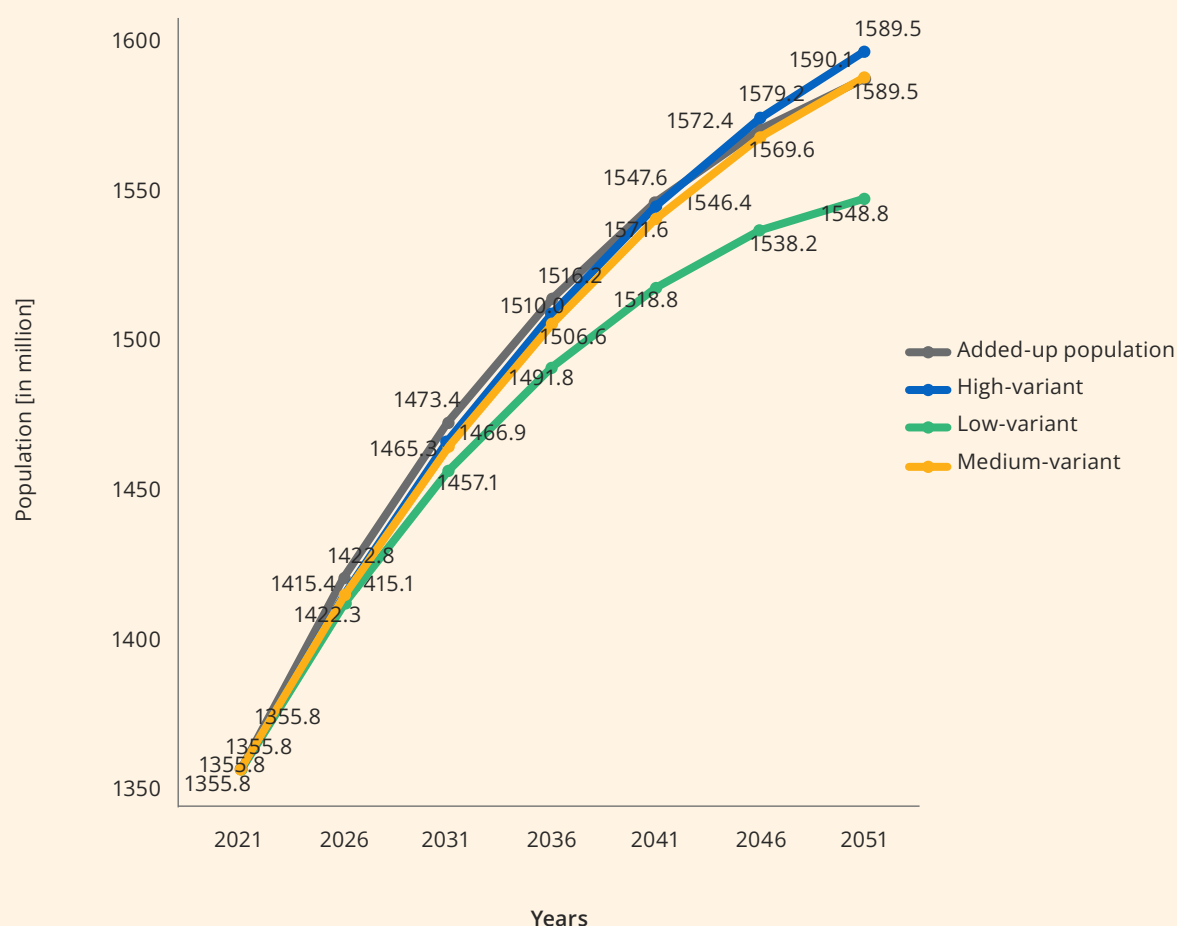
Appendix Table 4.75 exhibits the projected demographic dynamics, disaggregated by broad age groups, across major regions for the next three decades from 2021 to 2051. The working-age population [15–59] cohort will exhibit regional divergence: stability in the central region contrasts with notable declines elsewhere, especially in the south. The proportion of the working-age population in this region has followed a sustained upward trajectory, reaching 62.9 percent in 2021 and projected to rise further to 65 percent by the end of the projection period, thereby reflecting the persistence of a demographic dividend. In contrast, the southern region is experiencing a contraction in its workforce, with the proportion—having reached its peak—anticipated to decrease from 67 percent at present [2021] to 58.2 percent by the end of the projection horizon [Appendix Figure 2.3]. The decline in the working-age population is projected to unfold in a staggered sequence across regions, beginning in the eastern region after 2026, and subsequently in the northern and western regions after 2031. The excess labour force in the northern region may trigger further labour migration to the southern region in the years to come, where labour shortages tend to keep wages high.

The proportion of the population of the elderly [60+] is projected to increase across all regions, with the magnitude of growth ranging from approximately 100 percent in the central region to nearly 140 percent in the northern region [Appendix Figure 2.4]. In short, the central and northern regions are projected to maintain comparatively youthful demographic structures, whereas the southern and western regions will likely undergo relatively higher rate of population ageing by 2050. However, the oldest-old population [80+] is projected to grow at a considerably higher pace than the elderly population as a whole, with a regional hike estimated to range from 171 percent in the central region to nearly 300 percent in the eastern region over the next three decades [Appendix Figure 2.5]. This trend highlights the intensification of advanced population ageing and the corresponding rise in the dependency burden of the working population. The projected population by region, age and gender is provided in Appendix Tables 4.76, 4.77 and 4.78, respectively.

1.11.3 When parts don't equal the whole: Comparative assessment of the projected populations

In the first section [1.7], we hypothesised that the medium-variant population projection at the national level would be significantly different from the added-up population estimates of the states and the UTs by the end of the projection period. However, the comparison of our population projections at the national level is estimated to be 1590.1 million, while the separately added-up total from the state accounts for 1589.5 million in 2051 [Figure 1.4]. This highlights that there is only a minimal difference of 0.6 million, equivalent to 0.03 percent of the population, suggesting an almost negligible quantum of discrepancy between the projected figures.

Figure 1.4: Projected population of India using four different projection methods, 2021–2051



Source: Projected figures

Notes: The term 'Added-up population' expresses the aggregated population obtained by summing the populations of all states and UTs in the country. The figures are in million.

Therefore, our hypothesis is rejected and we found that there is no significant difference between the medium-variant population projection at the national level and the added-up population estimates at the states level. As the subtitle highlights, there are possibilities of discrepancy between the aggregated populations of the states compared to the national population totals, which are always unlikely to align. However, contrary to the prevailing argument, our findings exhibit that the parts and the whole are in strong harmony, with the aggregated state populations being identical to the national population estimates.

1.11.4 Validation of the population projection

Validating our projections [comparing against other estimates for the same periods] is crucial, as it demonstrates the degree to which the estimates align with other well-established benchmarks. This section undertakes a validation of IIMAD and PFI [2025] projections at the national level by systematically comparing them with other major projections for the years 2026 and 2051 [Table 1.5]. Closeness is showed up in two manners—positive indicating the current projections are higher than earlier estimates or negative, meaning they are lower estimates. Dyson’s [6] projections are the closest to our 2026 estimates, yet still exceed our figures by more than four million. By contrast, the United Nations [12] projections present the greatest deviation from our estimates, with a margin of about 61 million above our figures.

Table 1.5: Population projections of IIMAD and PFI versus other selected sources, 2026–2051 [in million]

Authors/Institutions	Types of projections	2026	2051	Difference	
				2026	2051
Registrar General of India [2019][2]		1423	-	7.9	-
Dyson [2004][6]	Standard variant	1419	1578	3.9	-12.1
United Nations [2005][10]	Medium-variant	1395	1592	-20.1	1.9
United Nations [2024a][12]	Probabilistic method [median]	1476	1683	60.9	92.9
Kulkarni [2021][13]	Scenario-C [TFR=1.74]	-	1640	-	49.9

Notes: The projected population figures of IIMD and PFI [2025] are 1415.1 million for 2026 and 1590.1 million for 2051, respectively.

Source: Same as Table 1.1.

By 2051, the trend reverses, with only the United Nations [10] projection aligning closely with ours, being less than two million above our estimate. As the temporal horizon extends, the deviations between projections amplify substantially; notably, the divergence from the United Nations [12] projections increases to 93 million. Similar validation assessments at the state level and UTs were attempted, and the results are presented in Appendix Table 4.79. In a nutshell, most of the projections fail the test of time, showing inconsistent results across a period within 25 years.

1.12 Population projections for the smaller states and UTs

As per the 2011 Census figures, Tripura—among the smaller states considered here—had a population of 3.6 million, which is projected to rise to 4.3 million by 2051. Similarly, Sikkim, the least populous state in the smaller state category with 6.1 lakh people in 2011, is projected to grow to 7.9 lakh by 2051. Among the UTs discussed here, Puducherry with a population of 1.4 million in 2016 is projected to increase more than 1.5 times and reach 2.4 million by 2051 [Appendix Table 8.1]. Over the projection period, Meghalaya [924.9%] and Manipur [587.3%] are projected to have the steepest demographic shifts among the smaller states. Among the UTs, the most significant demographic changes are projected in Daman and Diu with Dadra and Nagar Haveli [302.6%] and in Puducherry [292.2%].

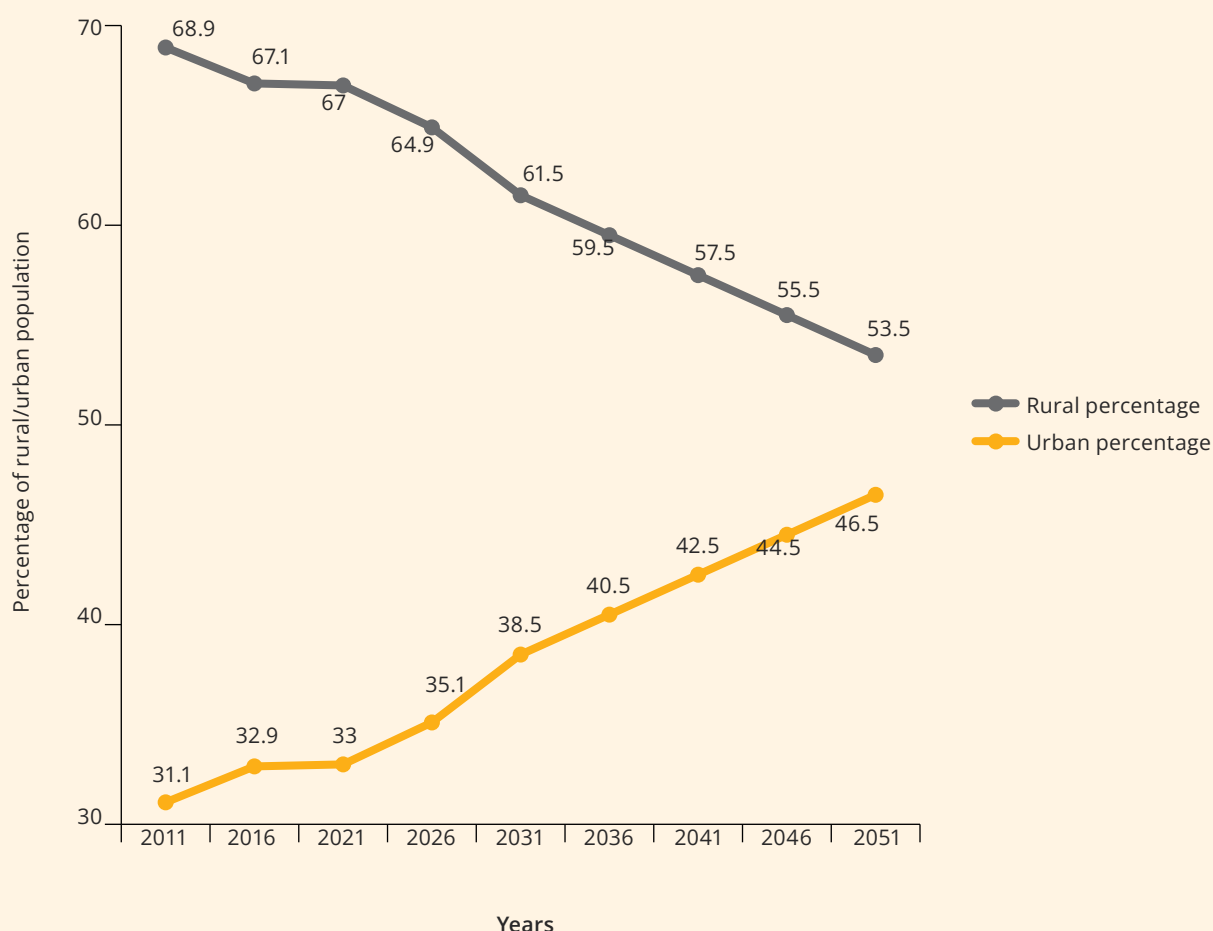
India's national demographic trajectories are predominantly shaped by its larger and most populous states in the country.

Meghalaya is projected to record the highest annual population growth rate among the smaller states at 2 percent, followed by Manipur and Arunachal Pradesh at 1.4 percent each. Dadra and Nagar Haveli and Daman and Diu are expected to record the steepest population growth among the UTs, at 2.7 percent per annum [Appendix Table 8.2]. Smaller states and UTs, owing to their limited population bases, contribute negligibly to India's overall population growth. Consequently, India's national demographic trajectories are predominantly shaped by its larger and most populous states in the country.

1.13 Summary results from urban-rural population projections

Urban-rural population projections are generated using the revised URGD method, developed by the United Nations [2018]. Results suggest that India's urban population will increase from 377.1 million in 2011 to 828.4 million by the end of the projection period [Appendix Table 5.1/Appendix Figure 6.1]. This represents more than a doubling of the urban population in the aforementioned period. As a consequence, for the first time in India's demographic history, slightly more than half of the population is projected to inhabit in the urban agglomerations. Conversely, the share of rural population declines to less than half, signifying a transformative milestone in the course of urbanisation [Figure 1.5].

Figure 1.5: Projected percentage of urban-rural population for India, 2011-2051



It was further noted that, by the end of the estimation period, more than half of the population in states including Andhra Pradesh, NCT of Delhi, Gujarat, Haryana, Karnataka, Kerala, Maharashtra, Punjab, Tamil Nadu, Telangana, Uttarakhand and West Bengal will be residing in urban areas. Similarly, NCT of Delhi, Kerala, Tamil Nadu, and Telangana are anticipated to rank among the most urbanised states, with more than two-thirds of their populations residing in urban settlements [Appendix Table 5.1].

This URGD method of projection is ideal for presenting a more balanced and realistic representation of how rural and urban populations might shift across the country in the coming decades. In addition, these results are closely aligning with the rural-urban estimates offered by the Technical Committee [2]. These findings corroborate the UN's World Urbanisation Prospects estimate, which anticipates that India's urbanisation component would be close to 53 percent by 2050 [24]. Therefore, the revised UN method [2018] of

projecting the urban–rural population is considered to provide the most likely indication of national- and state-level urbanisation trends in India. Appendix Maps 7.1 and 7.3 present a compelling visual account of progressive spatial expansion of urban areas across states over the four-decade span from 2011 to 2051. When comparing Appendix Maps 7.2 and 7.4, the declining share of rural areas becomes clearly visible, underscoring the growing footprint of urban development. Flipping through all the maps [Appendix Maps 7.1 to 7.4], reveal a single, striking trend: once-rural territories across states are steadily transforming into thriving urban agglomerations—engulfing former countryside hubs in their expansion.

1.14 Policy implications

The projected population figures demonstrate that the probability of population size attaining the so-called ‘population explosion’ levels envisioned in popular discourse is virtually negligible, on account of both sustained fertility decline and the ongoing progression towards a more advanced stage of demographic transition. Fertility decline is being witnessed across all parts of India, with further reductions anticipated in those parts that currently exhibit relatively higher fertility levels. Furthermore, our projections yield comparatively lower projected population estimates than many existing population projections, largely attributable to the expected higher pace of fertility decline.

Fertility decline is being witnessed across all parts of India, with further reductions anticipated in those parts that currently exhibit relatively higher fertility levels.

The projected results validate that there will be a substantial decline in the proportion of children within the broader school going age group [0–14 years]. In absolute terms, the children in school going ages are expected to decline from 165.3 million in 2021 to 127.7 million by 2051, a reduction of 36 million over the next three decades. Findings from the Annual Status of Education Report [ASER] 2024 indicate that enrolment levels among rural children aged 6–14 have consistently been exceeding 95 percentage for more than two decades [25].

Despite near-universal coverage of primary education, the dropout rate at the primary and upper-primary levels remains around 7.1 percent. This may be addressed by improving the quality of education, such as through better teaching methods, infrastructure, and student support. The decline in the number of school going children is expected to offer a better teacher–pupil ratio and expanded infrastructural facilities in the schools. The structural transformation in this age group may contribute to improved educational quality, better student support and well-being, and ultimately should result in enhanced learning outcomes among children and adolescents.

As states undergo demographic transition—with falling fertility rates and rising household incomes—demand for publicly funded schools is waning. Smaller families and greater financial flexibility are prompting parents to prioritise educational quality, driving a shift towards fee-charging private unaided schools, which are widely perceived to deliver superior quality education [26].

The trends observed in India are part of a wider global demographic transformation. Across much of the Global South, fertility rates are falling faster than anticipated, even in countries that historically had high population growth. Nations such as Bangladesh, Indonesia, and Brazil have seen significant declines in fertility due to rising education levels, urbanisation, and access to contraception. Yet, they already face challenges of ageing populations and shrinking youth cohorts earlier than expected. In contrast, sub-Saharan Africa continues to experience relatively high fertility, reflecting gaps in access to health services, education, and gender equality. Aligning India's population policy with this global context will ensure that demographic management remains rooted in equity, preparedness, and long-term sustainability.

The population in ages 15–59 years, comprising population as part of labour force, peaks at 65.8 percent in 2031 before declining to 62.7 percent by 2051. This indicates an impending concern that our demographic dividend may begin declining after 2031. The education and skill development system should be revamped to ensure that it can effectively respond to and absorb available opportunities before they disappear. To tap the full potential of the demographic dividend, much needs to be done to improve the skill of the labour force and raise the level of employability and productivity of our labourers. For India to leverage the demographic dividend, investing in skill development should be accorded primacy—for fuelling stronger economic growth and opening up brighter prospects for the nation. In addition, India has the potential to supply skilled labour force to countries facing acute shortage of workforces and ageing populations.

Even a skilled and educated population cannot possibly realise its potential unless it is healthy. With fertility levels stabilising, continued investment is essential to meet unmet needs, prevent

To tap the full potential of the demographic dividend, much needs to be done to improve the skill of the labour force and raise the level of employability and productivity of our labourers.

The proportion of elderly population, particularly the oldest-old [80+], is rising steadily across states—the pattern being more pronounced in the southern region compared to the northern region.

early and unintended pregnancies, and ensure that the reproductive health needs of the population are met. To tap the full potential of the demographic dividend, much needs to be done to improve the skill of the labour force that enhances their level of employability and productivity. For instance, empirical evidence suggests that every dollar allocated for family planning generates a minimum sixfold saving in expenditures on programmes targeting development outcomes such as poverty alleviation, educational attainment, and child survival [27].

To sustain progress, governments must protect and expand funding for family planning and adolescent health under the National Health Mission [NHM], ensuring diverse contraceptive choices, privacy, and quality counselling. Integrating family planning with primary healthcare and social protection platforms can improve reach and efficiency. Comprehensive sexuality education should be universalised to equip young people with knowledge and agency.

The contrasting trajectories of population growth in the youngest and oldest segments of the population clearly explain the structural transformation of the population at the top and the bottom of the population pyramid. As an instance, the number of children [0–4] will decline from 113.5 million in 2021 to 86.3 million by 2051, corresponding to an average annual exponential growth rate of –0.9 percent. In contrast, the population of the oldest-old [80 +] is expected to expand from 11.5 million to 37.3 million over the same period, reflecting an average annual growth rate of 3.9 percent. This demographic divergent pattern underscores the profound shift toward population ageing and signals far reaching implications in the socio-economic and healthcare perspectives. The proportion of elderly population, particularly the oldest-old [80+], is rising steadily across states—the pattern being more pronounced in the southern region compared to the northern region.

The increasing proportion of elderly—comprising the retired government pensioners and the elderly beneficiaries of other social security schemes, is likely to exert additional pressures on the state exchequer. Although a growing elderly population is generally considered to be a fiscal and social burden, it can equally serve as a catalyst for economic advancement through a process of second demographic dividend—the silver economy. Re-skilling and skilling people after retirement can enable them to work for a longer period of time and can manage their livelihood as well as contribute to economic growth. In response to population ageing, countries such as Japan and Germany have implemented labour policies to ensure

active participation of the elderly population in economic activities⁴. India too needs similar initiatives that enable the elderly to lead productive and engaged lives. As elderly cohorts invest their savings in both financial and physical capital, these resources can be channelised toward productive investment, thereby facilitating capital formation, enhancing productivity, and supporting sustained economic growth. The decline in the population of working-age group results in a shrinking tax base, thereby raising concerns about the sustainability of funds required to support and protect the ever-expanding proportion of elderly. It becomes mandatory to develop a comprehensive healthcare policy for the elderly, both at the national and regional levels—specifically in the southern region considering their relatively higher share in the population. Its effective implementation can ensure better health, financial stability, and basic living standards of the elderly, who once played a pivotal role in driving our economy. The states with ageing population may have migrant-friendly policies and infrastructure to attract skilled labour from states with excess labour force. Policies must support caregivers, especially women, with caregiver allowances, training and parental leave reforms [expanding parental leave policies and ensuring job security post-leave for both parents] and male engagement in caregiving.

India's gender dividend—its large and growing female population—offers immense economic potential, yet remains under-realised. Women's labour force participation, though rising, remains low and largely informal, while ageing trends show a growing share of elderly women facing economic and health vulnerabilities. Investing in women's empowerment across their life course is therefore essential for both growth and equity. Policy must prioritise expanding care infrastructure, childcare, eldercare, and safe transport, to reduce women's unpaid workload and enable formal employment. Targeted skilling, gender-responsive industrial incentives, and financial inclusion can move women into higher-quality, better-paid jobs. Simultaneously, social protection for elderly women, through pensions, health coverage, and community-based care, must be strengthened.

As India's population ages, reproductive health concerns are no longer confined to the young. The country's older population, especially women, faces rising challenges related to menopause,

Women's labour force participation, though rising, remains low and largely informal, while ageing trends show a growing share of elderly women facing economic and health vulnerabilities.

⁴ Japan incentivises employers through tax benefits to retain or rehire seniors while redesigning workplaces to reduce physical strain and support flexible or remote arrangements. Germany has raised the statutory retirement age to 67, offers enhanced pension accrual for delayed retirement, and invests in state-sponsored upskilling to ensure older workers remain technologically competitive. These coordinated measures aim to alleviate pressure on public welfare systems by sustaining the economic participation of the ageing population.

reproductive cancers, sexual health, and chronic conditions linked to reproductive ageing. Yet these issues remain under-recognised and under-funded within public health programmes that continue to focus primarily on fertility control. Policymakers must integrate reproductive health for older adults into the broader continuum of care. This includes routine screening for cervical, breast, and reproductive tract cancers; menopause management and counselling. Strengthening primary healthcare systems to address these emerging needs, through capacity building, inclusion in essential health packages, and community-level awareness, will be critical. Investing in the reproductive health of older adults, particularly women, not only enhances quality of life and reduces long-term healthcare costs but also upholds the principle of reproductive rights and dignity across the life course.

Demographic shifts are capable of reshaping consumer demand, opening new business opportunities while leading to a gradual decline in certain sectors.

Despite considerable uncertainty associated with migration—another key determinant of future demographic dynamics—it is likely to persist, particularly from the northern to the other regions. The northern states currently possess a surplus of labour, which is projected to diminish in the long run with the advancement in demographic transition and urbanisation process in these regions. While a large number of studies assess the influence of age structure on economic growth, its implications for business realities remain largely overlooked in academic discourse. Demographic shifts are capable of reshaping consumer demand, opening new business opportunities while leading to a gradual decline in certain sectors. As an example, slumping birth rates may reduce demand for goods and services that are children-oriented, such as clothing and toys, while a greying population is expected to drive expansion in products and services for older adults, including pharmaceuticals, hair dyes, home care, and age-friendly housing retrofits. The shifting trends in the age structure of the population provides invaluable insights into the shifting concentration of population across age groups, enabling scholars to establish connections with emerging market dynamics, product-mix and guiding entrepreneurship tailored to the broader predilections of the community.

Finding an amicable solution to resource sharing and sharing of representation is the need of the hour to properly balance the federal structure of the country. However, the broader socio-economic and political implications of demographic divide in the country will only manifest in the long run, highlighting the need for proactive policy interventions to mitigate potential disparities and capitalise on emerging opportunities. Although large-scale demographic shifts are underway, our population projections indicate that the country will fall short of achieving population stabilisation even by the middle

of the 21st century. Similar to several short- and medium-term targets of the National Population Policy [2000], the long-term objective of attaining population stabilisation at the national level by 2045 [28] appears unlikely even by the close of this projection period. In fact, considering the current demographic trajectories, this target is unlikely to be achieved before 2055 and may require an additional half-a-decade or more.

Finally, it is imperative to strengthen and modernise our existing demographic data collection systems to effectively address the contemporary challenges associated with data quality, reliability and accuracy. Besides revamping SRS, an alternative approach lies in enhancing the quality of CRS, thereby equipping programme-implementing authorities to access the most accurate data in alignment with their own requirements and professional discretion. Without a recent census and due to the usual delays in releasing data, especially related to migration, our ability to understand the constantly evolving migration patterns in the country is further impeded. Addressing these data deficiencies would require periodic, large sample migration surveys led by the NSSO or any other responsible agencies, thereby improving the accuracy of estimates and maintaining timely information on migration trends.

SECTION
2

DETAILED METHODOLOGICAL FRAMEWORK



2.1 Approaches to population projection for major states

The Cohort Component Method [CCM] was applied for population projection, given its status as the most robust tool in demographic forecasting.

The current population projection exercise is carried out in two phases. The first step projects the 2011 Census base-year population to 2021 by incorporating demographic inputs on fertility, mortality, and migration observed during the intervening period. The second phase entails projecting the population forward to the mid-century, i.e., up to 2051. The Cohort Component Method [CCM] was applied for population projection, given its status as the most robust tool in demographic forecasting. This method works on the explicit assumptions regarding future trends in fertility, mortality, and migration, and applies these to the age-sex cohort of the base year population. Each age cohort is projected forward to estimate the future size, structure, and composition of the population, with the annual changes in fertility, mortality, and migration incorporated for every age and sex group. As this method accounts for the components of change for each age cohort, this approach is commonly referred to as the CCM. The DEMPROJ module of the SPECTRUM software [Version 6.42] has been used here to apply this method, generating projections by age and gender. The CCM can be mathematically expressed as follows:

$$P^{t+x} = P^t + B^x - D^x + M^x$$

Where; P^{t+x} is the estimated total population at a particular date x years after the census, P^t is the population at time t or at the time of census enumeration, D^x and B^x represent the number of deaths and births respectively, between the date of census and the date for which the population is estimated. Finally, M^x is the number of net migrants between the census period and the date of population projection.

The CCM has been applied to 22 states with populations exceeding six million, as reported in the 2011 Census. The states in this category includes Andhra Pradesh, Assam, Bihar, Chhattisgarh, NCT of Delhi, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Jammu and Kashmir [undivided], Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh, Uttarakhand, and West Bengal. Uttar Pradesh tops the list with a population of 199.8 million, whereas Himachal Pradesh ranks at the bottom with a population of only 6.8 million. Two states that have undergone bifurcation since the 2011 Census are Andhra Pradesh and Jammu and Kashmir. The newly formed state, Telangana, was part of the erstwhile Andhra Pradesh; the SRS estimates are available from 2014 onwards. Although Ladakh had a population of 2.74 lakhs in 2001, its projected population was estimated as the residual from the projection of Jammu and Kashmir [undivided], with the results subsequently

disaggregated for each region. Dadra and Nagar Haveli and Daman and Diu, previously two separate UTs, were unified into a single UT bearing the same name. Thus, the CCM of population projection encompasses 98.4 percent of India's population and the mathematical method covers the remaining 1.6 percent of the population based on 2011 Census estimates. The methodological details of each input variable employed in the population projections are presented in their respective sections. All the projected population figures for the major states using the CCM in India correspond to March 31st of the relevant year.

2.2 Establishing the base year population

A key prerequisite for a new projection is determining an ideal base year population. For the current projection, the smoothed age-sex distribution prepared by the Technical Committee—based on the 2011 Census for major states with populations over six million—was employed [2]. The updated state-level population estimates up to the year 2021 are provided in Appendix Table 1.8. The percentage distribution of the population by age and gender for 2021 is presented in Appendix Table 1.9. Based on the updated demographic inputs from the SRS, the base population has been carried forward to 2021, which now serves as the base-year population for subsequent projections. The specific inputs used to update the base population to 2021 and to project it through the end of the projection horizon are outlined in the following sections.

2.3 Assumptions on fertility

Fertility assessment, among all the demographic components, has the most significant impact on the precision of projected population figures. Robust forecasting of future fertility trajectories entails not only the extrapolation of historical trends, but also a holistic understanding of the intrinsic reproductive preferences of couples, particularly with respect to their desired family size and the capacity to implement them. Fertility preferences can be examined through the analysis of their desired number of children reported by the couples in the contemporary fertility surveys, offering meaningful revelations into the potential reproductive behaviour and intentions. Results from the fifth round of NFHS [2019–21] indicate that about 23 percent of currently married women in the reproductive ages [15–49 years] reported a desire to have an additional child. Among the currently married women who had at least one child, 57 percent expressed the intention to have an additional child, either imminently or in the distant future. Similarly, data show that only 9.8 percent of currently married women aged 15–24 with one child reported no desire to have additional children [29].

Fertility assessment, among all the demographic components, has the most significant impact on the precision of projected population figures.

The key conclusions underscore that a substantial share of women in the reproductive cohorts who intend to have more children would profoundly influence the evolution of future fertility. Nevertheless, reproductive preferences are inherently heterogeneous, differing significantly across regional and socio-economic contexts due to the interplay of cultural norms, structural conditions, and contextual influences. Similar to SRS trends, data based on NFHS-5 reveal a sharp contrast in fertility preferences between Kerala and Bihar, two states that stand at the polar ends of the fertility transition spectrum. While only 58 percent of women with one child in Kerala expressed a desire for an additional child sooner or later, the corresponding proportion in Bihar is markedly higher at 77 percent. While only 10 percent of women with two children in Kerala express a desire for an additional child now or any time in the future, the corresponding figure in Bihar is more than 20 percent—twice as high—highlighting a pronounced regional disparity in fertility preferences.

This evidence reinforces two key dimensions of India's fertility transition. While the nation is formally categorised as having reached below-replacement fertility, this aggregate status conceals significant regional disparities and variations in reproductive behaviour. Secondly, although fertility levels have been rapidly declining in India, empirical evidence suggests that a substantial proportion of both men and women in ages 15–49 still prefer to have relatively larger families, with an ideal family size of 2.1 children. In view of the apparent inter-state disparities in fertility levels and reproductive preferences—disparities that are projected to prevail over time—state-specific fertility assumptions are required, aligned with the heterogeneous trajectories and stages of the fertility transition across the regions. In order to update the population estimates from 2011 to 2021, the TFR data from the SRS corresponding to this period were utilised [Appendix Table 1.1]. The SRS has systematically documented fertility trends across most of the Indian states since 1971. Nevertheless, it has generally been accepted that reliable estimates of the fertility indicators are available only from 1981 onwards [2]. Consequently, we use TFR data starting from 1981 to project future trends in fertility at the national and state levels.

This study posits that the GC can be used for projecting future fertility patterns at both the national and state level. The mathematical expression of the GC is given as,

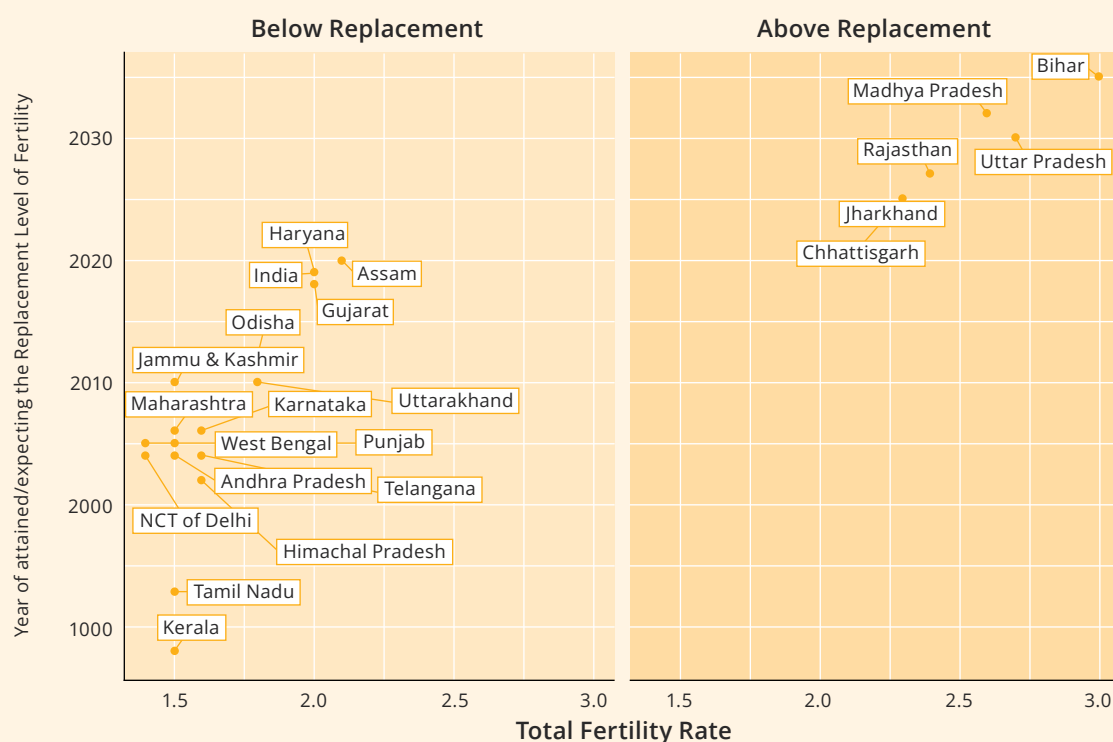
$$\frac{TFR - L}{U - L} = [a]^{b^t}$$

where U and L are the Upper and Lower bounds respectively. Here, t represents time, while a and b are constants. Using this equation, the TFR for a specific time t can be projected as $TFR = L + [U - L] a^{b^t}$. Future regional fertility patterns will be projected by fitting TFR estimates from the SRS for the period 1981 to 2021 to the GC model. In fitting the GC, the upper asymptote was calibrated according to the prevailing fertility levels across different regions. States were classified into high, medium, or low TFR categories based on their prevailing fertility levels. Accordingly, the upper asymptote [U] was set at 6 for northern states, 5 for eastern and western states, and 4 for southern states. In order to capture the potential range of future population

outcomes, we prepared three fertility projection variants—high, medium, and low—reflecting different scenarios at national and state level. To ensure comparability and demographic consistency, the observed age-specific fertility patterns of the states were calibrated against the projected age-specific fertility levels.

An examination of states highlights that, out of the 22 major states in the country for which SRS data are available, only six have not yet achieved below-replacement fertility levels, and these are predominantly the more densely populated regions [Figure 2.1] Over the span of the last decade, Gujarat, Haryana, and Odisha also transitioned into the category of states experiencing below-replacement fertility levels. Fertility projections were undertaken with the underlying assumption that state fertility differentials will persist until the mid-21st century. However, it is anticipated that these disparities will progressively diminish over time.

Figure 2.1: Classification of the states based on TFR [2021] and their year of replacement level of fertility status



Source: Sample Registration System, 2021

To facilitate TFR projections, states were classified into three categories according to their current fertility patterns: high, moderate, and low fertility states. The classification of states based on their threshold levels of fertility are presented in Table 2.1.

Population projections often use the weighted TFR, where the percentage of women in the reproductive age group serves as the weighting factor, to predict national fertility trends. However, this approach has been excluded from the present analysis,

as the currently estimated weighted TFR diverges significantly from the observed national fertility levels. Thus, two principal approaches were employed here to generate national population projections: [1] projecting the population at the national level using country-specific demographic inputs, and [2] estimating the national population by summing the projected population figures obtained independently for states. The TFR projections based on the GC model, estimating the likely year of achieving below-replacement fertility for states that have not yet attained it, are presented in Table 2.2.

Table 2.1: State-wise range of asymptote values used to fit the Gompertz Curve					
Fertility pattern	Category	States	Projection variants		
			Low	Medium	High
Below Replacement of Fertility	Low fertility [TFR≤1.5]	Andhra Pradesh	1.30	1.40	1.50
		NCT of Delhi	1.30	1.40	1.50
		Jammu and Kashmir	1.30	1.40	1.50
		Kerala	1.30	1.40	1.50
		Maharashtra	1.30	1.40	1.50
		Punjab	1.30	1.40	1.50
		Tamil Nadu	1.30	1.40	1.50
		West Bengal	1.30	1.40	1.50
	Moderate fertility [TFR 1.6 to 2.1]	Assam	1.40	1.60	1.70
		Gujarat	1.40	1.60	1.70
		Haryana	1.40	1.60	1.70
		Himachal Pradesh	1.40	1.50	1.60
		Karnataka	1.40	1.50	1.60
		Odisha	1.40	1.50	1.60
		Telangana	1.40	1.50	1.60
		Uttarakhand	1.40	1.50	1.60
Above Replacement of Fertility	High fertility [TFR 2.2 to 2.6]	Chhattisgarh	1.55	1.65	1.85
		Jharkhand	1.55	1.65	1.85
		Madhya Pradesh	1.55	1.70	1.90
		Rajasthan	1.55	1.65	1.85
	High fertility [TFR>2.6]	Bihar	1.75	1.81	1.90
		Uttar Pradesh	1.65	1.81	1.90

Source: Developed by the authors

Table 2.2: Expected timeframe for attaining below-replacement fertility

States	TFR 2021	Year attaining below replacement [TFR=2.1]		
		Low	Medium	High
Bihar	3.0	2033	2035	2037
Chhattisgarh	2.2	2022	2023	2024
Jharkhand	2.3	2024	2025	2026
Madhya Pradesh	2.6	2029	2032	2036
Rajasthan	2.4	2026	2027	2029
Uttar Pradesh	2.7	2029	2030	2032

Source: Figures for 2021 are from Sample Registration System

The pace of fertility decline is a key indicator that informs how fertility trends may unfold in the future, expressed as the average annual reduction in the number of children per woman. As an example, the figures at the state level indicate a decline in the fertility rate by 0.04 children per woman annually during the period 2011–2021 [Appendix Table 1.1]. It is clear from the analysis that the fertility rates in high-fertility states remain considerably elevated compared to those in low-fertility states, suggesting a potential for a swift decline in the former regions. As a result, it is assumed that under the medium-variant, fertility levels may decline to 1.6 over the next three decades, with the low and high-variants set at 1.5 and 1.7, respectively. For states with moderate-fertility levels, the medium-variant assumes a decline to 1.5, with the low-and high-variants at 1.4 and 1.6, respectively. In comparison, low-fertility states are expected to reach 1.4 under the medium-variant, with a projected range of 1.3 to 1.5. In all three cases, the intra category deviation in fertility is set at the minimum of ± 0.1 points [Table 2.2].

As per the 2021 SRS estimates, 10 states exhibited a TFR of 1.6, while two states had attained a TFR of 1.4. There is every possibility that fertility levels in low-fertility states may reach the floor level of 1.3 in the coming decades. Emerging global patterns suggest towards a more pronounced downturn in fertility across diverse regional settings, though the scale and persistence of this trend remain context-dependent. For instance, the recent estimates for the year 2025 indicate that 14 countries have reached a TFR of 1.4, while seven countries report a TFR of 1.3, and nine countries have experienced a further decline to 1.2. Countries falling within these broad categories

Emerging global patterns suggest towards a more pronounced downturn in fertility across diverse regional settings, though the scale and persistence of this trend remain context-dependent.

include Greece, Japan, Italy, Spain, Canada, Poland, Finland, Belgium, Bhutan, Norway, and Sweden, among others. The Republic of Korea currently records a TFR of 0.8 children per woman, representing one of the lowest fertility levels globally [22]. The projected TFR at the state level used in the population projections are presented in Appendix Table 3.1.

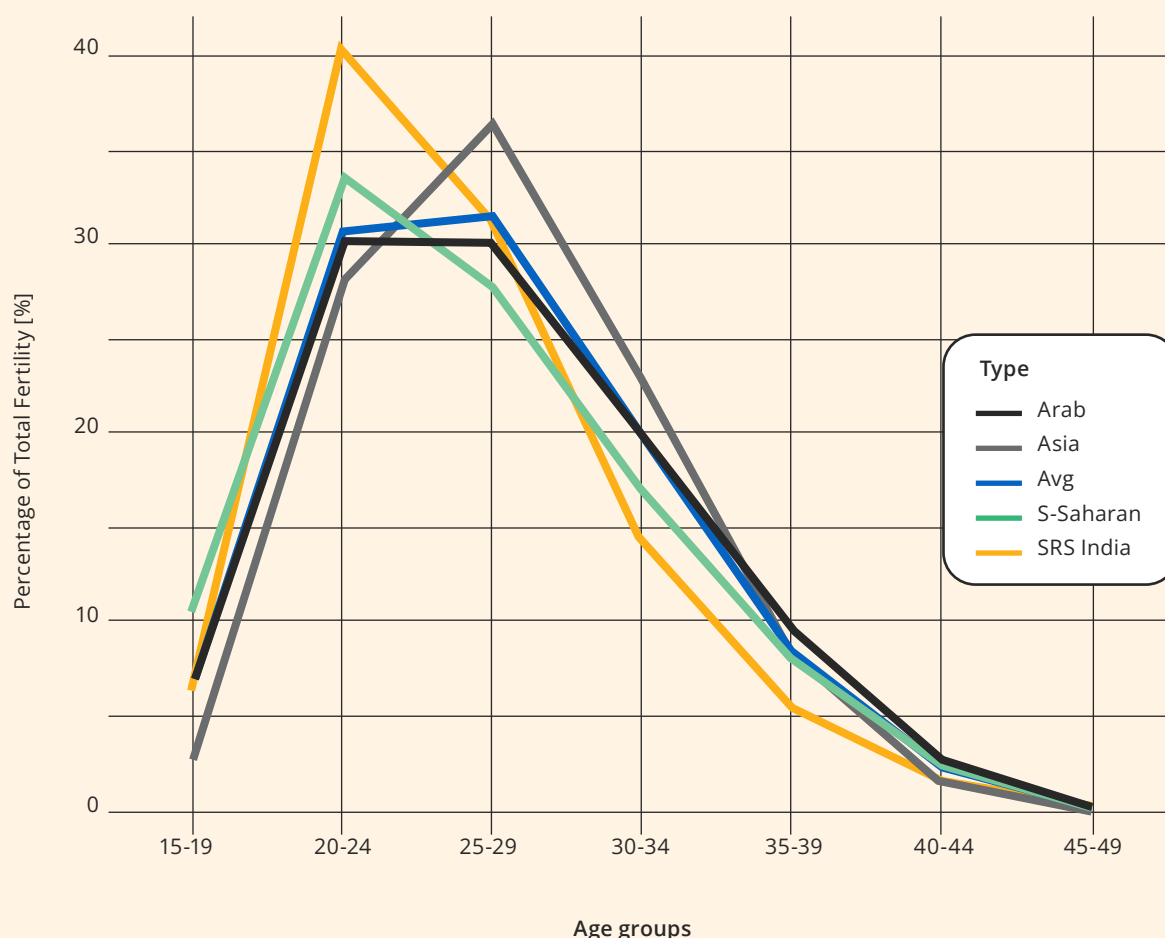
The quantum of fertility decline varies from state to state, with the most significant reductions expected to occur in those states currently exhibiting higher fertility rates.

2.3.1 Assumptions on age-specific fertility rates

As demonstrated earlier, the quantum of fertility decline varies from state to state, with the most significant reductions expected to occur in those states currently exhibiting higher fertility rates. The variations in the proportion of women in the reproductive ages across regions largely underscore the significance of precisely assigning Age-Specific Fertility Rates [ASFR], as the component plays a critical role in determining the dynamics of the projected population. Therefore, understanding the trends in ASFR is of prodigious importance. The ASFR of a region is often influenced by a multiplicity of factors, such as age at marriage, age at childbearing, magnitude of abortions and use of various spacing methods etc. Moreover, the age of the mothers and the timing of childbearing are also influential in determining the quantum and pace of future population growth. Alongside TFR estimates, the SPECTRUM software also needs the input distribution of fertility in percentage terms. To fulfil this criterion, the ASFR at the state levels were transformed into a percentage distribution by normalising each ASFR against the total sum of ASFR across all the women of reproductive age.

The UN Population Division has designed a set of regional fertility models—including those for Sub-Saharan Africa, Arab States, Asia, and a global average—to capture the transitions in childbearing and the fertility change. Most national and state population projections for India assume that the country will follow the age-specific fertility pattern of the South Asian model; however, this assumption may not be empirically justified, given the significant diversities in fertility behaviour. Therefore, it may be conceptually flawed to apply this fertility pattern uniformly across all Indian states solely on the basis that the country falls within the geographic boundaries of the South Asian region. An assessment of the age-specific fertility pattern in Bangladesh in 1975, when the TFR stood at 6.3, indicated that the South Asian model provided the best fit. When the TFR in Bangladesh declined to 5.1 by 1989, the South Asian model was deemed unfit to reflect the age pattern of fertility, while the Sub-Saharan African model demonstrated a closer alignment with the observed distribution [30].

Figure 2.2: Age-specific fertility profiles corresponding to a TFR equals 2.40

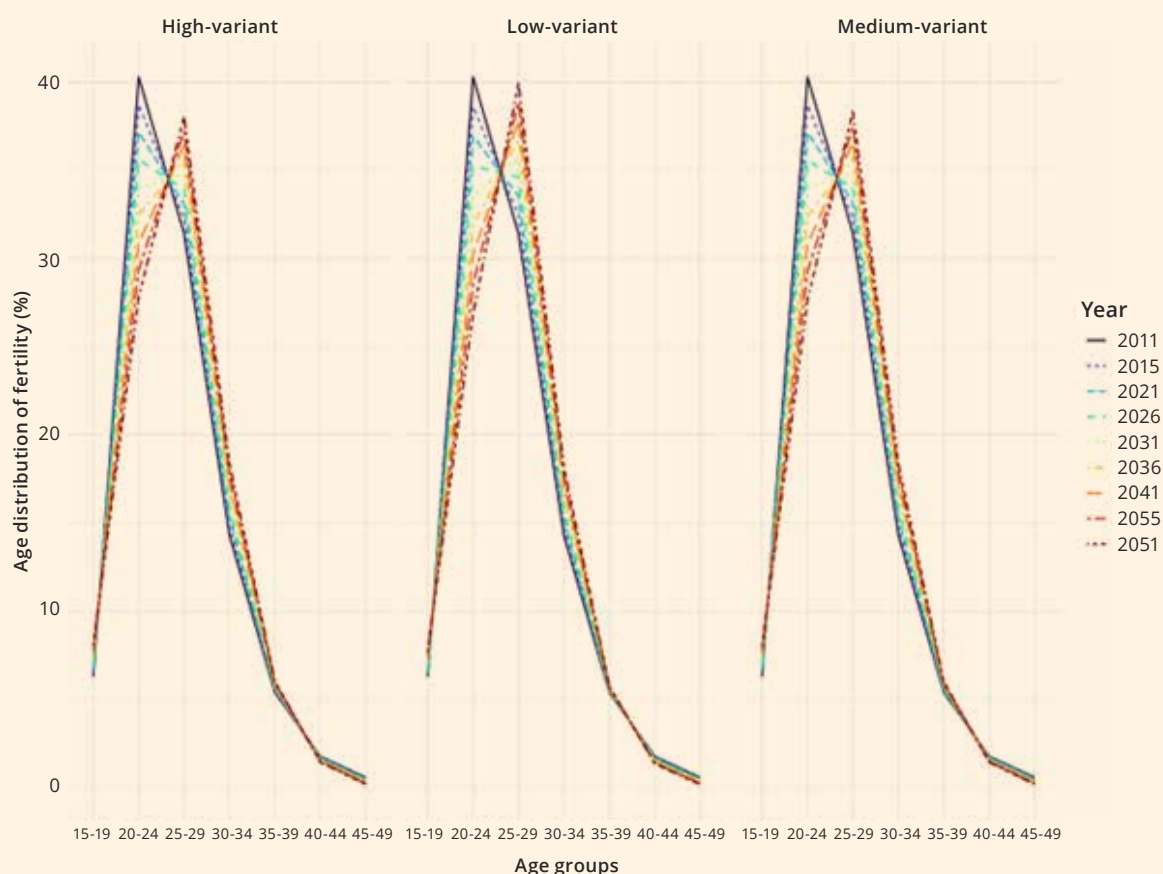


None of the existing fertility models, however, adequately reflects the age-specific fertility pattern reflected in India in 2011, when the TFR was 2.40, as per the SRS data [Figure 2.2]. Even by 2021, the situation remained largely unchanged from 2011, as none of the Indian states exhibited age-specific fertility patterns that accurately mirrored with the well-established regional fertility models. In addition to the national level, states such as Andhra Pradesh, Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, and Telangana do not adhere to any of the model regional fertility patterns. However, some states reflect minor traits indicative of these models in the respective regional fertility models.

The fertility patterns in states like Jharkhand, Kerala, Odisha, Punjab, Rajasthan, Tamil Nadu, West Bengal, and Himachal Pradesh exhibit correspondence with the global average model. Assam and Bihar have similar fertility patterns that are far aligned with the Sub-Saharan model, while Chhattisgarh shows greater similarity to the Arab model. The NCT of Delhi, Jammu and Kashmir [undivided], Uttar Pradesh, and

Uttarakhand follow patterns more closely associated with the Asian model. This could stem from the variability inherent in the regional fertility distribution patterns, or alternatively, from limitations in the quality of data provided by the SRS. It merits attention that India deviates even from the average model pattern, underscoring the inadequacy of existing models of fertility patterns in projecting our fertility trajectory.

Figure 2.3: Projected patterns of age-specific Fertility Rate [2011–2051]



To compute future ASFR, the percentage distribution of fertility obtained from the 2021 SRS data was projected to 2051, using the projected TFR for that year. This exercise was carried out with the aid of the Population Analysis System software [ASFRPATT], developed by the US Census Bureau. An interpolation between the 2021 and 2051 figures was then performed to estimate age-specific fertility distributions across the projection period. Similar attempts were carried out at the state level across different projection variants to project future trends in ASFR. For the newly formed state of Telangana, the fertility distribution was derived from that of Andhra Pradesh and projected forward using Telangana's projected fertility levels. The pattern of projected fertility schedules by reproductive age group exhibits no significant divergence across the projected periods under all three variants [Figure 2.3/Appendix Table 3.2].

2.4 Mortality assumptions

Before delving into the detailed methodological aspects of projecting life expectancy, it is important to outline how the upper limits of life expectancy have evolved over time. Further, it examines the probable factors that are likely to influence future trajectories of life expectancy in India, providing essential contextual background for understanding the future trends.

2.4.1 Life expectancy trends in India: An analytical overview

To capture the changes in mortality improvements over time, model life tables establish varying ceiling limits for life expectancy. One of the earlier and the most widely accepted model life tables projected life expectancy to reach a maximum of 77.3 years for males and 80 years for females [31]. The UN has periodically adjusted its upper-bound projections of life expectancy to reflect sustained advancements in socio-economic development and public health indicators worldwide. An assessment reveals that the UN model life tables assumed maximum life expectancies of 77.5 years for women and 72.6 years for men in the 1973 revision, which were subsequently revised upward to 87.5 years and 82.5 years, respectively, in the 1996 revision. Later on, it was observed that the highest level of life expectancy of 81 years was found for females in Iceland [1985] and Japan [1986]. Based on these experiences, the UN decided to extend the highest life expectancy in their working model to 87.5 years for females and 82.5 years for males. In the 1998 revision, the UN projections assumed that all countries will eventually reach a maximum life expectancy of 87.5 years for males and 92.5 years for females [32]. In 2025, more than 20 countries have attained life expectancies of 80 years or more for both males and females [22].

The UN has periodically adjusted its upper-bound projections of life expectancy to reflect sustained advancements in socio-economic development and public health indicators worldwide.

Utilising the canonical Lee-Carter mortality forecasting model, subsequent demographic projections extended the anticipated upper limit of life expectancy from 75 to 92.5 years for both males and females [33]. The latest available life tables suggest that the life expectancies can move up to the age of 100 for both sexes [34]. Excluding the effects of the pandemic on mortality, life expectancy has shown a consistent upward trend across countries. In 2001, there were 72 million people aged 80 and above within a global population of 6100 million. By 2050, this number is projected to soar to 379 million—more than a fivefold increase—within a global population of 9300 million [35]. This dramatic rise appears to be a clear indication of the unprecedented growth in the global population within the oldest age group, primarily driven by increasing life expectancies.

Improving life expectancy, particularly among adults, is closely linked to the ability to prevent widespread rise of lifestyle-related diseases.

Improvements in life expectancy in India in the coming years will primarily hinge on two key factors: [1] the degree of progress we could make in reducing adult mortality and [2] the potential for continued decline in the Infant Mortality Rate [IMR]. There is ample evidence that life expectancy at older ages is likely to increase. Data from the Registrar General of India suggest that, between 1981–85 and 1991–95, life expectancy from age 5 increased by 2.1 years [62.9–60.80] and between 1991 and 2001–05 it increased by 2.2 years [65.1–62.9]. Similarly, for individuals aged 80 and above, the Technical Group suggests that the percentage in India, which was 0.63 percent according to the 2011 Census, is expected to nearly triple to 1.81 percent over the next 25 years [2].

Improving life expectancy, particularly among adults, is closely linked to the ability to prevent widespread rise of lifestyle-related diseases. Effective prevention and management of these conditions play a critical role in mitigating their potentially devastating impact and in ensuring a more stable and steadily increasing level of life expectancy. In addition, data from several developed countries show that death rates at old ages have been falling over the past several decades, and this improvement has been accelerating, not decelerating as would be expected if a limit were being approached [36, 37]. It is also possible that the overall socio-economic development and improvements in medical advancements could steadily increase life expectancies in all parts of the world.

Despite progress in extending adult life span, the IMR remained high at 27 per 1000 live births in 2021, indicating substantial scope for further improvement. IMR could be further reduced on account of the increasing vaccinations, nutrition, educational improvements of women, and improvements in healthcare systems. As per World Health Organization [WHO] estimates, IMR in countries such as Denmark [3.0], Canada [4.4], China [4.5], and Egypt [5.3] is approximately 80 percent lower than that of India [38]. The success stories of Kerala [6], Tamil Nadu, and the NCT of Delhi [12 each in 2021] set a strong precedent for other states to emulate. These experiences demonstrate that both improving adult life expectancy and substantially reducing IMR levels are critical to enhancing overall life expectancy in India. It is assumed that any further improvements in mortality may result in life expectancies at birth exceeding the projected life expectancies at birth. Their effect on future population growth is likely to exert a relatively small influence, especially when compared to the influence of fertility trends.

2.4.2 Pandemic and life expectancy

The estimates of life expectancies at birth for India and states are based on the abridged model life tables provided by the SRS division

of the Registrar General's office. The life tables are available in five-year age intervals, spanning from 1970–75 to 2018–2022. Life expectancies for each period, beginning with 2011 [mid-year of the 2009–13 period] through to 2019 [mid-year of the 2017–21 period], have been obtained from the SRS abridged life tables. A significant challenge in population projection involves accounting for the impact of pandemic on mortality across different regions of India during the period in which it disrupted the otherwise gradual transition of mortality patterns, particularly given the scarcity and inconsistency of reliable data.

To attain this objective, separate life tables were constructed using Age-Specific Death Rates [ASDR] from the SRS data to estimate life expectancy for the years 2020 and 2021. The ASDR was converted to nMx values for constructing life expectancies at the national and state levels. Life expectancies reported in the 2011 abridged life tables—65.8 years for males and 69.3 years for females—are closely aligned with the estimates derived from ASDRs, which yield 65.7 years for males and 69.4 years for females, supporting the accuracy in adopting this methodology in the current context. The 2021 life expectancy estimates are primarily assumed to account for the effects of pandemic mortality experienced in that year. Accordingly, the impact of pandemic led to a regression in national life expectancy, bringing it roughly back to the levels observed for males in 2013 and for females in 2017, with pronounced inter-state variations. In the absence of adequate data, the impact of pandemic-related deaths beyond 2021 could not be incorporated into the estimation process. Detailed gender-wise life expectancy estimates for the period 2011–2021, which were used in constructing the base population for 2021, are provided in Appendix Table 1.2.

A significant challenge in population projection involves accounting for the impact of pandemic on mortality across different regions of India during the period in which it disrupted the otherwise gradual transition of mortality patterns.

2.4.3 Fitting the model

As explained earlier, only a single path of mortality assumption or a single set of projected life expectancy is used in this exercise. Fitting the Logistic Curve for estimating future life expectancy seems to be an ideal method, as it approximates the expected changes in life expectancy. Unlike the declining trajectory captured by the logistic function in fertility modelling—transitioning from high to low fertility regimes—the LC applied to life expectancy projections assumes an upward progression, consistent with the sustained improvements in survival observed across diverse demographic settings over time. The mathematical expression of the LC for projecting life expectancy is given as:

$$Y_c = \frac{L_{max}}{1 + \exp[-\infty[t - \beta]]}$$

The impact of the pandemic on the population—especially among females—may have been more pronounced than what is reflected in the current statistical data.

Here, Y_c represents the projected life expectancy, $L_{\max}$ is the upper asymptote of life expectancy, $\exp$ is the base of natural logarithms. The other constant parameters ' α ', deal with the growth rate [steepness of the curve] of life expectancy, and ' β ' shows the length of time to the inflection point of life expectancy. In this study, we assume that the future life expectancy of India and its states will gradually align with the projections of the Lee-Carter mortality forecasting model, which establishes an upper bound of 92.5 years for both males and females [33].

The most appropriate model life tables were identified by comparing the CDR and IMR derived from various model life tables with the observed values. The model table that provided the closest match was then used to approximate the corresponding life expectancy at birth. A close examination of the mortality patterns between 2011 and 2019 points out that several states—Andhra Pradesh, Bihar, Gujarat, Haryana, Jammu and Kashmir [undivided], Jharkhand, as well as India as a whole, adhered to a transition. These states were realigned from the Southern model life table pattern to the Western model pattern, indicating a significant shift in the underlying age-specific mortality structure. In 2019, the Southern model life table pattern of mortality was observed only in Assam, Odisha, Rajasthan, Uttar Pradesh, Chhattisgarh, and Madhya Pradesh, while all other states currently follow the Western model mortality pattern.

2.4.4 Projected trends in life expectancies

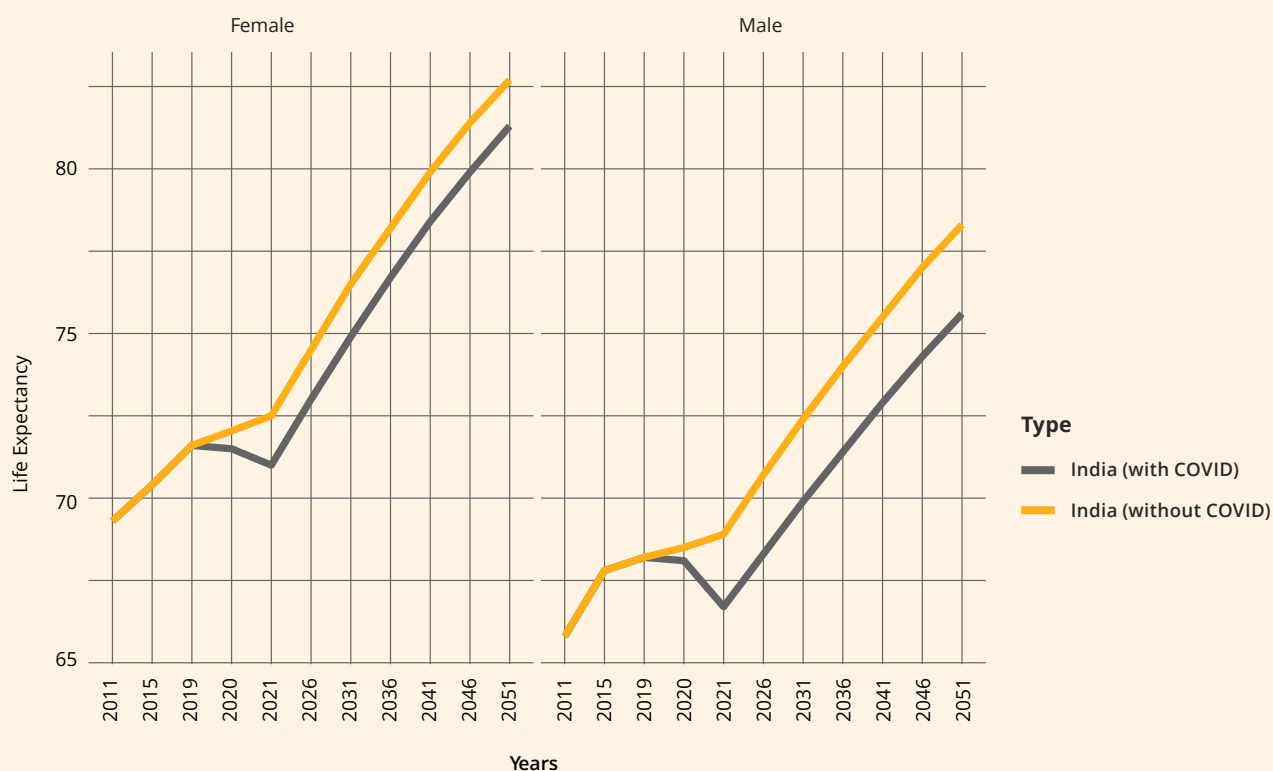
Appendix Table 1.2 provides sex-disaggregated life expectancy at birth figures [in years], sourced from the SRS Abridged Life Tables for 2011–2019, while the estimates for 2020 and 2021 have been assessed by the authors. The table clearly designates that the pandemic led to a temporary decline in life expectancy at birth across all regions of the country, with the impact being particularly obvious in 2021 compared to 2020. While male life expectancy at birth declined by about 1.4 years, the corresponding decline for females was considerably lower at 0.5 years, with notable interstate variations. The impact of the pandemic on the population—especially among females—may have been more pronounced than what is reflected in the current statistical data. The observed trends could be partially attributed to limitations in the SRS data, particularly during the pandemic period, which may have contributed to the underreporting of female deaths.

While making minor allowances to account for pandemic mortality, these estimates are largely in line with the projections of Natarajan and Jayachandran [3], who project male life expectancy to reach 73.5 years and female life expectancy to 80.4 years, exhibiting notable

variation across states. Data from the abridged life tables, along with our own estimates for 2021, indicate that male life expectancy in India increased marginally by about seven years in three decades—from 59.7 years in 1991–95 to 66.7 years in 2021. During the aforementioned period, female life expectancy registered an increase of 10 years—from 60.9 years in 1991–95 to 71 years in 2021.

In 2019, male life expectancy in Indian states ranged from 62.8 years in Chhattisgarh to 73 years in NCT of Delhi, while female life expectancy ranged from 66.4 years in Chhattisgarh to 77.9 years in Kerala. The gender gap in life expectancy, which favoured women by 1.2 years during 1991–95, showed consistent improvement, reaching a peak of 3.5 years in 2009–13, before declining to 2.5 years in 2014–18. The current gender gap in life expectancy in India, which stood at 4.3 years in 2021 [71.0 years for females versus 66.7 years for males], is projected to widen to 5.7 years by the end of the projection period, with female life expectancy reaching 81.3 years and male life expectancy reaching 75.6 years. This pattern is consistent with current global trends in gender disparities in life expectancy, especially in less developed countries, where the gap remains close to four years [39].

Figure 2.4: Projected life expectancy trends by gender with and without pandemic, 2011–2051



The relatively lower mortality rates reported among females may account for the faster rebound in their life expectancy to pre-pandemic levels, in contrast to the longer recovery period required for males.

The widening gender gap in life expectancy may be partly explained by the continuation of lower female mortality rates observed during the pandemic, which have been factored into the future projections [Figure 2.4]. The impact of pandemic has effectively reversed male life expectancy to levels last observed in 2012, while female life expectancy has regressed to levels seen around 2017 [Appendix Table 1.2]. It is projected that male life expectancy will return to its pre-pandemic level of 68.2 years [recorded in 2019] by 2026, while female life expectancy, at 71.6 years, is expected to rebound to pre-pandemic levels as early as 2022. The relatively lower mortality rates reported among females may account for the faster rebound in their life expectancy to pre-pandemic levels, in contrast to the longer recovery period required for males. Appendix Table 3.3 presents the projected gender-specific life expectancies for 2026–2051, which served as the basis for projecting the population.

2.5 Assumptions on migration trends

The subsequent sections detail the methodologies used to project migration trends in the country's major states.

2.5.1 Magnitude of migration in India

As previously noted, census is the sole source that provides very comprehensive information on migration, due to its coverage of the entire population. Migration data are also sourced from sample surveys and MISs conducted by NSSO/NSO, along with large-scale migration surveys undertaken by research institutions and scholars. NSSO incorporated migration modules in their previous surveys, such as the 38th Round [January–December 1983], 43rd Round [July 1987–June 1988], 49th Round [January–June 1993], 55th Round [July 1999–June 2000], and 64th Round [July 2007–June 2008]. However, in the absence of a census and delays in timely publishing census-related information on migration often prevents us from understanding the clear dynamics of migration from time to time.

Just before the 2011 Census, the 64th Round of NSSO [2007–2008] was undertaken to provide detailed insights into employment, unemployment, and migration patterns across the country. The survey reported that migrants constitute around 33.3 million individuals, making up 3.3 percent of India's population. As per the 2011 Census, India had a total of 456 million migrants, accounting for 38 percent of the total population, compared to 315 million [31%] in 2001. During the intercensal period, when the overall population grew close to 18 percent, migrant population increased by 45 percent. The compound annual growth rate of migrants was 2.7 percent during 1991–2001, which rose to 3.7 percent in the subsequent decade,

2001–2011, indicating a notable acceleration in the size of the migrant population. Parallely, the proportion of migrants in the aggregate workforce has increased from 8.1 percent to 9.3 percent during the same period. In 2011, out of the total migrant population, 146.1 million were males [32%] and 309.6 million were females [68%]. Marriage acts as a significant driver of female dominant migration, as women are often expected to relocate to live with their spouses. On the other hand, while 11.4 percent of the male workforce consisted of migrants, only 4.9 percent of the female workers were migrants.

In 2020–21, migration-related data was collected by NSO through two major nationally representative surveys—PLFS and MIS. In the PLFS Round, over 4.10 lakh persons were surveyed at the national level, while the number of persons enumerated was almost three times higher, exceeding 11.63 lakh. While the main thrust of MIS was to acquire data for key national indicators of the Sustainable Development Goals [SDGs], emphasis was also equally placed on collecting data with respect to migration. The MIS reported that migrants constitute 39.9 million [3.5%] of the total population of 1140 million. The PLFS [2020–21] records that there are 148.8 million migrants that adds up to 3.37 percent of the population.

Besides the census, information on passenger volumes in the rail transport system, combined with estimates using the Cohort-based Migration Metric [CMM], indicates that average annual inter-state migration during the 2011–2016 quinquennial period was approximately 9 million. The migration estimates derived from alternative sources such as high frequency railway data surpass those reported by the census on a comparable scale, highlighting a higher degree of labour mobility than previously approximated [40]. A similar assessment, based on rail passenger movement data and figures from the Telecom Regulatory Authority of India [TRAI], found that the migration rate in 2023 was 28.87 percent—equivalent to 402.09 million migrants in the country [41]. This rate was significantly lower than the estimate indicated in the Economic Survey and indicates a decelerating trend in migration.

A study using sectoral work force data found that migrant workers are estimated to be 100 million or 20 percent of the population [42]. Using NSSO data [2007–2008], the number of migrant workers constitutes 70 million workers in the country, comprising only 17 percent of the work force in the survey year [43]. These results highlight that there is no consensus among scholars regarding the estimates of the migrant population in the country. Regarding emigrants, at the time of drafting this chapter [July 2025], statistics supplied by the Ministry of External Affairs [MEA] indicate that there are 35.4 million overseas Indians, comprising 15.8 million Non-Resident Indians [NRIs] and 19.6 million

The migration estimates derived from alternative sources such as high frequency railway data surpass those reported by the census on a comparable scale, highlighting a higher degree of labour mobility than previously approximated.

Persons of Indian Origin [PIOs][44]. This study, in line with the earlier population projections, does not incorporate the effects of emigration on the national population, as it entails substantial uncertainties.

2.5.2 Complexities in measuring migration

It is widely viewed that migration plays only a secondary role in configuring the demographic landscape among the Indian states. However, the effects of migration on population size could vary significantly across states, cultural contexts, and specific circumstances. Precisely capturing the effect of migration component in population projections remains a challenge, primarily due to the lack of reliable time-series estimates on human mobility. In a country as large and diverse as India, the absence of a systematic mechanism to track the volume of both internal and external migration—driven by various factors—poses a significant barrier to accurately assessing the overall impact of migration on demographic change over time.

However, the prolonged delay in the release of migration data from the census hinders research initiatives; for instance, data collected in the 2011 Census was released only in 2019, following a nine-year lag. This limits the immediate utility of the data, reducing its effectiveness in shaping targeted migration policies. Moreover, migration patterns can shift dramatically—as has been the case over the past one and a half decades—rendering the data outdated by the time it is published. It is often argued that the census overlooks migration at the state level, primarily because it fails to capture circular, short-term, and seasonal migration of the population [40]. As a result, accurate migration estimates cannot be ensured at the national or state level, and only the largest migration streams are discernible. On the other hand, sample surveys are based on a smaller population base; they remain valuable for capturing the fluid and seasonal migration trends.

Beyond the traditionally recognised drivers of migration, scholars increasingly agree that environmental degradation, as well as conflict and violence, are playing a growing role in displacing people from their usual habitats.

Beyond the traditionally recognised drivers of migration, scholars increasingly agree that environmental degradation, as well as conflict and violence, are playing a growing role in displacing people from their usual habitats. Environmental hazardous events such as floods, heatwaves, cyclones, coastal erosion, and sea-level rise linked to climate change—have increasingly rendered many areas uninhabitable, forcing societies to abandon their settlements. Climatic changes, leading to water scarcity or severe floods, frequently cause crop failures that undermine the economic stability of agrarian population, ultimately compelling them to relocate in search of alternative means of sustenance.

As per the latest statistics, India accounted for 5.4 million internal displacements, ranking third globally after the United States

[11.0 million] and the Philippines [8.9 million], out of a total of 45.8 million internal displacements in 2024. The current events mark the highest level of internal displacement India has endured in the past 12 years, with more than 60 percent of these movements triggered by floods [45]. Studies at the micro-level exhibit that migration is increasing in areas like the Sundarbans—the largest mangrove forest globally—as families grapple with the erosion of their livelihoods due to climate-related hazards [46]. Subsequently, a large number of hinterland populations are being forced to migrate to urban centres, as their once-fertile land is becoming saline due to the increasing frequency of floods. Such push factors are anticipated to drive large-scale temporary, seasonal, and permanent migration in the years ahead. Studies have also projected that by the mid of this century, more than 62 million people could be displaced across South Asian countries, including Bangladesh, India, Nepal, Pakistan, and Sri Lanka on account of the climatic-induced factors [47]. However, population displacement caused by environmental hazards lies outside the scope of our current population projection framework, as estimating its scale involves significant uncertainties.

The historical trend of migration toward metropolitan regions has become increasingly pronounced, with its scale and direction now clearly visible towards the southern states, especially driven by the influx of labourers from labour-surplus states in northern India. Despite the ongoing attraction of smart cities and rapid urbanisation, there remains a notable paucity of reliable data on the magnitude and directional dynamics of migration. Similar to other variables in population projections, migration is subject to considerable uncertainty, which complicates the task of estimating its future trajectories. Given these intricacies in projecting migration rates, most population projections exclude migration as a component and rely only on fertility and mortality. Others rely on the assumption that net migration rates from the two preceding censuses will persist unchanged even in the long term—a premise that is highly debatable, especially in light of the uncertainties surrounding the dynamics of migration over the last 10 years.

The historical trend of migration toward metropolitan regions has become increasingly pronounced, with its scale and direction now clearly visible towards the southern states, especially driven by the influx of labourers from labour-surplus states in northern India.

2.5.3 Three datasets, divergent approaches and compatibility issues

Net migration rates are generally calculated from census data by assessing the number of individuals who have moved into a region with those who have moved out within a specified timeframe. The estimation of net migration from census data is based on responses regarding place of previous residence within nine years prior to the census reference date. With no migration data available from the past decennial census, relying on respondents' place of last residence

With no migration data available from the past decennial census, relying on respondents' place of last residence to estimate net migration rates proved inadequate, complicating the efforts to track reliable migration trends.

to estimate net migration rates proved inadequate, complicating the efforts to track reliable migration trends. This presents a critical impediment in producing baseline net migration rates, which are mandatory for estimating future population. To gauge this gap, we utilise three nationally representative sample surveys, beginning with the NSSO 64th Round conducted in 2007–08, held shortly before the 2011 Census. The other two surveys are the MIS and the PLFS, both conducted during 2020–21.

The 64th Round of NSSO serves as a comprehensive pre-pandemic benchmark, offering invaluable insights into long-term migration patterns across states. In contrast, MIS and PLFS 2020–21 capture migration patterns of the population during and immediately after the pandemic lockdown, including patterns of post-lockdown return migration. Although PLFS excludes short-term migration data and incorporates temporary visitor information due to the pandemic, the sample surveys consistently define long-term migration as a change in the Usual Place of Residence [UPR]. Bearing these limitations in mind, all these datasets allow us to compare long-term interstate migration over time, and also account for structural shifts in migration streams across states. Most importantly, both the surveys are considered nationally representative, using stratified multi-stage sampling and offering unit-level data with sampling weights—thus serving as credible sources for estimating and projecting net interstate migration and gender flows [48].

On top of that, it is evident from the discussion in Section 2.5.1 that migration estimates from the three major sample surveys are relatively consistent, unlike those provided by other migration datasets. The inclusion of comparable migration-related questions in these surveys permits us to estimate net migration rates based on the survey data. The surveys categorised respondents as per their last UPR across seven major categories, including the movement of people from rural to urban areas within the same district, different districts, different states, and emigration. In the current analysis, only interstate migration is examined, specifically the movements of populations from rural or urban areas of one state to various locations in other states within India. In these surveys, a household member is considered a migrant if their last UPR, at any point in the past, was different from their current place of enumeration. The UPR is described as the village/town where the person has resided continuously for at least six months across states. To determine interstate migration, individuals whose last UPR differed from their current state of enumeration were listed as interstate migrants. In-migrants were classified on the basis of their current state of residence, while out-migrants were labelled using their last usual state of residence.

Migration flags were created to distinguish in-migrants and out-migrants by gender, and appropriate sampling weights were applied to produce representative population estimates.

To assess state-level net migration estimates, states were categorised into different groups based on their current migration trends, as deemed appropriate. The first category including states such as Andhra Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Jammu and Kashmir [undivided], Kerala, Madhya Pradesh, Maharashtra, and Telangana were classified according to MIS 2020–21 data. In the next category, comprising Jharkhand, Odisha, Tamil Nadu, and Uttarakhand, net migration estimates were adjusted to account for recent shifts in migration patterns. For the third category, which includes NCT of Delhi, Himachal Pradesh, Karnataka, Punjab, Uttar Pradesh, and West Bengal, estimates were based on PLFS 2020–21. The net annual migration rates at the state level, derived from these sources, form the basis for subsequent calculations and are applied in population projections throughout the country. Detailed input data used for the population projections are provided in Appendix Tables 1.3 to 1.6. Migration estimates [inputs] from all the sources—including NSSO [2007–08, Census [2011], MIS [2020–21], and PLFS [2021–22]—are presented in Appendix Maps 2.1 to 2.12. Together, these maps provide a comparative view of migration patterns and trends across different data sources and time periods.

The net annual migration rates at the state level form the basis for subsequent calculations and are applied in population projections throughout the country.

2.5.4 Approaches in estimating net-migrants

The initial step is to compute the net migration rate [NMR] for the baseline survey year [2008] and for the most recent year for which survey data are available [2021]. The NMRs expressed as percentages, were computed separately for each state and gender using the formula.

$$NMR = \frac{N_1}{P_0} * 100.$$

Here, NMR is the net migration rate and N_1 is the net migrant population and P_0 is the total population. To facilitate comparison, net migrants derived from the NSSO survey [2007–2008] were converted into net migration rates by normalising with the 2008 population, interpolated from the 2001 and 2011 Census data. A comparable approach was employed using the net migrant figures reported in the PLFS surveys [2020–2021], wherein the NMRs were calculated by dividing these figures by the 2021 projected population, as reported by Rajan and Retnakumar [14].

To determine the annual net migrants for the inter-survey period [2009–2021], a combination of exponential growth rate and interpolation methods was utilised. The average annual exponential

For drawing the observed trends in NMR in the initial and final survey years, two distinct interpolation algorithms were employed for the periods spanning 2009 to 2021.

growth rate [r] of the NMR for the reference interval was computed applying the formula,

$$r = \frac{1}{t} * \ln \left[\frac{NMR_{2021}}{NMR_{2008}} \right]$$

where NMR is the Net Migration Rate indicated for respective years and t is the number of years between 2008 and 2021 [i.e., 13]. This rate was used to interpolate the NMRs for intervening years for which data are not presently accessible, and assuming a monotonic trend in the absence of disruptive shocks. For drawing the observed trends in NMR in the initial and final survey years, two distinct interpolation algorithms were employed for the periods spanning 2009 to 2021. Exponential interpolation method was employed in cases where the NMR values for 2008 and 2021 exhibited the same direction of change, indicating either positive or negative values over the period. In such a case, $NMR_t = NMR_{2008} * e^{-r*[t-2008]}$ is the formula used for estimations. In this context, NMR_t refers to the net migration rate at time t, while r denotes the estimated annual exponential growth rate, as defined earlier.

On the other hand, when the NMR values for a state changed its sign of direction between the survey periods [i.e., from positive to negative or vice versa], linear interpolation was applied, as the exponential interpolation techniques are ill-suited for modelling zero or negative values. Under such a scenario, the NMR at time t was estimated using the linear interpolation formula:

$$NMR_t = NMR_{2008} + \left[\left[\frac{NMR_{2021} - NMR_{2008}}{[2021 - 2008]} \right] * [t - 2008] \right]$$

where t represents each year from 2009 to 2021. Following the interpolation of NMR_t values for each year, the Annual Net Migrant [ANM_t] counts were calculated by applying these rates to the projected population [14] of the respective years using the formula:

$$ANM_t = \left[\frac{NMR_t}{100} * P_t \right].$$

Although the definitions used in the Census and NSSO surveys differ widely—making direct comparison of net migrant estimates methodologically inappropriate—the data nonetheless offer a comprehensive indication of the trends in migration [Appendix Table 1.3/1.4]. The table also provides the estimates of total internal migrants reported in various surveys [NSO/Census and PLFS]. The estimated net annual male migrants and female migrants are presented in Appendix Tables 1.5 and 1.6.

2.5.6 Modelling of net migrant population in projections

As mentioned previously, the projected net migration figures for 2022 to 2051 constitute an indispensable component in the current population projections. Future patterns of net migration were estimated using two separate curve-fitting approaches, appropriate on the basis of historical migration trajectories of the respective states. For those states exhibiting a consistent net migration trend—either positive or negative—the Logistic Converging Growth Model [LCM] was found to be the most compatible approach. The model is expressed by the equation, $P_t = P_c + [P_1 - P_c] * e^{-r*[t-t_1]}$. P_t denotes the projected number of net migrants in year t [covering the period 2022 to 2051], P_1 refers to the net migrant count in the base year 2011, P_c is the assumed convergence level of net migration expected to stabilise from 2021 onward, and r represents the convergence rate. The parameters $-t_1$ and t represent the base year [2011] and the year for which the population projection is carried out, respectively. The r component is calculated using the formula.

$$P_t = \frac{-1}{[t-t_1]} * \ln \left[\frac{[P_t - P_c]}{[P_1 - P_c]} \right]$$

This method assumes that the migration values asymptotically approach a saturation level, rather than exhibiting unbounded growth or decline. Once converging growth rates were estimated, the LCM was applied to the project annual net migration for the projection period. However, this model was deemed inappropriate for states, where net migration trends shifted and its pattern changed from negative to positive by 2021, or vice-versa. In such cases, Linear Convergence models were applied using the formula

$$P_t = P_c + [P_0 - P_c] * \left[1 - \left[\frac{[t-t_0]}{[T-t_0]} \right] \right]$$

Here, P_t refers to the projected net migration in year t ; P_0 is the size of net migrants in the base year [2011]; P_c is the assumed convergence level in 2021. The elements, t_0 and T refers to the base year and the end year of convergence [2051] respectively.

Few studies signal that overall tempo of inter-state migration in the country is slowing down. On the other hand, substantial changes have been observed in migration patterns, as evidenced by declining migration levels in Maharashtra and Assam, alongside notable increases in southern states, particularly Kerala and Tamil Nadu. Concurrently, out-migration has been escalated in conventionally key sending states such as Madhya Pradesh, Bihar, and Uttar Pradesh [41]. While the precise extent of interstate migration is unclear, there has

Future patterns of net migration were estimated using two separate curve-fitting approaches, appropriate on the basis of historical migration trajectories of the respective states.

Most of the states currently experiencing high levels of net migration—whether in the form of in-migration or out-migration—are expected to gradually move toward stabilisation in a phased manner in terms of population mobility.

been a noticeable shift from traditional migration routes between neighbouring states—such as from Tamil Nadu to Kerala—to longer distance movements from northern to southern states. This trend indicates the emergence of new migration corridors across the country.

Migration is often understood through the lens of push-pull dynamics, where economically disadvantaged and labour-surplus regions push individuals to migrate, while economically affluent, labour-deficit regions that normally offer better wages and employment opportunities pull them in. Most of the states currently experiencing high levels of net migration—whether in the form of in-migration or out-migration—are expected to gradually move toward stabilisation in a phased manner in terms of population mobility. It is also argued that economic growth often drives the diffusion of its benefits to rural and semi-urban areas, which typically act as the centres of outmigration, thereby leading to the development of these regions as well. Thus, the wider distribution of economic opportunities, combined with enhanced infrastructure facilities—such as better roads, education, healthcare, and public transport—stimulates people to limit their migration and stay in their home towns or only travel over shorter distances [49, 50]. For instance, states such as Uttar Pradesh and Bihar, which presently witness high levels of out-migration, are generally typified by lower levels of economic development and population expansion. Conversely, most of the urbanised and industrialised states such as Maharashtra, Karnataka, Tamil Nadu, and NCT of Delhi, are likely to maintain their status quo as major destinations for migrants even in the years to come.

Most importantly, as the labour force in the current sending states declines due to ongoing fertility transitions, improved wage prospects in these regions may arise, potentially reducing the scope for further migration in the long run. These paradigm shifts in demographics of the larger states could lead to higher wages and reduce the need for long-distance travel, allowing individuals to find employment without leaving their families behind. As a result, local employment may become more attractive, thereby decreasing the likelihood of further out-migration in the years to come. Similarly, as urbanisation and economic development extend to currently less-developed regions, migration pressure on the more urbanised states may decline, leading to a more balanced spatial distribution of migration flows over time. The sex-wise projected annual net migrants for 2022–2051 at the state level are presented in Appendix Table 3.4 and 3.5.

2.6 Estimates of sex ratio at birth

Like other inputs used in population projections, the SRB projection is inherently uncertain, as it may follow various possible trajectories—

including improvement, deterioration, or stability—over the projection period. Owing to the volatility of its future trends, SRBs are typically assumed to remain constant in most projection models. In India, the SRB is systematically documented across multiple data sources, including the Census, SRS, NFHS, and official vital statistics records. In population projection models, the SRB is usually calculated as per international norms—as the ratio of male to female births, expressed in percentages $[M/F \times 100]$. As per the estimates based on the 2011 data, the national-level SRB is estimated at 110 male births per 100 female births [Appendix Table 1.7]. Based on the definition of SRB as the number of female births per 100 male births $[F/M \times 100]$, the estimates stand at 90.6 in the SRS [2009–11], 90.9 from civil registration records [2011], and 91.9 in NFHS-4 [2015–16]. Global evidence suggests that, among human populations, the SRB is largely governed by biological determinants and generally ranges between 105 and 107 male births per 100 female births.

Regardless of the method of measurement or standardisation, the trend broadly aligns with the national SRB reported in the 2011 Census and highlights the persistent deficit of girl children in our society. A continued deficit of girl children will distort the sex composition of the population, with far-reaching demographic and social consequences. In the absence of the 2021 Census, we lack reliable estimates of the SRB from a comprehensive and nationally representative data source. The relatively small sample of births captured in NFHS surveys limits the reliability of state-level SRB estimates, and findings should be interpreted with caution [6]. Conversely, doubts remain about the reliability of vital statistics, owing to gaps in both coverage and data quality in some states. In this exercise, the Census data—though slightly outdated—are considered the preferred source for SRB projections due to its comprehensive coverage.

A continued deficit of girl children will distort the sex composition of the population, with far-reaching demographic and social consequences.

2.6.1 Is it possible for the sex ratio at birth to converge?

The SRB in India was similar to the natural trend during the 1950s and 1960s, before the sex-selective testing and abortions became rampant [51]. Owing to its predominantly patriarchal social structure, India demonstrates markedly elevated SRB levels across most states, with the northern region showing particularly pronounced imbalances [Appendix Table 1.7]. This has resulted in a distinctly masculine demographic profile in India. This trend may be attributed to several interrelated factors, such as higher female mortality, the prevalence of sex-selective abortions favouring male foetuses, and the systematic underreporting of female births [6]. Nonetheless, recent trends outlined in the preceding table indicate a gradual normalisation of the SRB, which may mitigate the existing demographic masculinity and align the ratio more closely with biologically determined levels

Persistent son preference, patriarchal inheritance norms, and the undervaluation of women's unpaid work continue to influence reproductive choices and family planning decisions.

over time. In support of this observation, Kerala was the only state to exhibit an improving SRB trend during 1991–2001; however, this number increased to seven out of the 22 regions considered in the subsequent decade. Of particular note are the improvements in states such as Punjab, which are especially encouraging given their historically imbalanced SRB levels.

Various factors contribute to the growing expectation that the value accorded to female children will rise in the years ahead, even within deeply entrenched patriarchal contexts like that of India. Studies have shown that societies with high rates of sex-selective abortions are likely to suffer shortage of women in a couple of decades at marriageable age leading to substantial marriage squeeze in the society that can trigger a variety of social menace [52]. The initiatives of the government have the potential to regulate the abnormalities in SRB and uplift the status of women—including a ban on sex-selective abortions and large-scale initiatives, such as ‘Beti Bachao, Beti Padhao’ [Save the daughter, educate the daughter]. The effective and sustained enforcement of the Pre-Conception and Pre-Natal Diagnostic Techniques [PCPNDT] Act of 1994 has a pivotal role to play in reducing the incidence of this unlawful practice over time.

However, policy interventions alone cannot overturn deeply rooted gender biases. Despite the enforcement of the PCPNDT Act and the visibility of campaigns like Beti Bachao, Beti Padhao, progress in improving the SRB has been uneven across states. Persistent son preference, patriarchal inheritance norms, and the undervaluation of women's unpaid work continue to influence reproductive choices and family planning decisions. Addressing these structural drivers—through education, media engagement, and targeted social behaviour change communication [SBCC]—is essential to complement legal and policy measures. Other key contributing factors include anticipated shortages of females in the labour force—resulting from historically skewed sex ratios—alongside rising female educational attainment, and broader progress in gender-related development metrics etc.

Furthermore, the strengthening of health infrastructure is anticipated to narrow sex-based differentials in childhood mortality, which in turn may contribute to a more balanced SRB. Therefore, it is assumed that the SRB will gradually converge toward the biologically plausible range of 105 to 107 male births per 100 female births, with significant inter-state variations expected over the projection horizon. It is anticipated that states, which in the past decades had a particularly large imbalance of baby boys to girls, now seem to gradually converge toward the natural level. In contrast, when fertility declines rapidly and

couples limit their family size, they may be forced to prefer at least one male child, which could lead to a widening of the SRB.

2.6.2 Projection of Sex ratio at birth

Two methodological approaches were adopted to project the SRB at the state level, recognising that time series data on the topic display diverse patterns across regions and over time. States that have exhibited a constant SRB across consecutive censuses, as well as those currently displaying unfavourable SRB levels, are assumed to follow the same trajectory—given the innate unpredictability associated with the gender combination in the future population. To guide future projections, states have been grouped into four categories, each representing a distinct pattern of SRB progression. To begin with, all the states that are currently well-ranked in terms of SRB [≤ 105] are exempted from the analysis, as it is assumed that these states—Kerala, West Bengal, Chhattisgarh, Assam, and Karnataka—will continue to follow their current SRB patterns in the future as well.

The second category comprises states—such as Himachal Pradesh, Gujarat, NCT of Delhi, Punjab and Haryana—that demonstrated a consistent improvement in SRB across the two preceding censuses. Therefore, these states are assumed to be on a trajectory towards convergence with biologically normative levels of the SRB over time. The SRB projections for these states are generated using a logarithmic convergence model. This model is often employed in demographic modelling to represent processes in which variables exhibit asymptotic convergence toward a predefined equilibrium. The mathematical expression of this model is $SRB_t = SRB_c + [SRB_0 - SRB_c] * e^{-r[t-t_0]}$. In this equation SRB_t refers to the projected SRB at time t ; SRB_c denotes the convergence level of SRB; SRB_0 is the SRB in the base year, r represents the convergence rate; and $t - t_0$ indicates the time interval between the base year and the projected year.

The pace at which states approach the biologically normative SRB is influenced by multiple factors, with the convergence rate from the prevailing level to the equilibrium being the most critical. Therefore, the attainment of this equilibrium is expected to occur at different times across states, reflecting their distinct convergence trajectories. While Himachal Pradesh is projected to attain the optimal SRB of 107 by 2031, Punjab may not reach this benchmark until well beyond the mid-21st century. On the flip side, Haryana trails considerably and may require several more decades to reach the stipulated optimal SRB level [Appendix Table 3.6].

However, this model is unsuitable for projecting SRB in states that were categorised as third-tier states, as it overlooks the continued

Two methodological approaches were adopted to project the sex ratio at birth at the state level, recognising that time series data on the topic display diverse patterns across regions and over time.

The observed SRB trends show an upward trajectory toward a higher baseline, conflicting with the underlying assumption of SRB improvement nationwide.

deterioration in sex ratio trends. The observed SRB trends show an upward trajectory toward a higher baseline, conflicting with the underlying assumption of SRB improvement nationwide. This includes the third category, comprising the largest number of states—including Tamil Nadu, Andhra Pradesh, Jharkhand, Telangana, Bihar, Rajasthan, Maharashtra, Uttarakhand, and Jammu and Kashmir [undivided]—as well as India as a whole, which has exhibited a secular decline in the SRB.

In fact, data from the fourth [2015–16] and fifth [2019–21] rounds of the NFHS indicate favourable trends in the SRB across states such as Jammu and Kashmir, Uttarakhand, Rajasthan, Telangana, as well as at the all-India level, reflecting a positive shift in favour of the girl child. In such cases, the convergence rate [r] is calculated using the formula:

$$r = -\frac{1}{t-t_0} * \ln * \left[\frac{SRB_{t-1} - SRB_c}{SRB_t - SRB_c} \right]$$

Here, SRB_t refers to the base year for which the SRB is available [2015–16] and SRB_{t-1} denotes the final year for which data is available [2019–21].

The term SRB_c represents the long-run convergent level of the SRB and $t-t_0$ indicates the time span between the two survey periods. The logarithmic convergence model is then used to project SRB values, assuming a gradual adjustment toward the convergent level over time. The remaining states in this category—Tamil Nadu, Andhra Pradesh, Jharkhand, Bihar, and Maharashtra—were also excluded from the analysis and assumed to continue along their current SRB trends into the future. The fourth category, consisting of Uttar Pradesh, Odisha, and Madhya Pradesh, was excluded from the analysis, as these states exhibited no change in the SRB between the 2001 and 2011 Censuses.

2.7 Issues in projecting urban-rural population

India is often characterised as an agrarian economy, with the 2011 Census reporting that more than two-third [68.9%] of its population lived in rural areas, while less than one-third [31.1%] inhabited in urban centres. Over the next one and a half decades, this trend may have become even more pronounced. Conversely, there are arguments that India's urbanisation would slow down on account of its exclusionary nature and its limited capacity to facilitate rural-to-urban migration [53].

In India, areas are designated as urban or rural depending on demographic and economic parameters. As per the broad definition

of the 2011 Census, an area is designated as urban if it falls under a municipality, corporation, cantonment board, or notified town area committee. For other areas, three criteria are followed for classifying urban areas; 1] area should have a minimum population of 5,000, 2] at least three-fourth of the male population in the working ages should be engaged in non-farm activities 3] population density of a minimum of 400 persons per square kilometre.

Besides the natural increase in urban population, net rural-to-urban migration and reclassification of areas [especially rural to urban areas] drives the urban population growth. As people move from rural to urban areas, population growth in the former decreases while it increases in the latter. The urban population growth alone cannot speed up urbanisation, but more importantly, if urbanisation has to occur, the urban population growth rate should exceed the rural population growth rate. Thus, in real terms, the urban-rural population growth differential is critical to the process of urbanisation [54]. Another significant factor influencing the urbanisation process could be the definitional changes in the jurisdictional boundaries of regions. Such definitional changes could potentially alter the projected rural and urban population figures presented in this report.

2.8. Methodologies for urban-rural population projections

Population projections for urban and rural areas across major states have been computed using only one set of population projection. After examining a wide range of methodologies for projecting urban-rural populations, the revised URGD method developed by the UN [2018] proved to be the most appropriate and robust framework. This procedure is anchored in empirical observations of shifts in the proportion of the population residing in urban areas, with the procedural details systematically outlined in the UN methodological guidelines [55]. Its suitability is further reinforced by consistency with urbanisation patterns highlighted in other studies, making it suitable for generating projections at both the national and state levels in India. Thus, unlike the national- and state-level projections, which incorporate multiple variants, the URGD approach is implemented with only a single projection variant [Figure 1.10].

Besides the natural increase in urban population, net rural-to-urban migration and reclassification of areas [especially rural to urban areas] drives the urban population growth.

The first step in projecting urban-rural population is the calculation of urban-rural ratio [URR_t], defined as the ratio of the urban to the rural population expressed as:

$$UR_t = \frac{U_t}{R_t} \dots \dots [1].$$

Here, U_t and R_t denote the size of the urban and the rural populations, respectively at time t . The urban-rural ratio at time t is directly related to the percentage urban $[PU_t]$ because:

$$PU_t = \frac{U_t}{U_t + R_t} = \frac{URR_t}{1 + URR_t} \text{ -----}[2].$$

The growth rate of urban-rural ratio between time t and $t+n$ [${}_n rur_t$] is estimated with the formula

$${}_n rur_t = \frac{1}{[n]} * \left[\frac{URR_{t+n}}{URR_t} \right] \text{}[3].$$

Then substituting URR_t for its equivalent according to equation [1], it follows that

$$\begin{aligned} {}_n rur_t &= \frac{1}{[n]} * \left[\ln \left[\frac{U_{t+n}}{R_{t+n}} \right] - \ln \left[\frac{U_t}{R_t} \right] \right] \\ &= \frac{1}{[n]} * [\ln [U_{t+n}] - \ln [R_{t+n}] - \ln [U_t] + \ln [R_t]] \\ &= \frac{1}{[n]} * \left[\ln \left[\frac{U_{t+n}}{U_t} \right] - \ln \left[\frac{R_{t+n}}{R_t} \right] \right] \\ &= \left[\frac{1}{[n]} * \ln \left[\frac{U_{t+n}}{U_t} \right] \right] - \left[\frac{1}{[n]} * \ln \left[\frac{R_{t+n}}{R_t} \right] \right] \\ &= {}_n u_t - {}_n r_t \end{aligned}$$

Here ${}_n u_t$ and ${}_n r_t$ are the urban and rural growth rate of population respectively between times t and $t+n$. Therefore, the growth rate of the urban-rural ratio is equivalent to the difference between the growth rates of the urban and the rural populations. So, ${}_n rur_t$ [urban-rural growth difference] is used as the basis for interpolation and extrapolation of the urban proportion. If we assume a constant growth rate in the Urban Rural Ratio [URR] and if T is any time point within the intercensal period $[t, t+n]$, URR at time T can be computed with the formula $URR_T = URR_t * e^{(nrurt*(T-t))}$ [5]. The same equation can be used to obtain extrapolated values of URR even when T stands outside the intercensal period and $[t, t+n]$. Using the equation five, interpolation and extrapolation can be carried out assuming that the ${}_n rur$ remains constant for the projected period. Once we compute the value of URR_T it can be transformed to PU_T with equation two.

Generally, the extrapolation method presumes that the Logistic Curve implies that the urban-rural growth difference would remain unaltered for the entire projection period. However, as urbanisation progresses, urban growth decreases as a fraction of the urban population, while it increases as a fraction of the rural population. To overcome this, the UN has developed a hypothetical urban-rural growth difference, denoted by $hrur_t$ and that can be estimated with the help of a regression equation ${}_n hrur_t = 0.032561 - 0.0153693 * PU_{[t+n/2]}$[6]; where $PU_{[t+n/2]}$ is the proportion urban for the mid-point of the intercensal period between times t and $t+n$.

As urbanisation progresses, urban growth decreases as a fraction of the urban population, while it increases as a fraction of the rural population.

2.9 Approach to population projection for smaller states

The decadal growth rates of population in most of the smaller states and UTs are erratic and no clear trend in the growth rates is discernible [1]. Moreover, the SRS does not consistently provide the essential demographic inputs needed for population projections for these territories. Due to this limitation, mathematical methods—specifically curve fitting using logistic methods—were employed to project the populations of these states. There are eight smaller states for which this method of projection was employed. These include Arunachal Pradesh, Goa, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura. The five UTs in this category include Andaman and Nicobar Islands, Chandigarh, Dadra and Nagar Haveli and Daman and Diu, Lakshadweep, and Puducherry.

The LC follows the standard form of $Y_t = \frac{K}{1 + \exp[-\alpha(t - \beta)]}$;

where α , β , and k are constants and $b < 0$. Y_t is the value of the time series at time 't'. Here, the R Studio software programme is used for projecting the population using the SSlogis function given in the stats package. Appendix Figure 2.6 illustrates how closely the LC fits the observed and estimated population of Arunachal Pradesh. A similar procedure was followed for all smaller states and UTs included in this category. Population projections for the smaller states are detailed in Appendix VIII [Appendix Table 8.1].

SECTION
3

APPENDIX: I

**APPENDIX TABLES:
STATISTICAL INPUTS FOR
MODEL ESTIMATION**



Appendix Table 1.1: State-wise trends and absolute decline in TFR, 2011–2021

States/India	2011	2014	2017	2021	Absolute decline in fertility [2011–2021]
Andhra Pradesh	1.8	1.8	1.6	1.5	0.03
Assam	2.4	2.3	2.3	2.1	0.03
Bihar	3.6	3.2	3.2	3.0	0.06
Chhattisgarh	2.7	2.6	2.4	2.2	0.05
Gujarat	2.4	2.3	2.2	2.0	0.04
Haryana	2.3	2.3	2.2	2.0	0.03
Himachal Pradesh	1.8	1.7	1.6	1.6	0.02
Jammu and Kashmir	1.9	1.7	1.6	1.5	0.04
Jharkhand	2.9	2.8	2.5	2.3	0.06
Karnataka	1.9	1.8	1.7	1.6	0.03
Kerala	1.8	1.9	1.7	1.5	0.03
Madhya Pradesh	3.1	2.8	2.7	2.6	0.05
Maharashtra	1.8	1.8	1.7	1.5	0.03
NCT of Delhi	1.8	1.7	1.5	1.4	0.04
Odisha	2.2	2.1	1.9	1.8	0.04
Punjab	1.8	1.7	1.6	1.5	0.03
Rajasthan	3.0	2.8	2.6	2.4	0.06
Tamil Nadu	1.7	1.7	1.6	1.5	0.02
Telangana	-	1.8	1.7	1.6	NA
Uttarakhand	2.1	2.0	1.9	1.8	0.03
Uttar Pradesh	3.4	3.2	3.0	2.7	0.07
West Bengal	1.7	1.6	1.6	1.4	0.03
India	2.4	2.3	2.2	2.0	0.04

Source: SRS Statistical Reports

Appendix Table 1.2: Life expectancy at the national and state level by gender in India, 2011-2021 [in years]

States/India	2011		2015		2019		2020		2021	
	M	F	M	F	M	F	M	F	M	F
Andhra Pradesh	65.5	70.4	68.3	71.2	68.5	72.4	68.2	71.2	66.7	69.9
Assam	61.9	65.1	65.4	67.3	67.0	69.4	67.0	68.7	65.9	67.2
Bihar	67.3	68.0	69.2	68.6	69.1	69.3	69.1	69.2	67.6	69.1
Chhattisgarh	-	-	63.8	66.6	62.8	66.4	62.6	66.3	60.5	65.8
NCT of Delhi	-	-	73.3	76.3	73.0	77.2	72.6	77.0	70.6	74.9
Gujarat	66.0	70.5	67.6	72.0	67.4	72.9	66.8	72.1	64.7	70.3
Haryana	65.8	70.9	67.6	72.3	66.3	72.1	66.3	72.1	65.0	69.7
Himachal Pradesh	69.0	73.1	69.8	75.6	69.9	77.2	69.5	75.8	68.5	73.6
Jammu and Kashmir	70.6	74.0	72.1	76.7	72.9	75.7	73.0	77.3	72.2	75.0
Jharkhand	-	-	68.8	68.4	69.5	69.3	69.5	69.2	67.6	69.1
Karnataka	66.4	70.8	67.7	70.8	67.5	71.7	67.8	71.6	65.7	70.8
Kerala	71.8	77.8	72.5	77.8	71.7	77.9	70.8	78.1	70.4	75.9
Madhya Pradesh	62.3	65.5	64.2	67.9	65.3	69.4	66.0	69.3	63.7	68.1
Maharashtra	69.4	73.4	71.2	73.9	70.8	74.5	70.0	74.4	67.8	73.7
Odisha	63.8	65.9	67.1	69.9	69.2	71.5	69.3	71.4	67.2	70.1
Punjab	69.1	73.4	71.0	74.0	69.3	73.6	68.8	72.9	66.5	71.2
Rajasthan	65.4	70.0	66.3	70.9	67.1	71.9	67.0	71.8	66.6	71.6
Tamil Nadu	68.2	72.3	69.9	73.7	70.6	75.2	70.5	76.4	69.4	74.2
Telangana	-	-	-	-	68.5	72.0	68.4	71.9	68.0	70.2
Uttar Pradesh	62.5	65.2	64.3	65.6	65.5	67.7	65.9	67.6	65.0	67.5
Uttarakhand	-	-	68.0	74.2	67.5	73.8	67.5	72.7	66.2	70.3
West Bengal	68.5	71.6	70.4	72.2	70.7	73.6	70.6	73.4	69.3	72.3
India	65.8	69.3	67.8	70.4	68.2	71.6	68.1	71.5	66.7	71.0

Source: Figures for the period 2011 to 2019 are drawn from the SRS Abridged Life Tables, while the estimates for 2020 and 2021 have been computed by the authors.

Appendix Table 1.3: Total number of interstate migrants reported in various surveys, 2007-08 and 2021-22

NSSO 64th Round [2007-08]		Multiple Indicators Survey [2020-21]				Periodic Labour Force Survey [2021-22]			
States	Total	Male	Female	Total	Male	Female	Total	Male	Female
Andhra Pradesh	1427546	617991	804553	3476635	1752861	1723852	3319170	1468106	1850622
Assam	392621	196739	196289	880563	488787	391219	637144	339188	297377
Bihar	6757158	3585600	3172143	8982759	4894742	4078894	6080157	3049269	3036605
Chhattisgarh	1229712	446198	791594	1424766	648526	777847	1332303	441140	900724
NCT of Delhi	6602569	3338781	3277835	6666124	4014888	2647514	7208729	4315931	2888554
Gujarat	3630229	1915236	1711172	5197631	3155291	2051546	5172499	3110797	2070109
Haryana	3989983	1304547	2709447	3396317	1293548	2101742	3565248	1211606	2342254
Himachal Pradesh	648337	326879	320976	930454	498351	432762	629014	316394	312571
Jammu and Kashmir	363715	222892	139497	591130	430209	167946	559804	363430	200993
Jharkhand	1519346	461751	1061619	3691064	1541746	2143306	2650636	1074207	1578227
Karnataka	4089425	1836671	2252147	3787157	1935341	1851254	4612384	2207845	2402854
Kerala	1763456	947853	821732	2210256	1338129	875581	2493106	1571535	932309
Madhya Pradesh	3423144	946837	2497309	4079213	1403623	2676110	5030528	1849483	3169711
Maharashtra	8003228	4118609	3884492	10157636	5831821	4336138	9402067	5138000	4272887
Odisha	1650384	763966	883367	2524294	1522071	998347	2125742	1325688	797527
Punjab	3259005	1524877	1737713	3811806	1925410	1887168	3183590	1416278	1752101
Rajasthan	4206324	1463864	2722633	5331210	2220611	3124937	5168497	2287264	2878070
Tamil Nadu	2536242	1119446	1407878	2669618	1485859	1185413	3746574	1898495	1849060
Telangana	999121	445968	552986	2590556	1351849	1238037	1987378	1018710	968430
Uttar Pradesh	12414938	6031683	6368435	14241402	7567193	6677002	15407030	8453357	6962802
Uttarakhand	1834238	845170	989974	1565232	653216	916521	1758095	861730	897546
West Bengal	3293647	1582303	1710307.5	5444387	3069273	2380227	4780203	2810740	1981082

Sources: Estimated by the authors from the unit-level data of NSSO 64th Round [2007-08], Multiple Indicators Survey [2020-21] and the Periodic Labour Force Survey [2021-22].

Appendix Table 1.4: Comparison of inter-state net migrants reported in various surveys [2007-08 to 2021-22 and the Census [2001-11]]

States	NSSO 64th Round [2007-08]			Periodic Labour Force Survey [2021-22]			Multiple Indicators Survey [2020-21]			Census [2001-11]		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Andhra Pradesh	-313903	-140455	-172567	-876477	-470385	-406167	-274821	-132583	-142213	-16771	20597	-37368
Assam	-149471	-57994	-92867	-245614	-157209	-87231	-188411	-46440	-142618	-153654	-93443	-60211
Bihar	-5368462	-3258210	-2115014	-5308967	-2607842	-2709111	-5180944	-2050617	-3154974	-2825188	-1682224	-1142964
Chhattisgarh	608890	279509	330620	456701	142340	318012	343186	208876	133420	180970	90813	90157
NCT of Delhi	3785027	2213927	1539422	1898777	768542	1132398	1065340	-99267	1169949	1504813	818272	686541
Gujarat	1103476	782256	306103	-105787	-652403	534232	184881	-166316	345651	1457581	942350	515231
Haryana	867089	343767	526731	869245	301358	565210	-359759	-176575	-183155	809637	419680	389957
Himachal Pradesh	-82563	23660	-100762	76805	72088	5420	305758	249686	58394	30236	36948	-6712
Jammu and Kashmir	-135083	-112053	-21575	97405	73910	25033	-130914	-141409	6176	-49606	-28087	-21519
Jharkhand	-532502	-222149	-311000	1024452	424339	600750	1204977	610290	594576	-4071	-56117	52046
Karnataka	698425	450727	247943	243933	160487	83943	-834390	-504229	-327762	335793	247894	87899
Kerala	-29775	-12395	-17071	290826	145552	145442	675195	366377	309343	-187513	-49145	-138368
Madhya Pradesh	-453960	-200321	-254518	330407	227244	104025	-512492	-194397	-318147	-276666	-160567	-116099
Maharashtra	4522077	2646129	1870432	549192	-242591	773069	3318707	1030511	2275143	2483939	1567425	916514
Odisha	-478652	-265707	-213924	417796	574540	-160342	372068	452865	-84888	-264824	-167396	-97428
Punjab	640530	472053	165809	86181	52373	34225	881256	285648	597348	500802	295826	204976
Rajasthan	-443387	-331820	-114325	60491	153147	-91663	-669576	-248367	-423822	-361370	-242540	-118830
Tamil Nadu	-525482	-207358	-314906	-468290	-366865	-105777	-437271	-314788	-123518	-99684	-61692	-37992
Telangana	56485	5359	51059	688221	304816	383984	501225	224407	277225	40546	-11192	51738
Uttar Pradesh	-5616960	-3591033	-2045226	-2104582	-188726	-1897236	-2583194	-937067	-1639199	-3546335	-2166435	-1379900
Uttarakhand	362694	178040	184722	312670	62203	253963	191689	57619	135326	177978	109765	68213
West Bengal	561249	192465	367942	1388687	1217295	187280	1701446	1351480	358437	-264451	-164610	-99841

Sources: Estimated by the authors from the unit-level data of NSSO 64th Round [2007-08], Periodic Labour Force Survey [2021-22], Multiple Indicators Survey [2020-21]] and the Census [2001-11].

Appendix Table 1.5: Estimated annual net male migrants, 2011-2021

States	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Andhra Pradesh	-1385	-1379	-1373	-1366	-1360	-1353	-1345	-1336	-1328	-1320	-1311
Assam	-552	-543	-534	-525	-516	-507	-498	-489	-480	-472	-463
Bihar	-29821	-28864	-27929	-27015	-26122	-25250	-24348	-23472	-22623	-21800	-21002
Chhattisgarh	2813	2734	2656	2580	2506	2433	2361	2290	2221	2154	2088
NCT of Delhi	18126	16858	15670	14559	13521	12552	11646	10800	10013	9279	8597
Gujarat	5586	4959	4401	3905	3464	3072	2723	2413	2138	1893	1677
Haryana	2466	2100	1721	1329	925	507	77	-366	-821	-1289	-1768
Himachal Pradesh	306	333	363	395	430	469	509	554	602	654	711
Jammu and Kashmir	-1255	-1269	-1282	-1296	-1310	-1324	-1335	-1346	-1358	-1369	-1381
Jharkhand	-2845	-3078	-3331	-3602	-3895	-4211	-4546	-4907	-5296	-5715	-6166
Karnataka	3592	3317	3063	2828	2610	2410	2221	2046	1886	1737	1601
Kerala	701	981	1265	1553	1845	2141	2437	2736	3038	3343	3652
Madhya Pradesh	-2011	-2009	-2006	-2002	-1998	-1994	-1986	-1979	-1970	-1962	-1953
Maharashtra	21625	20093	18667	17340	16106	14957	13873	12866	11932	11064	10258
Odisha	-3034	-3161	-3293	-3431	-3574	-3722	-3872	-4027	-4188	-4355	-4529
Punjab	2872	2420	2039	1717	1447	1218	1025	862	725	609	512
Rajasthan	-3127	-3059	-2991	-2924	-2858	-2793	-2723	-2655	-2588	-2522	-2458
Tamil Nadu	-971	-581	-186	213	619	1029	1442	1858	2278	2702	3129
Telangana	127	169	225	300	399	532	707	940	1249	1660	2207
Uttar Pradesh	-18307	-14610	-11657	-9298	-7415	-5912	-4706	-3746	-2980	-2371	-1886
Uttarakhand	1324	1156	984	806	623	435	242	44	-159	-367	-580
West Bengal	2967	3419	3940	4540	5231	6026	6931	7971	9167	10542	12123

Source: Estimated by the authors

Appendix Table 1.6: Estimated annual net female migrants, 2011-2021													
States	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021		
Andhra Pradesh	-1674	-1647	-1620	-1593	-1566	-1540	-1513	-1485	-1458	-1431	-1405		
Assam	-1039	-1072	-1106	-1141	-1177	-1214	-1251	-1289	-1329	-1369	-1410		
Bihar	-23634	-24430	-25242	-26072	-26921	-27788	-28621	-29471	-30340	-31227	-32132		
Chhattisgarh	2883	2673	2478	2296	2128	1971	1824	1687	1560	1443	1334		
NCT of Delhi	14337	14185	14028	13865	13699	13529	13359	13186	13011	12832	12653		
Gujarat	3136	3171	3205	3239	3273	3306	3339	3371	3403	3434	3466		
Haryana	3871	3383	2877	2352	1809	1247	666	67	-550	-1186	-1840		
Himachal Pradesh	-802	-723	-643	-561	-477	-393	-306	-218	-129	-38	53		
Jammu and Kashmir	-153	-134	-114	-94	-73	-52	-30	-7	15	38	62		
Jharkhand	-3658	-3849	-4049	-4259	-4477	-4706	-4942	-5190	-5448	-5718	-6000		
Karnataka	1954	1796	1651	1518	1395	1282	1176	1079	990	908	833		
Kerala	530	773	1019	1269	1522	1778	2034	2293	2554	2818	3085		
Madhya Pradesh	-2698	-2749	-2800	-2851	-2903	-2954	-3003	-3051	-3100	-3149	-3198		
Maharashtra	19631	19934	20238	20545	20854	21166	21459	21753	22050	22349	22651		
Odisha	-1749	-1628	-1516	-1411	-1314	-1223	-1137	-1057	-982	-913	-849		
Punjab	1149	1017	900	796	705	623	551	486	430	379	335		
Rajasthan	-1567	-1734	-1920	-2124	-2349	-2598	-2868	-3165	-3493	-3853	-4250		
Tamil Nadu	-2282	-1953	-1618	-1279	-934	-585	-231	128	489	855	1224		
Telangana	757	862	981	1116	1269	1444	1641	1865	2119	2407	2735		
Uttar Pradesh	-20324	-20208	-20087	-19961	-19831	-19697	-19535	-19370	-19203	-19034	-18864		
Uttarakhand	1221	991	756	515	267	13	-246	-512	-783	-1060	-1344		
West Bengal	3203	3037	2880	2730	2588	2454	2322	2198	2080	1968	1862		

Source: Estimated by the authors

Appendix Table 1.7: State-level trends in sex ratio at birth, 1991–2011

States/India	1991	2001	2011	Status [1991–2001]	Status [2001–2011]
Andhra Pradesh	103	104	106	Declining	Declining
Assam	105	105	105	Constant	Constant
Bihar	108	109	110	Declining	Declining
Chhattisgarh		104	104	-	Constant
Gujarat	109	116	113	Declining	Improving
Haryana	115	124	120	Declining	Improving
Himachal Pradesh	108	115	110	Declining	Improving
Jammu and Kashmir	-	114	128	-	Declining
Jharkhand	-	105	108	-	Declining
Karnataka	104	106	105	Declining	Improving
Kerala	104	103	102	Improving	Improving
Madhya Pradesh	104	108	108	Declining	Constant
Maharashtra	107	111	114	Declining	Declining
NCT of Delhi	110	117	114	Declining	Improving
Odisha	103	106	106	Declining	Constant
Punjab	117	129	118	Declining	Improving
Rajasthan	108	112	114	Declining	Declining
Tamil Nadu	103	105	106	Declining	Declining
Telangana	-	103	108	-	Declining
Uttarakhand	-	113	114	-	Declining
Uttar Pradesh	109	111	111	Declining	Constant
West Bengal	104	104	105	Constant	Declining
India	106	109	110	Declining	Declining

Notes: The figures for India in 1991 exclude data from Jammu and Kashmir. SRB is expressed as the number of male births per 100 female births, calculated as $[M/F] \times 100$.

Source: Estimated by the authors from Census

Appendix Table 1.8: Age-sex distribution of the state-level base population used for population projections, 2021									
Age group	India			Andhra Pradesh			Assam		
	M	F	T	M	F	T	M	F	T
0-4	59235372	54284586	113519958	1677473	1589404	3266877	1552206	1474719	3026925
5-9	60491295	55395355	115886650	1923585	1823347	3746932	1520305	1444812	2965117
10-14	58188886	53862679	112051565	1830916	1738180	3569096	1602280	1545699	3147979
15-19	66021511	60491913	126513424	2147942	2031697	4179639	1793590	1726747	3520337
20-24	68877642	63007544	131885186	2373272	2251804	4625076	1772579	1687987	3460566
25-29	63239751	56117787	119357538	2418122	2235541	4653663	1574840	1455382	3030222
30-34	56803812	53277593	110081405	2330666	2347643	4678309	1393169	1471646	2864815
35-39	50524196	49386546	99910742	2168201	2279706	4447907	1366694	1397504	2764198
40-44	43689189	43116881	86806070	1886238	1896811	3783049	1145759	1131298	2277057
45-49	41492721	41079403	82572124	1833620	1943255	3776875	1114744	1076865	2191609
50-54	35553573	33472730	69026303	1613565	1545804	3159369	916903	834161	1751064
55-59	29410993	28316901	57727894	1359088	1349233	2708321	781296	710170	1491466
60-64	22412507	21031890	43444397	1031908	1036597	2068505	568447	507382	1075829
65-69	15501087	16744345	32245432	701566	858426	1559992	379530	349063	728593
70-74	13049463	14462460	27511923	686382	869149	1555531	291577	301878	593455
75-79	7277977	8507984	15785961	398196	495196	893392	151373	163224	314597
80+	5223021	6283172	11506193	240733	308817	549550	105665	116117	221782
All ages	696992994	658839767	1355832761	26621474	26600610	53222084	18030956	17394656	35425612

Appendix Table 1.8: Age-sex distribution of the state-level base population used for population projections, 2021										
Age group	Bihar				Chhattisgarh				Gujarat	
	M	F	T	M	F	T	M	F	T	T
0-4	6808513	6127796	12936309	1552206	1474719	3026925	2769635	2521645	5291280	
5-9	6196690	5529362	11726052	1520305	1444812	2965117	2889912	2603198	5493110	
10-14	6527105	6108709	12635814	1602280	1545699	3147979	2840820	2568483	5409303	
15-19	7784658	7219312	15003970	1793590	1726747	3520337	3119426	2710024	5829450	
20-24	7292194	6554409	13846603	1772579	1687987	3460566	3269906	2862958	6132864	
25-29	5237522	4120219	9357741	1574840	1455382	3030222	3125743	2713751	5839494	
30-34	4142178	3781419	7923597	1393169	1471646	2864815	3020495	2725194	5745689	
35-39	3750732	3765072	7515804	1366694	1397504	2764198	2736465	2498432	5234897	
40-44	3424392	3455486	6879878	1145759	1131298	2277057	2427128	2284351	4711479	
45-49	3205298	3055051	6260349	1114744	1076865	2191609	2200504	2054949	4255453	
50-54	2634234	2320166	4954400	916903	834161	1751064	1910642	1830948	3741590	
55-59	2062109	1957459	4019568	781296	710170	1491466	1596837	1546764	3143601	
60-64	1626204	1387647	3013851	568447	507382	1075829	1261615	1216855	2478470	
65-69	1126537	1280750	2407287	379530	349063	728593	872185	922313	1794498	
70-74	1194033	1154105	2348138	291577	301878	593455	640892	731884	1372776	
75-79	696217	657628	1353845	151373	163224	314597	336194	439008	775202	
80+	431811	365704	797515	105665	116117	221782	230757	346705	577462	
All ages	64140424	58840292	122980716	18030957	17394654	35425611	35249156	32577460	67826616	

Appendix Table 1.8: Age-sex distribution of the state-level base population used for population projections, 2021									
Age group	Haryana			Himachal Pradesh			Jammu and Kashmir [Undivided]		
	M	F	T	M	F	T	M	F	T
0-4	1231363	1064303	2295666	470227	243141	713368	457126	368265	825391
5-9	1284535	1097397	2381932	507494	263560	771054	468359	373299	841658
10-14	1265580	1067464	2333044	542480	283406	825886	758025	647437	1405462
15-19	1364284	1123970	2488254	589390	310261	899651	743973	664128	1408101
20-24	1462253	1189485	2651738	635889	335953	971842	740879	667400	1408279
25-29	1472096	1182466	2654562	635578	333552	969130	635835	594929	1230764
30-34	1355454	1186135	2541589	638136	320396	958532	598662	554677	1153339
35-39	1159851	1044425	2204276	582830	286693	869523	578661	498520	1077181
40-44	956735	906279	1863014	538203	266725	804928	488807	427590	916397
45-49	885237	835306	1720543	506044	251297	757341	432479	391935	824414
50-54	754018	697651	1451669	429173	212339	641512	375568	320487	696055
55-59	608650	563980	1172630	371766	183016	554782	295644	271598	567242
60-64	454793	427902	882695	299566	145862	445428	235273	203951	439224
65-69	312111	340217	652328	226946	109805	336751	151617	155448	307065
70-74	308707	357463	666170	177298	82478	259776	139756	130287	270043
75-79	154811	176214	331025	101920	45512	147432	69884	77548	147432
80+	108285	136683	244968	96905	39131	136036	64736	72786	137522
All ages	15138763	13397339	28536102	7349845	3713127	11062972	7235284	6420283	13655567

Appendix Table 1.8: Age-sex distribution of the state-level base population used for population projections, 2021												
Age group	Jammu and Kashmir [UT]			Jharkhand			Karnataka					
	M	F	T	M	F	T	M	F	T			
0-4	450590	362092	812682	1794564	1642911	3437475	2276130	2190707	4466837			
5-9	460640	366653	827293	1773668	1612669	3386337	2548494	2451106	4999600			
10-14	744969	635824	1380793	1854892	1752840	3607732	2554814	2445383	5000197			
15-19	729841	650497	1380338	2113814	2014682	4128496	2677350	2532228	5209578			
20-24	719696	652346	1372042	2103623	1981214	4084837	2922934	2761696	5684630			
25-29	611127	580780	1191907	1701350	1475406	3176756	2998018	2758080	5756098			
30-34	577847	542527	1120374	1415409	1377518	2792927	3061085	2907313	5968398			
35-39	562097	488175	1050272	1323343	1289365	2612708	2827763	2848437	5676200			
40-44	476024	418889	894913	1143919	1119009	2262928	2332748	2262677	4595425			
45-49	421920	383787	805707	1062880	1017758	2080638	2236323	2308929	4545252			
50-54	367702	313304	681006	891530	828239	1719769	1867300	1771837	3639137			
55-59	288903	265989	554892	747110	698345	1445455	1646140	1608363	3254503			
60-64	230319	199310	429629	558817	522622	1081439	1193913	1194400	2388313			
65-69	147918	152158	300076	413750	437223	850973	837326	927238	1764564			
70-74	136489	127279	263768	363562	386180	749742	688812	816583	1505395			
75-79	67789	75566	143355	200252	211677	411929	404430	507871	912301			
80+	63067	71158	134225	116155	118896	235051	279018	368621	647639			
All ages	7056938	6286332	13343270	19578638	18486554	38065192	33352598	32661469	66014067			

Appendix Table 1.8: Age-sex distribution of the state-level base population used for population projections, 2021

Age group	Kerala			Ladakh [UT]			Madhya Pradesh		
	M	F	T	M	F	T	M	F	T
0-4	1053833	1042546	2096379	6536	6173	12709	4176978	3900345	8077323
5-9	1214378	1200282	2414660	7719	6646	14365	4093086	3823221	7916307
10-14	1242730	1203228	2445958	13056	11613	24669	3792834	3528562	7321396
15-19	1299091	1250452	2549543	14132	13631	27763	4276587	3934486	8211073
20-24	1431764	1381928	2813692	21183	15054	36237	4393203	4094111	8487314
25-29	1319907	1279946	2599853	24708	14149	38857	3923193	3428080	7351273
30-34	1289515	1362148	2651663	20815	12150	32965	3492333	3128876	6621209
35-39	1193587	1392225	2585812	16564	10345	26909	2925921	2752931	5678852
40-44	1113816	1316051	2429867	12783	8701	21484	2580284	2512917	5093201
45-49	1136587	1398878	2535465	10559	8148	18707	2402236	2307630	4709866
50-54	1075865	1267129	2342994	7866	7183	15049	2075564	1950120	4025684
55-59	1035131	1200078	2235209	6741	5609	12350	1689660	1600152	3289812
60-64	832822	942795	1775617	4954	4641	9595	1271487	1154576	2426063
65-69	716619	802083	1518702	3699	3290	6989	844411	903610	1748021
70-74	507471	618128	1125599	3267	3008	6275	719273	794721	1513994
75-79	280960	403088	684048	2095	1982	4077	395490	491970	887460
80+	217605	396893	614498	1669	1628	3297	279846	355958	635804
All ages	16961681	18457878	35419559	178346	133951	312297	43332384	40662264	83994648

Appendix Table 1.8: Age-sex distribution of the state-level base population used for population projections, 2021											
Age group	Maharashtra			NCT of Delhi			Odisha				
	M	F	T	M	F	T	M	F	T	F	T
0-4	4149345	3667010	7816355	1104795	584934	1689729	1728391	1629846	3358237		
5-9	4663745	4108413	8772158	1291749	686379	1978128	1798368	1697333	3495701		
10-14	4929625	4418172	9347797	1380684	733785	2114469	1852598	1749078	3601676		
15-19	5173471	4646212	9819683	1539460	830935	2370395	2078119	1984272	4062391		
20-24	5642161	5072920	10715081	1653305	897623	2550928	2190188	2136493	4326681		
25-29	5680771	4916549	10597320	1678284	929374	2607658	1952639	1939486	3892125		
30-34	5814313	5241120	11055433	1780297	957352	2737649	1845802	1894837	3740639		
35-39	5238482	4862812	10101294	1685393	884608	2570001	1742839	1780498	3523337		
40-44	4486664	4234652	8721316	1449501	762470	2211971	1508929	1537894	3046823		
45-49	4121840	3983866	8105706	1325235	698257	2023492	1484757	1491889	2976646		
50-54	3602479	3366791	6969270	1089067	583279	1672346	1327585	1265552	2593137		
55-59	2908080	2793238	5701318	883723	475472	1359195	1129830	1073620	2203450		
60-64	2291843	2176084	4467927	645401	345509	990910	857530	832134	1689664		
65-69	1623159	1690689	3313848	453079	230961	684040	626504	660126	1286630		
70-74	1244145	1548084	2792229	380323	181786	562109	558424	600942	1159366		
75-79	851258	1116635	1967893	187041	88856	275897	301495	336349	637844		
80+	614832	802279	1417111	142346	63601	205947	212849	247433	460282		
All ages	63036213	58645526	121681739	18669682	9935181	28604863	23196847	22857782	46054629		

Appendix Table 1.8: Age-sex distribution of the state-level base population used for population projections, 2021

Age group	Punjab			Rajasthan			Tamil Nadu		
	M	F	T	M	F	T	M	F	T
0-4	972097	861165	1833262	4045638	3627740	7673378	2344835	2230457	4575292
5-9	1096272	948252	2044524	3958756	3518922	7477678	2646336	2515406	5161742
10-14	1143816	979461	2123277	3810064	3412885	7222949	2696309	2551591	5247900
15-19	1296189	1063621	2359810	4244912	3781841	8026753	2837986	2692400	5530386
20-24	1434812	1133091	2567903	4405136	3941417	8346553	3164786	2976286	6141072
25-29	1554482	1239625	2794107	3855011	3407635	7262646	3196646	3004793	6201439
30-34	1449766	1300479	2750245	3338603	3027677	6366280	3119164	3229673	6348837
35-39	1254386	1180890	2435276	2722546	2562111	5284657	3194744	3390344	6585088
40-44	1063708	1018840	2082548	2337340	2310101	4647441	2856991	2865257	5722248
45-49	983047	956864	1939911	2137589	2096618	4234207	2737773	2958276	5696049
50-54	867536	849700	1717236	1840040	1762678	3602718	2434702	2434652	4869354
55-59	756225	729927	1486152	1495028	1477886	2972914	2197782	2224709	4422491
60-64	583192	543826	1127018	1199427	1101962	2301389	1650774	1692024	3342798
65-69	393976	410451	804427	782422	866481	1648903	1252626	1373917	2626543
70-74	343629	406695	750324	661243	733214	1394457	987516	1129383	2116899
75-79	216086	232172	448258	357168	468597	825765	523889	665427	1189316
80+	162753	182418	345171	261753	366670	628423	397821	517953	915774
All ages	15571972	14037477	29609449	41452676	38464435	79917111	38240680	38452548	76693228

Appendix Table 1.8: Age-sex distribution of the state-level base population used for population projections, 2021										
Age group	Telangana			Uttar Pradesh			Uttarakhand			
	M	F	T	M	F	T	M	F	T	T
0-4	1326355	1232356	2558711	13139926	11821144	24961070	468669	423225		891894
5-9	1443743	1349992	2793735	12032581	10778161	22810742	451545	405456		857001
10-14	1387206	1301248	2688454	10524916	9570744	20095660	483194	432300		915494
15-19	1624545	1529752	3154297	13248610	11809466	25058076	556373	496715		1053088
20-24	1841110	1755289	3596399	13640376	12157796	25798172	596900	538860		1135760
25-29	1771997	1667035	3439032	12223155	10654264	22877419	579808	530913		1110721
30-34	1709653	1726391	3436044	9310770	8080026	17390796	476662	480125		956787
35-39	1616433	1699982	3316415	7365046	7011400	14376446	390044	407166		797210
40-44	1376838	1369358	2746196	6307661	6404368	12712029	336944	346686		683630
45-49	1300970	1330333	2631303	6214326	6006418	12220744	319010	326154		645164
50-54	1081461	1009561	2091022	5144083	4670163	9814246	269683	270477		540160
55-59	871924	859354	1731278	4058258	3861579	7919837	226083	227770		453853
60-64	650475	661369	1311844	3165566	2778754	5944320	174456	178349		352805
65-69	444739	553726	998465	2169788	2475795	4645583	120266	143963		264229
70-74	446514	556418	1002932	2178126	2153069	4331195	112638	129522		242160
75-79	246669	303256	549925	1154191	1214566	2368757	60523	72493		133016
80+	165001	207324	372325	798355	794627	1592982	45027	58736		103763
All ages	19305633	19112744	38418377	122675734	112242340	234918074	5667825	5468910		11136735

Age group	West Bengal		
	M	F	T
0-4	3169171	3024681	6193852
5-9	3365832	3205784	6571616
10-14	3722893	3568322	7291215
15-19	4200344	4017198	8217542
20-24	4647860	4456091	9103951
25-29	4662431	4323193	8985624
30-34	4382571	4294038	8676609
35-39	4003589	3904790	7908379
40-44	3413960	3321544	6735504
45-49	3435591	3405914	6841505
50-54	3082554	2828001	5910555
55-59	2612573	2383610	4996183
60-64	2047306	1778699	3826005
65-69	1427731	1320226	2747957
70-74	1013453	1051067	2064520
75-79	582907	654058	1236965
80+	412546	505745	918291
All ages	50183312	48042961	98226273

Appendix Table 1.9: Percentage distribution of population by age and gender at the state level, 2021

[illegible]

Age group	Bihar			Chhattisgarh			Gujarat		
	M	F	T	M	F	T	M	F	T
0-4	10.62	10.41	10.52	8.61	8.48	8.54	7.86	7.74	7.80
5-9	9.66	9.40	9.53	8.43	8.31	8.37	8.20	7.99	8.10
10-14	10.18	10.38	10.27	8.89	8.89	8.89	8.06	7.88	7.98
15-19	12.14	12.27	12.20	9.95	9.93	9.94	8.85	8.32	8.59
20-24	11.37	11.14	11.26	9.83	9.70	9.77	9.28	8.79	9.04
25-29	8.17	7.00	7.61	8.73	8.37	8.55	8.87	8.33	8.61
30-34	6.46	6.43	6.44	7.73	8.46	8.09	8.57	8.37	8.47
35-39	5.85	6.40	6.11	7.58	8.03	7.80	7.76	7.67	7.72
40-44	5.34	5.87	5.59	6.35	6.50	6.43	6.89	7.01	6.95
45-49	5.00	5.19	5.09	6.18	6.19	6.19	6.24	6.31	6.27
50-54	4.11	3.94	4.03	5.09	4.80	4.94	5.42	5.62	5.52
55-59	3.21	3.33	3.27	4.33	4.08	4.21	4.53	4.75	4.63
60-64	2.54	2.36	2.45	3.15	2.92	3.04	3.58	3.74	3.65
65-69	1.76	2.18	1.96	2.10	2.01	2.06	2.47	2.83	2.65
70-74	1.86	1.96	1.91	1.62	1.74	1.68	1.82	2.25	2.02
75-79	1.09	1.12	1.10	0.84	0.94	0.89	0.95	1.35	1.14
80+	0.67	0.62	0.65	0.59	0.67	0.63	0.65	1.06	0.85
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

[illegible]

Age group	Jammu and Kashmir [UT]				Jharkhand			Karnataka		
	M	F	T	M	F	T	M	F	T	
0-4	6.39	5.76	6.09	9.17	8.89	9.03	6.82	6.71	6.77	
5-9	6.53	5.83	6.20	9.06	8.72	8.90	7.64	7.50	7.57	
10-14	10.56	10.11	10.35	9.47	9.48	9.48	7.66	7.49	7.57	
15-19	10.34	10.35	10.34	10.80	10.90	10.85	8.03	7.75	7.89	
20-24	10.20	10.38	10.28	10.74	10.72	10.73	8.76	8.46	8.61	
25-29	8.66	9.24	8.93	8.69	7.98	8.35	8.99	8.44	8.72	
30-34	8.19	8.63	8.40	7.23	7.45	7.34	9.18	8.90	9.04	
35-39	7.97	7.77	7.87	6.76	6.97	6.86	8.48	8.72	8.60	
40-44	6.75	6.66	6.71	5.84	6.05	5.94	6.99	6.93	6.96	
45-49	5.98	6.11	6.04	5.43	5.51	5.47	6.71	7.07	6.89	
50-54	5.21	4.98	5.10	4.55	4.48	4.52	5.60	5.42	5.51	
55-59	4.09	4.23	4.16	3.82	3.78	3.80	4.94	4.92	4.93	
60-64	3.26	3.17	3.22	2.85	2.83	2.84	3.58	3.66	3.62	
65-69	2.10	2.42	2.25	2.11	2.37	2.24	2.51	2.84	2.67	
70-74	1.93	2.02	1.98	1.86	2.09	1.97	2.07	2.50	2.28	
75-79	0.96	1.20	1.07	1.02	1.15	1.08	1.21	1.55	1.38	
80+	0.89	1.13	1.01	0.59	0.64	0.62	0.84	1.13	0.98	
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	

[illegible]

Age group	Maharashtra			NCT of Delhi			Odisha		
	M	F	T	M	F	T	M	F	T
0-4	6.58	6.25	6.42	5.92	5.89	5.91	7.45	7.13	7.29
5-9	7.40	7.01	7.21	6.92	6.91	6.92	7.75	7.43	7.59
10-14	7.82	7.53	7.68	7.40	7.39	7.39	7.99	7.65	7.82
15-19	8.21	7.92	8.07	8.25	8.36	8.29	8.96	8.68	8.82
20-24	8.95	8.65	8.81	8.86	9.03	8.92	9.44	9.35	9.39
25-29	9.01	8.38	8.71	8.99	9.35	9.12	8.42	8.49	8.45
30-34	9.22	8.94	9.09	9.54	9.64	9.57	7.96	8.29	8.12
35-39	8.31	8.29	8.30	9.03	8.90	8.98	7.51	7.79	7.65
40-44	7.12	7.22	7.17	7.76	7.67	7.73	6.50	6.73	6.62
45-49	6.54	6.79	6.66	7.10	7.03	7.07	6.40	6.53	6.46
50-54	5.71	5.74	5.73	5.83	5.87	5.85	5.72	5.54	5.63
55-59	4.61	4.76	4.69	4.73	4.79	4.75	4.87	4.70	4.78
60-64	3.64	3.71	3.67	3.46	3.48	3.46	3.70	3.64	3.67
65-69	2.57	2.88	2.72	2.43	2.32	2.39	2.70	2.89	2.79
70-74	1.97	2.64	2.29	2.04	1.83	1.97	2.41	2.63	2.52
75-79	1.35	1.90	1.62	1.00	0.89	0.96	1.30	1.47	1.38
80+	0.98	1.37	1.16	0.76	0.64	0.72	0.92	1.08	1.00
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Age group	Punjab			Rajasthan			Tamil Nadu		
	M	F	T	M	F	T	M	F	T
0-4	6.24	6.13	6.19	9.76	9.43	9.60	6.13	5.80	5.97
5-9	7.04	6.75	6.90	9.55	9.15	9.36	6.92	6.54	6.73
10-14	7.35	6.98	7.17	9.19	8.87	9.04	7.05	6.64	6.84
15-19	8.32	7.58	7.97	10.24	9.83	10.04	7.42	7.00	7.21
20-24	9.21	8.07	8.67	10.63	10.25	10.44	8.28	7.74	8.01
25-29	9.98	8.83	9.44	9.30	8.86	9.09	8.36	7.81	8.09
30-34	9.31	9.26	9.29	8.05	7.87	7.97	8.16	8.40	8.28
35-39	8.06	8.41	8.22	6.57	6.66	6.61	8.35	8.82	8.59
40-44	6.83	7.26	7.03	5.64	6.01	5.82	7.47	7.45	7.46
45-49	6.31	6.82	6.55	5.16	5.45	5.30	7.16	7.69	7.43
50-54	5.57	6.05	5.80	4.44	4.58	4.51	6.37	6.33	6.35
55-59	4.86	5.20	5.02	3.61	3.84	3.72	5.75	5.79	5.77
60-64	3.75	3.87	3.81	2.89	2.86	2.88	4.32	4.40	4.36
65-69	2.53	2.92	2.72	1.89	2.25	2.06	3.28	3.57	3.42
70-74	2.21	2.90	2.53	1.60	1.91	1.74	2.58	2.94	2.76
75-79	1.39	1.65	1.51	0.86	1.22	1.03	1.37	1.73	1.55
80+	1.05	1.30	1.17	0.63	0.95	0.79	1.04	1.35	1.19
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Age group	Telangana			Uttar Pradesh			Uttarakhand		
	M	F	T	M	F	T	M	F	T
0-4	6.87	6.45	6.66	10.71	10.53	10.63	8.27	7.74	8.01
5-9	7.48	7.06	7.27	9.81	9.60	9.71	7.97	7.41	7.70
10-14	7.19	6.81	7.00	8.58	8.53	8.55	8.53	7.90	8.22
15-19	8.41	8.00	8.21	10.80	10.52	10.67	9.82	9.08	9.46
20-24	9.54	9.18	9.36	11.12	10.83	10.98	10.53	9.85	10.20
25-29	9.18	8.72	8.95	9.96	9.49	9.74	10.23	9.71	9.97
30-34	8.86	9.03	8.94	7.59	7.20	7.40	8.41	8.78	8.59
35-39	8.37	8.89	8.63	6.00	6.25	6.12	6.88	7.45	7.16
40-44	7.13	7.16	7.15	5.14	5.71	5.41	5.94	6.34	6.14
45-49	6.74	6.96	6.85	5.07	5.35	5.20	5.63	5.96	5.79
50-54	5.60	5.28	5.44	4.19	4.16	4.18	4.76	4.95	4.85
55-59	4.52	4.50	4.51	3.31	3.44	3.37	3.99	4.16	4.08
60-64	3.37	3.46	3.41	2.58	2.48	2.53	3.08	3.26	3.17
65-69	2.30	2.90	2.60	1.77	2.21	1.98	2.12	2.63	2.37
70-74	2.31	2.91	2.61	1.78	1.92	1.84	1.99	2.37	2.17
75-79	1.28	1.59	1.43	0.94	1.08	1.01	1.07	1.33	1.19
80+	0.85	1.08	0.97	0.65	0.71	0.68	0.79	1.07	0.93
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Age group	West Bengal		
	M	F	T
0-4	6.32	6.30	6.31
5-9	6.71	6.67	6.69
10-14	7.42	7.43	7.42
15-19	8.37	8.36	8.37
20-24	9.26	9.28	9.27
25-29	9.29	9.00	9.15
30-34	8.73	8.94	8.83
35-39	7.98	8.13	8.05
40-44	6.80	6.91	6.86
45-49	6.85	7.09	6.97
50-54	6.14	5.89	6.02
55-59	5.21	4.96	5.09
60-64	4.08	3.70	3.90
65-69	2.85	2.75	2.80
70-74	2.02	2.19	2.10
75-79	1.16	1.36	1.26
80+	0.82	1.05	0.93
Total	100.00	100.00	100.00

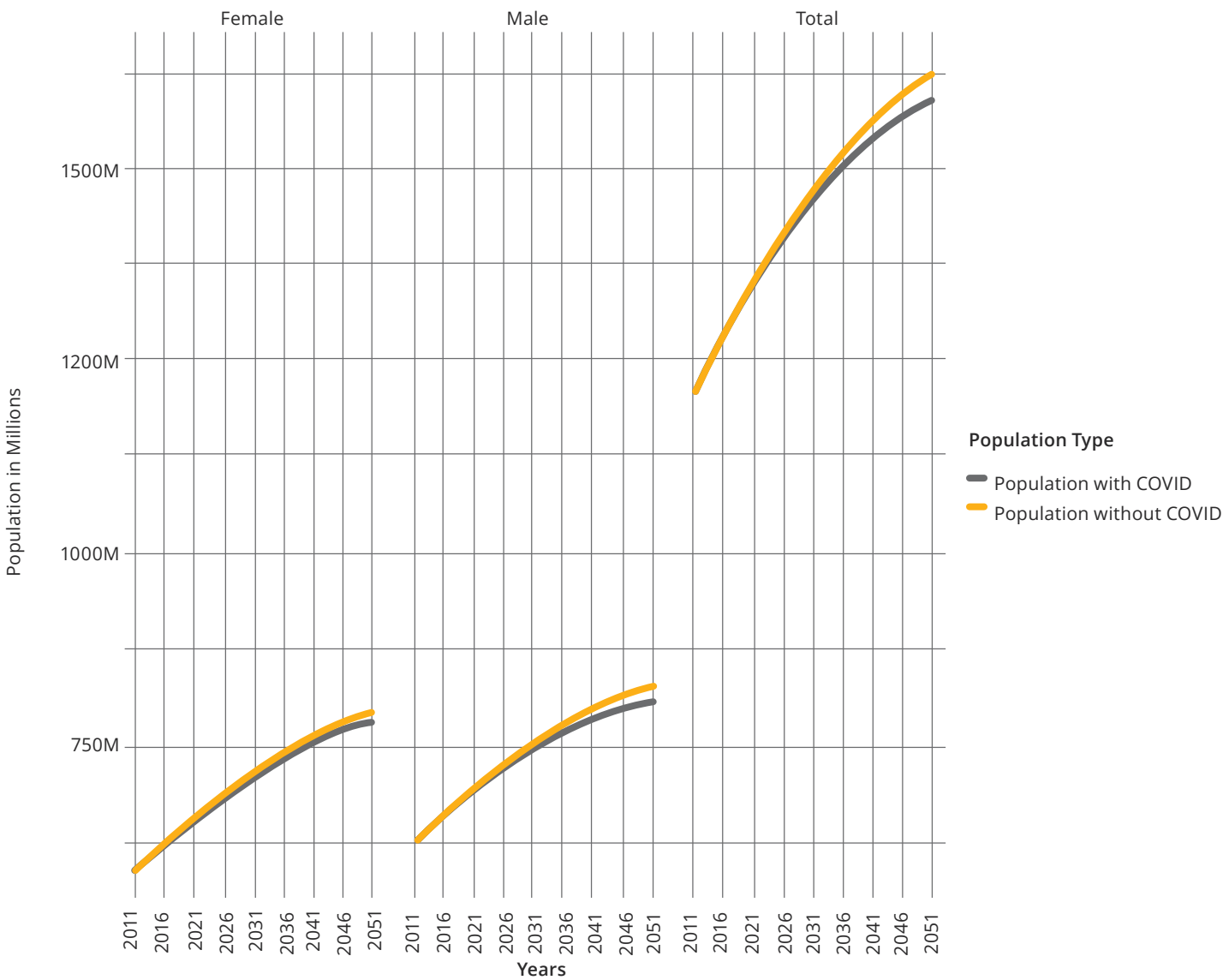
SECTION
4

APPENDIX: II

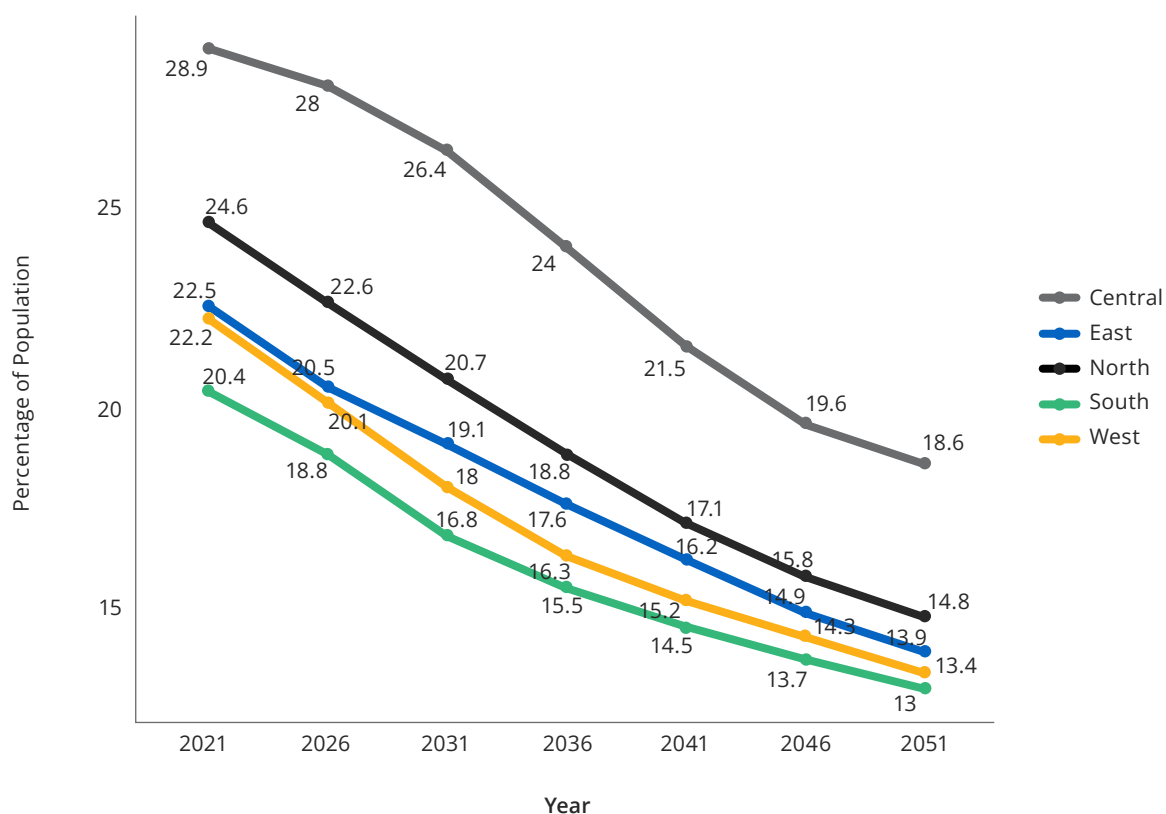
**FIGURES AND MAPS:
STATISTICAL INPUTS FOR
MODEL ESTIMATION**



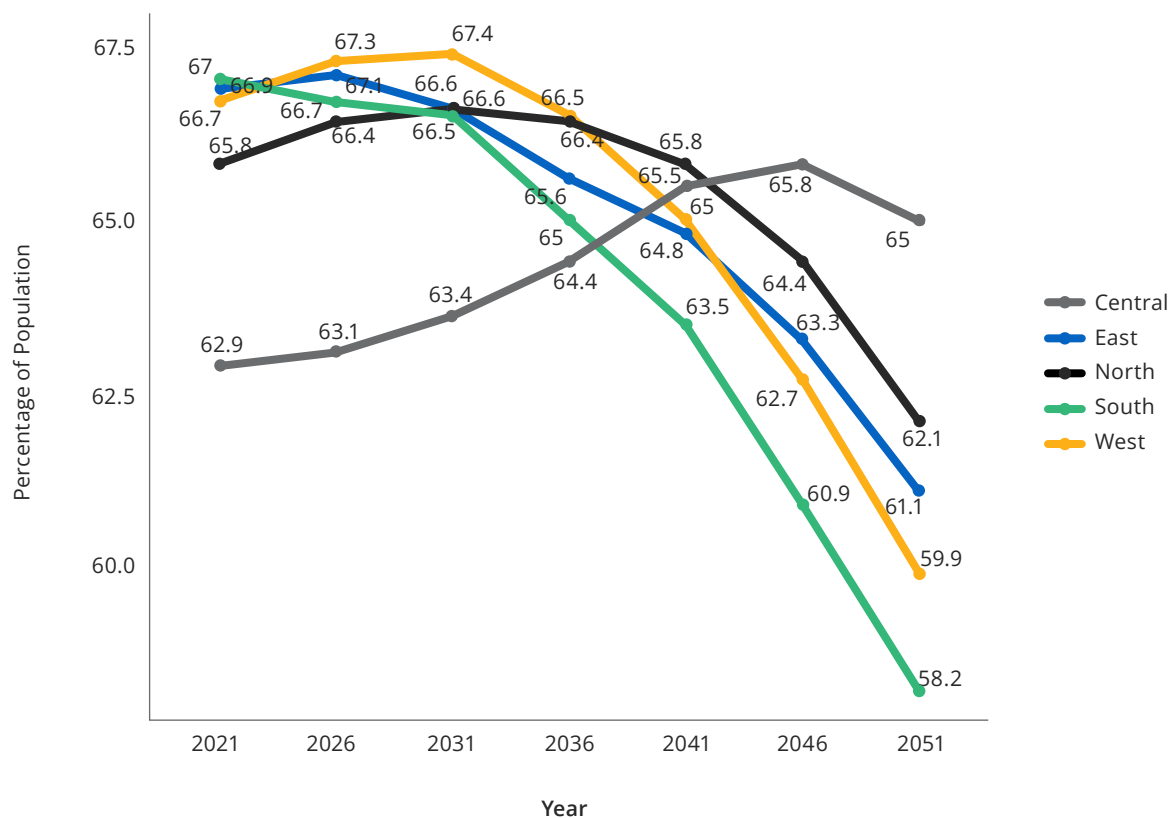
Appendix Figure 2.1: Gender-wise projected total population of India with and without the impact of pandemic, 2011-2051 [in Million]



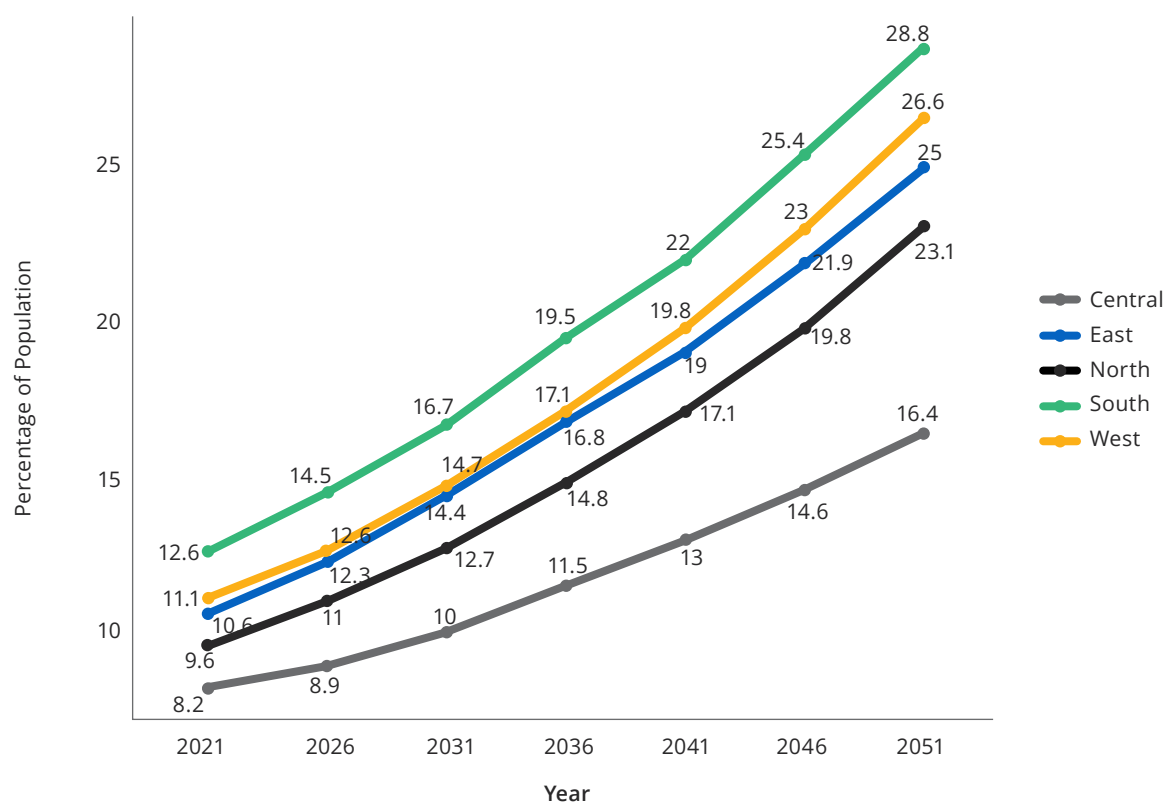
Appendix Figure 2.2: Projected proportion of child population [0-14] by region, 2021-2051



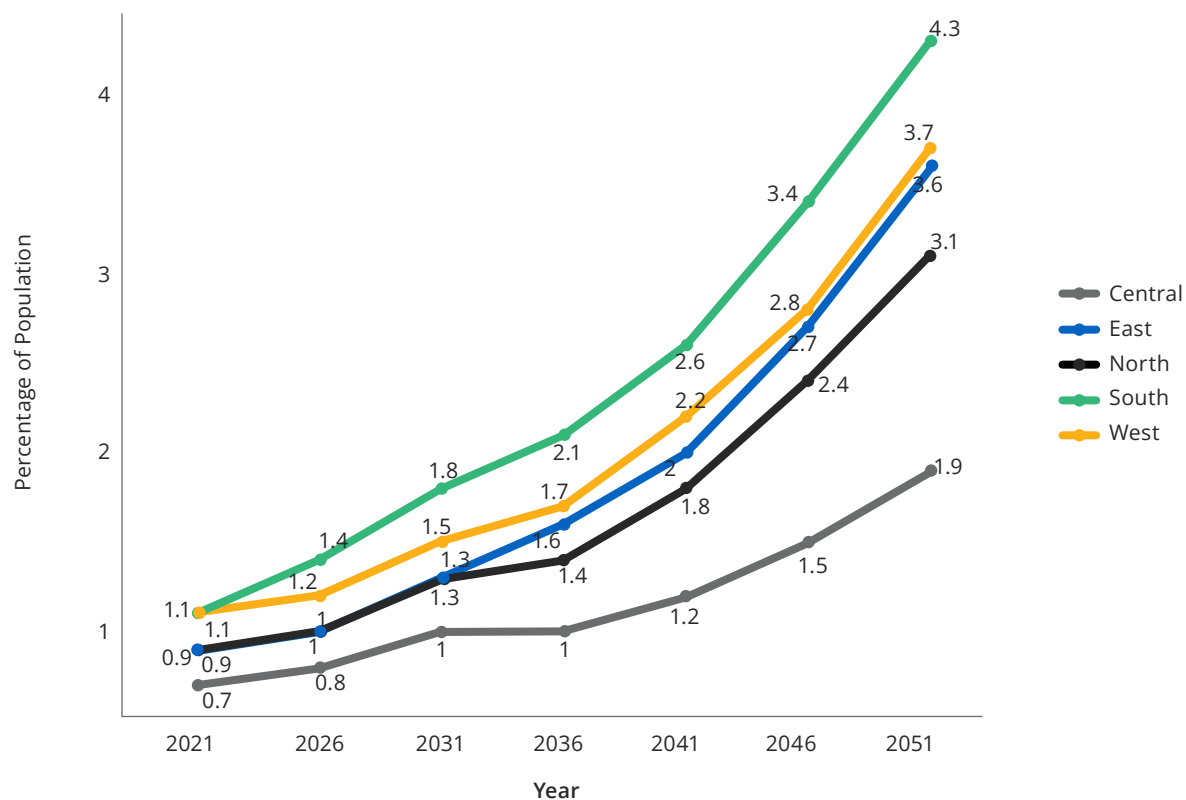
Appendix Figure 2.3: Projected proportion of working-age [15-59] population by region, 2021-2051



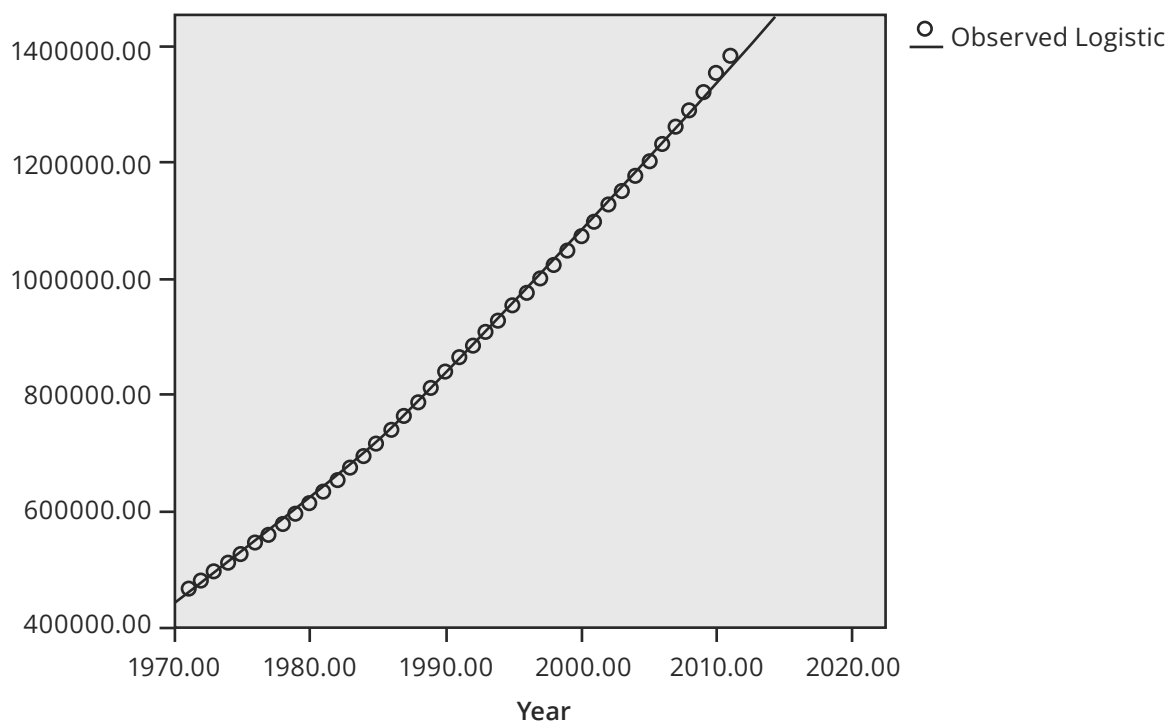
Appendix Figure 2.4: Projected proportion of elderly population [60 +] by region, 2021–2051



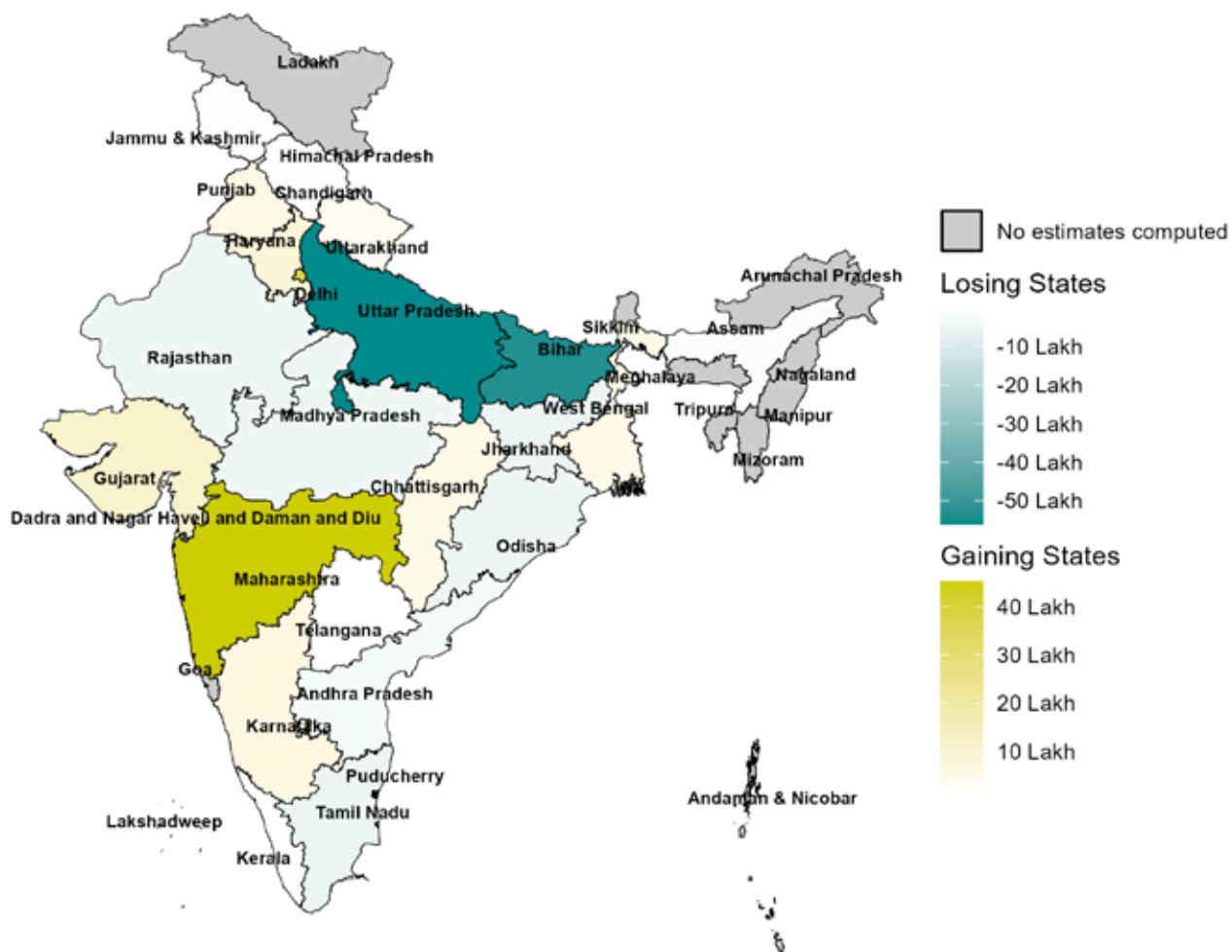
Appendix Figure 2.5: Projected proportion of oldest old [80 +] by region, 2021–2051



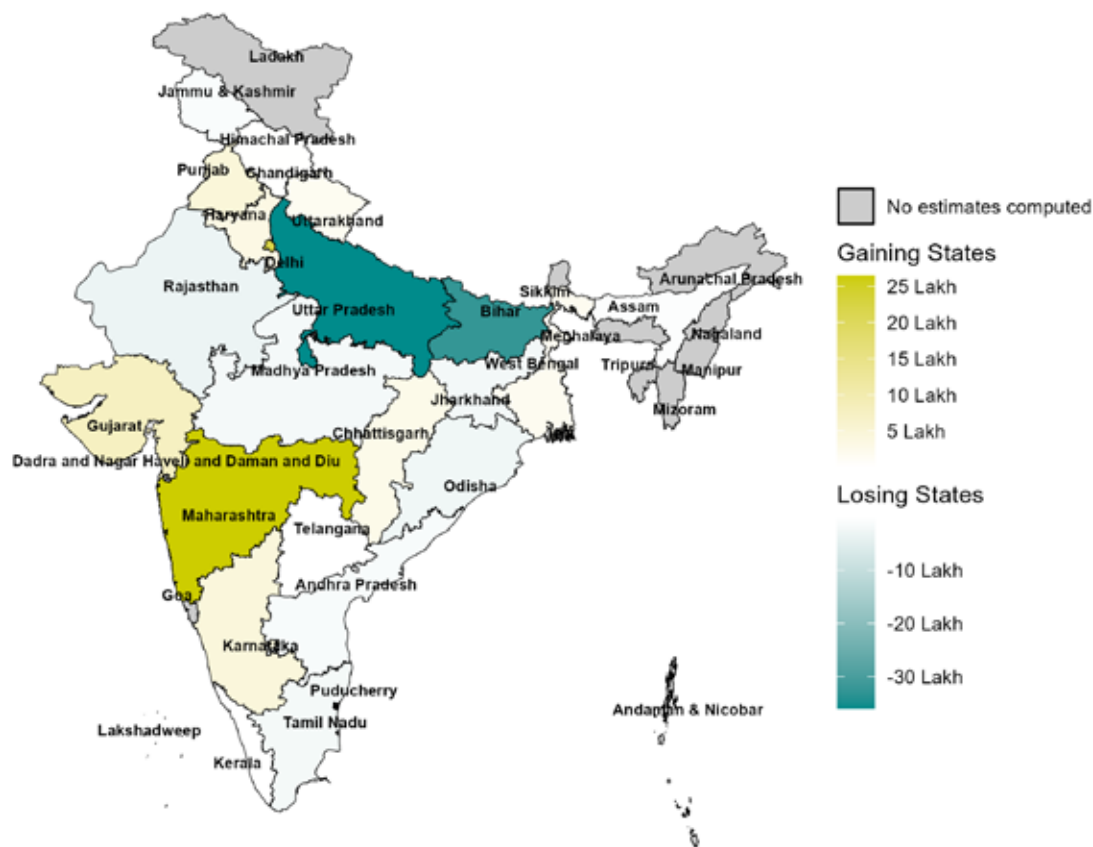
Appendix Figure 2.6: Observed and estimated population for Arunachal Pradesh, 1971–2021



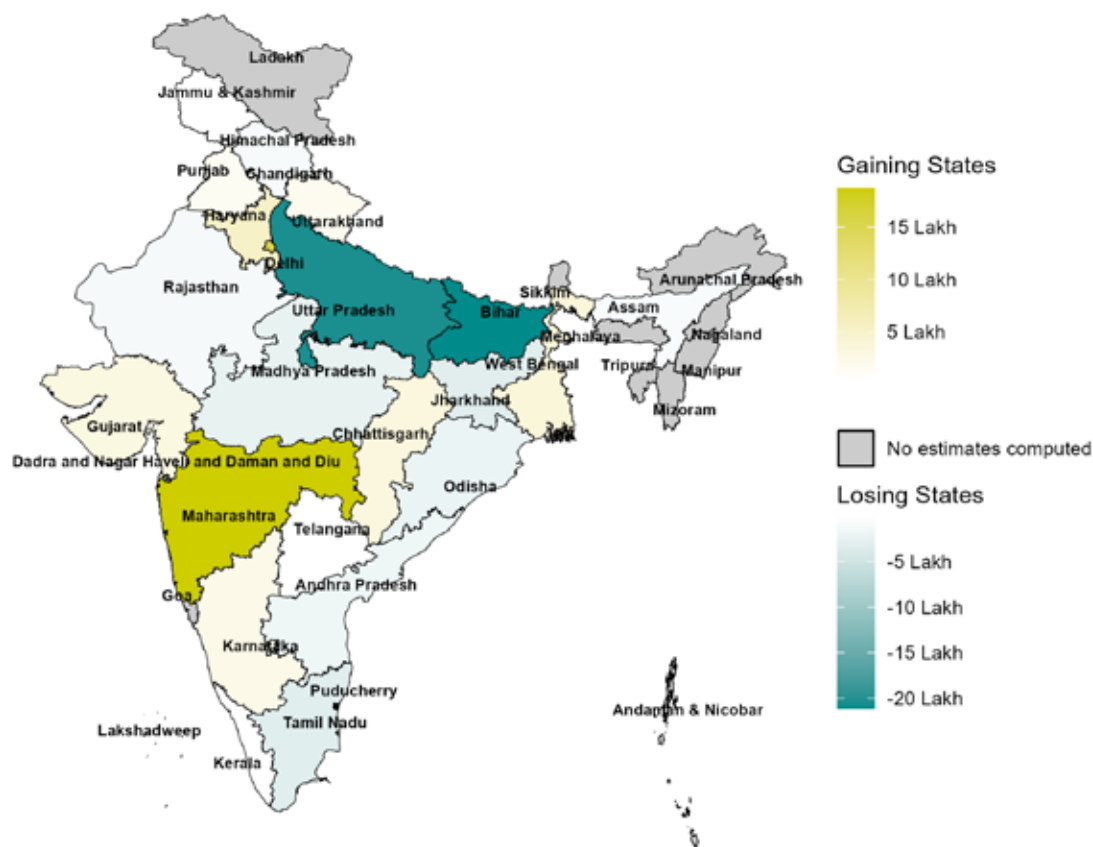
Appendix Map 2.1: Net migration across states, NSSO 2007–08



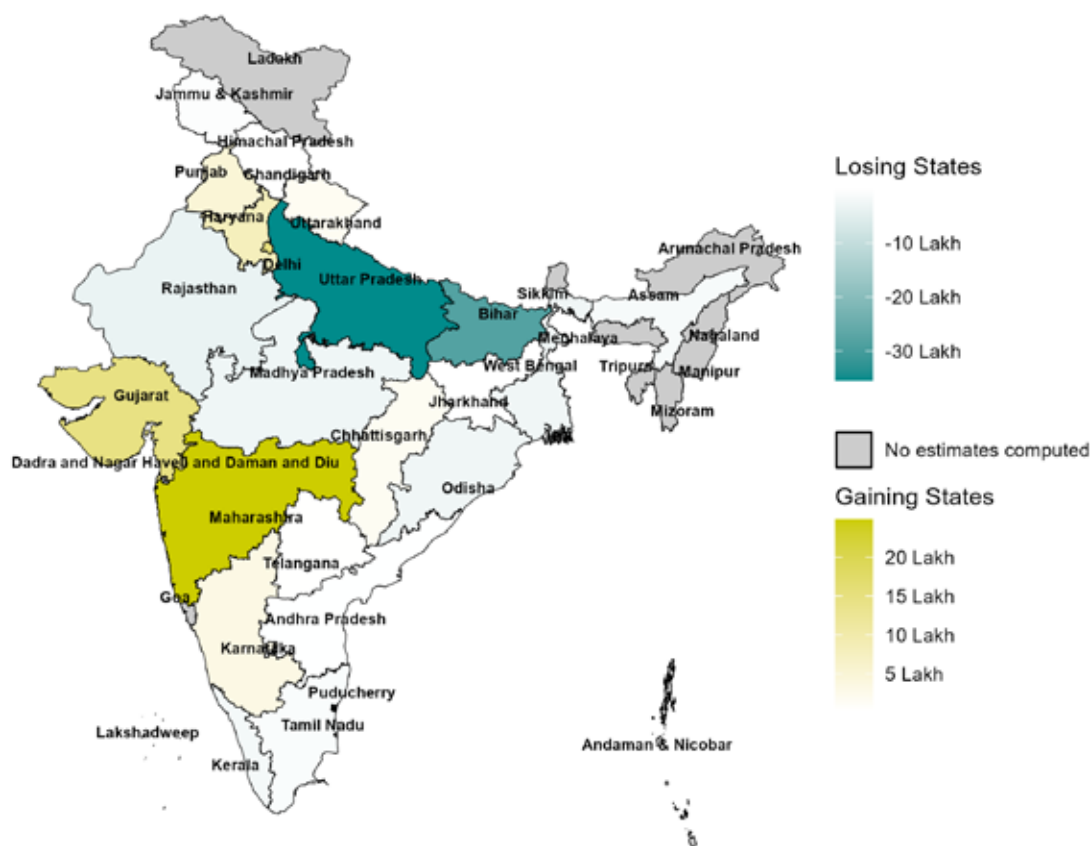
Appendix Map 2.2: State-wise net male migrants, NSSO 2007-08



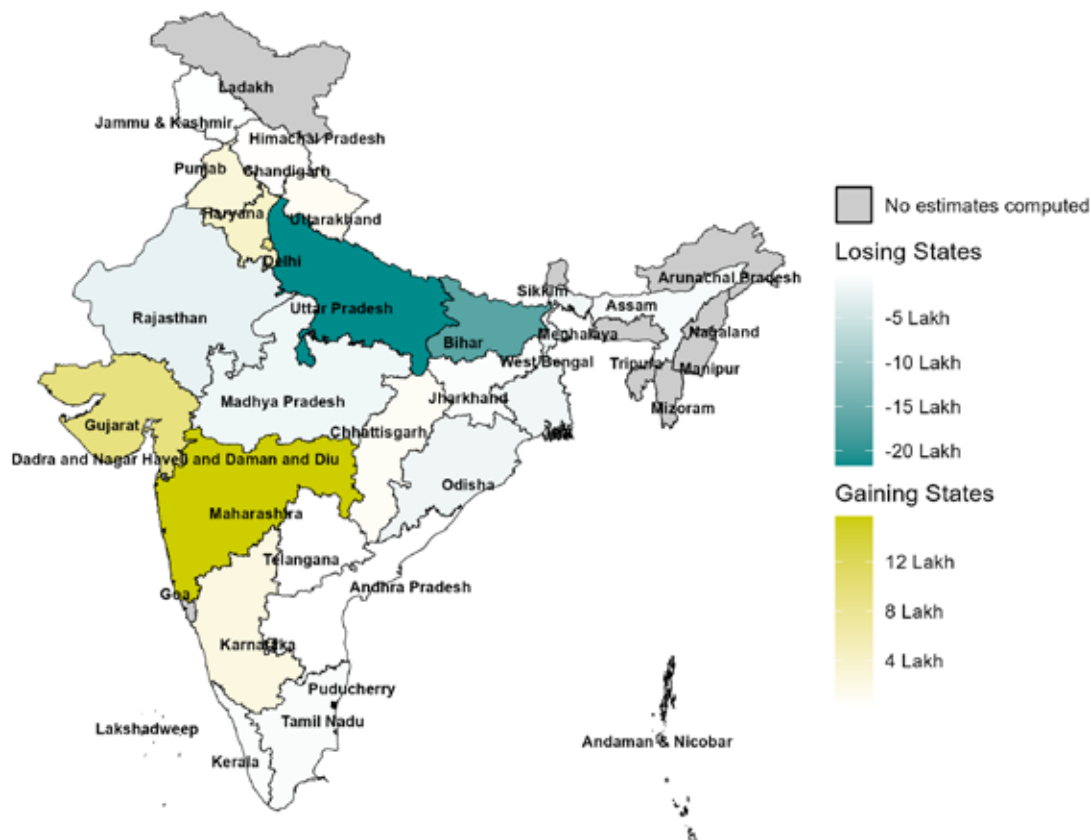
Appendix Map 2.3: State-wise net female migrants, NSSO 2007-08



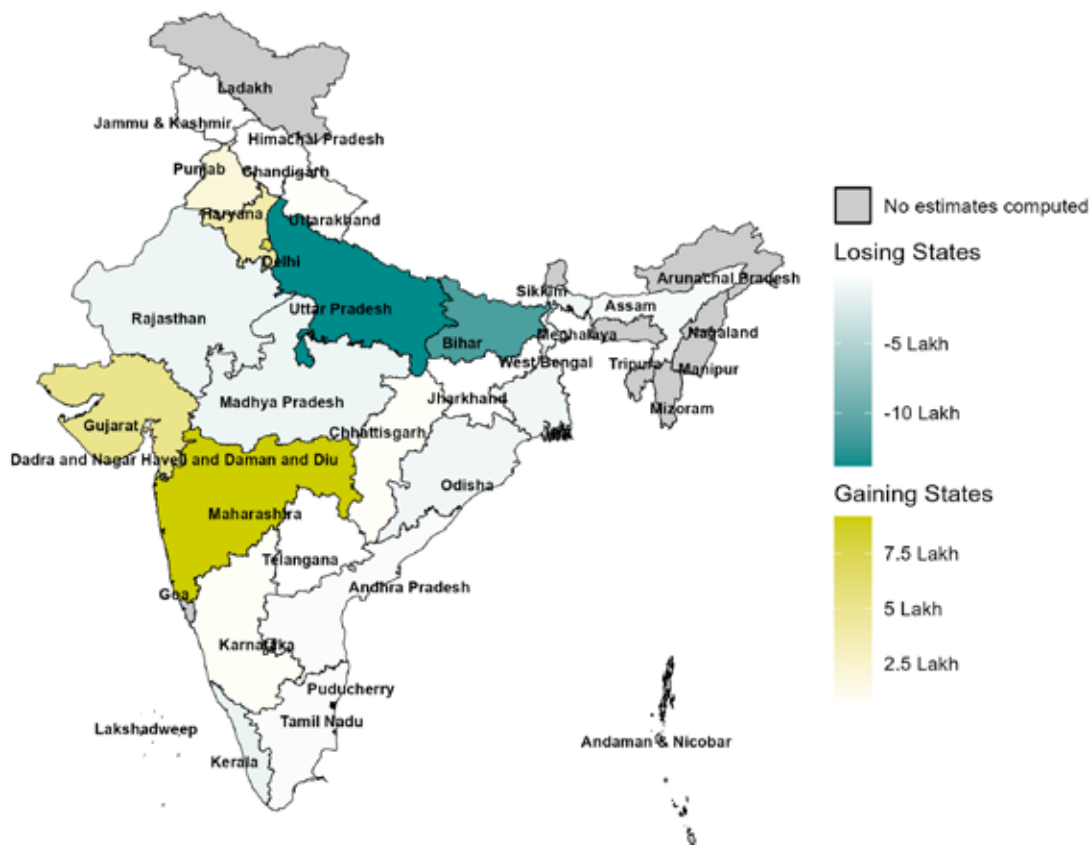
Appendix Map 2.4: Net migration across states, Census 2011



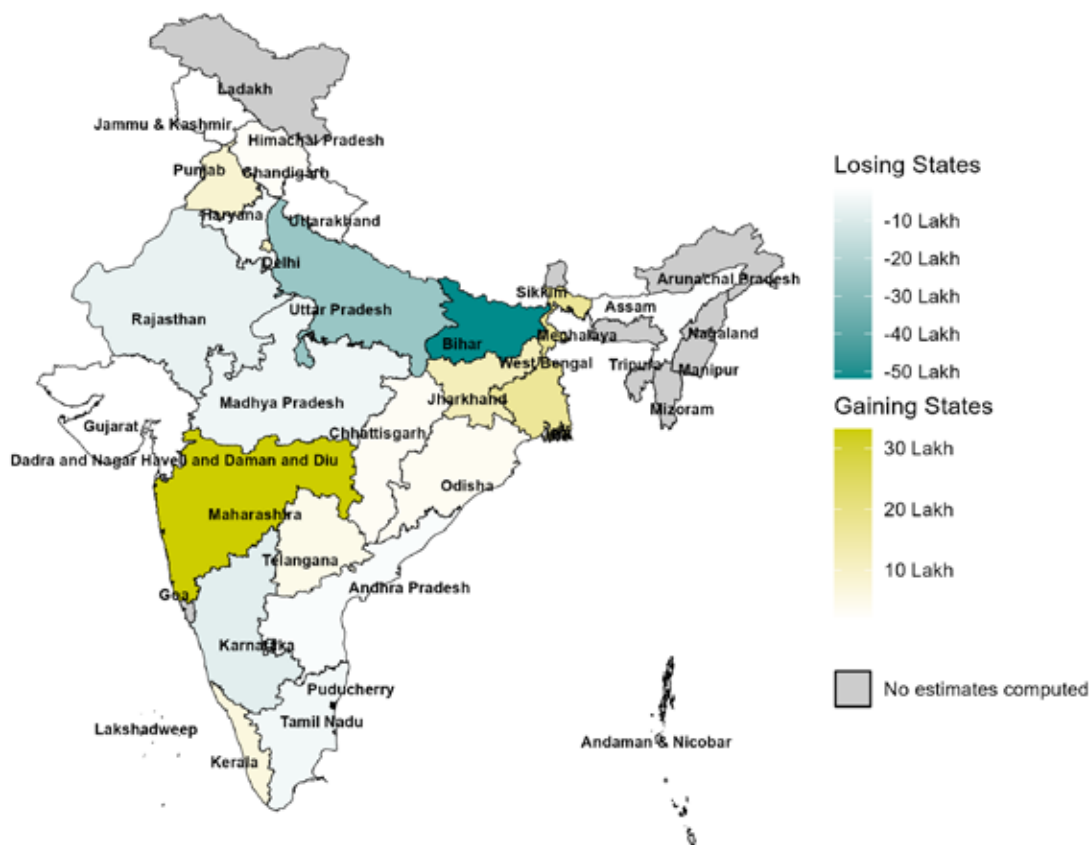
Appendix Map 2.5: State-wise net male migrants, Census 2011



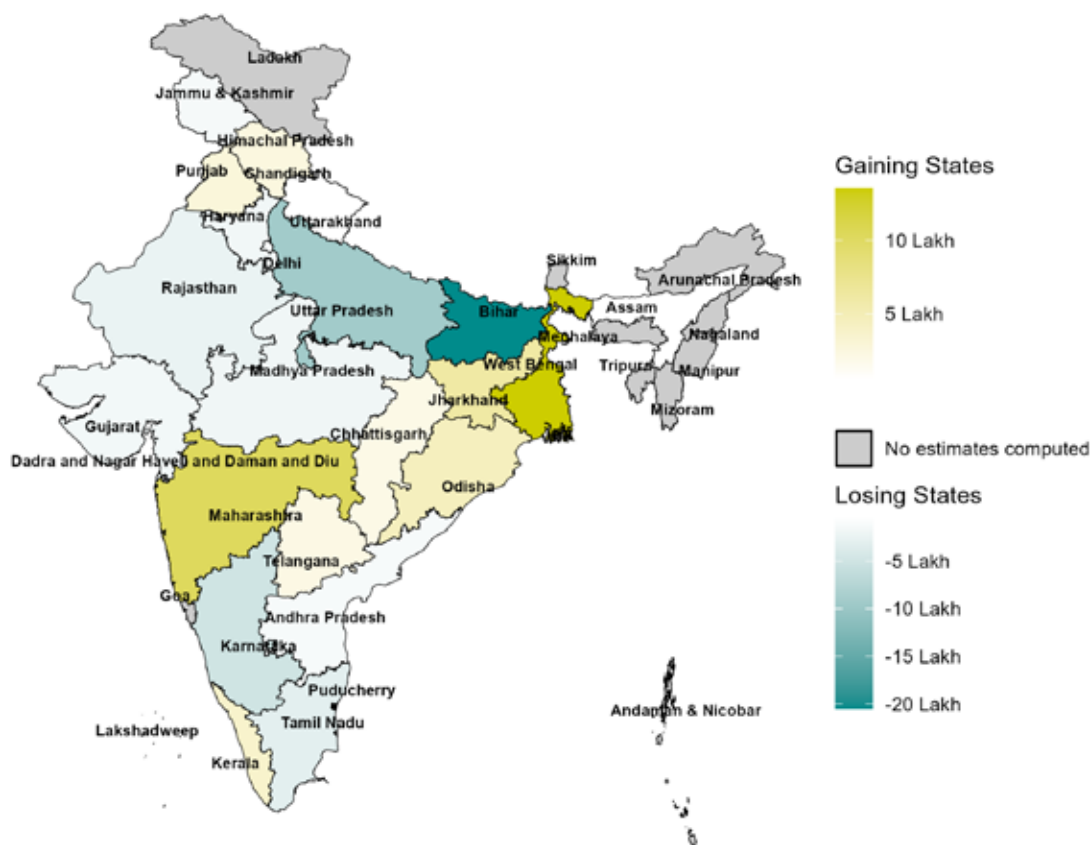
Appendix Map 2.6: State-wise net female migrants, Census 2011



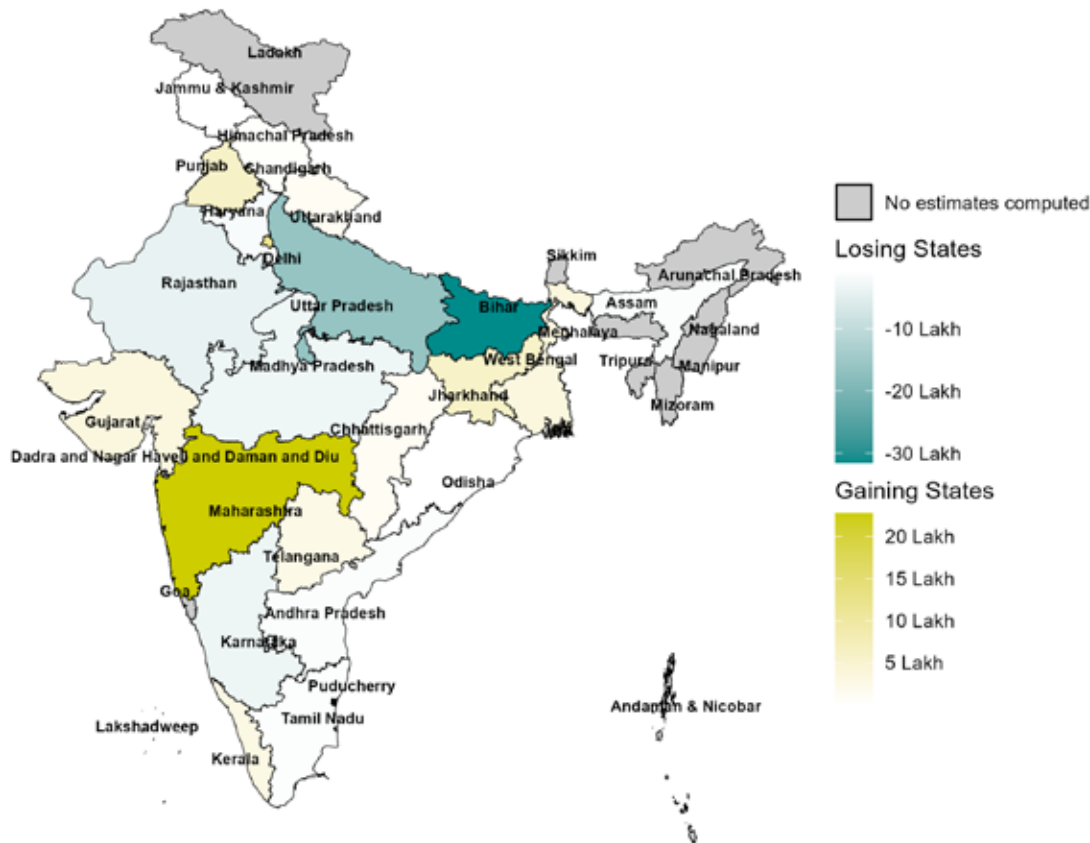
Appendix Map 2.7: Net migration across states, MIS 2020-21



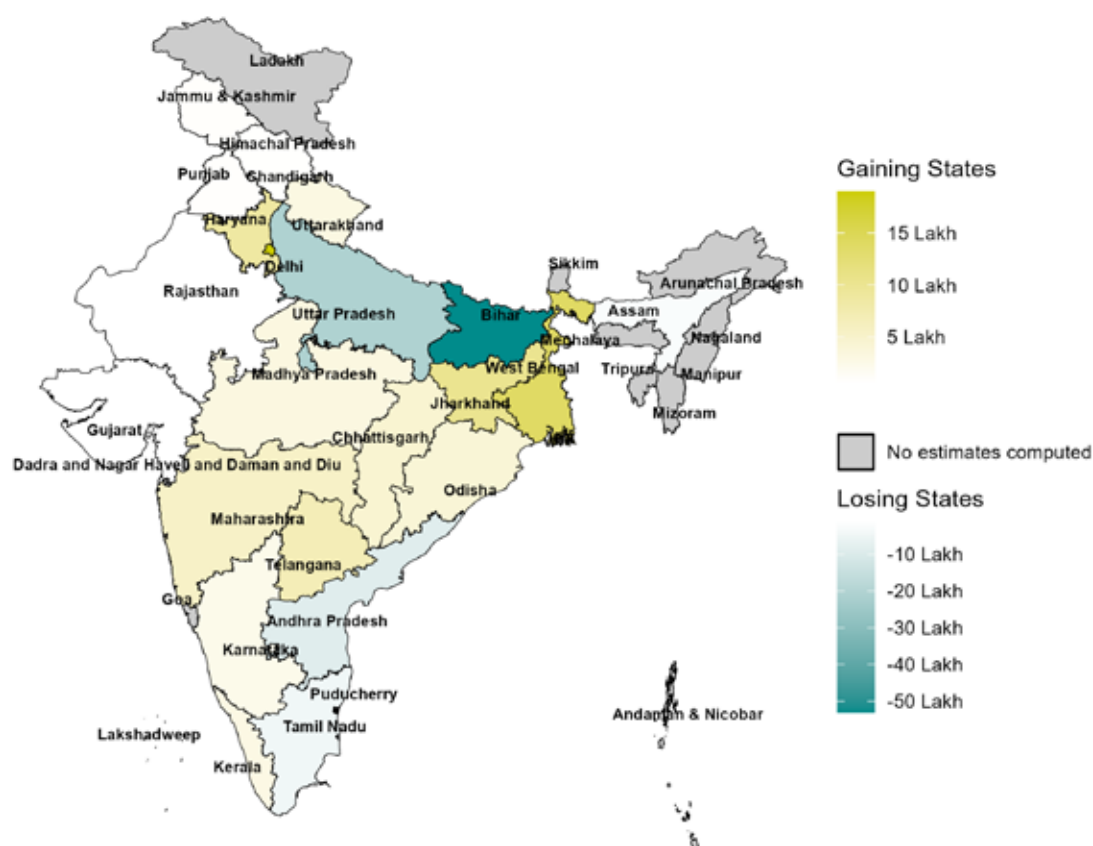
Appendix Map 2.8: State-wise net male migrants, MIS 2020-21



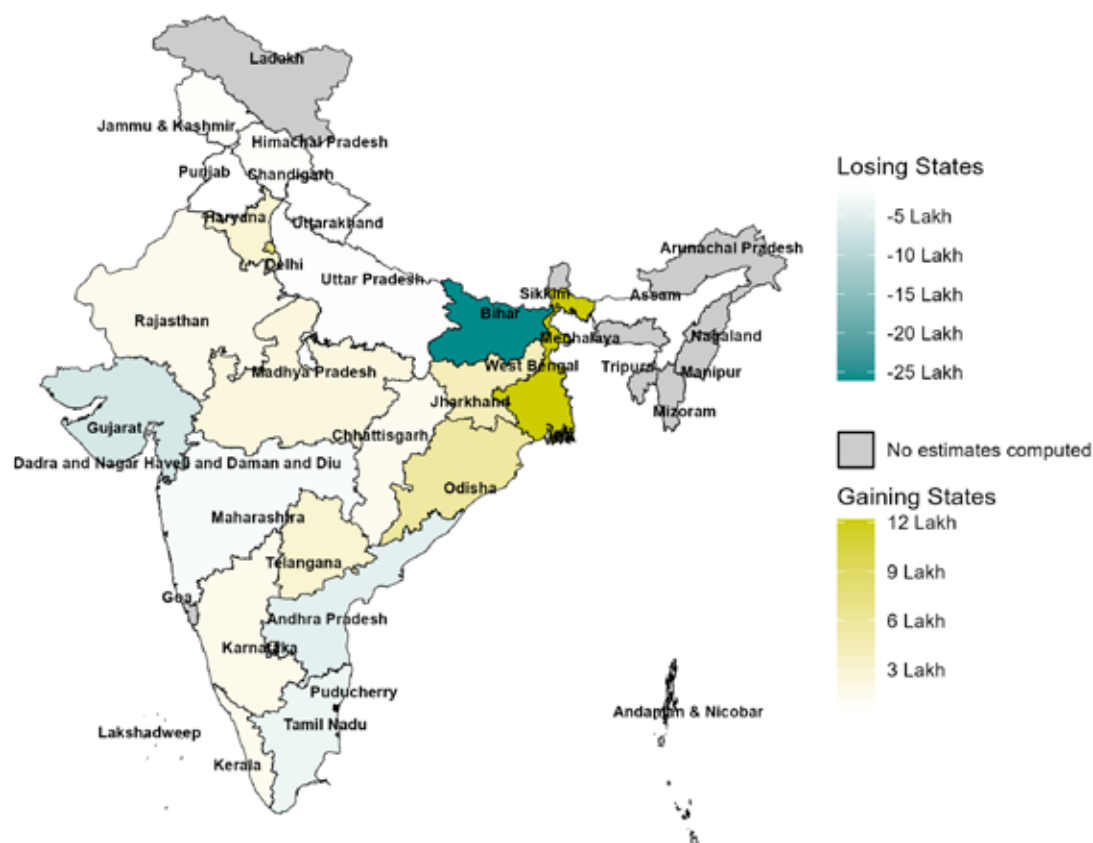
Appendix Map 2.9: State-wise net female migrants, MIS 2020-21



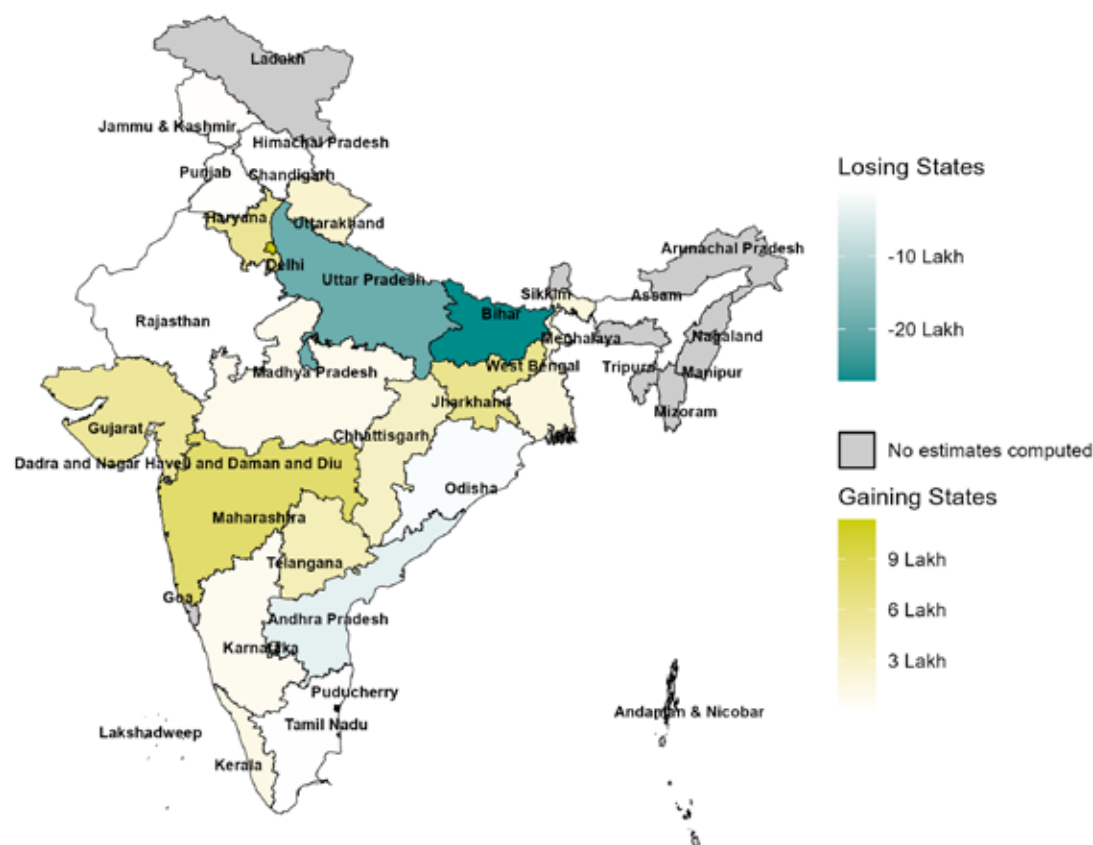
Appendix Map 2.10: Net migration across states, PLFS 2021-22



Appendix Map 2.11: State-wise net male migrants, PLFS 2021-22



Appendix Map 2.12: State-wise net female migrants, PLFS 2021-22



**SECTION
5**

APPENDIX: III

**TABLES OF MAJOR OUTPUT
INDICATORS FROM THE POPULATION
PROJECTIONS**



Appendix Table 3.1: Projections of Total Fertility Rates across Indian States, 2026–2051

States/India	Variants of projection	2026	2031	2036	2041	2046	2051
Andhra Pradesh	L	1.37	1.32	1.31	1.30	1.30	1.30
	M	1.43	1.41	1.40	1.40	1.40	1.40
	H	1.52	1.50	1.50	1.50	1.50	1.50
Assam	L	1.83	1.69	1.58	1.51	1.46	1.43
	M	1.90	1.78	1.71	1.65	1.63	1.61
	H	1.94	1.84	1.77	1.74	1.72	1.71
Bihar	L	2.47	2.19	1.99	1.86	1.79	1.76
	M	2.50	2.24	2.05	1.94	1.88	1.86
	H	2.53	2.28	2.12	2.02	1.97	1.96
Chhattisgarh	L	1.94	1.77	1.66	1.60	1.57	1.56
	M	1.96	1.81	1.72	1.68	1.66	1.65
	H	2.02	1.92	1.87	1.86	1.85	1.85
NCT of Delhi	L	1.33	1.30	1.30	1.30	1.30	1.30
	M	1.41	1.40	1.40	1.40	1.40	1.40
	H	1.50	1.50	1.50	1.50	1.50	1.50
Gujarat	L	1.70	1.58	1.50	1.45	1.42	1.41
	M	1.79	1.70	1.65	1.62	1.61	1.60
	H	1.84	1.77	1.73	1.71	1.70	1.70
Haryana	L	1.70	1.57	1.49	1.44	1.42	1.41
	M	1.79	1.70	1.65	1.62	1.61	1.60
	H	1.84	1.77	1.73	1.71	1.70	1.70
Himachal Pradesh	L	1.46	1.43	1.41	1.40	1.40	1.40
	M	1.53	1.51	1.50	1.50	1.50	1.50
	H	1.61	1.60	1.60	1.60	1.60	1.60
Jammu and Kashmir	L	1.33	1.30	1.30	1.30	1.30	1.30
	M	1.41	1.40	1.40	1.40	1.40	1.40
	H	1.50	1.50	1.50	1.50	1.50	1.50
Jharkhand	L	2.01	1.80	1.67	1.60	1.57	1.55
	M	2.03	1.85	1.74	1.68	1.66	1.65
	H	2.08	1.95	1.88	1.86	1.85	1.85
Karnataka	L	1.54	1.48	1.44	1.42	1.41	1.40
	M	1.59	1.54	1.52	1.51	1.50	1.50
	H	1.65	1.62	1.61	1.60	1.60	1.60
Kerala	L	1.40	1.36	1.33	1.32	1.31	1.30
	M	1.46	1.43	1.42	1.41	1.40	1.40
	H	1.53	1.51	1.51	1.50	1.50	1.50

Appendix Table 3.1: Projections of Total Fertility Rates across Indian States, 2026–2051							
States/India	Variants of projection	2026	2031	2036	2041	2046	2051
Madhya Pradesh	L	2.24	2.04	1.88	1.76	1.68	1.62
	M	2.27	2.09	1.95	1.85	1.79	1.74
	H	2.32	2.17	2.06	1.99	1.94	1.92
Maharashtra	L	1.37	1.32	1.30	1.30	1.30	1.30
	M	1.44	1.41	1.40	1.40	1.40	1.40
	H	1.52	1.50	1.50	1.50	1.50	1.50
Odisha	L	1.59	1.50	1.44	1.42	1.41	1.40
	M	1.64	1.57	1.53	1.51	1.50	1.50
	H	1.70	1.64	1.61	1.60	1.60	1.60
Punjab	L	1.35	1.32	1.30	1.30	1.30	1.30
	M	1.43	1.41	1.40	1.40	1.40	1.40
	H	1.51	1.50	1.50	1.50	1.50	1.50
Rajasthan	L	2.08	1.86	1.71	1.62	1.58	1.56
	M	2.11	1.91	1.78	1.71	1.67	1.66
	H	2.18	2.02	1.93	1.88	1.86	1.85
Tamil Nadu	L	1.36	1.33	1.31	1.30	1.30	1.30
	M	1.43	1.41	1.40	1.40	1.40	1.40
	H	1.51	1.50	1.50	1.50	1.50	1.50
Telangana	L	1.45	1.41	1.40	1.40	1.40	1.40
	M	1.52	1.50	1.50	1.50	1.50	1.50
	H	1.60	1.60	1.60	1.60	1.60	1.60
Uttar Pradesh	L	2.24	1.98	1.80	1.71	1.67	1.65
	M	2.30	2.07	1.92	1.85	1.82	1.81
	H	2.34	2.12	1.99	1.93	1.91	1.90
Uttarakhand	L	1.62	1.52	1.46	1.43	1.41	1.40
	M	1.64	1.57	1.53	1.51	1.50	1.50
	H	1.68	1.63	1.61	1.60	1.60	1.60
West Bengal	L	1.33	1.31	1.30	1.30	1.30	1.30
	M	1.40	1.40	1.40	1.40	1.40	1.40
	H	1.50	1.50	1.50	1.50	1.50	1.50
India	L	1.77	1.64	1.57	1.53	1.51	1.50
	M	1.85	1.75	1.70	1.68	1.67	1.67
	H	1.86	1.78	1.73	1.71	1.70	1.70

Notes: L- Low -Variant, M- Medium-Variant, H- High-variant

Appendix Table 3.2: Projected percentage of fertility levels for India under alternative variants, 2011-2051

High Variant									
Age group	2011	2016	2021	2026	2031	2036	2041	2046	2051
15-19	6.29	6.52	6.74	6.97	7.2	7.43	7.65	7.88	8.11
20-24	40.27	38.71	37.15	35.58	34.02	32.46	30.9	29.34	27.78
25-29	31.39	32.22	33.05	33.89	34.72	35.55	36.38	37.21	38.05
30-34	14.3	14.81	15.32	15.83	16.34	16.85	17.36	17.87	18.38
35-39	5.4	5.48	5.56	5.64	5.72	5.8	5.88	5.96	6.04
40-44	1.77	1.73	1.69	1.65	1.61	1.57	1.53	1.49	1.45
45-49	0.58	0.53	0.48	0.44	0.39	0.34	0.29	0.25	0.2
Medium Variant									
Age group	2011	2016	2021	2026	2031	2036	2041	2046	2051
15-19	6.29	6.51	6.73	6.95	7.17	7.4	7.62	7.84	8.06
20-24	40.27	38.69	37.12	35.54	33.96	32.38	30.8	29.23	27.65
25-29	31.39	32.25	33.12	33.98	34.84	35.71	36.57	37.44	38.3
30-34	14.3	14.81	15.31	15.82	16.32	16.83	17.34	17.84	18.35
35-39	5.4	5.47	5.55	5.63	5.7	5.78	5.85	5.92	6
40-44	1.77	1.73	1.69	1.65	1.6	1.56	1.52	1.48	1.44
45-49	0.58	0.53	0.48	0.44	0.39	0.34	0.29	0.25	0.2
Low Variant									
Age group	2011	2016	2021	2026	2031	2036	2041	2046	2051
15-19	6.29	6.47	6.66	6.84	7.03	7.21	7.39	7.58	7.76
20-24	40.27	38.59	36.91	35.23	33.55	31.88	30.2	28.52	26.84
25-29	31.39	32.45	33.52	34.59	35.65	36.72	37.78	38.84	39.91
30-34	14.3	14.79	15.27	15.76	16.24	16.73	17.21	17.7	18.18
35-39	5.4	5.45	5.49	5.54	5.58	5.63	5.67	5.71	5.76
40-44	1.77	1.72	1.67	1.62	1.56	1.51	1.46	1.41	1.36
45-49	0.58	0.53	0.48	0.43	0.38	0.33	0.28	0.23	0.18

Appendix Table 3.3: Projected life expectancy at the national and state levels in India by gender, 2026–2051 [in years]

	2026		2031		2036		2041		2046		2051	
States/India	M	F	M	F	M	F	M	F	M	F	M	F
Andhra Pradesh	68.3	71.9	69.9	73.7	71.4	75.5	72.9	71.1	74.3	78.6	75.6	80.0
Assam	67.4	69.0	68.9	70.8	70.4	72.4	71.9	74.0	73.2	75.5	74.5	77.0
Bihar	69.3	71.0	70.9	72.9	72.4	74.6	73.9	76.2	75.4	77.7	76.7	79.2
Chhattisgarh	61.6	67.6	62.6	69.2	63.7	70.8	64.7	72.3	65.7	73.2	66.7	75.2
NCT of Delhi	72.5	77.0	74.3	79.0	75.9	80.7	77.4	82.3	78.9	82.6	80.2	85.0
Gujarat	66.2	72.3	67.6	74.2	69.0	75.9	70.3	77.6	71.6	79.1	72.9	80.5
Haryana	66.5	71.6	67.9	73.5	69.4	75.3	70.7	76.9	72.0	78.4	73.3	79.9
Himachal Pradesh	70.3	75.7	71.9	77.7	73.5	79.4	75.0	81.0	76.5	82.4	77.9	83.7
Jammu and Kashmir	74.2	77.1	75.9	79.0	77.6	80.8	79.2	82.4	80.7	83.8	81.9	85.0
Jharkhand	69.3	71.0	70.9	72.9	72.4	74.6	73.9	76.2	75.4	77.7	76.7	79.2
Karnataka	67.2	72.8	68.7	74.7	70.2	76.4	71.6	76.0	72.9	79.6	74.2	80.4
Kerala	72.3	78.0	74.0	79.9	75.7	81.7	77.2	83.2	78.6	84.5	80.0	85.7
Madhya Pradesh	65.1	70.0	66.4	71.7	67.7	73.5	69.0	75.1	70.3	76.6	71.4	78.0
Maharashtra	69.5	75.8	71.1	77.8	72.7	79.5	74.2	81.1	75.6	82.5	77.0	83.8
Odisha	68.9	72.1	70.5	73.9	72.0	75.7	73.5	77.4	74.8	78.8	76.2	80.2
Punjab	68.1	73.2	69.6	75.2	71.1	76.9	72.5	78.6	73.9	80.0	75.3	81.4
Rajasthan	68.2	73.6	69.8	75.6	71.3	77.3	72.7	79.3	74.1	80.5	75.4	81.8
Tamil Nadu	71.2	76.3	73.0	78.3	74.6	80.0	76.1	81.6	77.6	83.0	78.9	84.3
Telangana	69.7	76.0	71.4	74.0	72.9	75.9	74.4	77.5	75.9	79.0	77.2	80.4
Uttar Pradesh	66.5	69.3	67.9	71.0	69.4	72.7	70.7	74.4	72.0	75.9	73.3	77.3
Uttarakhand	67.8	72.3	69.3	74.2	70.8	75.9	72.2	77.6	73.6	79.1	74.9	80.5
West Bengal	71.1	74.4	72.8	76.3	74.4	78.0	75.9	79.7	77.4	81.2	78.7	82.5
India	68.3	73.0	69.9	74.9	71.4	76.7	72.9	78.4	74.3	79.9	75.6	81.3

Appendix Table 3.4: Projected annual net migrants [males], 2022–2051

States	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Andhra Pradesh	-1332	-1329	-1327	-1326	-1324	-1323	-1321	-1320	-1319	-1318	-1318	-1317	-1316	-1316	-1315
Assam	-479	-477	-475	-474	-472	-471	-470	-469	-468	-467	-467	-466	-466	-465	-465
Bihar	-22326	-22137	-21975	-21838	-21720	-21620	-21534	-21460	-21397	-21342	-21295	-21255	-21220	-21190	-21165
Chhattisgarh	2199	2183	2169	2158	2148	2139	2132	2126	2121	2116	2112	2109	2106	2103	2101
NCT of Delhi	9304	9182	9082	9001	8933	8877	8831	8792	8760	8734	8711	8693	8677	8664	8653
Gujarat	1808	1782	1761	1745	1732	1721	1713	1706	1701	1696	1693	1690	1687	1685	1684
Haryana	1301	1196	1090	984	878	772	666	560	455	349	243	137	31	-75	-181
Himachal Pradesh	498	513	527	541	554	566	578	588	598	608	617	625	632	639	646
Jammu and Kashmir	-1357	-1360	-1363	-1366	-1368	-1370	-1371	-1373	-1374	-1375	-1376	-1376	-1377	-1378	-1378
Jharkhand	-4520	-4645	-4763	-4875	-4979	-5078	-5169	-5255	-5334	-5407	-5475	-5537	-5595	-5647	-5695
Karnataka	1733	1710	1691	1675	1662	1652	1643	1636	1630	1625	1621	1618	1615	1613	1611
Kerala	1512	1586	1660	1734	1807	1881	1955	2029	2102	2176	2250	2324	2398	2471	2545
Madhya Pradesh	-1979	-1977	-1976	-1974	-1973	-1971	-1970	-1969	-1968	-1967	-1966	-1965	-1964	-1963	-1963
Maharashtra	11093	10949	10831	10734	10654	10587	10533	10487	10449	10418	10392	10370	10351	10336	10323
Odisha	-4019	-4072	-4120	-4164	-4203	-4239	-4271	-4299	-4324	-4347	-4368	-4386	-4402	-4416	-4429
Punjab	544	537	531	527	524	521	519	518	517	516	515	514	514	514	513
Rajasthan	-2578	-2562	-2548	-2536	-2526	-2517	-2509	-2502	-2496	-2491	-2487	-2483	-2480	-2477	-2474
Tamil Nadu	157	259	362	464	567	669	772	874	977	1079	1181	1284	1386	1489	1591
Telangana	198	206	214	222	231	240	250	260	270	280	291	302	313	325	337
Uttar Pradesh	-1966	-1946	-1931	-1920	-1912	-1905	-1901	-1897	-1895	-1893	-1891	-1890	-1889	-1888	-1888
Uttarakhand	800	753	705	658	610	562	515	467	420	372	324	277	229	181	134
West Bengal	5361	5605	5851	6097	6344	6589	6833	7074	7312	7546	7775	7999	8217	8430	8635

Appendix Table 3.4: [continued]:

States	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051
Andhra Pradesh	-1315	-1314	-1314	-1314	-1313	-1313	-1313	-1313	-1313	-1312	-1312	-1312	-1312	-1312	-1312
Assam	-465	-465	-464	-464	-464	-464	-464	-464	-464	-463	-463	-463	-463	-463	-463
Bihar	-21142	-21123	-21107	-21092	-21080	-21070	-21060	-21052	-21046	-21040	-21035	-21030	-21026	-21023	-21020
Chhattisgarh	2099	2098	2096	2095	2094	2093	2093	2092	2091	2091	2090	2090	2090	2090	2089
NCT of Delhi	8644	8637	8630	8625	8621	8617	8614	8611	8609	8607	8606	8604	8603	8602	8601
Gujarat	1682	1681	1681	1680	1679	1679	1679	1678	1678	1678	1678	1677	1677	1677	1677
Haryana	-286	-392	-498	-604	-710	-816	-922	-1027	-1133	-1239	-1345	-1451	-1557	-1663	-1768
Himachal Pradesh	651	657	662	666	670	674	678	681	684	686	689	691	693	695	696
Jammu and Kashmir	-1378	-1379	-1379	-1379	-1379	-1380	-1380	-1380	-1380	-1380	-1380	-1380	-1380	-1380	-1380
Jharkhand	-5739	-5780	-5816	-5850	-5880	-5907	-5932	-5955	-5976	-5994	-6011	-6026	-6040	-6052	-6064
Karnataka	1609	1608	1606	1605	1605	1604	1603	1603	1603	1602	1602	1602	1602	1601	1601
Kerala	2619	2693	2766	2840	2914	2988	3061	3135	3209	3283	3356	3430	3504	3578	3652
Madhya Pradesh	-1962	-1961	-1961	-1960	-1960	-1959	-1959	-1959	-1958	-1958	-1958	-1957	-1957	-1957	-1956
Maharashtra	10313	10304	10296	10290	10285	10280	10277	10274	10271	10269	10267	10266	10264	10263	10262
Odisha	-4441	-4451	-4460	-4468	-4475	-4481	-4486	-4491	-4496	-4500	-4503	-4506	-4509	-4511	-4513
Punjab	513	513	513	513	513	512	512	512	512	512	512	512	512	512	512
Rajasthan	-2472	-2470	-2469	-2467	-2466	-2465	-2464	-2463	-2463	-2462	-2461	-2461	-2461	-2460	-2460
Tamil Nadu	1694	1796	1899	2001	2104	2206	2309	2411	2514	2616	2719	2821	2924	3026	3129
Telangana	350	363	376	390	404	418	433	448	464	480	497	513	531	548	566
Uttar Pradesh	-1888	-1887	-1887	-1887	-1887	-1887	-1887	-1887	-1886	-1886	-1886	-1886	-1886	-1886	-1886
Uttarakhand	86	39	-9	-57	-104	-152	-199	-247	-295	-342	-390	-437	-485	-533	-580
West Bengal	8834	9025	9209	9385	9554	9714	9868	10013	10151	10282	10405	10522	10631	10735	10831

Appendix Table 3.5: Projected annual net migrants [females], 2022-2051

States	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Andhra Pradesh	-1457	-1450	-1444	-1439	-1435	-1431	-1427	-1424	-1422	-1420	-1418	-1416	-1415	-1414	-1413
Assam	-1296	-1309	-1320	-1330	-1339	-1347	-1355	-1361	-1367	-1372	-1376	-1380	-1384	-1387	-1389
Bihar	-29693	-29979	-30233	-30459	-30660	-30837	-30994	-31133	-31255	-31362	-31457	-31540	-31613	-31678	-31734
Chhattisgarh	1444	1425	1409	1396	1386	1377	1370	1364	1359	1355	1351	1349	1346	1344	1343
NCT of Delhi	13016	12970	12931	12896	12866	12839	12816	12796	12778	12763	12749	12737	12727	12718	12710
Gujarat	3394	3403	3412	3419	3425	3431	3435	3439	3443	3446	3449	3451	3453	3455	3456
Haryana	2301	2158	2015	1872	1730	1587	1444	1301	1159	1016	873	730	588	445	302
Himachal Pradesh	72	69	66	64	63	62	60	59	59	58	57	57	56	56	56
Jammu and Kashmir	-94	-89	-84	-78	-73	-67	-62	-57	-51	-46	-41	-35	-30	-24	-19
Jharkhand	-5113	-5199	-5277	-5350	-5415	-5475	-5529	-5578	-5622	-5662	-5698	-5730	-5759	-5785	-5809
Karnataka	902	890	880	871	865	859	855	851	848	845	843	841	840	839	838
Kerala	1233	1296	1360	1424	1488	1552	1616	1680	1743	1807	1871	1935	1999	2063	2127
Madhya Pradesh	-3081	-3096	-3109	-3121	-3131	-3140	-3147	-3154	-3160	-3165	-3169	-3173	-3176	-3179	-3182
Maharashtra	21943	22034	22114	22184	22244	22297	22344	22384	22419	22449	22476	22499	22519	22536	22551
Odisha	-917	-905	-896	-888	-881	-876	-871	-868	-864	-862	-860	-858	-856	-855	-854
Punjab	361	356	352	349	346	344	342	341	340	339	338	338	337	337	336
Rajasthan	-2674	-2769	-2862	-2951	-3037	-3119	-3198	-3272	-3344	-3411	-3474	-3534	-3590	-3642	-3691
Tamil Nadu	-1318	-1231	-1143	-1055	-968	-880	-792	-705	-617	-529	-442	-354	-266	-179	-91
Telangana	1353	1411	1469	1527	1584	1641	1696	1750	1803	1855	1905	1954	2000	2045	2088
Uttar Pradesh	-19267	-19223	-19184	-19150	-19119	-19092	-19067	-19045	-19026	-19009	-18993	-18979	-18967	-18956	-18946
Uttarakhand	516	452	388	323	259	195	131	67	3	-61	-125	-189	-254	-318	-382
West Bengal	2000	1978	1960	1944	1932	1921	1912	1904	1898	1892	1888	1884	1880	1878	1875

Appendix Table 3.5: [continued]:

States	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051
Andhra Pradesh	-1412	-1411	-1410	-1409	-1409	-1408	-1408	-1408	-1407	-1407	-1407	-1407	-1407	-1406	-1406
Assam	-1392	-1394	-1396	-1397	-1399	-1400	-1401	-1402	-1403	-1404	-1405	-1405	-1406	-1406	-1407
Bihar	-31783	-31827	-31865	-31898	-31927	-31953	-31975	-31995	-32012	-32027	-32040	-32052	-32062	-32071	-32079
Chhattisgarh	1341	1340	1339	1338	1337	1337	1336	1336	1336	1335	1335	1335	1335	1335	1335
NCT of Delhi	12703	12696	12691	12686	12682	12679	12675	12673	12670	12668	12666	12664	12663	12662	12661
Gujarat	3457	3459	3460	3460	3461	3462	3462	3463	3463	3463	3464	3464	3464	3464	3465
Haryana	159	16	-126	-269	-412	-555	-697	-840	-983	-1126	-1268	-1411	-1554	-1697	-1840
Himachal Pradesh	55	55	55	55	55	54	54	54	54	54	54	54	54	54	54
Jammu and Kashmir	-14	-8	-3	2	8	13	19	24	29	35	40	45	51	56	62
Jharkhand	-5829	-5848	-5865	-5879	-5893	-5905	-5915	-5924	-5933	-5940	-5947	-5953	-5958	-5963	-5967
Karnataka	837	836	836	835	835	834	834	834	834	833	833	833	833	833	833
Kerala	2190	2254	2318	2382	2446	2510	2574	2638	2701	2765	2829	2893	2957	3021	3085
Madhya Pradesh	-3184	-3186	-3187	-3189	-3190	-3191	-3192	-3193	-3193	-3194	-3194	-3195	-3195	-3195	-3196
Maharashtra	22564	22576	22586	22594	22602	22608	22614	22619	22623	22627	22630	22633	22635	22637	22639
Odisha	-853	-852	-852	-851	-851	-851	-850	-850	-850	-850	-849	-849	-849	-849	-849
Punjab	336	336	336	336	336	336	335	335	335	335	335	335	335	335	335
Rajasthan	-3736	-3779	-3818	-3854	-3888	-3919	-3947	-3973	-3997	-4019	-4040	-4058	-4075	-4091	-4105
Tamil Nadu	-4	84	172	259	347	435	522	610	698	785	873	961	1048	1136	1224
Telangana	2130	2169	2206	2242	2275	2307	2337	2365	2391	2416	2440	2461	2482	2501	2518
Uttar Pradesh	-18937	-18929	-18922	-18916	-18911	-18906	-18901	-18897	-18894	-18890	-18888	-18885	-18883	-18881	-18879
Uttarakhand	-446	-510	-574	-638	-702	-767	-831	-895	-959	-1023	-1087	-1151	-1215	-1279	-1344
West Bengal	1873	1872	1870	1869	1868	1867	1866	1866	1865	1865	1864	1864	1864	1864	1863

Appendix Table 3.6: Projected sex ratio at birth, 2016–2051

States/India	2011	Ceiling limit of SRB	2016	2021	2026	2031	2036	2041	2046	2051
Andhra Pradesh	106	NA	106	106	106	106	106	106	106	106
Assam	105	NA	105	105	105	105	105	105	105	105
Bihar	110	NA	110	110	110	110	110	110	110	110
Chhattisgarh	104	NA	104	104	104	104	104	104	104	104
Gujarat	113	107	112	111	110	110	109	109	108	108
Haryana	120	107	118	117	116	115	114	113	112	111
Himachal Pradesh	110	107	109	108	108	107	107	107	107	107
Jammu and Kashmir	128	107	125	124	123	122	121	120	120	119
Jharkhand	108	NA	108	108	108	108	108	108	108	108
Karnataka	105	NA	105	105	105	105	105	105	105	105
Kerala	102	NA	102	102	102	102	102	102	102	102
Madhya Pradesh	108	NA	108	108	108	108	108	108	108	108
Maharashtra	114	NA	114	114	114	114	114	114	114	114
NCT of Delhi	114	107	113	112	111	110	110	109	109	109
Odisha	106	NA	106	106	106	106	106	106	106	106
Punjab	118	107	115	113	111	110	109	108	108	108
Rajasthan	114	107	114	112	112	112	111	111	111	111
Tamil Nadu	106	NA	106	106	106	106	106	106	106	106
Telangana	108	105	108	108	108	108	108	107	107	107
Uttarakhand	114	107	113	112	112	112	111	111	111	111
Uttar Pradesh	111	NA	111	111	111	111	111	111	111	111
West Bengal	105	NA	105	105	105	105	105	105	105	105
India	110	107	110	110	110	110	110	110	110	110

Notes: The projected figures are rounded off, NA-Not Applicable

Appendix Table 3.7: Summary of projected demographic indicators for India, [low-variant], 2026–2051

Indicators	2026	2031	2036	2041	2046	2051
Fertility indicators						
Total Fertility Rate	1.77	1.64	1.57	1.53	1.51	1.50
Gross Reproduction Rate	0.84	0.78	0.75	0.73	0.72	0.71
Net Reproduction Rate	0.81	0.76	0.73	0.72	0.71	0.71
Mean Age of Childbearing	26.7	26.8	26.9	27	27	27.1
Child-Woman Ratio	0.28	0.25	0.23	0.22	0.21	0.21
Mortality indicators						
Male Life Expectancy	68.1	69.7	71.2	72.7	74.1	75.4
Female Life Expectancy	72.9	74.9	76.6	78.3	79.8	81.4
Total Life Expectancy	70.5	72.2	73.8	75.4	76.9	78.4
Infant Mortality Rate	27.4	21.4	16.6	12.7	9.2	6
Under Five Mortality Rate	33.1	25.1	19.1	14.5	10.3	6.4
Vital rates						
Crude Birth Rate per 1000	14.8	13	11.7	11	10.4	9.7
Crude Death Rate per 1000	7.5	7.5	7.6	7.8	8.3	8.8
Rate of Natural Increase [percent]	0.73	0.55	0.42	0.32	0.21	0.09
Annual births and deaths [in million]						
Births	20.97	18.93	17.50	16.68	15.94	14.97
Deaths	10.65	10.93	11.27	11.88	12.73	13.62
Population [in million]						
Total	1412.3	1457.1	1491.9	1518.8	1538.3	1548.8
Male	724.8	746.3	762.4	774.1	782.0	785.3
Female	687.5	710.8	729.5	744.7	756.3	763.5
Percent 0–4	7.5	6.6	5.9	5.5	5.2	4.9
Percent 5–14	16.2	15.0	13.5	12.1	11.2	10.6
Percent 15–24	16.8	15.5	15.2	14.3	13.1	11.9
Percent 15–49	55.2	55.2	54.6	53.3	51.2	48.2
Percent 15–59	65.5	66.2	66.4	66.3	65.2	63.5
Percent 60 and above	10.8	12.2	14.2	16.8	18.4	21.0
Percent Females 15–49	54.8	54.5	53.7	52.2	50.2	47.1
Sex Ratio	105.4	105.0	104.5	104.0	103.4	102.9
Overall Dependency Ratio	52.6	51.1	50.7	50.9	53.4	57.5
Median Age	30.0	32.0	35.0	37.0	39.0	41.0

Appendix Table 3.8: Summary of projected demographic indicators for India, [high-variant], 2026–2051

Indicators	2026	2031	2036	2041	2046	2051
Fertility indicators						
Total Fertility Rate	1.86	1.78	1.73	1.71	1.70	1.70
Gross Reproduction Rate	0.89	0.85	0.82	0.81	0.81	0.81
Net Reproduction Rate	0.85	0.83	0.81	0.80	0.80	0.81
Mean Age of Childbearing	26.70	26.80	26.90	26.90	27.00	27.10
Child-Woman Ratio	0.29	0.27	0.25	0.24	0.24	0.24
Mortality indicators						
Male Life Expectancy	68.1	69.7	71.2	72.7	74.1	75.4
Female Life expectancy	72.9	74.9	76.6	78.3	79.8	81.4
Total Life Expectancy	70.5	72.2	73.8	75.4	76.9	78.4
Infant Mortality Rate	27.4	21.4	16.6	12.7	9.2	6.0
Under five Mortality Rate	33.1	25.1	19.1	14.5	10.3	6.4
Vital rates						
Crude Birth Rate per 1000	15.6	14	12.8	12.1	11.5	11
Crude Death Rate per 1000	7.5	7.5	7.5	7.7	8.1	8.5
Rate of Natural Increase[percent]	0.8	0.65	0.53	0.44	0.34	0.24
Annual births and deaths [in million]						
Births	22.02	20.52	19.30	18.68	18.13	17.51
Deaths	10.68	10.97	11.31	11.91	12.76	13.64
Population [in million]						
Total	1415.4	1466.9	1510.0	1546.4	1576.2	1598.5
Male	726.4	751.4	771.8	788.5	801.7	811.2
Female	689.0	715.5	738.2	757.9	774.5	787.3
Percent 0–4	7.7	7.0	6.4	6.0	5.8	5.5
Percent 5–14	16.1	15.1	14.0	12.9	12.0	11.5
Percent 15–24	16.8	15.4	15.1	14.2	13.4	12.5
Percent 15–49	55.1	54.8	54.0	52.6	50.6	47.8
Percent 15–59	65.4	65.5	65.7	65.5	65.3	64.2
Percent 60 and above	10.7	12.1	14.3	15.8	17.9	20.3
Percent Females 15–49	54.7	54.1	53.0	51.5	49.6	46.8
Sex Ratio	105.4	105.0	104.6	104.0	103.5	103.0
Overall Dependency Ratio	52.8	52.2	52.5	53.2	55.6	59.6
Median Age	30.0	32.0	34.0	36.0	38.0	40.0

Appendix Table 3.9: State-wise projected population by gender [low-variant], 2026–2051 [in million]

States/India	Gender	2026	2031	2036	2041	2046	2051
Andhra Pradesh	Male	27.0	27.1	27.1	26.9	26.6	26.0
	Female	27.0	27.2	27.2	26.9	26.6	26.2
	Total	54.0	54.3	54.3	53.8	53.2	52.2
Assam	Male	18.9	19.6	20.1	20.5	20.7	20.7
	Female	18.3	19.0	19.6	20.0	20.3	20.4
	Total	37.2	38.6	39.7	40.5	41.0	41.1
Bihar	Male	69.2	74.2	78.4	81.8	84.8	87.6
	Female	63.6	68.2	72.1	75.3	78.2	80.8
	Total	132.8	142.4	150.5	157.1	163.0	168.4
Chhattisgarh	Male	15.3	15.7	16.0	16.2	16.3	16.3
	Female	15.3	15.8	16.3	16.7	16.9	17.1
	Total	30.6	31.5	32.3	32.9	33.2	33.4
NCT of Delhi	Male	10.2	10.4	10.6	10.6	10.5	10.4
	Female	9.0	9.3	9.5	9.7	9.7	9.7
	Total	19.2	19.7	20.1	20.3	20.2	20.1
Gujarat	Male	36.3	37.1	37.5	37.7	37.6	37.2
	Female	33.8	34.7	35.5	36.0	36.3	36.3
	Total	70.1	71.8	73.0	73.7	73.9	73.5
Haryana	Male	15.6	16.0	16.2	16.3	16.3	16.2
	Female	13.9	14.3	14.5	14.8	14.9	14.9
	Total	29.5	30.3	30.7	31.1	31.2	31.1
Himachal Pradesh	Male	3.8	3.8	3.8	3.8	3.8	3.8
	Female	3.7	3.8	3.8	3.8	3.8	3.8
	Total	7.5	7.6	7.6	7.6	7.6	7.6
Jammu and Kashmir [undivided]	Male	7.5	7.7	7.9	8.0	8.1	8.0
	Female	6.6	6.8	7.0	7.1	7.2	7.1
	Total	14.1	14.5	14.9	15.1	15.3	15.1
Jharkhand	Male	20.8	21.8	22.6	23.2	23.7	24.1
	Female	19.6	20.6	21.4	22.0	22.5	22.9
	Total	40.4	42.4	44.0	45.2	46.2	47.0
Karnataka	Male	33.9	34.3	34.4	34.4	34.1	33.6
	Female	33.4	34.0	34.5	34.6	34.6	34.5
	Total	67.3	68.3	68.9	69.0	68.7	68.1
Kerala	Male	17.1	17.1	17.1	17.0	16.9	16.6
	Female	18.6	18.8	18.8	18.8	18.6	18.3
	Total	35.7	35.9	35.9	35.8	35.5	34.9

Appendix Table 3.9: State-wise projected population by gender [low-variant], 2026–2051 [in million]

States/India	Gender	2026	2031	2036	2041	2046	2051
Madhya Pradesh	Male	46.0	48.2	49.9	51.2	52.3	53.0
	Female	43.3	45.7	47.6	49.3	50.7	51.7
	Total	89.3	93.9	97.5	100.5	103.0	104.7
Maharashtra	Male	64.0	64.6	64.8	64.7	64.1	63.1
	Female	59.9	60.8	61.5	61.9	62.0	61.5
	Total	123.9	125.4	126.3	126.6	126.1	124.6
Odisha	Male	23.9	24.4	24.7	24.8	24.8	24.6
	Female	23.6	24.2	24.6	24.9	25.0	25.0
	Total	47.5	48.6	49.3	49.7	49.8	49.6
Punjab	Male	15.7	15.7	15.6	15.4	15.2	14.8
	Female	14.2	14.3	14.3	14.3	14.2	14.0
	Total	29.9	30.0	29.9	29.7	29.4	28.8
Rajasthan	Male	44.1	46.3	48.0	49.4	50.5	51.3
	Female	41.0	43.2	45.0	46.5	47.8	48.8
	Total	85.1	89.5	93.0	95.9	98.3	100.1
Tamil Nadu	Male	38.6	38.7	38.6	38.3	37.8	37.1
	Female	39.0	39.3	39.5	39.5	39.2	38.6
	Total	77.6	78.0	78.1	77.8	77.0	75.7
Telangana	Male	19.8	20.2	20.4	20.5	20.5	20.3
	Female	19.7	20.1	20.2	20.4	20.4	20.3
	Total	39.5	40.3	40.6	40.9	40.9	40.6
Uttar Pradesh	Male	131.2	138.3	143.7	148.2	152.2	155.6
	Female	120.2	127.0	132.2	136.7	140.9	144.5
	Total	251.4	265.3	275.9	284.9	293.1	300.1
Uttarakhand	Male	5.9	6.0	6.1	6.2	6.2	6.2
	Female	5.7	5.8	5.9	6.0	6.1	6.1
	Total	11.6	11.8	12.0	12.2	12.3	12.3
West Bengal	Male	51.1	51.7	51.9	51.8	51.3	50.6
	Female	49.2	50.1	50.6	50.9	50.8	50.4
	Total	100.3	101.8	102.5	102.7	102.1	101.0
India	Male	724.8	746.3	762.4	774.1	782.0	785.3
	Female	687.5	710.8	729.5	744.7	756.3	763.5
	Total	1412.3	1457.1	1491.9	1518.8	1538.3	1548.8

Appendix Table 3.10: State-wise projected population by gender [medium-variant], 2021–2051 [in million]

States/India	Gender	2026	2031	2036	2041	2046	2051
Andhra Pradesh	Male	27.0	27.3	27.3	27.2	27.0	26.5
	Female	27.1	27.3	27.4	27.2	26.9	26.7
	Total	54.1	54.6	54.7	54.4	53.9	53.2
Assam	Male	18.9	19.7	20.3	20.8	21.1	21.2
	Female	18.3	19.1	19.8	20.3	20.7	20.9
	Total	37.2	38.8	40.1	41.1	41.8	42.1
Bihar	Male	69.3	74.4	78.8	82.4	85.6	88.7
	Female	63.6	68.4	72.4	75.8	78.9	81.8
	Total	132.9	142.8	151.2	158.2	164.5	170.5
Chhattisgarh	Male	15.3	15.8	16.1	16.3	16.5	16.5
	Female	15.3	15.9	16.4	16.8	17.1	17.3
	Total	30.6	31.7	32.5	33.1	33.6	33.8
NCT of Delhi	Male	10.2	10.4	10.6	10.7	10.7	10.6
	Female	9.1	9.4	9.6	9.8	9.9	9.9
	Total	19.3	19.8	20.2	20.5	20.6	20.5
Gujarat	Male	36.4	37.3	37.9	38.3	38.4	38.3
	Female	33.9	35.0	35.9	36.6	37.1	37.4
	Total	70.3	72.3	73.8	74.9	75.5	75.7
Haryana	Male	15.7	16.1	16.4	16.6	16.7	16.7
	Female	13.9	14.3	14.7	15.0	15.2	15.3
	Total	29.6	30.4	31.1	31.6	31.9	32.0
Himachal Pradesh	Male	3.8	3.8	3.9	3.9	3.9	3.9
	Female	3.7	3.8	3.8	3.9	3.9	3.9
	Total	7.5	7.6	7.7	7.8	7.8	7.8
Jammu and Kashmir [undivided]	Male	7.5	7.8	8.0	8.1	8.2	8.2
	Female	6.7	6.9	7.1	7.2	7.3	7.3
	Total	14.2	14.7	15.1	15.3	15.5	15.5
Jharkhand	Male	20.8	21.8	22.7	23.4	23.9	24.4
	Female	19.6	20.7	21.5	22.2	22.7	23.2
	Total	40.4	42.5	44.2	45.6	46.6	47.6
Karnataka	Male	34.0	34.4	34.6	34.7	34.5	34.1
	Female	33.5	34.1	34.7	34.9	35.0	35.0
	Total	67.5	68.5	69.3	69.6	69.5	69.1
Kerala	Male	17.1	17.2	17.2	17.2	17.1	16.9
	Female	18.7	18.9	18.9	19.0	18.8	18.6
	Total	35.8	36.1	36.1	36.2	35.9	35.5

Appendix Table 3.10: State-wise projected population by gender [medium-variant], 2021-2051 [in million]

States/India	Gender	2026	2031	2036	2041	2046	2051
Madhya Pradesh	Male	46.0	48.3	50.1	51.6	52.9	53.8
	Female	43.4	45.8	47.9	49.7	51.2	52.5
	Total	89.4	94.1	98.0	101.3	104.1	106.3
Maharashtra	Male	64.1	64.9	65.4	65.5	65.1	64.3
	Female	60.0	61.1	62.0	62.6	62.8	62.6
	Total	124.1	126.0	127.4	128.1	127.9	126.9
Odisha	Male	23.9	24.5	24.9	25.1	25.1	25.0
	Female	23.7	24.3	24.8	25.1	25.3	25.4
	Total	47.6	48.8	49.7	50.2	50.4	50.4
Punjab	Male	15.7	15.7	15.7	15.6	15.4	15.1
	Female	14.2	14.4	14.5	14.5	14.5	14.3
	Total	29.9	30.1	30.2	30.1	29.8	29.9
Rajasthan	Male	44.1	46.4	48.3	49.7	51.0	52.0
	Female	41.0	43.3	45.2	46.8	48.3	49.4
	Total	85.1	89.7	93.5	96.5	99.3	101.4
Tamil Nadu	Male	38.7	38.9	38.9	38.8	38.4	37.8
	Female	39.1	39.5	39.8	39.9	39.7	39.2
	Total	77.8	78.4	78.7	78.7	78.1	77.0
Telangana	Male	19.9	20.3	20.6	20.7	20.8	20.7
	Female	19.7	20.2	20.4	20.6	20.7	20.6
	Total	39.6	40.5	41.0	41.3	41.5	41.3
Uttar Pradesh	Male	131.4	139.0	145.0	150.2	155.0	159.4
	Female	120.5	127.6	133.4	138.5	143.4	147.9
	Total	251.9	266.6	278.4	288.7	298.4	307.3
Uttarakhand	Male	5.9	6.1	6.2	6.3	6.3	6.3
	Female	5.7	5.8	6.0	6.0	6.1	6.1
	Total	11.6	11.9	12.2	12.3	12.4	12.4
West Bengal	Male	51.2	52.0	52.4	52.4	52.1	51.6
	Female	49.3	50.3	51.1	51.5	51.6	51.3
	Total	100.5	102.3	103.5	103.9	103.7	102.9
India	Male	726.2	750.6	770.1	786.0	798.3	806.8
	Female	688.9	714.7	736.6	755.6	771.3	783.3
	Total	1415.1	1465.3	1506.7	1541.6	1569.6	1590.1

Appendix Table 3.11: State-wise projected population by gender [high-variant], 2021–2051 [in million]

States/India	Gender	2026	2031	2036	2041	2046	2051
Andhra Pradesh	Male	27.1	27.4	27.6	27.6	27.4	27.0
	Female	27.1	27.5	27.7	27.5	27.3	27.2
	Total	54.2	54.9	55.3	55.1	54.7	54.2
Assam	Male	19.0	19.8	20.4	20.9	21.3	21.5
	Female	18.3	19.2	19.9	20.5	20.9	21.2
	Total	37.3	39.0	40.3	41.4	42.2	42.7
Bihar	Male	69.3	74.6	79.1	83.0	86.5	89.9
	Female	63.7	68.5	72.7	76.4	79.7	82.9
	Total	133.0	143.1	151.8	159.4	166.2	172.8
Chhattisgarh	Male	15.3	15.8	16.3	16.6	16.9	17.0
	Female	15.3	15.9	16.5	17.0	17.4	17.8
	Total	30.6	31.7	32.8	33.6	34.3	34.8
NCT of Delhi	Male	10.3	10.5	10.7	10.8	10.8	10.8
	Female	9.1	9.4	9.7	9.9	10.0	10.1
	Total	19.3	19.9	20.4	20.7	20.8	20.9
Gujarat	Male	36.5	37.5	38.2	38.7	38.9	38.9
	Female	33.9	35.1	36.1	36.9	37.5	37.9
	Total	70.4	72.6	74.3	75.6	76.4	76.8
Haryana	Male	15.7	16.1	16.5	16.7	16.9	16.9
	Female	13.9	14.4	14.8	15.1	15.4	15.6
	Total	29.6	30.5	31.3	31.8	32.3	32.5
Himachal Pradesh	Male	3.8	3.9	3.9	3.9	3.9	3.9
	Female	3.7	3.8	3.9	3.9	4.0	4.0
	Total	7.5	7.7	7.8	7.8	7.9	7.9
Jammu and Kashmir [undivided]	Male	7.5	7.8	8.1	8.3	8.3	8.3
	Female	6.7	6.9	7.2	7.3	7.4	7.4
	Total	14.2	14.7	15.3	15.6	15.7	15.7
Jharkhand	Male	20.8	21.9	22.9	23.7	24.5	25.1
	Female	19.7	20.7	21.7	22.5	23.2	23.9
	Total	40.5	42.6	44.6	46.2	47.7	49.0
Karnataka	Male	34.1	34.6	34.9	35.1	35.0	34.8
	Female	33.6	34.3	34.9	35.3	35.5	35.6
	Total	67.7	68.9	69.8	70.4	70.5	70.4

Appendix Table 3.11: State-wise projected population by gender [high-variant], 2021-2051 [in million]

Kerala	Male	17.2	17.3	17.4	17.4	17.3	17.2
	Female	18.7	18.9	19.1	19.1	19.1	18.9
	Total	35.9	36.2	36.5	36.5	36.4	36.1
Madhya Pradesh	Male	46.1	48.5	50.5	52.2	53.7	55.0
	Female	43.4	46.0	48.2	50.2	52.0	53.6
	Total	89.5	94.5	98.7	102.4	105.7	108.6
Maharashtra	Male	64.3	65.3	66.0	66.3	66.2	65.7
	Female	60.2	61.5	62.6	63.4	63.8	63.8
	Total	124.5	126.8	128.6	129.7	130.0	129.5
Odisha	Male	24.0	24.6	25.0	25.3	25.5	25.5
	Female	23.7	24.4	25.0	25.4	25.6	25.8
	Total	47.7	49.0	50.0	50.7	51.1	51.3
Punjab	Male	15.7	15.8	15.9	15.8	15.6	15.4
	Female	14.3	14.5	14.6	14.7	14.7	14.6
	Total	30.0	30.3	30.5	30.5	30.3	30.0
Rajasthan	Male	44.2	46.7	48.8	50.5	52.1	53.6
	Female	41.1	43.5	45.6	47.5	49.3	50.8
	Total	85.3	90.2	94.4	98.0	101.4	104.4
Tamil Nadu	Male	38.8	39.1	39.3	39.2	39.0	38.6
	Female	39.2	39.7	40.1	40.3	40.3	40.0
	Total	78.0	78.8	79.4	79.5	79.3	78.6
Telangana	Male	19.9	20.4	20.8	21.0	21.1	21.1
	Female	19.8	20.3	20.6	20.8	21.0	21.0
	Total	39.7	40.7	41.4	41.8	42.1	42.1
Uttar Pradesh	Male	131.6	139.3	145.7	151.3	156.7	161.6
	Female	120.6	127.9	134.0	139.5	144.9	149.9
	Total	252.2	267.3	279.7	290.8	301.6	311.5
Uttarakhand	Male	5.9	6.1	6.2	6.3	6.4	6.4
	Female	5.7	5.9	6.0	6.1	6.2	6.2
	Total	11.6	12.0	12.2	12.4	12.6	12.6
West Bengal	Male	51.4	52.4	52.9	53.2	53.1	52.7
	Female	49.5	50.7	51.6	52.2	52.5	52.4
	Total	100.9	103.1	104.5	105.4	105.6	105.1
India	Male	726.4	751.4	771.8	788.5	801.7	811.2
	Female	689.0	715.5	738.2	757.9	774.5	787.3
	Total	1415.4	1466.9	1510.0	1546.4	1576.2	1598.5

Appendix Table 3.12: State-wise percentage change and average annual growth rate of population, 2021-2051									
Major states	2021	2026	2031	2036	2041	2046	2051	Percentage Change 2021-2051	Average annual growth
Andhra Pradesh	53.2	54.1	54.6	54.7	54.4	53.9	53.2	0.0	0.0
Assam	35.4	37.2	38.8	40.1	41.1	41.8	42.1	18.9	0.6
Bihar	122.9	132.9	142.8	151.2	158.2	164.5	170.5	38.7	1.1
Chhattisgarh	29.1	30.6	31.7	32.5	33.1	33.6	33.8	16.2	0.5
NCT of Delhi	18.6	19.3	19.8	20.2	20.5	20.6	20.5	10.2	0.3
Gujarat	67.8	70.3	72.3	73.8	74.9	75.5	75.7	11.7	0.4
Haryana	28.5	29.6	30.4	31.1	31.6	31.7	32	12.3	0.4
Himachal Pradesh	7.3	7.5	7.6	7.7	7.8	7.8	7.7	5.5	0.2
Jammu and Kashmir [undivided]	13.6	14.2	14.7	15.1	15.3	15.5	15.5	14.0	0.4
Jharkhand	38.1	40.4	42.5	44.2	45.6	46.7	47.6	24.9	0.7
Karnataka	66.1	67.5	68.5	69.3	69.6	69.5	69.1	4.5	0.1
Kerala	35.5	35.8	36.1	36.1	36.2	35.9	35.5	0.0	0.0
Madhya Pradesh	84	89.4	94.1	98	101.3	104.1	106.3	26.5	0.8
Maharashtra	121.6	124.1	126	127.4	128.1	127.9	126.9	4.4	0.1
Odisha	46.1	47.6	48.8	49.7	50.2	50.4	50.4	9.3	0.3
Punjab	46.1	47.6	48.8	49.7	50.2	50.4	50.4	9.3	0.3
Rajasthan	80	85.1	89.7	93.5	96.5	99.3	101.4	26.8	0.8
Tamil Nadu	76.7	77.8	78.4	78.7	78.7	78.1	77	0.4	0.0
Telangana	38.4	39.6	40.4	41	41.3	41.5	41.3	7.6	0.2
Uttar Pradesh	234.9	251.9	266.5	278.3	288.7	298.4	307.2	30.8	0.9
Uttarakhand	11.2	11.6	11.9	12.2	12.3	12.4	12.4	10.7	0.3
West Bengal	98.2	100.5	102.3	103.5	103.9	103.7	102.9	4.8	0.2
India	1355.8	1415.1	1465.3	1506.7	1451.6	1569.6	1590.1	17.3	0.5

Notes: Population figures are expressed in millions, and the average annual growth rates refer to exponential growth rates

SECTION
6

APPENDIX: IV

**STATE-WISE DETAILED REPORT-
MEDIUM VARIANT ASSUMPTION**



Appendix Table 4.1: Projected summary of demographic indicators for Andhra Pradesh, 2026-2051

Indicators	2026	2031	2036	2041	2046	2051
Fertility indicators						
Total Fertility Rate	1.43	1.41	1.40	1.40	1.40	1.40
Gross Reproduction Rate	0.69	0.68	0.68	0.68	0.68	0.68
Net Reproduction Rate	0.64	0.64	0.64	0.62	0.65	0.66
Mean Age of Childbearing	25.30	25.70	26.10	26.40	26.80	27.10
Child-Woman Ratio	0.20	0.19	0.18	0.18	0.18	0.18
Mortality indicators						
Male Life Expectancy	68.2	69.9	71.3	72.8	74.2	75.5
Female Life Expectancy	71.8	73.6	75.4	71	78.5	80
Total Life Expectancy	70	71.8	73.4	71.9	76.4	77.8
Infant Mortality Rate	55	48.4	42.2	46.3	32.5	27.8
Under Five Mortality Rate	67.1	57.6	49.7	56.7	37.1	31.9
Average annual net migration rate						
Male	-1324	-1318	-1315	-1313	-1312	-1312
Female	-1435	-1420	-1413	-1409	-1407	-1406
Total	-2759	-2738	-2728	-2722	-2719	-2718
Vital rates						
Crude Birth Rate per 1000	11.2	10.0	9.3	8.7	8.1	7.5
Crude Death Rate per 1000	8.5	8.8	8.9	11	9.9	10.8
Rate of Natural Increase [percent]	0.27	0.13	0.04	-0.23	-0.18	-0.33
GR percent	0.26	0.12	0.04	-0.23	-0.19	-0.33
Annual births and deaths [in million]						
Births	0.61	0.55	0.51	0.48	0.44	0.40
Deaths	0.46	0.48	0.49	0.60	0.53	0.58
Population [in million]						
Total	54.1	54.6	54.7	54.4	53.9	53.2
Male	27.0	27.3	27.3	27.2	27.0	26.5
Female	27.1	27.3	27.4	27.2	26.9	26.7
Percent 0-4	5.5	5.0	4.6	4.3	4.0	3.8
Percent 5-14	12.9	11.3	10.3	9.5	8.9	8.4
Percent 15-24	14.3	13.3	12.7	11.3	10.4	9.7
Percent 15-49	54.9	54.1	51.6	48.6	45.5	42.2
Percent 15-59	67.4	67.3	65.8	64.5	61.8	58.7
Percent 60 and above	14.3	16.4	19.4	21.8	25.3	29.1
Percent Females 15-49	54.3	53.3	50.4	47.3	44.4	41.0
Sex Ratio	99.9	99.8	99.6	100.2	100.1	99.3
Overall Dependency Ratio	47.8	48.4	48.5	51.9	55.1	61.7
Median Age	35.0	38.0	40.0	43.0	45.0	47.0

Appendix Table 4.2: Projected age structure of Andhra Pradesh, 2026-2051											
Age group	2026				2031				2036		
	M	F	T	M	F	T	M	F	T		
0-4	1520144	1440717	2960861	1388879	1316386	2705265	1279758	1214007		2493765	
5-9	1658342	1572003	3230345	1506517	1428052	2934569	1379259	1307495		2686754	
10-14	1918121	1819287	3737408	1654520	1569141	3223661	1503673	1425991		2929664	
15-19	1824887	1733936	3558823	1912982	1815718	3728700	1650816	1566707		3217523	
20-24	2137134	2024084	4161218	1817331	1728530	3545861	1906450	1811237		3717687	
25-29	2358446	2240482	4598928	2126065	2015509	4141574	1809287	1722389		3531676	
30-34	2400356	2222504	4622860	2343947	2229608	4573555	2114896	2007433		4122329	
35-39	2309496	2331746	4641242	2381971	2209915	4591886	2328609	2219303		4547912	
40-44	2142504	2259953	4402457	2286105	2314665	4600770	2361230	2196519		4557749	
45-49	1852964	1874275	3727239	2109547	2237074	4346621	2255296	2294850		4550146	
50-54	1783146	1909845	3692991	1807288	1846289	3653577	2063228	2208630		4271858	
55-59	1544212	1506690	3050902	1712996	1867588	3580584	1742868	1811036		3553904	
60-64	1270253	1296550	2566803	1451125	1455309	2906434	1618410	1812401		3430811	
65-69	929531	968460	1897991	1153052	1221333	2374385	1327903	1381916		2709819	
70-74	589163	755911	1345074	791465	866462	1657927	993459	1107161		2100620	
75-79	501956	682926	1184882	439119	607591	1046710	603618	714941		1318559	
80+	301972	418438	720410	385652	590704	976356	397033	644310		1041343	
Total	27042627	27057807	54100434	27268561	27319874	54588435	27335793	27446326		54782119	

Appendix Table 4.2: Projected age structure of Andhra Pradesh, 2026–2051

Age group	2041				2046				2051			
	M	F	T	M	F	T	M	F	T	M	F	T
0–4	1201741	1121514	2323255	1121097	1053909	2175006	1033107	978244	2011351			
5–9	1272398	1204893	2477291	1196265	1113070	2309335	1117208	1049741	2166949			
10–14	1377051	1305089	2682140	1270711	1203133	2473844	1194961	1111954	2306915			
15–19	1500822	1423052	2923874	1374888	1303135	2678023	1269064	1201893	2470957			
20–24	1645956	1561639	3207595	1497101	1419592	2916693	1372007	1300862	2672869			
25–29	1899263	1803301	3702564	1640567	1556192	3196759	1492851	1415900	2908751			
30–34	1800923	1713609	3514532	1891903	1796272	3688175	1635032	1551771	3186803			
35–39	2102851	1995739	4098590	1792065	1705851	3497916	1884071	1790685	3674756			
40–44	2311020	2202638	4513658	2089259	1984248	4073507	1782126	1698994	3481120			
45–49	2333351	2173741	4507092	2287396	2184897	4472293	2070794	1973126	4043920			
50–54	2211208	2259735	4470943	2293171	2147878	4441049	2252725	2166746	4419471			
55–59	1997200	2158808	4156008	2147912	2219528	4367440	2234653	2121188	4355841			
60–64	1655879	1747274	3403153	1907747	2100002	4007749	2061510	2176962	4238472			
65–69	1493052	1704147	3197199	1539994	1665313	3205307	1787510	2030419	3817929			
70–74	1158745	1232530	2391275	1318579	1555955	2874534	1376083	1559275	2935358			
75–79	772699	887663	1660362	919089	1031607	1950696	1065124	1363135	2428259			
80+	511541	708140	1219681	674768	898482	1573250	855721	1188577	2044298			
Total	27245700	27203512	54449212	26962512	26939064	53901576	26484547	26679472	53164019			

Appendix Table 4.3: Projected percentage distribution of population by age and gender for Andhra Pradesh, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	5.62	5.32	5.47	5.09	4.82	4.96	4.68	4.42	4.55
5–9	6.13	5.81	5.97	5.52	5.23	5.38	5.05	4.76	4.90
10–14	7.09	6.72	6.91	6.07	5.74	5.91	5.50	5.20	5.35
15–19	6.75	6.41	6.58	7.02	6.65	6.83	6.04	5.71	5.87
20–24	7.90	7.48	7.69	6.66	6.33	6.50	6.97	6.60	6.79
25–29	8.72	8.28	8.50	7.80	7.38	7.59	6.62	6.28	6.45
30–34	8.88	8.21	8.54	8.60	8.16	8.38	7.74	7.31	7.52
35–39	8.54	8.62	8.58	8.74	8.09	8.41	8.52	8.09	8.30
40–44	7.92	8.35	8.14	8.38	8.47	8.43	8.64	8.00	8.32
45–49	6.85	6.93	6.89	7.74	8.19	7.96	8.25	8.36	8.31
50–54	6.59	7.06	6.83	6.63	6.76	6.69	7.55	8.05	7.80
55–59	5.71	5.57	5.64	6.28	6.84	6.56	6.38	6.60	6.49
60–64	4.70	4.79	4.74	5.32	5.33	5.32	5.92	6.60	6.26
65–69	3.44	3.58	3.51	4.23	4.47	4.35	4.86	5.03	4.95
70–74	2.18	2.79	2.49	2.90	3.17	3.04	3.63	4.03	3.83
75–79	1.86	2.52	2.19	1.61	2.22	1.92	2.21	2.60	2.41
80+	1.12	1.55	1.33	1.41	2.16	1.79	1.45	2.35	1.90
Total	100.00	100.00	100.00	100	100	100	100	100	100
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	4.41	4.12	4.27	4.16	3.91	4.04	3.90	3.67	3.78
5–9	4.67	4.43	4.55	4.44	4.13	4.28	4.22	3.93	4.08
10–14	5.05	4.80	4.93	4.71	4.47	4.59	4.51	4.17	4.34
15–19	5.51	5.23	5.37	5.10	4.84	4.97	4.79	4.50	4.65
20–24	6.04	5.74	5.89	5.55	5.27	5.41	5.18	4.88	5.03
25–29	6.97	6.63	6.80	6.08	5.78	5.93	5.64	5.31	5.47
30–34	6.61	6.30	6.45	7.02	6.67	6.84	6.17	5.82	5.99
35–39	7.72	7.34	7.53	6.65	6.33	6.49	7.11	6.71	6.91
40–44	8.48	8.10	8.29	7.75	7.37	7.56	6.73	6.37	6.55
45–49	8.56	7.99	8.28	8.48	8.11	8.30	7.82	7.40	7.61
50–54	8.12	8.31	8.21	8.51	7.97	8.24	8.51	8.12	8.31
55–59	7.33	7.94	7.63	7.97	8.24	8.10	8.44	7.95	8.19
60–64	6.08	6.42	6.25	7.08	7.80	7.44	7.78	8.16	7.97
65–69	5.48	6.26	5.87	5.71	6.18	5.95	6.75	7.61	7.18
70–74	4.25	4.53	4.39	4.89	5.78	5.33	5.20	5.84	5.52
75–79	2.84	3.26	3.05	3.41	3.83	3.62	4.02	5.11	4.57
80+	1.88	2.60	2.24	2.50	3.34	2.92	3.23	4.46	3.85
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.4: Projected summary of demographic indicators for Assam, 2026–2051

Indicators	2026	2031	2036	2041	2046	2051
Fertility indicators						
Total Fertility Rate	1.90	1.78	1.71	1.65	1.63	1.61
Gross Reproduction Rate	0.93	0.87	0.83	0.80	0.80	0.79
Net Reproduction Rate	0.84	0.80	0.77	0.75	0.75	0.75
Mean Age of Childbearing	27.00	27.00	27.00	27.10	27.10	27.10
Child-Woman Ratio	0.28	0.26	0.24	0.23	0.22	0.22
Mortality indicators						
Male Life Expectancy	67.3	68.8	70.4	71.8	73.1	74.5
Female Life Expectancy	69	70.7	72.3	73.9	75.4	76.9
Total Life Expectancy	68.1	69.8	71.3	72.9	74.3	75.6
Infant Mortality Rate	62	55.6	49.5	43.8	38.6	34
Under Five Mortality Rate	77.5	67.9	59.5	51.9	45.3	39.4
Annual net migration rate						
Male	-472	-467	-465	-464	-463	-463
Female	-1,339	-1,372	-1,389	-1,399	-1,404	-1,407
Total	-1,811	-1,839	-1,854	-1,863	-1,867	-1,870
Vital rates						
Crude Birth Rate per 1000	16.5	14.8	13.1	11.8	11.1	10.5
Crude Death Rate per 1000	7.0	7.1	7.3	7.7	8.3	8.9
Rate of Natural Increase [percent]	0.95	0.77	0.59	0.41	0.28	0.16
Annual births and deaths [in million]						
Births	0.61	0.57	0.53	0.48	0.46	0.44
Deaths	0.26	0.27	0.29	0.32	0.35	0.37
Population [in million]						
Total	37.2	38.8	40.1	41.1	41.8	42.1
Male	18.9	19.7	20.3	20.8	21.1	21.2
Female	18.3	19.1	19.8	20.3	20.7	20.9
Percent 0–4	7.8	7.1	6.4	5.8	5.4	5.1
Percent 5–14	16.0	15.0	13.9	12.9	11.7	10.9
Percent 15–24	17.8	15.6	14.7	14.1	13.3	12.5
Percent 15–49	56.1	55.2	53.8	52.5	50.9	48.3
Percent 15–59	66.4	66.2	65.7	65.3	64.2	62.8
Percent 60 and above	9.9	11.7	14.0	16.0	18.7	21.3
Percent Females 15–49	56.5	55.4	53.6	51.7	50.2	47.5
Sex Ratio	103.4	103.1	102.7	102.3	101.9	101.5
Overall Dependency Ratio	0.4	0.4	0.4	0.4	0.4	0.5
Median Age	30.0	32.0	34.0	37.0	39.0	41.0

Appendix Table 4.5: Projected age structure of Assam, 2026-2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0-4	1480446	1403809	2884255	1420525	1348428	2768953	1318318	1251173	2569491
5-9	1532326	1451374	2983700	1464907	1386243	2851150	1409037	1334755	2743792
10-14	1515681	1440324	2956005	1528469	1447874	2976343	1461963	1383478	2845441
15-19	1596501	1540397	3136898	1511101	1436443	2947544	1524670	1444602	2969272
20-24	1783932	1717891	3501823	1589255	1533980	3123235	1505572	1431406	2936978
25-29	1760993	1676720	3437713	1774149	1708521	3482670	1582123	1526733	3108856
30-34	1562647	1443943	3006590	1749398	1665921	3415319	1764426	1699073	3463499
35-39	1379723	1458237	2837960	1549696	1432911	2982607	1737195	1655058	3392253
40-44	1349314	1381456	2730770	1364397	1443917	2808314	1535024	1420653	2955677
45-49	1124256	1114369	2238625	1326813	1363540	2690353	1344423	1427384	2771807
50-54	1082460	1054375	2136835	1094715	1093722	2188437	1295493	1341159	2636652
55-59	875726	808695	1684421	1037527	1025564	2063091	1053153	1066985	2120138
60-64	728068	676951	1405019	820278	774751	1595029	976751	986966	1963717
65-69	509902	468218	978120	657729	629418	1287147	746672	725793	1472465
70-74	317039	301436	618475	431138	410104	841242	561984	557751	1119735
75-79	211762	229698	441460	234271	233987	468258	324549	325951	650500
80+	118754	137119	255873	158054	186276	344330	189651	216421	406072
Total	18929530	18305012	37234542	19712422	19121600	38834022	20331004	19795341	40126345

Appendix Table 4.5: Projected age structure of Assam, 2026-2051

Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0-4	1214268	1153206	2367474	1155722	1098502	2254224	1108875	1053663	2162538
5-9	1309813	1240828	2550641	1207830	1145677	2353507	1150802	1092461	2243263
10-14	1406703	1332576	2739279	1308004	1239210	2547214	1206475	1144380	2350855
15-19	1458892	1380895	2839787	1404188	1330557	2734745	1306052	1237561	2543613
20-24	1519967	1440356	2960323	1455078	1377548	2832626	1401138	1327699	2728837
25-29	1499878	1425644	2925522	1515087	1435503	2950590	1451176	1373393	2824569
30-34	1574663	1519430	3094093	1493844	1419875	2913719	1509941	1430342	2940283
35-39	1753836	1689607	3443443	1566454	1512181	3078635	1487237	1413854	2901091
40-44	1722939	1642960	3365899	1741286	1679051	3420337	1556750	1503679	3060429
45-49	1515342	1406454	2921796	1703466	1628867	3332333	1724077	1666302	3390379
50-54	1316014	1406622	2722636	1486843	1388617	2875460	1674983	1610699	3285682
55-59	1250952	1312163	2563115	1275032	1379751	2654783	1445320	1365180	2810500
60-64	996955	1031304	2028259	1190219	1273603	2463822	1218889	1343694	2562583
65-69	896218	931055	1827273	921822	979495	1901317	1108480	1216922	2325402
70-74	646102	650988	1297090	784399	844368	1628767	816034	897849	1713883
75-79	431019	451689	882708	505110	537764	1042874	623891	710848	1334739
80+	259747	294006	553753	357193	416321	773514	453153	547050	1000203
Total	20773308	20309783	41083091	21071577	20686890	41758467	21243273	20935576	42178849

Appendix Table 4.6: Projected percentage distribution of population by age and gender for Assam, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	7.82	7.67	7.75	7.21	7.05	7.13	6.48	6.32	6.40
5–9	8.09	7.93	8.01	7.43	7.25	7.34	6.93	6.74	6.84
10–14	8.01	7.87	7.94	7.75	7.57	7.66	7.19	6.99	7.09
15–19	8.43	8.42	8.42	7.67	7.51	7.59	7.50	7.30	7.40
20–24	9.42	9.38	9.40	8.06	8.02	8.04	7.41	7.23	7.32
25–29	9.30	9.16	9.23	9.00	8.94	8.97	7.78	7.71	7.75
30–34	8.26	7.89	8.07	8.87	8.71	8.79	8.68	8.58	8.63
35–39	7.29	7.97	7.62	7.86	7.49	7.68	8.54	8.36	8.45
40–44	7.13	7.55	7.33	6.92	7.55	7.23	7.55	7.18	7.37
45–49	5.94	6.09	6.01	6.73	7.13	6.93	6.61	7.21	6.91
50–54	5.72	5.76	5.74	5.55	5.72	5.64	6.37	6.78	6.57
55–59	4.63	4.42	4.52	5.26	5.36	5.31	5.18	5.39	5.28
60–64	3.85	3.70	3.77	4.16	4.05	4.11	4.80	4.99	4.89
65–69	2.69	2.56	2.63	3.34	3.29	3.31	3.67	3.67	3.67
70–74	1.67	1.65	1.66	2.19	2.14	2.17	2.76	2.82	2.79
75–79	1.12	1.25	1.19	1.19	1.22	1.21	1.60	1.65	1.62
80+	0.63	0.75	0.69	0.80	0.97	0.89	0.93	1.09	1.01
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	5.85	5.68	5.76	5.48	5.31	5.40	5.22	5.03	5.13
5–9	6.31	6.11	6.21	5.73	5.54	5.64	5.42	5.22	5.32
10–14	6.77	6.56	6.67	6.21	5.99	6.10	5.68	5.47	5.57
15–19	7.02	6.80	6.91	6.66	6.43	6.55	6.15	5.91	6.03
20–24	7.32	7.09	7.21	6.91	6.66	6.78	6.60	6.34	6.47
25–29	7.22	7.02	7.12	7.19	6.94	7.07	6.83	6.56	6.70
30–34	7.58	7.48	7.53	7.09	6.86	6.98	7.11	6.83	6.97
35–39	8.44	8.32	8.38	7.43	7.31	7.37	7.00	6.75	6.88
40–44	8.29	8.09	8.19	8.26	8.12	8.19	7.33	7.18	7.26
45–49	7.29	6.93	7.11	8.08	7.87	7.98	8.12	7.96	8.04
50–54	6.34	6.93	6.63	7.06	6.71	6.89	7.88	7.69	7.79
55–59	6.02	6.46	6.24	6.05	6.67	6.36	6.80	6.52	6.66
60–64	4.80	5.08	4.94	5.65	6.16	5.90	5.74	6.42	6.08
65–69	4.31	4.58	4.45	4.37	4.73	4.55	5.22	5.81	5.51
70–74	3.11	3.21	3.16	3.72	4.08	3.90	3.84	4.29	4.06
75–79	2.07	2.22	2.15	2.40	2.60	2.50	2.94	3.40	3.16
80+	1.25	1.45	1.35	1.70	2.01	1.85	2.13	2.61	2.37
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.7: Projected summary of demographic indicators for Bihar, 2026–2051

Indicators	2026	2031	2036	2041	2046	2051
Fertility indicators						
Total Fertility Rate	2.50	2.24	2.05	1.94	1.88	1.86
Gross Reproduction Rate	1.19	1.07	0.98	0.92	0.90	0.89
Net Reproduction Rate	1.09	0.99	0.92	0.88	0.85	0.85
Mean Age of Childbearing	27.50	27.40	27.30	27.20	27.10	27.10
Child-Woman Ratio	0.39	0.37	0.32	0.27	0.25	0.26
Mortality indicators						
Male Life Expectancy	69.3	70.8	72.3	73.8	75.4	76.6
Female Life Expectancy	70.9	72.8	74.6	76.1	77.5	79.1
Total Life Expectancy	70.1	71.8	73.4	74.9	76.4	77.8
Infant Mortality Rate	54.2	47.8	41.9	36.3	31.3	27.4
Under Five Mortality Rate	65.9	57.1	49.2	42.3	36.3	31.6
Annual net migration rates						
Male	-21720	-21342	-21165	-21080	-21040	-21020
Female	-30660	-31362	-31734	-31927	-32027	-32079
Total	-52380	-52704	-52899	-53007	-53067	-53099
Vital rates						
Crude Birth Rate per 1000	22.3	19.8	16.5	14.5	13.7	13.5
Crude Death Rate per 1000	6.5	6.2	5.7	5.7	5.9	6.2
Rate of Natural Increase [percent]	1.58	1.36	1.08	0.88	0.79	0.73
Annual births and deaths [in million]						
Births	2.94	2.81	2.48	2.28	2.25	2.29
Deaths	0.86	0.87	0.86	0.89	0.96	1.05
Population [in million]						
Total	132.9	142.8	151.2	158.2	164.5	170.5
Male	69.3	74.4	78.8	82.4	85.6	88.7
Female	63.6	68.4	72.4	75.8	78.9	81.8
Percent 0–4	10.2	9.6	8.2	7.1	6.6	6.5
Percent 5–14	18.4	18.3	17.9	16.4	14.3	12.9
Percent 15–24	20.7	17.0	16.1	16.5	16.3	15.2
Percent 15–49	54.6	53.8	54.1	55.0	55.4	52.6
Percent 15–59	62.8	63.0	63.2	64.1	65.2	65.3
Percent 60 and above	8.6	9.4	10.9	12.4	14	15.3
Percent Females 15–49	54.5	53.4	53.3	54.2	54.9	52.1
Sex Ratio	108.9	108.8	108.7	108.6	108.5	108.4
Overall Dependency Ratio	62.3	59.3	59.7	58.6	55.9	53.4
Median Age	25.0	27.0	30.0	32.0	34.0	35.0

Appendix Table 4.8: Projected age structure of Bihar, 2026-2051										
Age group	2026			2031			2036			
	M	F	T	M	F	T	M	F	T	
0-4	7106373	6432608	13538981	7180225	6502309	13682534	6517390	5909971	12427361	
5-9	6737729	6049082	12786811	7051472	6367053	13418525	7136435	6451420	13587855	
10-14	6181169	5515123	11696292	6724490	6036365	12760855	7039953	6356331	13396284	
15-19	6506427	6089913	12596340	6165172	5500694	11665866	6709767	6023496	12733263	
20-24	7743840	7178779	14922619	6476574	6057421	12533995	6140152	5473629	11613781	
25-29	7239043	6499710	13738753	7696884	7126584	14823468	6439093	6014098	12453191	
30-34	5187057	4077872	9264929	7185014	6449518	13634532	7646504	7079481	14725985	
35-39	4092331	3736410	7828741	5136562	4035150	9171712	7128561	6399591	13528152	
40-44	3696447	3709683	7406130	4041705	3685882	7727587	5083395	3987484	9070879	
45-49	3358290	3401069	6759359	3634320	3658128	7292448	3982083	3640251	76223334	
50-54	3116013	2993077	6109090	3274773	3340345	6615118	3553847	3600998	7154845	
55-59	2523068	2253858	4776926	2997049	2918439	5915488	3161831	3267454	6429285	
60-64	1930759	1868598	3799357	2376844	2163716	4540560	2839456	2817591	5657047	
65-69	1469299	1280743	2750042	1759556	1742989	3502545	2185308	2035853	4221161	
70-74	951220	1117100	2068320	1259505	1135015	2394520	1528178	1566860	3095038	
75-79	882015	897140	1779155	717023	887653	1604676	973431	925353	1898784	
80+	539587	526832	1066419	692136	753041	1445177	687134	872489	1559623	
Total	69260667	63627597	132888264	74369304	68360302	142729606	78752518	72422350	151174868	

Appendix Table 4.8: Projected age structure of Bihar, 2026-2051

Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0-4	5874269	5327440	11201709	5693079	5158305	10851384	5774410	5236895	11011305
5-9	6486037	5874269	12360306	5852794	5299271	11152065	5676103	5134736	10810839
10-14	7126926	6442542	13569468	6479212	5866918	12346130	5847457	5293230	11140687
15-19	7027048	6344914	13371962	7116217	6432052	13548269	6470460	5858028	12328488
20-24	6686789	5997912	12684701	7006829	6320223	13327052	7097630	6408723	13506353
25-29	6107761	5435437	11543198	6656957	5960270	12617227	6978530	6283810	13262340
30-34	6398557	5975230	12373787	6073007	5400706	11473713	6623365	5926405	12549770
35-39	7594320	7032049	14626369	6357571	5934867	12292438	6036520	5365053	11401573
40-44	7068440	6343209	13411649	7539461	6976627	14516088	6313357	5888073	12201430
45-49	5020063	3944618	8964681	6995673	6288217	13283890	7470264	6923505	14393769
50-54	3904631	3589890	7494521	4937016	3896978	8833994	6894691	6225438	13120129
55-59	3444498	3532088	6976586	3799162	3528888	7328050	4820052	3840100	8660152
60-64	3012149	3168315	6180464	3299925	3437409	6737334	3657541	3445897	7103438
65-69	2632199	2672760	5304959	2815333	3024169	5839502	3107089	3300751	6407840
70-74	1923210	1852772	3775982	2345666	2459495	4805161	2537952	2811527	5349479
75-79	1205511	1305486	2510997	1549918	1575263	3125181	1927708	2132277	4059985
80+	861616	991920	1853536	1106543	1341410	2447953	1476653	1758228	3234881
Total	82374024	75830851	158204875	85624363	78901068	164525431	88709782	81832676	170542458

Appendix Table 4.9: Projected percentage distribution of population by age and gender for Bihar, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	10.26	10.11	10.19	9.65	9.51	9.59	8.28	8.16	8.22
5–9	9.73	9.51	9.62	9.48	9.31	9.40	9.06	8.91	8.99
10–14	8.92	8.67	8.80	9.04	8.83	8.94	8.94	8.78	8.86
15–19	9.39	9.57	9.48	8.29	8.05	8.17	8.52	8.32	8.42
20–24	11.18	11.28	11.23	8.71	8.86	8.78	7.80	7.56	7.68
25–29	10.45	10.22	10.34	10.35	10.43	10.39	8.18	8.30	8.24
30–34	7.49	6.41	6.97	9.66	9.43	9.55	9.71	9.78	9.74
35–39	5.91	5.87	5.89	6.91	5.90	6.43	9.05	8.84	8.95
40–44	5.34	5.83	5.57	5.43	5.39	5.41	6.45	5.51	6.00
45–49	4.85	5.35	5.09	4.89	5.35	5.11	5.06	5.03	5.04
50–54	4.50	4.70	4.60	4.40	4.89	4.63	4.51	4.97	4.73
55–59	3.64	3.54	3.59	4.03	4.27	4.14	4.01	4.51	4.25
60–64	2.79	2.94	2.86	3.20	3.17	3.18	3.61	3.89	3.74
65–69	2.12	2.01	2.07	2.37	2.55	2.45	2.77	2.81	2.79
70–74	1.37	1.76	1.56	1.69	1.66	1.68	1.94	2.16	2.05
75–79	1.27	1.41	1.34	0.96	1.30	1.12	1.24	1.28	1.26
80+	0.78	0.83	0.80	0.93	1.10	1.01	0.87	1.20	1.03
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	7.13	7.03	7.08	6.65	6.54	6.60	6.51	6.40	6.46
5–9	7.87	7.75	7.81	6.84	6.72	6.78	6.40	6.27	6.34
10–14	8.65	8.50	8.58	7.57	7.44	7.50	6.59	6.47	6.53
15–19	8.53	8.37	8.45	8.31	8.15	8.23	7.29	7.16	7.23
20–24	8.12	7.91	8.02	8.18	8.01	8.10	8.00	7.83	7.92
25–29	7.41	7.17	7.30	7.77	7.55	7.67	7.87	7.68	7.78
30–34	7.77	7.88	7.82	7.09	6.84	6.97	7.47	7.24	7.36
35–39	9.22	9.27	9.25	7.42	7.52	7.47	6.80	6.56	6.69
40–44	8.58	8.36	8.48	8.81	8.84	8.82	7.12	7.20	7.15
45–49	6.09	5.20	5.67	8.17	7.97	8.07	8.42	8.46	8.44
50–54	4.74	4.73	4.74	5.77	4.94	5.37	7.77	7.61	7.69
55–59	4.18	4.66	4.41	4.44	4.47	4.45	5.43	4.69	5.08
60–64	3.66	4.18	3.91	3.85	4.36	4.10	4.12	4.21	4.17
65–69	3.20	3.52	3.35	3.29	3.83	3.55	3.50	4.03	3.76
70–74	2.33	2.44	2.39	2.74	3.12	2.92	2.86	3.44	3.14
75–79	1.46	1.72	1.59	1.81	2.00	1.90	2.17	2.61	2.38
80+	1.05	1.31	1.17	1.29	1.70	1.49	1.66	2.15	1.90
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.10: Projected summary of demographic indicators for Chhattisgarh, 2026–2051

Indicators	2026	2031	2036	2041	2046	2051
Fertility indicators						
Total Fertility Rate	1.96	1.81	1.72	1.68	1.66	1.65
Gross Reproduction Rate	0.96	0.89	0.84	0.82	0.81	0.81
Net Reproduction Rate	0.86	0.8	0.77	0.76	0.76	0.76
Mean Age of Childbearing	26.4	26.5	26.7	26.8	26.9	27.1
Child-Woman Ratio	0.3	0.26	0.23	0.22	0.22	0.22
Mortality indicators						
Male Life Expectancy	61.5	62.5	63.6	64.7	65.7	66.6
Female Life Expectancy	67.5	69.2	70.7	72.2	73.1	75.2
Total Life Expectancy	64.5	65.9	67.2	68.5	69.5	71
Infant Mortality Rate	77.1	72	66.5	61.5	57.7	52.2
Under Five Mortality Rate	101.5	93.1	84.6	77	71.6	63.7
Annual net migration rates						
Male	2148	2116	2101	2094	2091	2089
Female	1386	1355	1343	1337	1335	1335
Total	3534	3471	3444	3431	3426	3424
Vital rates						
Crude Birth Rate per 1000	17.1	14.9	13.5	12.8	12.2	11.4
Crude Death Rate per 1000	8.9	8.9	9	9.4	10.1	10.4
Rate of Natural Increase [percent]	0.82	0.6	0.46	0.34	0.21	0.1
Annual births and deaths [in million]						
Births	0.52	0.47	0.44	0.42	0.41	0.39
Deaths	0.27	0.28	0.29	0.31	0.34	0.35
Population [in million]						
Total	30.5	31.6	32.5	33.1	33.5	33.8
Male	15.3	15.8	16.1	16.3	16.5	16.5
Female	15.3	15.9	16.4	16.8	17.1	17.3
Percent 0–4	8.0	7.1	6.4	6.0	5.8	5.5
Percent 5–14	17.0	15.7	14.2	12.9	11.9	11.5
Percent 15–24	17.0	16.1	15.9	14.9	13.7	12.5
Percent 15–49	54.4	54.9	54.8	53.8	52.0	49.3
Percent 15–59	64.5	65.0	65.1	65.1	64.4	63.0
Percent 60 and above	10.3	11.9	13.7	15.2	16.9	19.1
Percent Females 15–49	54.1	54.2	54.1	52.8	50.9	48.1
Sex Ratio	100.0	99.3	98.5	97.5	96.6	95.7
Overall Dependency Ratio	55.4	54.8	53.2	52.2	51.6	52.9
Median Age	29.0	31.0	34.0	36.0	37.0	39.0

Appendix Table 4.11: Projected age structure of Chhattisgarh, 2026-2051										
Age group	2026				2031				2036	
	M	F	T	M	F	T	M	F	T	
0-4	1236378	1213097	2449475	1133529	1114988	2248517	1046125	1030632	2076757	
5-9	1296676	1267461	2564137	1209365	1194890	2404255	1111552	1101650	2213202	
10-14	1339646	1296848	2636494	1290508	1263961	2554469	1204195	1192322	2396517	
15-19	1251840	1223273	2475113	1332580	1292880	2625460	1284307	1260879	2545186	
20-24	1379831	1338258	2718089	1241755	1217841	2459596	1323016	1288298	2611314	
25-29	1429039	1400847	2829886	1366837	1330988	2697825	1231411	1212601	2444012	
30-34	1284758	1255784	2540542	1413736	1391779	2805515	1353562	1323980	2677542	
35-39	1156305	1169183	2325488	1267854	1246158	2514012	1396632	1382825	2779457	
40-44	1008884	980694	1989578	1136541	1157431	2293972	1247795	1235433	2483228	
45-49	851676	885078	1736754	984303	967344	1951647	1110498	1143522	2254020	
50-54	825691	845859	1671550	821388	867703	1689091	951032	950384	1901416	
55-59	709874	727654	1437528	780697	821292	1601989	778572	844910	1623482	
60-64	581825	577780	1159605	652194	694991	1347185	719476	787690	1507166	
65-69	390207	407823	798030	510854	534308	1045162	575196	646972	1222168	
70-74	253855	297959	551814	315872	353594	669466	416187	468385	884572	
75-79	170994	231408	402402	175697	227370	403067	221575	275376	496951	
80+	96515	146005	242520	117365	186442	303807	128926	205371	334297	
Total	15263994	15265011	30529005	15751075	15863960	31615035	16100057	16351230	32451287	

Appendix Table 4.11: Projected age structure of Chhattisgarh, 2026–2051

Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	1000226	986207	1986433	972985	958836	1931821	935864	924109	1859973
5–9	1028247	1020282	2048529	985216	977691	1962907	959974	952049	1912023
10–14	1107335	1099715	2207050	1024792	1018770	2043562	982256	976584	1958840
15–19	1198982	1189900	2388882	1103023	1097799	2200822	1021207	1017406	2038613
20–24	1276176	1257148	2533324	1192310	1186882	2379192	1097591	1095664	2193255
25–29	1313227	1283656	2596883	1267894	1253274	2521168	1185490	1184100	2369590
30–34	1220723	1207287	2428010	1302951	1278750	2581701	1258965	1249507	2508472
35–39	1338749	1316745	2655494	1208707	1201564	2410271	1291238	1273849	2565087
40–44	1376235	1372419	2748654	1320825	1307919	2628744	1193884	1194914	2388798
45–49	1221060	1222288	2443348	1348612	1359138	2707750	1296100	1297106	2593206
50–54	1074777	1125500	2200277	1183835	1204634	2388469	1309648	1342023	2651671
55–59	903632	927953	1831585	1023451	1100991	2124442	1129988	1181617	2311605
60–64	719970	813689	1533659	838437	896467	1734904	952693	1068110	2020803
65–69	637341	738044	1375385	640949	766152	1407101	750350	850324	1600674
70–74	471631	573345	1044976	525987	659131	1185118	533138	692452	1225590
75–79	294497	371817	666314	336799	461165	797964	379357	540570	919927
80+	158720	249302	408022	208480	332016	540496	251393	434796	686189
Total	16341528	16755297	33096825	16485253	17061179	33546432	16529136	17275180	33804316

Appendix Table 4.12: Projected percentage distribution of population by age and gender for Chhattisgarh, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	8.10	7.95	8.02	7.20	7.03	7.11	6.50	6.30	6.40
5–9	8.49	8.30	8.40	7.68	7.53	7.60	6.90	6.74	6.82
10–14	8.78	8.50	8.64	8.19	7.97	8.08	7.48	7.29	7.38
15–19	8.20	8.01	8.11	8.46	8.15	8.30	7.98	7.71	7.84
20–24	9.04	8.77	8.90	7.88	7.68	7.78	8.22	7.88	8.05
25–29	9.36	9.18	9.27	8.68	8.39	8.53	7.65	7.42	7.53
30–34	8.42	8.23	8.32	8.98	8.77	8.87	8.41	8.10	8.25
35–39	7.58	7.66	7.62	8.05	7.86	7.95	8.67	8.46	8.57
40–44	6.61	6.42	6.52	7.22	7.30	7.26	7.75	7.56	7.65
45–49	5.58	5.80	5.69	6.25	6.10	6.17	6.90	6.99	6.95
50–54	5.41	5.54	5.48	5.21	5.47	5.34	5.91	5.81	5.86
55–59	4.65	4.77	4.71	4.96	5.18	5.07	4.84	5.17	5.00
60–64	3.81	3.78	3.80	4.14	4.38	4.26	4.47	4.82	4.64
65–69	2.56	2.67	2.61	3.24	3.37	3.31	3.57	3.96	3.77
70–74	1.66	1.95	1.81	2.01	2.23	2.12	2.59	2.86	2.73
75–79	1.12	1.52	1.32	1.12	1.43	1.27	1.38	1.68	1.53
80+	0.63	0.96	0.79	0.75	1.18	0.96	0.80	1.26	1.03
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	6.12	5.89	6.00	5.90	5.62	5.76	5.66	5.35	5.50
5–9	6.29	6.09	6.19	5.98	5.73	5.85	5.81	5.51	5.66
10–14	6.78	6.56	6.67	6.22	5.97	6.09	5.94	5.65	5.79
15–19	7.34	7.10	7.22	6.69	6.43	6.56	6.18	5.89	6.03
20–24	7.81	7.50	7.65	7.23	6.96	7.09	6.64	6.34	6.49
25–29	8.04	7.66	7.85	7.69	7.35	7.52	7.17	6.85	7.01
30–34	7.47	7.21	7.34	7.90	7.50	7.70	7.62	7.23	7.42
35–39	8.19	7.86	8.02	7.33	7.04	7.18	7.81	7.37	7.59
40–44	8.42	8.19	8.30	8.01	7.67	7.84	7.22	6.92	7.07
45–49	7.47	7.29	7.38	8.18	7.97	8.07	7.84	7.51	7.67
50–54	6.58	6.72	6.65	7.18	7.06	7.12	7.92	7.77	7.84
55–59	5.53	5.54	5.53	6.21	6.45	6.33	6.84	6.84	6.84
60–64	4.41	4.86	4.63	5.09	5.25	5.17	5.76	6.18	5.98
65–69	3.90	4.40	4.16	3.89	4.49	4.19	4.54	4.92	4.74
70–74	2.89	3.42	3.16	3.19	3.86	3.53	3.23	4.01	3.63
75–79	1.80	2.22	2.01	2.04	2.70	2.38	2.30	3.13	2.72
80+	0.97	1.49	1.23	1.26	1.95	1.61	1.52	2.52	2.03
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.13: Projected summary of demographic indicators for NCT of Delhi, 2026-2051

Indicators	2026	2031	2036	2041	2046	2051
Fertility indicators						
Total Fertility Rate	1.41	1.40	1.40	1.40	1.40	1.40
Gross Reproduction Rate	0.66	0.66	0.66	0.67	0.67	0.67
Net Reproduction Rate	0.65	0.65	0.65	0.66	0.66	0.66
Mean Age of Childbearing	26.90	26.90	27.00	27.00	27.10	27.10
Child-Woman Ratio	0.20	0.19	0.19	0.19	0.18	0.18
Mortality indicators						
Male Life Expectancy	72.4	74.2	75.8	77.2	78.7	80.2
Female Life Expectancy	76.8	78.9	80.6	82.1	82.4	85.0
Total Life Expectancy	74.5	76.4	78.1	79.5	80.5	82.5
Infant Mortality Rate	16.9	13.1	10.5	9.0	8.0	6.3
Under Five Mortality Rate	19.7	15	12.1	10.4	9.2	7.3
Annual net migration rates						
Male	8933	8734	8653	8621	8607	8601
Female	12866	12763	12710	12682	12668	12661
Total	21799	21497	21363	21303	21275	21262
Vital rates						
Crude Birth Rate per 1000	10.9	10	9.1	8.2	7.5	7.0
Crude Death Rate per 1000	6.0	6.4	6.7	7.4	8.5	9.0
Rate of Natural Increase [percent]	0.49	0.36	0.24	0.09	-0.1	-0.2
Annual births and deaths [in million]						
Births	0.21	0.20	0.18	0.17	0.15	0.14
Deaths	0.12	0.13	0.14	0.15	0.17	0.18
Population [in million]						
Total	19.3	19.8	20.2	20.5	20.5	20.5
Male	10.2	10.4	10.6	10.7	10.7	10.6
Female	9.1	9.4	9.6	9.8	9.9	9.9
Percent 0-4	5.4	5.0	4.6	4.2	3.9	3.6
Percent 5-14	12.4	10.9	10.1	9.5	8.8	8.1
Percent 15-24	15.2	13.5	11.9	10.6	10.0	9.5
Percent 15-49	58.0	55.8	52.0	48.0	44.6	41.4
Percent 15-50	70.0	69.0	66.5	64.1	61.0	57.5
Percent 60 and above	11.9	14.6	18.1	21.7	26.1	30.7
Percent Females 15-49	57.2	54.8	50.8	46.7	43.7	40.5
Sex Ratio	112.7	111.6	110.4	109.2	108.3	107.3
Overall Dependency Ratio	42.7	42.4	44.0	48.9	54.8	63.2
Median Age	35.0	38.0	40.0	43.0	46.0	48.0

Appendix Table 4.14: Projected age structure of NCT of Delhi, 2026-2051

Age group	2026					2031					2036				
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
0-4	553784	495636	1049420	525344	471727	997071	492570	444066	936636						
5-9	583267	518916	1102183	552764	494983	1047747	524842	471330	996172						
10-14	686217	605999	1292216	583552	519760	1103312	553293	495941	1049234						
15-19	733749	647713	1381462	686670	607031	1293701	584466	521014	1105480						
20-24	830795	710047	1540842	734666	649637	1384303	688261	609253	1297514						
25-29	897913	759828	1657741	832231	714685	1546916	737102	654719	1391821						
30-34	929695	754122	1683817	899337	765473	1664810	834670	720872	1555542						
35-39	956784	826882	1783666	930496	759048	1689544	901281	770936	1672217						
40-44	881785	803655	1685440	955022	830579	1785601	930336	763954	1694290						
45-49	756430	687012	1443442	876374	803948	1680322	950910	832002	1782912						
50-54	685169	621263	1306432	744982	682402	1427384	865581	799871	1665452						
55-59	561652	496900	1058552	663328	612310	1275638	724992	674912	1399904						
60-64	445141	395921	841062	530225	484658	1014883	630990	600108	1231098						
65-69	309601	282941	592542	403663	377168	780831	486451	465888	952339						
70-74	192190	198283	390473	262514	257581	520095	348034	348718	696752						
75-79	134133	160858	294991	145766	166050	311816	204608	222157	426765						
80+	76884	100506	177390	111200	158086	269286	138071	200387	338458						
Total	10215189	9066482	19281671	10438134	9355126	19793260	10596458	9596128	20192586						

Appendix Table 4.14: Projected age structure of NCT of Delhi, 2026-2051

Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0-4	453184	410735	863919	413242	376278	789520	380499	348408	728907
5-9	492276	443836	936112	453054	410610	863664	413249	376271	789520
10-14	525483	472363	997846	493017	444913	937930	453884	411753	865637
15-19	554376	497293	1051669	526710	473764	1000474	494372	446400	940772
20-24	586547	523494	1110041	556726	499857	1056583	529287	476466	1005753
25-29	691120	614600	1305720	589891	529060	1118951	560337	505607	1065944
30-34	740141	661295	1401436	694557	621363	1315920	593763	536177	1129940
35-39	837296	726828	1564124	743432	667554	1410986	698291	628017	1326308
40-44	902000	776329	1678329	838935	732609	1571544	745936	673985	1419921
45-49	927725	766673	1694398	900803	779358	1680161	839156	736635	1575791
50-54	941088	829010	1770098	920364	764867	1685231	895666	778733	1674399
55-59	845552	792534	1638086	922769	822193	1744962	905827	760829	1666656
60-64	694441	663878	1358319	815273	780379	1595652	895040	812667	1707707
65-69	585236	580217	1165453	651229	643594	1294823	772128	761227	1533355
70-74	426834	435595	862429	522403	544907	1067310	590652	611448	1202100
75-79	278732	306713	585445	351318	386492	737810	440697	493010	933707
80+	194622	273140	467762	279802	381178	660980	384961	520223	905184
Total	10676653	9774533	20451186	10673525	9858976	20532501	10593745	9877856	20471601

Appendix Table 4.15: Projected percentage distribution of population by age and gender for NCT of Delhi, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	5.42	5.47	5.44	5.03	5.04	5.04	4.65	4.63	4.64
5–9	5.71	5.72	5.72	5.30	5.29	5.29	4.95	4.91	4.93
10–14	6.72	6.68	6.70	5.59	5.56	5.57	5.22	5.17	5.20
15–19	7.18	7.14	7.16	6.58	6.49	6.54	5.52	5.43	5.47
20–24	8.13	7.83	7.99	7.04	6.94	6.99	6.50	6.35	6.43
25–29	8.79	8.38	8.60	7.97	7.64	7.82	6.96	6.82	6.89
30–34	9.10	8.32	8.73	8.62	8.18	8.41	7.88	7.51	7.70
35–39	9.37	9.12	9.25	8.91	8.11	8.54	8.51	8.03	8.28
40–44	8.63	8.86	8.74	9.15	8.88	9.02	8.78	7.96	8.39
45–49	7.40	7.58	7.49	8.40	8.59	8.49	8.97	8.67	8.83
50–54	6.71	6.85	6.78	7.14	7.29	7.21	8.17	8.34	8.25
55–59	5.50	5.48	5.49	6.35	6.55	6.44	6.84	7.03	6.93
60–64	4.36	4.37	4.36	5.08	5.18	5.13	5.95	6.25	6.10
65–69	3.03	3.12	3.07	3.87	4.03	3.94	4.59	4.85	4.72
70–74	1.88	2.19	2.03	2.51	2.75	2.63	3.28	3.63	3.45
75–79	1.31	1.77	1.53	1.40	1.77	1.58	1.93	2.32	2.11
80+	0.75	1.11	0.92	1.07	1.69	1.36	1.30	2.09	1.68
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	4.24	4.20	4.22	3.87	3.82	3.85	3.59	3.53	3.56
5–9	4.61	4.54	4.58	4.24	4.16	4.21	3.90	3.81	3.86
10–14	4.92	4.83	4.88	4.62	4.51	4.57	4.28	4.17	4.23
15–19	5.19	5.09	5.14	4.93	4.81	4.87	4.67	4.52	4.60
20–24	5.49	5.36	5.43	5.22	5.07	5.15	5.00	4.82	4.91
25–29	6.47	6.29	6.38	5.53	5.37	5.45	5.29	5.12	5.21
30–34	6.93	6.77	6.85	6.51	6.30	6.41	5.60	5.43	5.52
35–39	7.84	7.44	7.65	6.97	6.77	6.87	6.59	6.36	6.48
40–44	8.45	7.94	8.21	7.86	7.43	7.65	7.04	6.82	6.94
45–49	8.69	7.84	8.29	8.44	7.91	8.18	7.92	7.46	7.70
50–54	8.81	8.48	8.66	8.62	7.76	8.21	8.45	7.88	8.18
55–59	7.92	8.11	8.01	8.65	8.34	8.50	8.55	7.70	8.14
60–64	6.50	6.79	6.64	7.64	7.92	7.77	8.45	8.23	8.34
65–69	5.48	5.94	5.70	6.10	6.53	6.31	7.29	7.71	7.49
70–74	4.00	4.46	4.22	4.89	5.53	5.20	5.58	6.19	5.87
75–79	2.61	3.14	2.86	3.29	3.92	3.59	4.16	4.99	4.56
80+	1.82	2.79	2.29	2.62	3.87	3.22	3.63	5.27	4.42
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.16: Projected Summary of demographic indicators for Gujarat, 2026–2051**Summary demographic indicators**

Indicators	2026	2031	2036	2041	2046	2051
Fertility indicators						
Total Fertility Rate	1.79	1.70	1.65	1.62	1.61	1.60
Gross Reproduction Rate	0.85	0.81	0.79	0.78	0.77	0.77
Net Reproduction Rate	0.79	0.76	0.75	0.74	0.74	0.74
Mean Age of Childbearing	26.70	26.80	26.80	26.90	27.00	27.10
Child-Woman Ratio	0.26	0.24	0.23	0.22	0.22	0.22
Mortality indicators						
Male Life Expectancy	66.1	67.5	69	70.3	71.5	72.8
Female Life Expectancy	72.2	74.1	75.8	77.4	79	80.4
Total Life Expectancy	69.1	70.7	72.3	73.8	75.2	76.6
Infant Mortality Rate	58.9	52.5	46.5	41.2	36.5	32.1
Under Five Mortality Rate	72.8	63.7	55.6	48.7	42.8	37.4
Annual net migration rates						
Male	1732	1696	1684	1679	1678	1677
Female	3425	3446	3456	3461	3463	3465
Total	5157	5142	5140	5140	5141	5142
Vital rates						
Crude Birth Rate per 1000	14	12.6	11.7	11	10.3	9.6
Crude Death Rate per 1000	7.6	7.8	8.1	8.6	9.2	9.8
Rate of Natural Increase [percent]	0.64	0.48	0.36	0.24	0.11	-0.02
Annual births and deaths [in million]						
Births	0.98	0.91	0.86	0.82	0.78	0.73
Deaths	0.53	0.56	0.60	0.64	0.69	0.74
Population [in million]						
Total	70.3	72.3	73.8	74.9	75.5	75.7
Male	36.4	37.3	37.9	38.3	38.4	38.3
Female	33.9	35.0	35.9	36.6	37.1	37.4
Percent 0–4	6.7	6.1	5.7	5.3	5.1	4.8
Percent 5–14	15.2	13.7	12.3	11.4	10.7	10.3
Percent 15–24	15.9	15.0	14.4	13.2	12.0	11.2
Percent 15–49	54.9	54.2	53.0	50.8	48.5	45.8
Percent 15–59	66.0	66.1	65.7	64.6	62.9	60.8
Percent 60 and above	12.1	14.1	16.3	18.7	21.3	24.2
Percent Females 15–49	53.9	53.0	51.6	49.3	47.1	44.5
Sex Ratio	107.5	106.7	105.8	104.7	103.7	102.6
Overall Dependency Ratio	52.0	51.6	51.3	52.1	54.8	59.0
Median Age	32.0	34.0	37.0	39.0	41.0	43.0

Appendix Table 4.17: Projected age structure of Gujarat, 2026-2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0-4	2465029	2271580	4736609	2299963	2129746	4429709	2159412	2010727	4170139
5-9	2729615	2495824	5225439	2434796	2253373	4688169	2276810	2117042	4393852
10-14	2880194	2598627	5478821	2721813	2492579	5214392	2429036	2251328	4680364
15-19	2829872	2563223	5393095	2870667	2594562	5465229	2714228	2489656	5203884
20-24	3101597	2702039	5803636	2816105	2557523	5373628	2859103	2590277	5449380
25-29	3247505	2853104	6100609	3083494	2695255	5778749	2802512	2553087	5355599
30-34	3100703	2702321	5803024	3224930	2843836	6068766	3065367	2688891	5754258
35-39	2990126	2710532	5700658	3073380	2690945	5764325	3200425	2834507	6034932
40-44	2699582	2479872	5179454	2954282	2694048	5648330	3041128	2677813	5718941
45-49	2378551	2260139	4638690	2650836	2457817	5108653	2906502	2674012	5580514
50-54	2133005	2022270	4155275	2311589	2229389	4540978	2582761	2429350	5012111
55-59	1820249	1787097	3607346	2039028	1980425	4019453	2217239	2189706	4406945
60-64	1482367	1489038	2971405	1698015	1729188	3427203	1911117	1925025	3836142
65-69	1124772	1139643	2264415	1330805	1406342	2737147	1535074	1645428	3180502
70-74	722267	816277	1538544	941659	1023693	1965352	1125324	1279542	2404866
75-79	459549	579102	1038651	526442	661929	1188371	697244	849832	1547076
80+	257612	403460	661072	337100	529203	866303	410711	660216	1070927
Total	36422595	33874148	70296743	37314904	34969853	72284757	37933993	35866439	73800432

Appendix Table 4.17: Projected age structure of Gujarat, 2026-2051

Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0-4	2067141	1929947	3997088	1975734	1854208	3829942	1859039	1749773	3608812
5-9	2142147	2000803	4142950	2053547	1922089	3975636	1964919	1848111	3813030
10-14	2272480	2115538	4388018	2138750	1999714	4138464	2050834	1921322	3972156
15-19	2423504	2249188	4672692	2268093	2113919	4382012	2135289	1998514	4133803
20-24	2705397	2486325	5191722	2416947	2246874	4663821	2263025	2112293	4375318
25-29	2847932	2586782	5434714	2696557	2483914	5180471	2410462	2245624	4656086
30-34	2788925	2548411	5337336	2836188	2583096	5419284	2687186	2481382	5168568
35-39	3045675	2681744	5727419	2773492	2543050	5316542	2822721	2578808	5401529
40-44	3171329	2822781	5994110	3021332	2672579	5693911	2754175	2535996	5290171
45-49	2997482	2660836	5658318	3130610	2807578	5938188	2986887	2660570	5647457
50-54	2838554	2647244	5485798	2933864	2638145	5572009	3070702	2787250	5857952
55-59	2485415	2391945	4877360	2740120	2612238	5352358	2841147	2608468	5449615
60-64	2087770	2136692	4224462	2351444	2342319	4693763	2604600	2565942	5170542
65-69	1739279	1843855	3583134	1913614	2059003	3972617	2170993	2269289	4440282
70-74	1311087	1514601	2825688	1501626	1715809	3217435	1670898	1934667	3605565
75-79	845101	1085748	1930849	1001896	1311280	2313176	1168196	1512619	2680815
80+	540844	877860	1418704	689088	1184790	1873878	859578	1548765	2408343
Total	38310062	36580300	74890362	38442902	37090605	75533507	38320651	37359393	75680044

Appendix Table 4.18: Projected percentage distribution of population by age and gender for Gujarat, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	6.77	6.71	6.74	6.16	6.09	6.13	5.69	5.61	5.65
5–9	7.49	7.37	7.43	6.52	6.44	6.49	6.00	5.90	5.95
10–14	7.91	7.67	7.79	7.29	7.13	7.21	6.40	6.28	6.34
15–19	7.77	7.57	7.67	7.69	7.42	7.56	7.16	6.94	7.05
20–24	8.52	7.98	8.26	7.55	7.31	7.43	7.54	7.22	7.38
25–29	8.92	8.42	8.68	8.26	7.71	7.99	7.39	7.12	7.26
30–34	8.51	7.98	8.26	8.64	8.13	8.40	8.08	7.50	7.80
35–39	8.21	8.00	8.11	8.24	7.70	7.97	8.44	7.90	8.18
40–44	7.41	7.32	7.37	7.92	7.70	7.81	8.02	7.47	7.75
45–49	6.53	6.67	6.60	7.10	7.03	7.07	7.66	7.46	7.56
50–54	5.86	5.97	5.91	6.19	6.38	6.28	6.81	6.77	6.79
55–59	5.00	5.28	5.13	5.46	5.66	5.56	5.84	6.11	5.97
60–64	4.07	4.40	4.23	4.55	4.94	4.74	5.04	5.37	5.20
65–69	3.09	3.36	3.22	3.57	4.02	3.79	4.05	4.59	4.31
70–74	1.98	2.41	2.19	2.52	2.93	2.72	2.97	3.57	3.26
75–79	1.26	1.71	1.48	1.41	1.89	1.64	1.84	2.37	2.10
80+	0.71	1.19	0.94	0.90	1.51	1.20	1.08	1.84	1.45
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	5.40	5.28	5.34	5.14	5.00	5.07	4.85	4.68	4.77
5–9	5.59	5.47	5.53	5.34	5.18	5.26	5.13	4.95	5.04
10–14	5.93	5.78	5.86	5.56	5.39	5.48	5.35	5.14	5.25
15–19	6.33	6.15	6.24	5.90	5.70	5.80	5.57	5.35	5.46
20–24	7.06	6.80	6.93	6.29	6.06	6.17	5.91	5.65	5.78
25–29	7.43	7.07	7.26	7.01	6.70	6.86	6.29	6.01	6.15
30–34	7.28	6.97	7.13	7.38	6.96	7.17	7.01	6.64	6.83
35–39	7.95	7.33	7.65	7.21	6.86	7.04	7.37	6.90	7.14
40–44	8.28	7.72	8.00	7.86	7.21	7.54	7.19	6.79	6.99
45–49	7.82	7.27	7.56	8.14	7.57	7.86	7.79	7.12	7.46
50–54	7.41	7.24	7.33	7.63	7.11	7.38	8.01	7.46	7.74
55–59	6.49	6.54	6.51	7.13	7.04	7.09	7.41	6.98	7.20
60–64	5.45	5.84	5.64	6.12	6.32	6.21	6.80	6.87	6.83
65–69	4.54	5.04	4.78	4.98	5.55	5.26	5.67	6.07	5.87
70–74	3.42	4.14	3.77	3.91	4.63	4.26	4.36	5.18	4.76
75–79	2.21	2.97	2.58	2.61	3.54	3.06	3.05	4.05	3.54
80+	1.41	2.40	1.89	1.79	3.19	2.48	2.24	4.15	3.18
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.19: Projected summary of demographic indicators for Haryana, 2026–2051

Indicators	2026	2031	2036	2041	2046	2051
Fertility indicators						
Total Fertility Rate	1.79	1.7	1.65	1.62	1.61	1.6
Gross Reproduction Rate	0.83	0.79	0.77	0.76	0.76	0.76
Net Reproduction Rate	0.76	0.74	0.73	0.72	0.73	0.73
Mean Age of Childbearing	26.2	26.4	26.6	26.7	26.9	27.1
Child-Woman Ratio	0.26	0.24	0.22	0.22	0.22	0.22
Mortality indicators						
Male Life Expectancy	66.4	67.8	69.4	70.7	71.9	73.2
Female Life Expectancy	71.5	73.4	75.3	76.8	78.3	79.9
Total Life Expectancy	68.8	70.5	72.2	73.6	74.9	76.4
Infant Mortality Rate	59.5	53.1	46.7	41.6	36.9	32.2
Under Five Mortality Rate	73.7	64.6	55.5	49	43.2	37.3
Annual net migration rates						
Male	878	349	-181	-710	-1239	-1768
Female	1730	1016	302	-412	-1126	-1840
Total	2608	1365	121	-1122	-2365	-3608
Vital rates						
Crude Birth Rate per 1000	14	12.5	11.6	10.9	10.2	9.3
Crude Death Rate per 1000	7.5	7.6	7.6	8	8.6	9.3
Rate of Natural Increase [percent]	0.65	0.48	0.4	0.29	0.15	0.0
Annual births and deaths [in million]						
Births	0.41	0.38	0.36	0.34	0.32	0.30
Deaths	0.22	0.23	0.24	0.25	0.28	0.30
Population [in million]						
Total	29.6	30.4	31.1	31.6	31.9	32.0
Male	15.7	16.1	16.4	16.6	16.7	16.7
Female	13.9	14.3	14.7	15.0	15.2	15.3
Percent 0–4	6.8	6.0	5.6	5.3	5.0	4.6
Percent 5–14	15.7	13.9	12.2	11.2	10.6	10.1
Percent 15–24	16.2	15.4	14.9	13.4	11.9	11.0
Percent 15–49	56.2	56.0	54.9	52.1	49.0	46.0
Percent 15–59	66.6	67.3	67.1	66.3	64.3	61.6
Percent 60 and above	11	12.7	14.9	17.2	20.1	23.6
Percent Females 15–49	55.0	54.5	53.2	50.3	47.4	44.6
Sex Ratio	112.6	112.0	111.4	110.6	109.7	108.7
Overall Dependency Ratio	52.2	50.2	48.6	48.6	50.8	55.4
Median Age	31.0	34.0	36.0	39.0	41.0	43.0

Appendix Table 4.20: Projected age structure of Haryana, 2026-2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0-4	1069388	930397	1999785	978889	859924	1838813	914808	811035	1725843
5-9	1214612	1052856	2267468	1056915	922172	1979087	969507	854073	1823580
10-14	1280521	1095396	2375917	1211304	1051270	2262574	1054469	921069	1975538
15-19	1260978	1065127	2326105	1276408	1093435	2369843	1207905	1049770	2257675
20-24	1357086	1120443	2477529	1255093	1062352	2317445	1271212	1091113	2362325
25-29	1452787	1185219	2638006	1349373	1117008	2466381	1248926	1059554	2308480
30-34	1460689	1177319	2638008	1442779	1180745	2623524	1341268	1113409	2454677
35-39	1342283	1179681	2521964	1447969	1171772	2619741	1431754	1175977	2607731
40-44	1144677	1036640	2181317	1326488	1171918	2498406	1432944	1165181	2598125
45-49	938081	896374	1834455	1124428	1026705	2151133	1305455	1162237	2467692
50-54	858613	821523	1680136	912133	883382	1795515	1096127	1013848	2109975
55-59	718971	680381	1399352	821310	803544	1624854	875533	866607	1742140
60-64	565747	542401	1108148	671419	657322	1328741	770633	779772	1550405
65-69	406192	399874	806066	508755	510869	1019624	608116	623876	1231992
70-74	258635	299323	557958	340957	357436	698393	431491	462725	894216
75-79	221550	280262	501812	188602	239976	428578	253657	294326	547983
80+	120320	159784	280104	160891	236287	397178	162658	254650	417308
Total	15671130	13923000	29594130	16073713	14346117	30419830	16376463	14699222	31075685

Appendix Table 4.20: Projected age structure of Haryana, 2026-2051

Age group	2041			2046			2051		
	M			M			M		
	F	T	T	F	M	T	F	M	T
0-4	881041	787401	1668442	839856	757010	1596866	707763	778600	1486363
5-9	907768	806532	1714300	875165	783596	1658761	753883	835014	1588897
10-14	967584	853136	1820720	906096	805645	1711741	782724	873658	1656382
15-19	1051854	919908	1971762	965314	852122	1817436	804734	904067	1708801
20-24	1203503	1047725	2251228	1048118	918157	1966275	850505	961909	1812414
25-29	1265759	1088301	2354060	1198645	1044914	2243559	915477	1044017	1959494
30-34	1242315	1056278	2298593	1259583	1084909	2344492	1041562	1193164	2234726
35-39	1332235	1109201	2441436	1234610	1052326	2286936	1080919	1252460	2333379
40-44	1418669	1169965	2588634	1321218	1103851	2425069	1047499	1225424	2272923
45-49	1412626	1156638	2569264	1400426	1162227	2562653	1097281	1305945	2403226
50-54	1275522	1149378	2424900	1383010	1145276	2528286	1152239	1373803	2526042
55-59	1055645	996958	2052603	1232147	1132503	2364650	1130691	1340025	2470716
60-64	825462	844075	1669537	1000081	974256	1974337	1110209	1172697	2282906
65-69	702727	744783	1447510	758234	810836	1569070	941287	925423	1866710
70-74	521136	571629	1092765	608684	689432	1298116	758365	664371	1422736
75-79	325898	389316	715214	400577	490506	891083	602932	476035	1078967
80+	203745	311280	515025	266419	415726	682145	556508	343067	899575
Total	16593489	15002504	31595993	16698183	15223292	31921475	15334578	16669679	32004257

Appendix Table 4.21: Projected percentage distribution of population by age and gender for Haryana, 2026-2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0-4	6.82	6.68	6.76	6.09	5.99	6.04	5.59	5.52	5.55
5-9	7.75	7.56	7.66	6.58	6.43	6.51	5.92	5.81	5.87
10-14	8.17	7.87	8.03	7.54	7.33	7.44	6.44	6.27	6.36
15-19	8.05	7.65	7.86	7.94	7.62	7.79	7.38	7.14	7.27
20-24	8.66	8.05	8.37	7.81	7.41	7.62	7.76	7.42	7.60
25-29	9.27	8.51	8.91	8.39	7.79	8.11	7.63	7.21	7.43
30-34	9.32	8.46	8.91	8.98	8.23	8.62	8.19	7.57	7.90
35-39	8.57	8.47	8.52	9.01	8.17	8.61	8.74	8.00	8.39
40-44	7.30	7.45	7.37	8.25	8.17	8.21	8.75	7.93	8.36
45-49	5.99	6.44	6.20	7.00	7.16	7.07	7.97	7.91	7.94
50-54	5.48	5.90	5.68	5.67	6.16	5.90	6.69	6.90	6.79
55-59	4.59	4.89	4.73	5.11	5.60	5.34	5.35	5.90	5.61
60-64	3.61	3.90	3.74	4.18	4.58	4.37	4.71	5.30	4.99
65-69	2.59	2.87	2.72	3.17	3.56	3.35	3.71	4.24	3.96
70-74	1.65	2.15	1.89	2.12	2.49	2.30	2.63	3.15	2.88
75-79	1.41	2.01	1.70	1.17	1.67	1.41	1.55	2.00	1.76
80+	0.77	1.15	0.95	1.00	1.65	1.31	0.99	1.73	1.34
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0-4	5.31	5.25	5.28	5.03	4.97	5.00	4.67	4.62	4.64
5-9	5.47	5.38	5.43	5.24	5.15	5.20	5.01	4.92	4.96
10-14	5.83	5.69	5.76	5.43	5.29	5.36	5.24	5.10	5.18
15-19	6.34	6.13	6.24	5.78	5.60	5.69	5.42	5.25	5.34
20-24	7.25	6.98	7.13	6.28	6.03	6.16	5.77	5.55	5.66
25-29	7.63	7.25	7.45	7.18	6.86	7.03	6.26	5.97	6.12
30-34	7.49	7.04	7.27	7.54	7.13	7.34	7.16	6.79	6.98
35-39	8.03	7.39	7.73	7.39	6.91	7.16	7.51	7.05	7.29
40-44	8.55	7.80	8.19	7.91	7.25	7.60	7.35	6.83	7.10
45-49	8.51	7.71	8.13	8.39	7.63	8.03	7.83	7.16	7.51
50-54	7.69	7.66	7.67	8.28	7.52	7.92	8.24	7.51	7.89
55-59	6.36	6.65	6.50	7.38	7.44	7.41	8.04	7.37	7.72
60-64	4.97	5.63	5.28	5.99	6.40	6.18	7.03	7.24	7.13
65-69	4.23	4.96	4.58	4.54	5.33	4.92	5.55	6.14	5.83
70-74	3.14	3.81	3.46	3.65	4.53	4.07	3.99	4.95	4.45
75-79	1.96	2.60	2.26	2.40	3.22	2.79	2.86	3.93	3.37
80+	1.23	2.07	1.63	1.60	2.73	2.14	2.06	3.63	2.81
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.22: Projected summary of demographic indicators for Himachal Pradesh, 2026–2051

Indicators	2026	2031	2036	2041	2046	2051
Fertility indicators						
Total Fertility Rate	1.53	1.51	1.50	1.50	1.50	1.50
Gross Reproduction Rate	0.74	0.73	0.72	0.72	0.72	0.72
Net Reproduction Rate	0.71	0.71	0.71	0.71	0.71	0.72
Mean Age of Childbearing	26.30	26.50	26.60	26.80	27.00	27.10
Child-Woman Ratio	0.22	0.21	0.20	0.20	0.20	0.20
Mortality indicators						
Male Life Expectancy	70.3	71.8	73.4	75	76.3	77.7
Female Life Expectancy	75.6	77.5	79.3	80.9	82.2	83.5
Total Life Expectancy	72.9	74.6	76.3	77.9	79.3	80.6
Infant Mortality Rate	20.8	17.2	13.8	10.9	9.5	8.1
Under Five Mortality Rate	24.4	20.1	16	12.5	10.9	9.3
Annual net migration rates						
Male	554	608	646	670	686	696
Female	63	58	56	55	54	54
Total	617	666	702	725	740	750
Vital rates						
Crude Birth Rate per 1000	11.9	10.9	10	9.3	8.8	8.3
Crude Death Rate per 1000	8	8	8.2	8.6	9.2	9.8
Rate of Natural Increase [percent]	0.39	0.28	0.18	0.07	-0.04	-0.15
Annual births and deaths [in million]						
Births	0.09	0.08	0.08	0.07	0.07	0.06
Deaths	0.06	0.06	0.06	0.07	0.07	0.08
Population [in million]						
Total	7.5	7.6	7.7	7.8	7.8	7.7
Male	3.8	3.8	3.9	3.9	3.9	3.9
Female	3.7	3.8	3.8	3.9	3.9	3.9
Percent 0–4	5.9	5.5	5.1	4.7	4.5	4.2
Percent 5–14	13.0	12.0	11.2	10.4	9.7	9.2
Percent 15–24	15.0	13.7	12.6	11.7	11.1	10.4
Percent 15–49	55.1	53.6	51.4	48.6	45.8	43.0
Percent 15–59	67.1	66.6	65.2	63.5	61.4	58.7
Percent 60 and above	13.9	16	18.6	21.4	24.4	27.9
Percent Females 15–49	54.1	52.2	49.6	46.5	43.9	41.2
Sex Ratio	101.8	101.3	100.8	100.2	99.8	99.5
Overall Dependency Ratio	49.2	48.9	50.1	53.4	57.4	62.8
Median Age	35.0	37.0	39.0	41.0	44.0	46.0

Appendix Table 4.23: Projected age structure of Himachal Pradesh, 2026–2051											
Age group	2026			2031			2036				
	M	F	T	M	F	T	M	F	T		
0–4	230323	215465	445788	215726	202516	418242	201412	189422	390834		
5–9	241912	226371	468283	229475	214937	444412	215128	202110	417238		
10–14	262982	243593	506575	241522	226115	467637	229216	214737	443953		
15–19	282563	258631	541194	262395	243263	505658	241130	225865	466995		
20–24	308673	278371	587044	281446	258071	539517	261622	242836	504458		
25–29	334017	298879	632896	307322	277588	584910	280547	257480	538027		
30–34	331553	300714	632267	332475	297839	630314	306279	276803	583082		
35–39	318023	315946	633969	329622	299348	628970	330986	296739	627725		
40–44	283608	293804	577412	315241	313923	629164	327315	297789	625104		
45–49	262029	268212	530241	279428	290910	570338	311376	311388	622764		
50–54	244006	250011	494017	255453	264089	519542	273466	287248	560714		
55–59	202223	210664	412887	233678	244091	477769	245985	258940	504925		
60–64	168921	180356	349277	188169	202851	391020	219167	236624	455791		
65–69	128242	142396	270638	150185	169142	319327	169272	192351	361623		
70–74	89162	102398	191560	105846	127061	232907	125985	153655	279640		
75–79	58931	74928	133859	65151	83617	148768	79277	106973	186250		
80+	40022	60726	100748	48959	77402	126361	57920	95889	153809		
Total	3787190	3721465	7508655	3842093	3792763	7634856	3876083	3846849	7722932		

Appendix Table 4.23: Projected age structure of Himachal Pradesh, 2026-2051									
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0-4	189211	177538	366749	178540	167300	345840	168442	157764	326206
5-9	201030	189113	390143	188959	177289	366248	178347	167098	345445
10-14	214985	201957	416942	200959	188991	389950	188929	177192	366121
15-19	228975	214545	443520	214842	201804	416646	200879	188871	389750
20-24	240652	225542	466194	228664	214285	442949	214646	201600	416246
25-29	261079	242386	503465	240340	225189	465529	228481	214005	442486
30-34	279929	256891	536820	260708	241917	502625	240129	224825	464954
35-39	305327	275974	581301	279318	256238	535556	260301	241401	501702
40-44	329229	295482	624711	304068	274979	579047	278400	255458	533858
45-49	324086	295821	619907	326548	293815	620363	301994	273663	575657
50-54	305821	308164	613985	319189	293199	612388	322330	291606	613936
55-59	264749	282644	547393	297399	303923	601322	311599	289769	601368
60-64	232483	252405	484888	252062	276544	528606	285013	298336	583349
65-69	199333	226405	425738	213793	242997	456790	234344	267737	502081
70-74	144279	177412	321691	172777	211044	383821	188443	228677	417120
75-79	96508	132593	229101	113468	155933	269401	139516	188525	328041
80+	72078	126625	198703	91966	166658	258624	116488	212596	329084
Total	3889754	3881497	7771251	3883600	3892105	7775705	3858281	3879123	7737404

Appendix Table 4.24: Projected percentage distribution of population by age and gender for Himachal Pradesh, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	6.08	5.79	5.94	5.61	5.34	5.48	5.20	4.92	5.06
5–9	6.39	6.08	6.24	5.97	5.67	5.82	5.55	5.25	5.40
10–14	6.94	6.55	6.75	6.29	5.96	6.13	5.91	5.58	5.75
15–19	7.46	6.95	7.21	6.83	6.41	6.62	6.22	5.87	6.05
20–24	8.15	7.48	7.82	7.33	6.80	7.07	6.75	6.31	6.53
25–29	8.82	8.03	8.43	8.00	7.32	7.66	7.24	6.69	6.97
30–34	8.75	8.08	8.42	8.65	7.85	8.26	7.90	7.20	7.55
35–39	8.40	8.49	8.44	8.58	7.89	8.24	8.54	7.71	8.13
40–44	7.49	7.89	7.69	8.20	8.28	8.24	8.44	7.74	8.09
45–49	6.92	7.21	7.06	7.27	7.67	7.47	8.03	8.09	8.06
50–54	6.44	6.72	6.58	6.65	6.96	6.80	7.06	7.47	7.26
55–59	5.34	5.66	5.50	6.08	6.44	6.26	6.35	6.73	6.54
60–64	4.46	4.85	4.65	4.90	5.35	5.12	5.65	6.15	5.90
65–69	3.39	3.83	3.60	3.91	4.46	4.18	4.37	5.00	4.68
70–74	2.35	2.75	2.55	2.75	3.35	3.05	3.25	3.99	3.62
75–79	1.56	2.01	1.78	1.70	2.20	1.95	2.05	2.78	2.41
80+	1.06	1.63	1.34	1.27	2.04	1.66	1.49	2.49	1.99
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	4.86	4.57	4.72	4.60	4.30	4.45	4.37	4.07	4.22
5–9	5.17	4.87	5.02	4.87	4.56	4.71	4.62	4.31	4.46
10–14	5.53	5.20	5.37	5.17	4.86	5.01	4.90	4.57	4.73
15–19	5.89	5.53	5.71	5.53	5.18	5.36	5.21	4.87	5.04
20–24	6.19	5.81	6.00	5.89	5.51	5.70	5.56	5.20	5.38
25–29	6.71	6.24	6.48	6.19	5.79	5.99	5.92	5.52	5.72
30–34	7.20	6.62	6.91	6.71	6.22	6.46	6.22	5.80	6.01
35–39	7.85	7.11	7.48	7.19	6.58	6.89	6.75	6.22	6.48
40–44	8.46	7.61	8.04	7.83	7.07	7.45	7.22	6.59	6.90
45–49	8.33	7.62	7.98	8.41	7.55	7.98	7.83	7.05	7.44
50–54	7.86	7.94	7.90	8.22	7.53	7.88	8.35	7.52	7.93
55–59	6.81	7.28	7.04	7.66	7.81	7.73	8.08	7.47	7.77
60–64	5.98	6.50	6.24	6.49	7.11	6.80	7.39	7.69	7.54
65–69	5.12	5.83	5.48	5.51	6.24	5.87	6.07	6.90	6.49
70–74	3.71	4.57	4.14	4.45	5.42	4.94	4.88	5.90	5.39
75–79	2.48	3.42	2.95	2.92	4.01	3.46	3.62	4.86	4.24
80+	1.85	3.26	2.56	2.37	4.28	3.33	3.02	5.48	4.25
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.25 for Jammu and Kashmir, [Undivided], 2026–2051

Indicators	2026	2031	2036	2041	2046	2051
Fertility indicators						
Total Fertility Rate	1.41	1.40	1.40	1.40	1.40	1.40
Gross Reproduction Rate	0.63	0.63	0.63	0.64	0.64	0.64
Net Reproduction Rate	0.60	0.61	0.61	0.62	0.62	0.63
Mean Age of Childbearing	28.70	28.40	28.00	27.70	27.40	27.10
Child-Woman Ratio	0.21	0.22	0.21	0.19	0.17	0.17
Mortality indicators						
Male Life Expectancy	74.1	75.8	77.4	79.1	80.6	81.7
Female Life Expectancy	76.9	78.9	80.7	82.2	83.7	85.0
Total Life Expectancy	75.5	77.3	79	80.6	82	83.3
Infant Mortality Rate	34.4	28.8	24.2	20.4	17.0	14.6
Under Five Mortality Rate	39.8	33.2	27.9	23.4	19.6	16.8
Annual net migration rate						
Male	-1368	-1375	-1378	-1379	-1380	-1380
Female	-73	-46	-19	8	35	62
Total	-1441	-1421	-1397	-1371	-1345	-1318
Vital rates						
Crude Birth Rate per 1000	12.5	12.2	10.7	8.4	7.2	6.8
Crude Death Rate per 1000	5.1	5.3	5.4	5.9	6.6	7.5
Rate of Natural Increase [percent]	0.74	0.69	0.52	0.25	0.06	-0.06
Annual births and deaths [in million]						
Births	0.18	0.18	0.16	0.13	0.11	0.11
Deaths	0.07	0.08	0.08	0.09	0.10	0.12
Population [in million]						
Total	14.2	14.7	15.1	15.3	15.5	15.5
Male	7.5	7.8	8.0	8.1	8.2	8.2
Female	6.7	6.9	7.1	7.2	7.3	7.3
Percent 0–4	5.9	5.9	5.4	4.5	3.7	3.4
Percent 5–14	11.7	11.3	11.2	10.9	9.8	8.2
Percent 15–24	19.8	15.3	11.0	10.7	10.9	10.8
Percent 15–49	60.5	57.7	54.2	51.1	48.4	44.7
Percent 15–59	71.0	69.2	67.0	65.2	63.3	61.3
Percent 60 and above	11.4	13.6	16.4	19.4	23.2	27.1
Percent Females 15–49	60.8	57.7	54.1	50.6	47.4	43.3
Sex Ratio	112.8	112.9	112.8	112.7	112.5	112.2
Overall Dependency Ratio	47.4	41.1	44.7	49.4	53.6	58.1
Median Age	31.0	34.0	37.0	40.0	43.0	46.0

Notes: The summary of projected demographic indicators is presented jointly, with no separate estimates for Jammu and Kashmir [UT] and Ladakh [UT]

Appendix Table 4.26: Projected age structure of Jammu and Kashmir [Undivided], 2026-2051											
Age group	2026					2031					2036
	M	F	T	M	F	T	M	F	T	M	F
0-4	460484	373108	833592	473748	386839	860587	449353	370300	819653		
5-9	454650	366187	820837	458671	371393	830064	472222	385455	857677		
10-14	467193	372861	840054	453647	365838	819485	457733	371113	828846		
15-19	755935	646584	1402519	465722	372444	838166	452278	365513	817791		
20-24	741418	662846	1404264	753763	645552	1399315	464155	371958	836113		
25-29	737988	665720	1403708	739016	661465	1400481	751580	644456	1396036		
30-34	633058	593084	1226142	735440	664024	1399464	736769	660101	1396870		
35-39	595159	552547	1147706	630022	591218	1221240	732443	662345	1394788		
40-44	574251	495934	1070185	591400	550187	1141587	626588	589177	1215765		
45-49	483337	424448	907785	568967	492919	1061886	586707	547455	1134162		
50-54	424515	387621	812136	475862	420563	896425	561427	489228	1050655		
55-59	364410	315162	679572	413696	382253	795949	465455	415786	881241		
60-64	282084	264588	546672	349970	308395	658365	399552	375516	775068		
65-69	218558	194875	413433	264592	254711	519303	331155	298891	630046		
70-74	133613	142413	276026	195762	181119	376881	240342	239581	479923		
75-79	110343	109600	219943	108326	122900	231226	163027	160104	323131		
80+	68672	84708	153380	97595	116782	214377	114942	148783	263725		
Total	7505668	6652286	14157954	7776199	6888602	14664801	8005728	7095762	15101490		

Appendix Table 4.26: Projected age structure of Jammu and Kashmir [Undivided], 2026–2051												
Age group	2041				2046				2051			
	M	F	T	M	F	T	M	F	T	M	F	T
0–4	379293	315039	694332	314094	261701	575795	287181	240639	527820	287181	240639	527820
5–9	448153	369242	817395	378434	314305	692739	313414	261186	574600	313414	261186	574600
10–14	471334	385222	856556	447331	369067	816398	377672	314196	691868	377672	314196	691868
15–19	456438	370848	827286	470098	385004	855102	446149	368909	815058	446149	368909	815058
20–24	450838	365119	815957	455089	370521	825610	468795	384731	853526	468795	384731	853526
25–29	462591	371429	834020	449406	364690	814096	453721	370165	823886	453721	370165	823886
30–34	749587	643352	1392939	461280	370913	832193	448207	364288	812495	448207	364288	812495
35–39	734135	658718	1392853	747252	642245	1389497	459665	370420	830085	459665	370420	830085
40–44	729085	660443	1389528	731227	657150	1388377	744595	640996	1385591	744595	640996	1385591
45–49	622394	586728	1209122	725024	658147	1383171	727625	655252	1382877	727625	655252	1382877
50–54	580103	544001	1124104	616552	583627	1200179	719102	655242	1374344	719102	655242	1374344
55–59	551045	484557	1035602	571094	539636	1110730	608242	579725	1187967	608242	579725	1187967
60–64	452031	409619	861650	537734	478535	1016269	559061	534034	1093095	559061	534034	1093095
65–69	381233	365702	746935	434607	400568	835175	519568	469657	989225	519568	469657	989225
70–74	304954	283655	588609	355361	349685	705046	408607	385560	794167	408607	385560	794167
75–79	205006	215315	420321	265876	258640	524516	314508	322808	637316	314508	322808	637316
80+	165650	199791	365441	227912	276761	504673	311938	363701	675639	311938	363701	675639
Total	8143870	7228780	15372650	8188371	7281195	15469566	8168050	7281509	15449559	8168050	7281509	15449559

Appendix Table 4.27: Projected percentage distribution of population by age and gender for Jammu and Kashmir [Undivided], 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	6.14	5.61	5.89	6.09	5.62	5.87	5.61	5.22	5.43
5–9	6.06	5.50	5.80	5.90	5.39	5.66	5.90	5.43	5.68
10–14	6.22	5.61	5.93	5.83	5.31	5.59	5.72	5.23	5.49
15–19	10.07	9.72	9.91	5.99	5.41	5.72	5.65	5.15	5.42
20–24	9.88	9.96	9.92	9.69	9.37	9.54	5.80	5.24	5.54
25–29	9.83	10.01	9.91	9.50	9.60	9.55	9.39	9.08	9.24
30–34	8.43	8.92	8.66	9.46	9.64	9.54	9.20	9.30	9.25
35–39	7.93	8.31	8.11	8.10	8.58	8.33	9.15	9.33	9.24
40–44	7.65	7.46	7.56	7.61	7.99	7.78	7.83	8.30	8.05
45–49	6.44	6.38	6.41	7.32	7.16	7.24	7.33	7.72	7.51
50–54	5.66	5.83	5.74	6.12	6.11	6.11	7.01	6.89	6.96
55–59	4.86	4.74	4.80	5.32	5.55	5.43	5.81	5.86	5.84
60–64	3.76	3.98	3.86	4.50	4.48	4.49	4.99	5.29	5.13
65–69	2.91	2.93	2.92	3.40	3.70	3.54	4.14	4.21	4.17
70–74	1.78	2.14	1.95	2.52	2.63	2.57	3.00	3.38	3.18
75–79	1.47	1.65	1.55	1.39	1.78	1.58	2.04	2.26	2.14
80+	0.91	1.27	1.08	1.26	1.70	1.46	1.44	2.10	1.75
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	4.66	4.36	4.52	3.84	3.59	3.72	3.52	3.30	3.42
5–9	5.50	5.11	5.32	4.62	4.32	4.48	3.84	3.59	3.72
10–14	5.79	5.33	5.57	5.46	5.07	5.28	4.62	4.31	4.48
15–19	5.60	5.13	5.38	5.74	5.29	5.53	5.46	5.07	5.28
20–24	5.54	5.05	5.31	5.56	5.09	5.34	5.74	5.28	5.52
25–29	5.68	5.14	5.43	5.49	5.01	5.26	5.55	5.08	5.33
30–34	9.20	8.90	9.06	5.63	5.09	5.38	5.49	5.00	5.26
35–39	9.01	9.11	9.06	9.13	8.82	8.98	5.63	5.09	5.37
40–44	8.95	9.14	9.04	8.93	9.03	8.97	9.12	8.80	8.97
45–49	7.64	8.12	7.87	8.85	9.04	8.94	8.91	9.00	8.95
50–54	7.12	7.53	7.31	7.53	8.02	7.76	8.80	9.00	8.90
55–59	6.77	6.70	6.74	6.97	7.41	7.18	7.45	7.96	7.69
60–64	5.55	5.67	5.61	6.57	6.57	6.57	6.84	7.33	7.08
65–69	4.68	5.06	4.86	5.31	5.50	5.40	6.36	6.45	6.40
70–74	3.74	3.92	3.83	4.34	4.80	4.56	5.00	5.30	5.14
75–79	2.52	2.98	2.73	3.25	3.55	3.39	3.85	4.43	4.13
80+	2.03	2.76	2.38	2.78	3.80	3.26	3.82	4.99	4.37
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.28: Projected age structure of Jammu and Kashmir [UT], 2026-2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0-4	453900	366957	820857	466974	380461	847435	442928	364195	807123
5-9	447157	359781	806938	451111	364896	816007	464439	378712	843151
10-14	459146	366291	825437	445833	359392	805225	449849	364574	814423
15-19	741575	633580	1375155	456875	364953	821828	443687	358162	801848
20-24	720219	648225	1368444	732211	631312	1363523	450884	363753	814637
25-29	709311	650255	1359566	710299	646099	1356398	722374	629485	1351860
30-34	611047	580372	1191419	709870	649791	1359661	711152	645952	1357105
35-39	578122	541314	1119436	611987	579198	1191185	711477	648879	1360356
40-44	559233	486044	1045277	575934	539215	1115149	610202	577428	1187629
45-49	471536	415804	887340	555076	482880	1037956	572382	536305	1108688
50-54	415624	379123	794747	465896	411343	877239	549669	478503	1028172
55-59	356101	308785	664886	404263	374518	778781	454841	407372	862214
60-64	276144	258701	534845	342601	301533	644134	391139	367161	758300
65-69	213226	190836	404062	258138	249431	507569	323077	292696	615773
70-74	130489	139199	269688	191186	177031	368217	234723	234174	468897
75-79	107035	106869	213904	105078	119838	224916	158139	156115	314254
80+	66902	82855	149757	95079	114228	209307	111979	145529	257508
Total	7316767	6514991	13831758	7578411	6746119	14324530	7802941	6948995	14751936

Appendix Table 4.28: Projected age structure of Jammu and Kashmir [UT], 2026-2051										
Age group	2041			2046			2051			
	M	F	T	M	F	T	M	F	T	
0-4	373870	309845	683715	309603	257386	566989	283075	236672	519747	
5-9	440767	362783	803550	372197	308807	681004	308248	256617	564865	
10-14	463216	378434	841650	439626	362564	802190	371167	308660	679827	
15-19	447768	363389	811157	461168	377261	838429	437674	361489	799163	
20-24	437948	357065	795013	442077	362348	804425	455391	376245	831636	
25-29	444615	362801	807416	431943	356218	788161	436090	361566	797656	
30-34	723525	629562	1353087	445242	362963	808205	432623	356480	789103	
35-39	713120	645326	1358446	725862	629188	1355050	446507	362889	809396	
40-44	710018	647272	1357290	712104	644045	1356149	725122	628213	1353335	
45-49	607198	574779	1181977	707322	644743	1352065	709860	641907	1351767	
50-54	567954	532075	1100029	603639	570833	1174472	704042	640878	1344920	
55-59	538480	474752	1013232	558072	528716	1086788	594373	567994	1162367	
60-64	442513	400505	843018	526412	467887	994299	547289	522151	1069440	
65-69	371933	358122	730055	424005	392265	816270	506894	459922	966816	
70-74	297825	277253	575078	347054	341793	688847	399055	376858	775913	
75-79	198859	209950	408809	257904	252196	510100	305078	314765	619843	
80+	161379	195421	356801	222036	270708	492744	303896	355746	659642	
Total	7940987	7079335	15020322	7986266	7129921	15116187	7966384	7129052	15095436	

Appendix Table 4.29: Projected percentage distribution of population by age and gender for Jammu and Kashmir [UT], 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	6.20	5.63	5.93	6.16	5.64	5.92	5.68	5.24	5.47
5–9	6.11	5.52	5.83	5.95	5.41	5.70	5.95	5.45	5.72
10–14	6.28	5.62	5.97	5.88	5.33	5.62	5.77	5.25	5.52
15–19	10.14	9.72	9.94	6.03	5.41	5.74	5.69	5.15	5.44
20–24	9.84	9.95	9.89	9.66	9.36	9.52	5.78	5.23	5.52
25–29	9.69	9.98	9.83	9.37	9.58	9.47	9.26	9.06	9.16
30–34	8.35	8.91	8.61	9.37	9.63	9.49	9.11	9.30	9.20
35–39	7.90	8.31	8.09	8.08	8.59	8.32	9.12	9.34	9.22
40–44	7.64	7.46	7.56	7.60	7.99	7.78	7.82	8.31	8.05
45–49	6.44	6.38	6.42	7.32	7.16	7.25	7.34	7.72	7.52
50–54	5.68	5.82	5.75	6.15	6.10	6.12	7.04	6.89	6.97
55–59	4.87	4.74	4.81	5.33	5.55	5.44	5.83	5.86	5.84
60–64	3.77	3.97	3.87	4.52	4.47	4.50	5.01	5.28	5.14
65–69	2.91	2.93	2.92	3.41	3.70	3.54	4.14	4.21	4.17
70–74	1.78	2.14	1.95	2.52	2.62	2.57	3.01	3.37	3.18
75–79	1.46	1.64	1.55	1.39	1.78	1.57	2.03	2.25	2.13
80+	0.91	1.27	1.08	1.25	1.69	1.46	1.44	2.09	1.75
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	4.71	4.38	4.55	3.88	3.61	3.75	3.55	3.32	3.44
5–9	5.55	5.12	5.35	4.66	4.33	4.51	3.87	3.60	3.74
10–14	5.83	5.35	5.60	5.50	5.09	5.31	4.66	4.33	4.50
15–19	5.64	5.13	5.40	5.77	5.29	5.55	5.49	5.07	5.29
20–24	5.52	5.04	5.29	5.54	5.08	5.32	5.72	5.28	5.51
25–29	5.60	5.12	5.38	5.41	5.00	5.21	5.47	5.07	5.28
30–34	9.11	8.89	9.01	5.58	5.09	5.35	5.43	5.00	5.23
35–39	8.98	9.12	9.04	9.09	8.82	8.96	5.60	5.09	5.36
40–44	8.94	9.14	9.04	8.92	9.03	8.97	9.10	8.81	8.97
45–49	7.65	8.12	7.87	8.86	9.04	8.94	8.91	9.00	8.95
50–54	7.15	7.52	7.32	7.56	8.01	7.77	8.84	8.99	8.91
55–59	6.78	6.71	6.75	6.99	7.42	7.19	7.46	7.97	7.70
60–64	5.57	5.66	5.61	6.59	6.56	6.58	6.87	7.32	7.08
65–69	4.68	5.06	4.86	5.31	5.50	5.40	6.36	6.45	6.40
70–74	3.75	3.92	3.83	4.35	4.79	4.56	5.01	5.29	5.14
75–79	2.50	2.97	2.72	3.23	3.54	3.37	3.83	4.42	4.11
80+	2.03	2.76	2.38	2.78	3.80	3.26	3.81	4.99	4.37
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.30: Projected summary of demographic indicators for Jharkhand, 2026–2051

Indicators	2026	2031	2036	2041	2046	2051
Fertility indicators						
Total Fertility Rate	2.03	1.85	1.74	1.68	1.66	1.65
Gross Reproduction Rate	0.98	0.89	0.84	0.81	0.80	0.79
Net Reproduction Rate	0.90	0.83	0.79	0.77	0.76	0.76
Mean Age of Childbearing	27.3	27.3	27.2	27.2	27.1	27.1
Child-Woman Ratio	0.32	0.29	0.26	0.23	0.22	0.22
Mortality indicators						
Male Life Expectancy	69.3	70.8	72.3	73.8	75.4	76.6
Female Life Expectancy	70.9	72.8	74.6	76.1	77.5	79.1
Total Life Expectancy	70.1	71.8	73.4	74.9	76.4	77.8
Infant Mortality Rate	54.3	47.8	41.8	36.3	31.4	27.4
Under Five Mortality Rate	66	57.1	49.2	42.3	36.3	31.6
Annual net migration rates						
Male	-4979	-5407	-5695	-5880	-5994	-6064
Female	-5415	-5662	-5809	-5893	-5940	-5967
Total	-10394	-11069	-11504	-11773	-11934	-12031
Vital rates						
Crude Birth Rate per 1000	18.2	16.1	13.8	12.2	11.5	11.1
Crude Death Rate per 1000	6.6	6.5	6.4	6.5	6.9	7.3
Rate of Natural Increase [percent]	1.16	0.96	0.74	0.57	0.46	0.37
Annual births and deaths [in million]						
Births	0.73	0.68	0.61	0.56	0.54	0.53
Deaths	0.27	0.28	0.28	0.30	0.32	0.35
Population [in million]						
Total	40.4	42.5	44.2	45.6	46.7	47.6
Male	20.8	21.8	22.7	23.4	23.9	24.4
Female	19.6	20.7	21.5	22.2	22.7	23.2
Percent 0–4	8.5	7.9	6.8	6.0	5.6	5.4
Percent 5–14	16.8	16.0	15.2	13.9	12.3	11.2
Percent 15–24	19.1	16.4	15.3	14.9	14.4	13.2
Percent 15–49	55.7	55.3	54.7	54.3	53.3	50.0
Percent 15–59	64.8	65.0	65.1	65.5	65.3	64.4
Percent 60 and above	9.9	11.1	12.8	14.6	16.8	18.9
Percent Females 15–49	55.7	55.0	54.2	53.6	52.7	49.4
Sex Ratio	105.8	105.8	105.6	105.4	105.3	105.0
Overall Dependency Ratio	56.6	54.3	53.8	53.6	52.7	53.1
Median Age	28.0	30.0	33.0	35.0	37.0	39.0

Appendix Table 4.31: Projected age structure of Jharkhand, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	1793799	1653824	3447623	1735387	1600716	3336103	1571533	1451560	3023093
5–9	1776115	1622262	3398377	1779896	1637187	3417083	1724590	1588209	3312799
10–14	1769032	1608634	3377666	1772373	1618931	3391304	1776699	1634485	3411184
15–19	1849134	1747979	3597113	1764501	1604963	3369464	1768451	1615939	3384390
20–24	2103374	2005377	4108751	1841217	1740811	3582028	1757771	1599276	3357047
25–29	2090270	1968523	4058793	2091946	1994158	4086104	1831854	1731929	3563783
30–34	1688100	1463681	3151781	2076718	1955739	4032457	2079754	1982947	4062701
35–39	1401472	1364916	2766388	1674029	1452042	3126071	2061875	1943211	4005086
40–44	1306818	1275088	2581906	1386198	1351712	2737910	1658259	1440006	3098265
45–49	1122742	1102832	2225574	1285579	1259059	2544638	1366090	1336930	2703020
50–54	1033846	997508	2031354	1095210	1083477	2178687	1257447	1239884	2497331
55–59	853942	804326	1658268	994251	972202	1966453	1057273	1059369	2116642
60–64	699674	667753	1367427	804315	773222	1577537	941795	939409	1881204
65–69	505016	484682	989698	637666	624930	1262596	739304	729567	1468871
70–74	349222	381805	731027	432455	429954	862409	553268	561994	1115262
75–79	268698	300249	568947	263084	303630	566714	333806	350579	684385
80+	152163	170438	322601	206664	249907	456571	232809	295937	528746
Total	20763417	19619877	40383294	21841489	20652640	42494129	22712578	21501231	44213809

Appendix Table 4.31: Projected age structure of Jharkhand, 2026-2051

Age group	2041				2046				2051			
	M	F	T	M	F	T	M	F	T	M	F	T
0-4	1428282	1319412	2747694	1361545	1256587	2618132	1336587	1234700	2571287			
5-9	1563678	1442730	3006408	1422797	1312419	2735216	1357230	1250843	2608073			
10-14	1721978	1586056	3308034	1561708	1440953	3002661	1421169	1310954	2732123			
15-19	1773361	1631976	3405337	1719281	1583870	3303151	1559482	1439166	2998648			
20-24	1762555	1610957	3373512	1768284	1627357	3395641	1714707	1579709	3294416			
25-29	1749665	1591784	3341449	1755410	1603942	3359352	1761632	1620808	3382440			
30-34	1821922	1722862	3544784	1741225	1583813	3325038	1747589	1596550	3344139			
35-39	2066597	1971818	4038415	1811428	1713551	3524979	1731900	1575764	3307664			
40-44	2045383	1929967	3975350	2052276	1959660	4011936	1799627	1703648	3503275			
45-49	1637572	1426341	3063913	2023828	1914340	3938168	2032764	1945578	3978342			
50-54	1339613	1319062	2658675	1610314	1409579	3019893	1994149	1895246	3889395			
55-59	1218568	1215807	2434375	1303067	1296385	2599452	1571596	1388589	2960185			
60-64	1007086	1028024	2035110	1167267	1184256	2351523	1254182	1267110	2521292			
65-69	872903	892845	1765748	941243	983031	1924274	1098990	1139307	2238297			
70-74	649843	664096	1313939	777231	821571	1598802	848061	914129	1762190			
75-79	435907	468097	904004	522899	564364	1087263	638187	711872	1350059			
80+	294141	360075	654216	391974	483249	875223	505834	630937	1136771			
Total	23389054	22181909	45570963	23931777	22738927	46670704	24373686	23204910	47578596			

Appendix Table 4.32: Projected percentage distribution of population by age and gender for Jharkhand, 2021–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	8.64	8.43	8.54	7.95	7.75	7.85	6.92	6.75	6.84
5–9	8.55	8.27	8.42	8.15	7.93	8.04	7.59	7.39	7.49
10–14	8.52	8.20	8.36	8.11	7.84	7.98	7.82	7.60	7.72
15–19	8.91	8.91	8.91	8.08	7.77	7.93	7.79	7.52	7.65
20–24	10.13	10.22	10.17	8.43	8.43	8.43	7.74	7.44	7.59
25–29	10.07	10.03	10.05	9.58	9.66	9.62	8.07	8.06	8.06
30–34	8.13	7.46	7.80	9.51	9.47	9.49	9.16	9.22	9.19
35–39	6.75	6.96	6.85	7.66	7.03	7.36	9.08	9.04	9.06
40–44	6.29	6.50	6.39	6.35	6.54	6.44	7.30	6.70	7.01
45–49	5.41	5.62	5.51	5.89	6.10	5.99	6.01	6.22	6.11
50–54	4.98	5.08	5.03	5.01	5.25	5.13	5.54	5.77	5.65
55–59	4.11	4.10	4.11	4.55	4.71	4.63	4.66	4.93	4.79
60–64	3.37	3.40	3.39	3.68	3.74	3.71	4.15	4.37	4.25
65–69	2.43	2.47	2.45	2.92	3.03	2.97	3.26	3.39	3.32
70–74	1.68	1.95	1.81	1.98	2.08	2.03	2.44	2.61	2.52
75–79	1.29	1.53	1.41	1.20	1.47	1.33	1.47	1.63	1.55
80+	0.73	0.87	0.80	0.95	1.21	1.07	1.03	1.38	1.20
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	6.11	5.95	6.03	5.69	5.53	5.61	5.48	5.32	5.40
5–9	6.69	6.50	6.60	5.95	5.77	5.86	5.57	5.39	5.48
10–14	7.36	7.15	7.26	6.53	6.34	6.43	5.83	5.65	5.74
15–19	7.58	7.36	7.47	7.18	6.97	7.08	6.40	6.20	6.30
20–24	7.54	7.26	7.40	7.39	7.16	7.28	7.04	6.81	6.92
25–29	7.48	7.18	7.33	7.34	7.05	7.20	7.23	6.98	7.11
30–34	7.79	7.77	7.78	7.28	6.97	7.12	7.17	6.88	7.03
35–39	8.84	8.89	8.86	7.57	7.54	7.55	7.11	6.79	6.95
40–44	8.75	8.70	8.72	8.58	8.62	8.60	7.38	7.34	7.36
45–49	7.00	6.43	6.72	8.46	8.42	8.44	8.34	8.38	8.36
50–54	5.73	5.95	5.83	6.73	6.20	6.47	8.18	8.17	8.17
55–59	5.21	5.48	5.34	5.44	5.70	5.57	6.45	5.98	6.22
60–64	4.31	4.63	4.47	4.88	5.21	5.04	5.15	5.46	5.30
65–69	3.73	4.03	3.87	3.93	4.32	4.12	4.51	4.91	4.70
70–74	2.78	2.99	2.88	3.25	3.61	3.43	3.48	3.94	3.70
75–79	1.86	2.11	1.98	2.18	2.48	2.33	2.62	3.07	2.84
80+	1.26	1.62	1.44	1.64	2.13	1.88	2.08	2.72	2.39
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.33: Projected summary of demographic indicators for Karnataka, 2026–2051

Indicators	2026	2031	2036	2041	2046	2051
Fertility indicators						
Total Fertility Rate	1.59	1.54	1.52	1.51	1.50	1.50
Gross Reproduction Rate	0.78	0.75	0.74	0.74	0.73	0.73
Net Reproduction Rate	0.74	0.73	0.72	0.72	0.72	0.72
Mean Age of Childbearing	25.60	25.90	26.20	26.50	26.80	27.10
Child-Woman Ratio	0.23	0.21	0.21	0.21	0.21	0.20
Mortality indicators						
Male Life Expectancy	67.1	68.6	70.2	71.5	72.8	74.1
Female Life Expectancy	72.7	74.7	76.3	75.9	79.5	80.3
Total Life Expectancy	69.9	71.6	73.2	73.7	76.2	77.3
Infant Mortality Rate	30.8	25	20.4	18.7	14.5	12.3
Under Five Mortality Rate	37.3	29.6	23.9	21.9	16.9	14.2
Annual net migration						
Male	1662	1625	1611	1605	1602	1601
Female	865	845	838	835	833	833
Total	2527	2470	2449	2440	2435	2434
Vital rates						
Crude Birth Rate per 1000	12.5	11.4	10.7	10.1	9.4	8.9
Crude Death Rate per 1000	8.6	8.7	8.9	9.9	9.8	10.6
Rate of natural Increase [percent]	0.38	0.26	0.18	0.02	-0.04	-0.17
Annual births and deaths [in million]						
Births	0.84	0.78	0.74	0.70	0.66	0.61
Deaths	0.58	0.60	0.62	0.69	0.68	0.73
Population [in million]						
Total	67.5	68.5	69.3	69.6	69.5	69.1
Male	34.0	34.4	34.6	34.7	34.5	34.1
Female	33.5	34.1	34.7	34.9	35.0	35.0
Percent 0–4	6.2	5.7	5.3	5.1	4.8	4.5
Percent 5–14	14.0	12.6	11.6	10.9	10.3	9.8
Percent 15–24	15.1	14.5	13.5	12.3	11.5	10.9
Percent 15–49	55.6	55.0	52.5	49.7	47.0	44.6
Percent 15–59	67.3	67.6	66.3	65.2	62.7	62.0
Percent 60 and above	12.5	14.2	16.7	18.9	22.2	25.7
Percent Females 15–49	54.9	54.1	51.3	48.5	45.9	43.3
Sex Ratio	101.5	100.8	99.9	99.4	98.5	97.5
Overall Dependency Ratio	48.9	48.6	48.0	50.8	53.4	59.5
Median Age	34.0	36.0	38.0	40.0	42.0	44.0

Appendix Table 4.34: Projected age structure of Karnataka, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	2133480	2063323	4196803	1978028	1911539	3889567	1883694	1815587	3699281
5–9	2256638	2179226	4435864	2118734	2055378	4174112	1967864	1906349	3874213
10–14	2538880	2445657	4984537	2249513	2175540	4425053	2113456	2052752	4166208
15–19	2542635	2438661	4981296	2528639	2440652	4969291	2242128	2172116	4414244
20–24	2656370	2521653	5178023	2525781	2431146	4956927	2514840	2434918	4949758
25–29	2897155	2747168	5644323	2636833	2511835	5148668	2510839	2423992	4934831
30–34	2970155	2740353	5710508	2874590	2733732	5608322	2620347	2502350	5122697
35–39	3026286	2883580	5909866	2941649	2723010	5664659	2852098	2720063	5572161
40–44	2783537	2817015	5600552	2985499	2858044	5843543	2908558	2703544	5612102
45–49	2277693	2226377	4504070	2725554	2779656	5505210	2931276	2826357	5757633
50–54	2154255	2253513	4407768	2202145	2181217	4383362	2644764	2731968	5376732
55–59	1759998	1708424	3468422	2039623	2183917	4223540	2094782	2123579	4218361
60–64	1499800	1519769	3019569	1613042	1626771	3239813	1880380	2093435	3973815
65–69	1033121	1088518	2121639	1307196	1400062	2707258	1416993	1514908	2931901
70–74	665490	790044	1455534	830749	944375	1775124	1060956	1234025	2294981
75–79	477810	620667	1098477	468339	615627	1083966	594177	756933	1351110
80+	317832	453202	771034	375282	571883	947165	400048	647935	1047983
Total	33991135	33497150	67488285	34401196	34144384	68545580	34637200	34660811	69298011

Appendix Table 4.34: Projected age structure of Karnataka, 2026-2051

Age group	2041					2046					2051				
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
0-4	1794523	1722290	3516813	1690355	1621097	3311452	1585983	1519344	3105327						
5-9	1876330	1810955	3687285	1788851	1718525	3507376	1686236	1618428	3304664						
10-14	1963895	1904018	3867913	1873215	1809142	3682357	1786502	1717180	3503682						
15-19	2107702	2049628	4157330	1959441	1901706	3861147	1869789	1807389	3677178						
20-24	2231940	2167235	4399175	2099722	2046001	4145723	1953470	1899122	3852592						
25-29	2502600	2428023	4930623	2223138	2162476	4385614	2093256	2042625	4135881						
30-34	2497999	2415213	4913212	2492042	2421031	4913073	2215855	2157726	4373581						
35-39	2603397	2490333	5093730	2484608	2406039	4890647	2481287	2413871	4895158						
40-44	2824996	2701291	5526287	2582501	2476673	5059174	2468253	2395712	4863965						
45-49	2862652	2674583	5537235	2786318	2678147	5464465	2552455	2459839	5012294						
50-54	2853790	2779171	5632961	2795712	2638757	5434469	2729516	2649576	5379092						
55-59	2528233	2662151	5190384	2740044	2721562	5461606	2696195	2595028	5291223						
60-64	1944802	2038382	3983184	2363361	2576171	4939532	2577419	2650578	5227997						
65-69	1667649	1953081	3620730	1742031	1927062	3669093	2137401	2461942	4599343						
70-74	1165592	1340391	2505983	1390492	1765343	3155835	1472620	1773136	3245756						
75-79	772430	993714	1766144	865719	1119443	1985162	1052570	1516973	2569543						
80+	491500	782791	1274291	642491	1052704	1695195	779166	1342900	2122066						
Total	34690030	34913250	69603280	34520041	35041879	69561920	34137973	35021369	69159342						

Appendix Table 4.35: Projected percentage distribution of population by age and gender for Karnataka, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	6.28	6.16	6.22	5.75	5.60	5.67	5.44	5.24	5.34
5–9	6.64	6.51	6.57	6.16	6.02	6.09	5.68	5.50	5.59
10–14	7.47	7.30	7.39	6.54	6.37	6.46	6.10	5.92	6.01
15–19	7.48	7.28	7.38	7.35	7.15	7.25	6.47	6.27	6.37
20–24	7.81	7.53	7.67	7.34	7.12	7.23	7.26	7.02	7.14
25–29	8.52	8.20	8.36	7.66	7.36	7.51	7.25	6.99	7.12
30–34	8.74	8.18	8.46	8.36	8.01	8.18	7.57	7.22	7.39
35–39	8.90	8.61	8.76	8.55	7.97	8.26	8.23	7.85	8.04
40–44	8.19	8.41	8.30	8.68	8.37	8.53	8.40	7.80	8.10
45–49	6.70	6.65	6.67	7.92	8.14	8.03	8.46	8.15	8.31
50–54	6.34	6.73	6.53	6.40	6.39	6.39	7.64	7.88	7.76
55–59	5.18	5.10	5.14	5.93	6.40	6.16	6.05	6.13	6.09
60–64	4.41	4.54	4.47	4.69	4.76	4.73	5.43	6.04	5.73
65–69	3.04	3.25	3.14	3.80	4.10	3.95	4.09	4.37	4.23
70–74	1.96	2.36	2.16	2.41	2.77	2.59	3.06	3.56	3.31
75–79	1.41	1.85	1.63	1.36	1.80	1.58	1.72	2.18	1.95
80+	0.94	1.35	1.14	1.09	1.67	1.38	1.15	1.87	1.51
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	5.17	4.93	5.05	4.90	4.63	4.76	4.65	4.34	4.49
5–9	5.41	5.19	5.30	5.18	4.90	5.04	4.94	4.62	4.78
10–14	5.66	5.45	5.56	5.43	5.16	5.29	5.23	4.90	5.07
15–19	6.08	5.87	5.97	5.68	5.43	5.55	5.48	5.16	5.32
20–24	6.43	6.21	6.32	6.08	5.84	5.96	5.72	5.42	5.57
25–29	7.21	6.95	7.08	6.44	6.17	6.30	6.13	5.83	5.98
30–34	7.20	6.92	7.06	7.22	6.91	7.06	6.49	6.16	6.32
35–39	7.50	7.13	7.32	7.20	6.87	7.03	7.27	6.89	7.08
40–44	8.14	7.74	7.94	7.48	7.07	7.27	7.23	6.84	7.03
45–49	8.25	7.66	7.96	8.07	7.64	7.86	7.48	7.02	7.25
50–54	8.23	7.96	8.09	8.10	7.53	7.81	8.00	7.57	7.78
55–59	7.29	7.63	7.46	7.94	7.77	7.85	7.90	7.41	7.65
60–64	5.61	5.84	5.72	6.85	7.35	7.10	7.55	7.57	7.56
65–69	4.81	5.59	5.20	5.05	5.50	5.27	6.26	7.03	6.65
70–74	3.36	3.84	3.60	4.03	5.04	4.54	4.31	5.06	4.69
75–79	2.23	2.85	2.54	2.51	3.19	2.85	3.08	4.33	3.72
80+	1.42	2.24	1.83	1.86	3.00	2.44	2.28	3.83	3.07
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.36: Projected summary of demographic indicators for Kerala, 2026–2051

Indicators	2026	2031	2036	2041	2046	2051
Fertility indicators						
Total Fertility Rate	1.46	1.43	1.41	1.41	1.40	1.40
Gross Reproduction Rate	0.72	0.71	0.70	0.70	0.69	0.69
Net Reproduction Rate	0.71	0.70	0.69	0.69	0.69	0.69
Mean Age of Childbearing	26.50	26.70	26.80	26.90	27.00	27.10
Child-Woman Ratio	0.21	0.20	0.20	0.20	0.19	0.19
Mortality indicators						
Male Life Expectancy	72.2	73.9	75.6	77	78.4	80
Female Life Expectancy	77.8	79.9	81.5	83	84.4	85.6
Total Life Expectancy	75.1	77	78.7	80.1	81.6	82.9
Infant Mortality Rate	16.4	12.8	10.2	8.7	7.4	6.2
Under Five Mortality Rate	19.1	14.7	11.7	10	8.5	7.1
Annual net migration rates						
Male	1807	2176	2545	2914	3283	3652
Female	1488	1807	2127	2446	2765	3085
Total	3295	3983	4672	5360	6048	6737
Vital rates						
Crude Birth Rate per 1000	10.7	10	9.4	8.9	8.2	7.6
Crude Death Rate per 1000	8.9	9	9.2	9.6	10.1	10.6
Rate of natural Increase [percent]	0.18	0.1	0.02	-0.06	-0.19	-0.29
Annual births and deaths [in million]						
Births	0.38	0.36	0.34	0.32	0.29	0.27
Deaths	0.32	0.32	0.33	0.35	0.36	0.38
Population [in million]						
Total	35.8	36.1	36.1	36.2	35.9	35.5
Male	17.1	17.2	17.2	17.2	17.1	16.9
Female	18.7	18.9	18.9	19.0	18.8	18.6
Percent 0–4	5.3	5.1	4.8	4.5	4.2	3.9
Percent 5–14	12.6	11.1	10.3	9.8	9.4	8.9
Percent 15–24	13.9	13.4	12.4	11.0	10.4	10.0
Percent 15–49	50.3	49.7	48.2	46.2	44.3	41.9
Percent 15–59	63.5	63.0	61.5	60.1	58.4	56.6
Percent 60 and above	18.6	20.9	23.5	25.6	28	30.6
Percent Females 15–49	49.0	47.8	45.7	43.6	41.9	39.6
Sex Ratio	91.6	91.3	90.9	90.7	90.7	90.9
Overall Dependency Ratio	55.7	57.4	58.8	62.6	66.4	71.2
Median Age	37.0	39.0	41.0	43.0	45.0	47.0

Appendix Table 4.37: Projected age structure of Kerala, 2026–2051

Age group	2026				2031				2036			
	M	F	T	M	F	T	M	F	T	M	F	T
0–4	961055	949615	1910670	916242	903339	1819581	869638	855347	1724985			
5–9	1050095	1040221	2090316	958590	947968	1906558	914745	902159	1816904			
10–14	1212103	1199065	2411168	1048680	1039460	2088140	957744	947487	1905231			
15–19	1239595	1201663	2441258	1209808	1197862	2407670	1047289	1038660	2085949			
20–24	1293900	1248411	2542311	1236050	1200415	2436465	1207579	1197176	2404755			
25–29	1425443	1379001	2804444	1289992	1246812	2536804	1233849	1199679	2433528			
30–34	1313691	1276104	2589795	1420544	1375944	2796488	1287194	1244931	2532125			
35–39	1281921	1356444	2638365	1307998	1272104	2580102	1416273	1372641	2788914			
40–44	1183186	1383849	2567035	1273292	1350159	2623451	1301556	1267590	2569146			
45–49	1097449	1303819	2401268	1169227	1373846	2543073	1261515	1342495	2604010			
50–54	1108438	1378296	2486734	1074969	1288744	2363713	1149865	1361193	2511058			
55–59	1030507	1238181	2268688	1068348	1353159	2421507	1042240	1269841	2312081			
60–64	963841	1156978	2120819	968161	1202586	2170747	1012405	1321587	2333992			
65–69	741820	886124	1627944	869677	1100440	1970117	884470	1154362	2038832			
70–74	592609	717560	1310169	625106	809010	1434116	746080	1020115	1766195			
75–79	372911	507232	880143	446508	608051	1054559	483935	704044	1187979			
80+	246538	454370	700908	321010	581172	902182	408977	749266	1158243			
Total	17115102	18676933	35792035	17204202	18851071	36055273	17225354	18948573	36173927			

Appendix Table 4.37: Projected age structure of Kerala, 2026-2051										
Age group	2041			2046			2051			
	M	F	T	M	F	T	M	F	T	
0-4	825504	811407	1636911	765289	751900	1517189	701704	689017	1390721	
5-9	868587	854480	1723067	824737	810799	1635536	764797	751526	1516323	
10-14	914158	901854	1816012	868201	854327	1722528	824534	810773	1635307	
15-19	956797	946933	1903730	913497	901468	1814965	867807	854078	1721885	
20-24	1046124	1038598	2084722	956357	947335	1903692	913624	902221	1815845	
25-29	1206312	1197052	2403364	1045927	1039225	2085152	956961	948525	1905486	
30-34	1232050	1198504	2430554	1205259	1196414	2401673	1045818	1039255	2085073	
35-39	1284404	1242713	2527117	1230226	1197004	2427230	1204267	1195433	2399700	
40-44	1410622	1368742	2779364	1280429	1240064	2520493	1227487	1195151	2422638	
45-49	1291582	1261903	2553485	1401599	1363858	2765457	1273972	1236739	2510711	
50-54	1243911	1332401	2576312	1276569	1254356	2530925	1388349	1357262	2745611	
55-59	1120059	1344720	2464779	1216461	1319183	2535644	1253347	1244265	2497612	
60-64	995212	1245314	2240526	1076907	1323372	2400279	1177212	1301889	2479101	
65-69	935958	1277065	2213023	930205	1210410	2140615	1017423	1292438	2309861	
70-74	772750	1082437	1855187	831818	1209231	2041049	840694	1155522	1996216	
75-79	594365	905155	1499520	632065	976539	1608604	698319	1105993	1804312	
80+	493687	946130	1439817	628471	1244137	1872608	750092	1516192	2266284	
Total	17192082	18955408	36147490	17084017	18839622	35923639	16906407	18596279	35502686	

Appendix Table 4.38: Projected percentage distribution of population by age and gender for Kerala, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	5.62	5.08	5.34	5.33	4.79	5.05	5.05	4.51	4.77
5–9	6.14	5.57	5.84	5.57	5.03	5.29	5.31	4.76	5.02
10–14	7.08	6.42	6.74	6.10	5.51	5.79	5.56	5.00	5.27
15–19	7.24	6.43	6.82	7.03	6.35	6.68	6.08	5.48	5.77
20–24	7.56	6.68	7.10	7.18	6.37	6.76	7.01	6.32	6.65
25–29	8.33	7.38	7.84	7.50	6.61	7.04	7.16	6.33	6.73
30–34	7.68	6.83	7.24	8.26	7.30	7.76	7.47	6.57	7.00
35–39	7.49	7.26	7.37	7.60	6.75	7.16	8.22	7.24	7.71
40–44	6.91	7.41	7.17	7.40	7.16	7.28	7.56	6.69	7.10
45–49	6.41	6.98	6.71	6.80	7.29	7.05	7.32	7.08	7.20
50–54	6.48	7.38	6.95	6.25	6.84	6.56	6.68	7.18	6.94
55–59	6.02	6.63	6.34	6.21	7.18	6.72	6.05	6.70	6.39
60–64	5.63	6.19	5.93	5.63	6.38	6.02	5.88	6.97	6.45
65–69	4.33	4.74	4.55	5.06	5.84	5.46	5.13	6.09	5.64
70–74	3.46	3.84	3.66	3.63	4.29	3.98	4.33	5.38	4.88
75–79	2.18	2.72	2.46	2.60	3.23	2.92	2.81	3.72	3.28
80+	1.44	2.43	1.96	1.87	3.08	2.50	2.37	3.95	3.20
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	4.80	4.28	4.53	4.48	3.99	4.22	4.15	3.71	3.92
5–9	5.05	4.51	4.77	4.83	4.30	4.55	4.52	4.04	4.27
10–14	5.32	4.76	5.02	5.08	4.53	4.79	4.88	4.36	4.61
15–19	5.57	5.00	5.27	5.35	4.78	5.05	5.13	4.59	4.85
20–24	6.08	5.48	5.77	5.60	5.03	5.30	5.40	4.85	5.11
25–29	7.02	6.32	6.65	6.12	5.52	5.80	5.66	5.10	5.37
30–34	7.17	6.32	6.72	7.05	6.35	6.69	6.19	5.59	5.87
35–39	7.47	6.56	6.99	7.20	6.35	6.76	7.12	6.43	6.76
40–44	8.21	7.22	7.69	7.49	6.58	7.02	7.26	6.43	6.82
45–49	7.51	6.66	7.06	8.20	7.24	7.70	7.54	6.65	7.07
50–54	7.24	7.03	7.13	7.47	6.66	7.05	8.21	7.30	7.73
55–59	6.51	7.09	6.82	7.12	7.00	7.06	7.41	6.69	7.03
60–64	5.79	6.57	6.20	6.30	7.02	6.68	6.96	7.00	6.98
65–69	5.44	6.74	6.12	5.44	6.42	5.96	6.02	6.95	6.51
70–74	4.49	5.71	5.13	4.87	6.42	5.68	4.97	6.21	5.62
75–79	3.46	4.78	4.15	3.70	5.18	4.48	4.13	5.95	5.08
80+	2.87	4.99	3.98	3.68	6.60	5.21	4.44	8.15	6.38
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.39: Projected age structure of Ladakh [UT], 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	6584	6151	12735	6774	6378	13152	6425	6105	12530
5–9	7493	6406	13899	7560	6497	14057	7783	6743	14526
10–14	8047	6570	14617	7814	6446	14260	7884	6539	14423
15–19	14360	13004	27364	8847	7491	16338	8591	7351	15943
20–24	21199	14621	35820	21552	14240	35792	13271	8205	21476
25–29	28677	15465	44142	28717	15366	44083	29206	14971	44176
30–34	22011	12712	34723	25570	14233	39803	25617	14149	39765
35–39	17037	11233	28270	18035	12020	30055	20966	13466	34432
40–44	15018	9890	24908	15466	10972	26438	16386	11749	28136
45–49	11801	8644	20445	13891	10039	23930	14325	11150	25474
50–54	8891	8498	17389	9966	9220	19186	11758	10725	22483
55–59	8309	6377	14686	9433	7735	17168	10614	8414	19027
60–64	5940	5887	11827	7369	6862	14231	8413	8355	16768
65–69	5332	4039	9371	6454	5280	11734	8078	6195	14273
70–74	3124	3214	6338	4576	4088	8664	5619	5407	11026
75–79	3308	2731	6039	3248	3062	6310	4888	3989	8877
80+	1770	1853	3623	2516	2554	5070	2963	3254	6217
Total	188901	137295	326196	197788	142483	340271	202787	146767	349554
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	5423	5194	10617	4491	4315	8806	4106	3967	8073
5–9	7386	6459	13845	6237	5498	11735	5166	4569	9735
10–14	8118	6788	14906	7705	6503	14208	6505	5536	12041
15–19	8670	7459	16129	8930	7743	16673	8475	7420	15895
20–24	12890	8054	20944	13012	8173	21185	13404	8486	21890
25–29	17976	8628	26604	17463	8472	25935	17631	8599	26230
30–34	26062	13790	39852	16038	7950	23988	15584	7808	23392
35–39	21015	13392	34407	21390	13057	34447	13158	7531	20689
40–44	19067	13171	32238	19123	13105	32228	19473	12783	32256
45–49	15196	11949	27145	17702	13404	31106	17765	13345	31110
50–54	12149	11926	24075	12913	12794	25707	15060	14364	29424
55–59	12565	9805	22370	13022	10920	23942	13869	11731	25600
60–64	9518	9114	18632	11322	10648	21970	11772	11883	23655
65–69	9300	7580	16880	10602	8303	18905	12674	9735	22409
70–74	7129	6402	13531	8307	7892	16199	9552	8702	18254
75–79	6147	5365	11512	7972	6444	14416	9430	8043	17473
80+	4271	4370	8640	5876	6053	11929	8042	7955	15997
Total	202883	149445	352328	202105	151274	353379	201666	152457	354123

Appendix Table 4.40: Projected percentage distribution of population by age for Ladakh [UT], 2026-2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0-4	3.49	4.48	3.90	3.42	4.48	3.87	3.17	4.16	3.58
5-9	3.97	4.67	4.26	3.82	4.56	4.13	3.84	4.59	4.16
10-14	4.26	4.79	4.48	3.95	4.52	4.19	3.89	4.46	4.13
15-19	7.60	9.47	8.39	4.47	5.26	4.80	4.24	5.01	4.56
20-24	11.22	10.65	10.98	10.90	9.99	10.52	6.54	5.59	6.14
25-29	15.18	11.26	13.53	14.52	10.78	12.96	14.40	10.20	12.64
30-34	11.65	9.26	10.64	12.93	9.99	11.70	12.63	9.64	11.38
35-39	9.02	8.18	8.67	9.12	8.44	8.83	10.34	9.17	9.85
40-44	7.95	7.20	7.64	7.82	7.70	7.77	8.08	8.01	8.05
45-49	6.25	6.30	6.27	7.02	7.05	7.03	7.06	7.60	7.29
50-54	4.71	6.19	5.33	5.04	6.47	5.64	5.80	7.31	6.43
55-59	4.40	4.64	4.50	4.77	5.43	5.05	5.23	5.73	5.44
60-64	3.14	4.29	3.63	3.73	4.82	4.18	4.15	5.69	4.80
65-69	2.82	2.94	2.87	3.26	3.71	3.45	3.98	4.22	4.08
70-74	1.65	2.34	1.94	2.31	2.87	2.55	2.77	3.68	3.15
75-79	1.75	1.99	1.85	1.64	2.15	1.85	2.41	2.72	2.54
80+	0.94	1.35	1.11	1.27	1.79	1.49	1.46	2.22	1.78
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0-4	2.67	3.48	3.01	2.22	2.85	2.49	2.04	2.60	2.28
5-9	3.64	4.32	3.93	3.09	3.63	3.32	2.56	3.00	2.75
10-14	4.00	4.54	4.23	3.81	4.30	4.02	3.23	3.63	3.40
15-19	4.27	4.99	4.58	4.42	5.12	4.72	4.20	4.87	4.49
20-24	6.35	5.39	5.94	6.44	5.40	5.99	6.65	5.57	6.18
25-29	8.86	5.77	7.55	8.64	5.60	7.34	8.74	5.64	7.41
30-34	12.85	9.23	11.31	7.94	5.26	6.79	7.73	5.12	6.61
35-39	10.36	8.96	9.77	10.58	8.63	9.75	6.52	4.94	5.84
40-44	9.40	8.81	9.15	9.46	8.66	9.12	9.66	8.38	9.11
45-49	7.49	8.00	7.70	8.76	8.86	8.80	8.81	8.75	8.79
50-54	5.99	7.98	6.83	6.39	8.46	7.27	7.47	9.42	8.31
55-59	6.19	6.56	6.35	6.44	7.22	6.78	6.88	7.69	7.23
60-64	4.69	6.10	5.29	5.60	7.04	6.22	5.84	7.79	6.68
65-69	4.58	5.07	4.79	5.25	5.49	5.35	6.28	6.39	6.33
70-74	3.51	4.28	3.84	4.11	5.22	4.58	4.74	5.71	5.15
75-79	3.03	3.59	3.27	3.94	4.26	4.08	4.68	5.28	4.93
80+	2.10	2.92	2.45	2.91	4.00	3.38	3.99	5.22	4.52
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.41: Projected summary of demographic indicators for Madhya Pradesh, 2026-2051

Indicators	2026	2031	2036	2041	2046	2051
Fertility indicators						
Total Fertility Rate	2.27	2.09	1.95	1.85	1.79	1.74
Gross Reproduction Rate	1.09	1.00	0.94	0.89	0.86	0.84
Net Reproduction Rate	1.00	0.93	0.88	0.84	0.82	0.80
Mean Age of Childbearing	26.50	26.60	26.70	26.90	27.00	27.10
Child-Woman Ratio	0.35	0.31	0.28	0.25	0.25	0.25
Mortality indicators						
Male Life Expectancy	65.1	66.3	67.6	69.0	70.3	71.3
Female Life Expectancy	70.0	71.6	73.4	75.1	76.5	77.8
Total Life Expectancy	67.5	68.9	70.5	72	73.3	74.5
Infant Mortality Rate	65.3	59.5	53.4	47.7	42.6	38.4
Under Five Mortality Rate	81.8	73.7	65.0	56.9	50.4	45.2
Annual net migration rates						
Male	-1,973	-1,967	-1,963	-1,960	-1,958	-1,956
Female	-3,131	-3,165	-3,182	-3,190	-3,194	-3,196
Total	-5,104	-5,132	-5,145	-5,150	-5,152	-5,152
Vital rates						
Crude Birth Rate per 1000	19.4	16.7	14.8	13.7	13.1	12.3
Crude Death Rate per 1000	7.7	7.4	7.3	7.6	8.0	8.4
Rate of Natural Increase[percent]	1.17	0.93	0.75	0.61	0.51	0.39
Annual births and deaths [in million]						
Births	1.72	1.57	1.44	1.38	1.36	1.31
Deaths	0.68	0.70	0.72	0.76	0.83	0.90
Population [in million]						
Total	89.4	94.1	98.0	101.3	104.1	106.3
Male	46.0	48.3	50.1	51.6	52.9	53.8
Female	43.4	45.8	47.9	49.7	51.2	52.5
Percent 0-4	9.1	8.1	7.2	6.6	6.3	6.0
Percent 5-14	17.7	17.0	15.9	14.3	13.0	12.3
Percent 15-24	17.3	16.1	16.1	15.7	14.9	13.6
Percent 15-49	54.1	54.0	53.9	53.5	52.2	49.7
Percent 15-59	63.7	63.9	64.2	64.8	64.7	63.6
Percent 60 and above	9.6	11	12.7	14.3	16.0	18.1
Percent Females 15-49	53.5	53.2	53.1	52.6	51.5	48.9
Sex Ratio	106.0	105.4	104.8	104.0	103.2	102.5
Overall Dependency Ratio	57.1	57.4	56.6	55.7	54.3	54.5
Median Age	28.0	30.0	32.0	34.0	36.0	37.0

Appendix Table 4.42: Projected age structure of Madhya Pradesh, 2026-2051										
Age group	2026				2031				2036	
	M	F	T	M	F	T	M	F	T	
0-4	4215099	3951902	8167001	3946280	3703980	7650260	3610358	3392463	7002821	
5-9	4105028	3844757	7949785	4155038	3908273	8063311	3898634	3670969	7569603	
10-14	4076677	3812620	7889297	4090747	3836245	7926992	4142477	3901194	8043671	
15-19	3775276	3517829	7293105	4060174	3803287	7863461	4076115	3828490	7904605	
20-24	4247210	3916246	8163456	3752448	3504213	7256661	4038975	3791176	7830151	
25-29	4356664	4069041	8425705	4216396	3896039	8112435	3728493	3488613	7217106	
30-34	3885218	3403338	7288556	4319384	4044661	8364045	4184366	3876084	8060450	
35-39	3450887	3102499	6553386	3844217	3379130	7223347	4278860	4020512	8299372	
40-44	2881061	2723771	5604832	3403447	3074432	6477879	3796816	3353063	7149879	
45-49	2523258	2478036	5001294	2823141	2690847	5513988	3341220	3042289	6383509	
50-54	2322662	2262242	4584904	2445713	2434842	4880555	2743209	2649820	5393029	
55-59	1971432	1894342	3865774	2213021	2204492	4417513	2337665	2379992	4717657	
60-64	1562531	1529909	3092440	1831163	1819836	3650999	2064505	2127838	4192343	
65-69	1127655	1069617	2197272	1394453	1428552	2823005	1644702	1712425	3357127	
70-74	693234	785230	1478464	936015	943073	1879088	1168079	1276140	2444219	
75-79	508688	610699	1119387	498106	616282	1114388	683768	758988	1442756	
80+	301172	420004	721176	371271	527077	898348	400630	596615	997245	
Total	46003752	43392082	89395834	48301014	45815261	94116275	50138872	47866671	98005543	

Appendix Table 4.42: Projected age structure of Madhya Pradesh, 2026-2051

Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0-4	3431876	3226821	6658697	3359134	3155138	6514272	3275732	3076160	6351892
5-9	3573791	3368746	6942537	3403827	3208521	6612348	3336191	3139619	6475810
10-14	3888578	3665694	7554272	3566108	3364630	6930738	3397460	3205014	6602474
15-19	4129697	3894921	8024618	3878365	3660640	7539005	3557785	3360489	6918274
20-24	4057890	3818562	7876452	4114338	3886232	8000570	3865686	3653256	7518942
25-29	4017005	3777394	7794399	4039438	3806431	7845869	4098002	3875133	7973135
30-34	3703608	3473463	7177071	3994387	3763309	7757696	4019267	3793671	7812938
35-39	4149818	3856655	8006473	3677005	3458029	7135034	3969059	3748592	7717651
40-44	4232083	3994636	8226719	4110023	3834881	7944904	3645179	3440424	7085603
45-49	3734248	3323213	7057461	4169803	3963695	8133498	4055042	3808461	7863503
50-54	3254388	3002163	6256551	3645801	3284851	6930652	4079039	3923354	8002393
55-59	2630701	2597827	5228528	3130816	2950323	6081139	3517505	3234942	6752447
60-64	2190588	2307554	4498142	2476784	2528296	5005080	2960211	2880778	5840989
65-69	1866065	2017003	3883068	1993154	2200957	4194111	2268694	2425218	4693912
70-74	1390810	1548407	2939217	1592944	1843654	3436598	1718403	2031801	3750204
75-79	864665	1048684	1913349	1044196	1297420	2341616	1214045	1573480	2787525
80+	520199	740913	1261112	674366	1022331	1696697	851375	1363196	2214571
Total	51636010	49662656	101298666	52870489	51229338	104099827	53828675	52533588	106362263

Appendix Table 4.43: Projected percentage distribution of population by age and gender for Madhya Pradesh, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	9.16	9.11	9.14	8.17	8.08	8.13	7.20	7.09	7.15
5–9	8.92	8.86	8.89	8.60	8.53	8.57	7.78	7.67	7.72
10–14	8.86	8.79	8.83	8.47	8.37	8.42	8.26	8.15	8.21
15–19	8.21	8.11	8.16	8.41	8.30	8.36	8.13	8.00	8.07
20–24	9.23	9.03	9.13	7.77	7.65	7.71	8.06	7.92	7.99
25–29	9.47	9.38	9.43	8.73	8.50	8.62	7.44	7.29	7.36
30–34	8.45	7.84	8.15	8.94	8.83	8.89	8.35	8.10	8.22
35–39	7.50	7.15	7.33	7.96	7.38	7.67	8.53	8.40	8.47
40–44	6.26	6.28	6.27	7.05	6.71	6.88	7.57	7.01	7.30
45–49	5.48	5.71	5.59	5.84	5.87	5.86	6.66	6.36	6.51
50–54	5.05	5.21	5.13	5.06	5.31	5.19	5.47	5.54	5.50
55–59	4.29	4.37	4.32	4.58	4.81	4.69	4.66	4.97	4.81
60–64	3.40	3.53	3.46	3.79	3.97	3.88	4.12	4.45	4.28
65–69	2.45	2.47	2.46	2.89	3.12	3.00	3.28	3.58	3.43
70–74	1.51	1.81	1.65	1.94	2.06	2.00	2.33	2.67	2.49
75–79	1.11	1.41	1.25	1.03	1.35	1.18	1.36	1.59	1.47
80+	0.65	0.97	0.81	0.77	1.15	0.95	0.80	1.25	1.02
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	6.65	6.50	6.57	6.35	6.16	6.26	6.09	5.86	5.97
5–9	6.92	6.78	6.85	6.44	6.26	6.35	6.20	5.98	6.09
10–14	7.53	7.38	7.46	6.74	6.57	6.66	6.31	6.10	6.21
15–19	8.00	7.84	7.92	7.34	7.15	7.24	6.61	6.40	6.50
20–24	7.86	7.69	7.78	7.78	7.59	7.69	7.18	6.95	7.07
25–29	7.78	7.61	7.69	7.64	7.43	7.54	7.61	7.38	7.50
30–34	7.17	6.99	7.09	7.56	7.35	7.45	7.47	7.22	7.35
35–39	8.04	7.77	7.90	6.95	6.75	6.85	7.37	7.14	7.26
40–44	8.20	8.04	8.12	7.77	7.49	7.63	6.77	6.55	6.66
45–49	7.23	6.69	6.97	7.89	7.74	7.81	7.53	7.25	7.39
50–54	6.30	6.05	6.18	6.90	6.41	6.66	7.58	7.47	7.52
55–59	5.09	5.23	5.16	5.92	5.76	5.84	6.53	6.16	6.35
60–64	4.24	4.65	4.44	4.68	4.94	4.81	5.50	5.48	5.49
65–69	3.61	4.06	3.83	3.77	4.30	4.03	4.21	4.62	4.41
70–74	2.69	3.12	2.90	3.01	3.60	3.30	3.19	3.87	3.53
75–79	1.67	2.11	1.89	1.98	2.53	2.25	2.26	3.00	2.62
80+	1.01	1.49	1.24	1.28	2.00	1.63	1.58	2.59	2.08
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.44: Projected summary of demographic indicators for Maharashtra, 2026–2051

Indicators	2026	2031	2036	2041	2046	2051
Fertility indicators						
Total fertility Rate	1.44	1.41	1.40	1.40	1.40	1.40
Gross Reproduction Rate	0.67	0.66	0.65	0.65	0.65	0.65
Net Reproduction Rate	0.65	0.64	0.64	0.64	0.65	0.65
Mean Age of Childbearing	25.80	26.10	26.30	26.60	26.90	27.10
Child-Woman Ratio	0.21	0.20	0.19	0.19	0.19	0.19
Mortality indicators						
Male Life Expectancy	69.5	71.0	72.6	74.1	75.5	76.8
Female Life Expectancy	75.7	77.6	79.4	81.0	82.3	83.6
Total Life Expectancy	72.5	74.2	75.9	77.5	78.8	80.2
Infant Mortality Rate	22.5	18.4	15.0	12.1	10.0	8.6
Under Five Mortality Rate	26.4	21.5	17.4	13.9	11.5	9.9
Annual net migration rates						
Male	10654	10418	10323	10285	10269	10262
Female	22244	22449	22551	22602	22627	22639
Total	32898	32867	32874	32887	32896	32901
Vital rates						
Crude Birth Rate per 1000	11.3	10.3	9.5	8.8	8.0	7.4
Crude Death Rate per 1000	8.0	7.9	8.0	8.4	9.1	9.9
Rate of natural Increase [percent]	0.3	0.2	0.2	0.0	-0.1	-0.2
Annual births and deaths [in millions]						
Births	1.40	1.30	1.22	1.13	1.03	0.94
Deaths	0.99	0.99	1.02	1.08	1.16	1.25
Population [in millions]						
Total	124.1	126.0	127.4	128.1	127.9	126.9
Male	64.1	64.9	65.4	65.5	65.1	64.3
Female	60.0	61.1	62.0	62.6	62.8	62.6
Percent 0–4	5.6	5.2	4.8	4.5	4.1	3.8
Percent 5–14	13.3	11.7	10.6	9.9	9.3	8.7
Percent 15–24	15.4	14.3	13.0	11.5	10.5	10.0
Percent 15–49	56.4	55.4	52.9	49.5	46.4	43.3
Percent 15–59	68.1	68.0	67.0	65.2	62.6	59.4
Percent 60 and above	12.9	15.0	17.6	20.5	24.0	28.1
Percent Females 15–49	55.5	54.2	51.5	47.9	44.9	41.7
Sex Ratio	106.9	106.2	105.4	104.5	103.7	102.8
Overall Dependency Ratio	48.8	46.8	46.8	49.3	53.4	59.8
Median Age	34.0	37.0	39.0	42.0	44.0	46.0

Appendix Table 4.45: Projected age structure of Maharashtra, 2026-2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0-4	3706285	3297324	7003609	3465763	3073408	6539171	3250168	2876520	6126688
5-9	4126265	3658208	7784473	3691772	3291649	6983421	3455501	3069657	6525158
10-14	4651991	4105167	8757158	4118442	3656443	7774885	3686479	3290998	6977477
15-19	4912827	4413185	9326012	4639620	4102169	8741789	4109745	3654979	7764724
20-24	5144502	4640443	9784945	4891142	4410503	9301645	4623422	4101880	8725302
25-29	5607843	5066977	10674820	5120799	4639429	9760228	4873836	4412540	9286376
30-34	5645182	4908989	10554171	5580865	5063244	10644109	5102231	4640324	9742555
35-39	5767809	5225766	10993575	5609828	4901045	10510873	5553160	5059016	10612176
40-44	5177495	4836366	10013861	5712754	5204219	10916973	5566071	4887554	10453625
45-49	4403129	4194447	8597576	5095462	4799593	9895055	5635717	5173108	10808825
50-54	3995683	3919114	7914797	4285053	4139474	8424527	4977107	4748842	9725949
55-59	3421340	3277686	6699026	3814000	3833096	7647096	4112969	4065766	8178735
60-64	2675337	2674834	5350171	3169395	3162082	6331477	3560908	3721898	7282806
65-69	2007291	2021633	4028924	2365488	2514796	4880284	2834415	3004844	5839259
70-74	1311307	1481380	2792687	1643306	1808861	3452167	1968247	2290338	4258585
75-79	880788	1224445	2105233	947076	1212448	2159524	1216166	1527377	2743543
80+	693383	1048490	1741873	756492	1292727	2049219	848048	1482093	2330141
Total	64128457	59994454	124122911	64907257	61105186	126012443	65374190	62007734	127381924

Appendix Table 4.45: Projected age structure of Maharashtra, 2026-2051

Age group	2041				2046				2051			
	M	F	T	M	F	T	M	F	T	M	F	T
0-4	3047305	2690681	5737986	2812008	2476819	5288827	2569059	2261404	4830463			
5-9	3243406	2874224	6117630	3043364	2689298	5732662	2809397	2476222	5285619			
10-14	3452038	3069736	6521774	3241382	2874770	6116152	3042065	2690232	5732297			
15-19	3680811	3290647	6971458	3448332	3070010	6518342	3238732	2875550	6114282			
20-24	4099174	3656668	7755842	3674430	3293623	6968053	3443917	3073872	6517789			
25-29	4611876	4106422	8718298	4093101	3663108	7756209	3671236	3301524	6972760			
30-34	4861505	4416443	9277948	4604668	4112503	8717171	4089305	3671214	7760519			
35-39	5083730	4640867	9724597	4849373	4419664	9269037	4596051	4118191	8714242			
40-44	5519114	5049568	10568682	5060283	4636092	9696375	4831123	4418184	9249307			
45-49	5504409	4866086	10370495	5469698	5031888	10501586	5022050	4624694	9646744			
50-54	5523849	5128997	10652846	5412547	4832407	10244954	5390855	5003517	10394372			
55-59	4802465	4679588	9482053	5354723	5065177	10419900	5267456	4782652	10050108			
60-64	3870219	3969064	7839283	4551625	4584591	9136216	5107290	4978016	10085306			
65-69	3219380	3567158	6786538	3536593	3827399	7363992	4203286	4445142	8648428			
70-74	2395579	2776856	5172435	2761487	3330455	6091942	3084692	3607771	6692463			
75-79	1490202	1981441	3471643	1854207	2445841	4300048	2191863	2980403	5172266			
80+	1071042	1876349	2947391	1367997	2491341	3859338	1789023	3273432	5062455			
Total	65476104	62640795	128116899	65135818	62844986	127980804	64347400	62582020	126929420			

Appendix Table 4.46: Projected percentage distribution of population by age and gender for Maharashtra, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	5.78	5.50	5.64	5.34	5.03	5.19	4.97	4.64	4.81
5–9	6.43	6.10	6.27	5.69	5.39	5.54	5.29	4.95	5.12
10–14	7.25	6.84	7.06	6.35	5.98	6.17	5.64	5.31	5.48
15–19	7.66	7.36	7.51	7.15	6.71	6.94	6.29	5.89	6.10
20–24	8.02	7.73	7.88	7.54	7.22	7.38	7.07	6.62	6.85
25–29	8.74	8.45	8.60	7.89	7.59	7.75	7.46	7.12	7.29
30–34	8.80	8.18	8.50	8.60	8.29	8.45	7.80	7.48	7.65
35–39	8.99	8.71	8.86	8.64	8.02	8.34	8.49	8.16	8.33
40–44	8.07	8.06	8.07	8.80	8.52	8.66	8.51	7.88	8.21
45–49	6.87	6.99	6.93	7.85	7.85	7.85	8.62	8.34	8.49
50–54	6.23	6.53	6.38	6.60	6.77	6.69	7.61	7.66	7.64
55–59	5.34	5.46	5.40	5.88	6.27	6.07	6.29	6.56	6.42
60–64	4.17	4.46	4.31	4.88	5.17	5.02	5.45	6.00	5.72
65–69	3.13	3.37	3.25	3.64	4.12	3.87	4.34	4.85	4.58
70–74	2.04	2.47	2.25	2.53	2.96	2.74	3.01	3.69	3.34
75–79	1.37	2.04	1.70	1.46	1.98	1.71	1.86	2.46	2.15
80+	1.08	1.75	1.40	1.17	2.12	1.63	1.30	2.39	1.83
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	4.65	4.30	4.48	4.32	3.94	4.13	3.99	3.61	3.81
5–9	4.95	4.59	4.78	4.67	4.28	4.48	4.37	3.96	4.16
10–14	5.27	4.90	5.09	4.98	4.57	4.78	4.73	4.30	4.52
15–19	5.62	5.25	5.44	5.29	4.89	5.09	5.03	4.59	4.82
20–24	6.26	5.84	6.05	5.64	5.24	5.44	5.35	4.91	5.13
25–29	7.04	6.56	6.80	6.28	5.83	6.06	5.71	5.28	5.49
30–34	7.42	7.05	7.24	7.07	6.54	6.81	6.36	5.87	6.11
35–39	7.76	7.41	7.59	7.45	7.03	7.24	7.14	6.58	6.87
40–44	8.43	8.06	8.25	7.77	7.38	7.58	7.51	7.06	7.29
45–49	8.41	7.77	8.09	8.40	8.01	8.21	7.80	7.39	7.60
50–54	8.44	8.19	8.31	8.31	7.69	8.01	8.38	8.00	8.19
55–59	7.33	7.47	7.40	8.22	8.06	8.14	8.19	7.64	7.92
60–64	5.91	6.34	6.12	6.99	7.30	7.14	7.94	7.95	7.95
65–69	4.92	5.69	5.30	5.43	6.09	5.75	6.53	7.10	6.81
70–74	3.66	4.43	4.04	4.24	5.30	4.76	4.79	5.76	5.27
75–79	2.28	3.16	2.71	2.85	3.89	3.36	3.41	4.76	4.07
80+	1.64	3.00	2.30	2.10	3.96	3.02	2.78	5.23	3.99
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.47: Projected summary of demographic indicators for Odisha, 2026–2051

Indicators	2026	2031	2036	2041	2046	2051
Fertility indicators						
Total Fertility Rate	1.64	1.57	1.53	1.51	1.50	1.50
Gross Reproduction Rate	0.80	0.76	0.74	0.73	0.73	0.73
Net Reproduction Rate	0.74	0.71	0.70	0.70	0.70	0.70
Mean Age of Childbearing	26.80	26.80	26.90	27.00	27.00	27.10
Child-Woman Ratio	0.24	0.23	0.21	0.20	0.20	0.20
Mortality indicators						
Male Life Expectancy	68.8	70.5	71.9	73.4	74.8	76.1
Female Life Expectancy	72.0	73.8	75.6	77.2	78.7	80.2
Total Life Expectancy	70.4	72.1	73.8	75.3	76.7	78.1
Infant Mortality Rate	53.3	46.7	40.7	35.3	30.8	26.7
Under Five Mortality Rate	64.7	55.6	47.9	41.2	35.5	30.8
Annual net migration rates						
Male	-4203	-4347	-4429	-4475	-4500	-4513
Female	-881	-862	-854	-851	-850	-849
Total	-5084	-5209	-5283	-5326	-5350	-5362
Vital rates						
Crude Birth Rate per 1000	13.8	12.3	11.0	10.1	9.5	9.0
Crude Death Rate per 1000	7.8	7.9	7.9	8.3	8.9	9.5
Rate of Natural Increase[percent]	0.6	0.5	0.3	0.2	0.1	-0.1
Annual births and deaths [in million]						
Births	0.66	0.60	0.55	0.51	0.48	0.45
Deaths	0.37	0.38	0.39	0.42	0.45	0.48
Population [in million]						
Total	47.6	48.8	49.7	50.2	50.4	50.4
Male	23.9	24.5	24.9	25.1	25.1	25.0
Female	23.7	24.3	24.8	25.1	25.3	25.4
Percent 0–4	6.7	6.1	5.4	5.0	4.7	4.5
Percent 5–14	14.3	13.2	12.2	11.2	10.3	9.6
Percent 15–24	16.1	14.5	13.7	12.8	12.0	11.1
Percent 15–49	54.7	53.9	52.5	50.6	48.5	45.4
Percent 15–59	66.0	65.8	65.0	64.4	62.8	62.9
Percent 60 and above	13	14.9	17.3	19.5	22.2	25.0
Percent Females 15–49	54.7	53.7	51.9	49.7	47.3	44.0
Sex Ratio	101.1	100.7	100.3	99.8	99.2	98.7
Overall Dependency Ratio	51.7	51.4	52.1	53.7	55.4	59.1
Median Age	32.0	35.0	37.0	39.0	42.0	44.0

Appendix Table 4.48: Projected age structure of Odisha, 2026-2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0-4	1629083	1540767	3169850	1518608	1436397	2955005	1387211	1313562	2700773
5-9	1709825	1612153	3321978	1615851	1527601	3143452	1508818	1427091	2935909
10-14	1793703	1693804	3487507	1706327	1609491	3315818	1613115	1525664	3138779
15-19	1846778	1744969	3591747	1789141	1690636	3479777	1702630	1607136	3309766
20-24	2067095	1977313	4044408	1838392	1739997	3578389	1782002	1686871	3468873
25-29	2175421	2126572	4301993	2055144	1969769	4024913	1828644	1734623	3563267
30-34	1936489	1928684	3865173	2160294	2116864	4277158	2042220	1962457	4004677
35-39	1826727	1882374	3709101	1919237	1918193	3837430	2143574	2107549	4251123
40-44	1721054	1765412	3486466	1807017	1868989	3676006	1901102	1906977	3808079
45-49	1482482	1519757	3002239	1694889	1747703	3442592	1782774	1853178	3635952
50-54	1444618	1466560	2911178	1446721	1497435	2944156	1658516	1725839	3384355
55-59	1271592	1234032	2505624	1389117	1434695	2823812	1396504	1469430	2865934
60-64	1057486	1032277	2089763	1196848	1192542	2389390	1314691	1392985	2707676
65-69	774265	778154	1552419	962618	973324	1935942	1098523	1133286	2231809
70-74	528257	582580	1110837	662031	697286	1359317	833538	883748	1717286
75-79	411437	473799	885236	396487	470008	866495	508797	576882	1085679
80+	242264	300670	542934	318038	416837	734875	350849	483429	834278
Total	23918576	23659877	47578453	24476760	24307767	48784527	24853508	24790707	49644215

Appendix Table 4.48: Projected age structure of Odisha, 2026-2051											
Age group	2041				2046				2051		
	M	F	T	M	F	T	M	F	T		
0-4	1284057	1215424	2499481	1218472	1152542	2371014	1157502	1094858		2252360	
5-9	1379954	1306619	2686573	1278798	1209977	2488775	1214591	1148220		2362811	
10-14	1506708	1425564	2932272	1378395	1305403	2683798	1277601	1209005		2486606	
15-19	1610161	1523757	3133918	1504409	1424009	2928418	1376585	1304168		2680753	
20-24	1696595	1604071	3300666	1605097	1521218	3126315	1500044	1421950		2921994	
25-29	1773524	1682385	3455909	1689307	1600306	3289613	1598666	1518079		3116745	
30-34	1817981	1728999	3546980	1764270	1677602	3441872	1681122	1596310		3277432	
35-39	2027936	1954994	3982930	1806242	1723201	3529443	1753861	1672735		3426596	
40-44	2126095	2096986	4223081	2013356	1946435	3959791	1794404	1716644		3511048	
45-49	1878897	1893069	3771966	2104644	2083711	4188355	1995437	1935727		3931164	
50-54	1748832	1833096	3581928	1847491	1875288	3722779	2073658	2066876		4140534	
55-59	1607071	1697970	3305041	1700261	1807355	3507616	1801987	1852681		3654668	
60-64	1329126	1432488	2761614	1537488	1661051	3198539	1634357	1773525		3407882	
65-69	1216545	1332647	2549192	1239470	1378487	2617957	1444512	1607150		3051662	
70-74	963322	1041582	2004904	1079115	1237349	2316464	1112727	1292449		2405176	
75-79	653657	747755	1401412	769569	898707	1668276	878897	1086556		1965453	
80+	443117	609676	1052793	581802	812763	1394565	734809	1054786		1789595	
Total	25063578	25127082	50190660	25118186	25315404	50433590	25030760	25351719		50382479	

Appendix Table 4.49: Projected percentage distribution of population by age and gender for Odisha, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	6.81	6.51	6.66	6.20	5.91	6.06	5.58	5.30	5.44
5–9	7.15	6.81	6.98	6.60	6.28	6.44	6.07	5.76	5.91
10–14	7.50	7.16	7.33	6.97	6.62	6.80	6.49	6.15	6.32
15–19	7.72	7.38	7.55	7.31	6.96	7.13	6.85	6.48	6.67
20–24	8.64	8.36	8.50	7.51	7.16	7.34	7.17	6.80	6.99
25–29	9.10	8.99	9.04	8.40	8.10	8.25	7.36	7.00	7.18
30–34	8.10	8.15	8.12	8.83	8.71	8.77	8.22	7.92	8.07
35–39	7.64	7.96	7.80	7.84	7.89	7.87	8.62	8.50	8.56
40–44	7.20	7.46	7.33	7.38	7.69	7.54	7.65	7.69	7.67
45–49	6.20	6.42	6.31	6.92	7.19	7.06	7.17	7.48	7.32
50–54	6.04	6.20	6.12	5.91	6.16	6.04	6.67	6.96	6.82
55–59	5.32	5.22	5.27	5.68	5.90	5.79	5.62	5.93	5.77
60–64	4.42	4.36	4.39	4.89	4.91	4.90	5.29	5.62	5.45
65–69	3.24	3.29	3.26	3.93	4.00	3.97	4.42	4.57	4.50
70–74	2.21	2.46	2.33	2.70	2.87	2.79	3.35	3.56	3.46
75–79	1.72	2.00	1.86	1.62	1.93	1.78	2.05	2.33	2.19
80+	1.01	1.27	1.14	1.30	1.71	1.51	1.41	1.95	1.68
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	5.12	4.84	4.98	4.85	4.55	4.70	4.62	4.32	4.47
5–9	5.51	5.20	5.35	5.09	4.78	4.93	4.85	4.53	4.69
10–14	6.01	5.67	5.84	5.49	5.16	5.32	5.10	4.77	4.94
15–19	6.42	6.06	6.24	5.99	5.63	5.81	5.50	5.14	5.32
20–24	6.77	6.38	6.58	6.39	6.01	6.20	5.99	5.61	5.80
25–29	7.08	6.70	6.89	6.73	6.32	6.52	6.39	5.99	6.19
30–34	7.25	6.88	7.07	7.02	6.63	6.82	6.72	6.30	6.51
35–39	8.09	7.78	7.94	7.19	6.81	7.00	7.01	6.60	6.80
40–44	8.48	8.35	8.41	8.02	7.69	7.85	7.17	6.77	6.97
45–49	7.50	7.53	7.52	8.38	8.23	8.30	7.97	7.64	7.80
50–54	6.98	7.30	7.14	7.36	7.41	7.38	8.28	8.15	8.22
55–59	6.41	6.76	6.58	6.77	7.14	6.95	7.20	7.31	7.25
60–64	5.30	5.70	5.50	6.12	6.56	6.34	6.53	7.00	6.76
65–69	4.85	5.30	5.08	4.93	5.45	5.19	5.77	6.34	6.06
70–74	3.84	4.15	3.99	4.30	4.89	4.59	4.45	5.10	4.77
75–79	2.61	2.98	2.79	3.06	3.55	3.31	3.51	4.29	3.90
80+	1.77	2.43	2.10	2.32	3.21	2.77	2.94	4.16	3.55
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.50: Projected summary of demographic indicators for Punjab, 2026–2051

Indicators	2026	2031	2036	2041	2046	2051
Total Fertility Rate	1.43	1.41	1.40	1.40	1.40	1.40
Gross Reproduction Rate	0.68	0.67	0.67	0.67	0.67	0.67
Net Reproduction Rate	0.65	0.65	0.65	0.66	0.66	0.66
Mean Age of Childbearing	26.6	26.70	26.80	26.90	27.00	27.10
Child-Woman Ratio	0.21	0.19	0.19	0.19	0.19	0.19
Mortality indicators						
Male Life Expectancy	68.0	69.6	71.0	72.4	73.8	75.3
Female Life Expectancy	73.1	75.2	76.7	78.4	80.0	81.2
Total Life Expectancy	70.4	72.2	73.8	75.3	76.8	78.2
Infant Mortality Rate	28.5	22.6	18.9	15.8	12.9	10.6
Under Five Mortality Rate	34.2	26.5	22.1	18.4	14.9	12.2
Annual net migration rate						
Male	524	516	513	513	512	512
Female	346	339	336	336	335	335
Total	870	855	849	849	847	847
Vital rates						
Crude Birth Rate per 1000	10.8	9.8	9.1	8.6	7.9	7.4
Crude Death Rate per 1000	8.9	9.0	9.1	9.5	10.2	11
Rate of Natural Increase[percent]	0.18	0.08	0	-0.1	-0.23	-0.36
Annual births and deaths [million]						
Births	0.32	0.30	0.28	0.26	0.24	0.22
Deaths	0.27	0.27	0.27	0.29	0.31	0.32
Population [in million]						
Total	29.9	30.1	30.2	30.1	29.9	29.4
Male	15.7	15.7	15.7	15.6	15.4	15.1
Female	14.2	14.4	14.5	14.5	14.5	14.3
Percent 0–4	5.4	4.9	4.6	4.3	4.1	3.8
Percent 5–14	12.9	11.4	10.2	9.5	9.0	8.5
Percent 15–24	14.9	13.7	12.7	11.3	10.3	9.7
Percent 15–49	56.6	55.8	53.6	49.9	46.0	42.9
Percent 15–59	68.4	68.4	67.6	66.0	63.4	59.5
Percent 60 and above	13.3	15.3	17.6	20.2	23.6	27.7
Percent Females 15–49	55.2	53.9	51.3	47.5	44.1	41.3
Sex Ratio	110.2	109.5	108.6	107.5	106.5	105.5
Overall Dependency Ratio	47.1	46.2	46.1	47.9	51.5	57.7
Median Age	34.0	37.0	40.0	42.0	45.0	47.0

Appendix Table 4.51: projected age structure of Punjab, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	847415	767450	1614865	774661	709935	1484596	718336	662817	1381153
5–9	964754	856869	1821623	842541	764770	1607311	771448	708115	1479563
10–14	1092493	946219	2038712	962115	855560	1817675	840738	763864	1604602
15–19	1138857	976975	2115832	1088623	944509	2033132	959324	854336	1813660
20–24	1286831	1059367	2346198	1132063	974158	2106221	1083300	942366	2025666
25–29	1422914	1127325	2550239	1278078	1055444	2333522	1125832	971325	2097157
30–34	1540919	1231987	2772906	1412709	1122171	2534880	1270645	1051612	2322257
35–39	1434498	1290268	2724766	1527443	1224597	2752040	1402582	1116748	2519330
40–44	1236237	1168381	2404618	1416982	1279486	2696468	1511823	1216197	2728020
45–49	1040280	1003133	2043413	1212549	1153703	2366252	1393521	1266024	2659545
50–54	948943	934650	1883593	1007961	983685	1991646	1179196	1134826	2314022
55–59	819841	820099	1639940	900966	906897	1807863	961748	958839	1920587
60–64	691360	690853	1382213	754047	782186	1536233	834126	870915	1705041
65–69	506837	496771	1003608	605343	638253	1243596	666154	730424	1396578
70–74	314965	350796	665761	409934	432788	842722	495179	565578	1060757
75–79	239998	310640	550638	223475	274879	498354	296416	349844	646260
80+	176384	215183	391567	196561	283167	479728	200839	306464	507303
Total	15703526	14246966	29950492	15746051	14386188	30132239	15711207	14470294	30181501

Appendix Table 4.51: projected age structure of Punjab, 2026-2051										
Age group	2041			2046			2051			
	M	F	T	M	F	T	M	F	T	
0-4	674381	626951	1301332	628005	584960	1212965	575964	535207	1111171	
5-9	715955	661388	1377343	672673	625837	1298510	626898	584086	1210984	
10-14	770101	707415	1477516	714976	660852	1375828	672001	625410	1297411	
15-19	838730	762965	1601695	768632	706738	1475370	713945	660324	1374269	
20-24	955403	852719	1808122	835986	761790	1597776	766715	705830	1472545	
25-29	1078343	940099	2018442	951922	851054	1802976	833706	760568	1594274	
30-34	1120415	968410	2088825	1074185	937802	2011987	949150	849322	1798472	
35-39	1263047	1047387	2310434	1115020	965224	2080244	1070217	935206	2005423	
40-44	1390416	1110365	2500781	1254036	1042464	2296500	1108758	961387	2070145	
45-49	1490077	1205434	2695511	1373424	1102240	2475664	1241442	1035984	2277426	
50-54	1359720	1248525	2608245	1458583	1191532	2650115	1348704	1091397	2440101	
55-59	1130829	1110662	2241491	1310145	1226226	2536371	1411885	1173255	2585140	
60-64	896998	926737	1823735	1062314	1079601	2141915	1239323	1196715	2436038	
65-69	744607	821676	1566283	809108	882507	1691615	968280	1035202	2003482	
70-74	552966	658188	1211154	627045	751604	1378649	691605	816756	1508361	
75-79	365349	469898	835247	416525	560316	976841	482404	652215	1134619	
80+	250088	384472	634560	317394	523549	840943	386694	681460	1068154	
Total	15597425	14503291	30100716	15389973	14454296	29844269	15087691	14300324	29388015	

Appendix Table 4.52: Projected percentage distribution of population by age and gender for Punjab, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	5.40	5.39	5.39	4.92	4.93	4.93	4.57	4.58	4.58
5–9	6.14	6.01	6.08	5.35	5.32	5.33	4.91	4.89	4.90
10–14	6.96	6.64	6.81	6.11	5.95	6.03	5.35	5.28	5.32
15–19	7.25	6.86	7.06	6.91	6.57	6.75	6.11	5.90	6.01
20–24	8.19	7.44	7.83	7.19	6.77	6.99	6.90	6.51	6.71
25–29	9.06	7.91	8.51	8.12	7.34	7.74	7.17	6.71	6.95
30–34	9.81	8.65	9.26	8.97	7.80	8.41	8.09	7.27	7.69
35–39	9.13	9.06	9.10	9.70	8.51	9.13	8.93	7.72	8.35
40–44	7.87	8.20	8.03	9.00	8.89	8.95	9.62	8.40	9.04
45–49	6.62	7.04	6.82	7.70	8.02	7.85	8.87	8.75	8.81
50–54	6.04	6.56	6.29	6.40	6.84	6.61	7.51	7.84	7.67
55–59	5.22	5.76	5.48	5.72	6.30	6.00	6.12	6.63	6.36
60–64	4.40	4.85	4.61	4.79	5.44	5.10	5.31	6.02	5.65
65–69	3.23	3.49	3.35	3.84	4.44	4.13	4.24	5.05	4.63
70–74	2.01	2.46	2.22	2.60	3.01	2.80	3.15	3.91	3.51
75–79	1.53	2.18	1.84	1.42	1.91	1.65	1.89	2.42	2.14
80+	1.12	1.51	1.31	1.25	1.97	1.59	1.28	2.12	1.68
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	4.32	4.32	4.32	4.08	4.05	4.06	3.82	3.74	3.78
5–9	4.59	4.56	4.58	4.37	4.33	4.35	4.16	4.08	4.12
10–14	4.94	4.88	4.91	4.65	4.57	4.61	4.45	4.37	4.41
15–19	5.38	5.26	5.32	4.99	4.89	4.94	4.73	4.62	4.68
20–24	6.13	5.88	6.01	5.43	5.27	5.35	5.08	4.94	5.01
25–29	6.91	6.48	6.71	6.19	5.89	6.04	5.53	5.32	5.42
30–34	7.18	6.68	6.94	6.98	6.49	6.74	6.29	5.94	6.12
35–39	8.10	7.22	7.68	7.25	6.68	6.97	7.09	6.54	6.82
40–44	8.91	7.66	8.31	8.15	7.21	7.69	7.35	6.72	7.04
45–49	9.55	8.31	8.95	8.92	7.63	8.30	8.23	7.24	7.75
50–54	8.72	8.61	8.67	9.48	8.24	8.88	8.94	7.63	8.30
55–59	7.25	7.66	7.45	8.51	8.48	8.50	9.36	8.20	8.80
60–64	5.75	6.39	6.06	6.90	7.47	7.18	8.21	8.37	8.29
65–69	4.77	5.67	5.20	5.26	6.11	5.67	6.42	7.24	6.82
70–74	3.55	4.54	4.02	4.07	5.20	4.62	4.58	5.71	5.13
75–79	2.34	3.24	2.77	2.71	3.88	3.27	3.20	4.56	3.86
80+	1.60	2.65	2.11	2.06	3.62	2.82	2.56	4.77	3.63
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.53: Projected summary of demographic indicators for Rajasthan, 2026–2051

Indicators	2026	2031	2036	2041	2046	2051
Fertility indicators						
Total Fertility Rate	2.11	1.91	1.78	1.71	1.67	1.66
Gross Reproduction Rate	1.00	0.90	0.84	0.81	0.79	0.79
Net Reproduction Rate	0.93	0.85	0.80	0.78	0.76	0.76
Mean Age of Childbearing	26.80	26.90	26.90	27.00	27.00	27.10
Child-Woman Ratio	0.34	0.29	0.25	0.23	0.23	0.23
Mortality Indicators						
Male Life Expectancy	68.1	69.8	71.2	72.6	74.0	75.4
Female Life Expectancy	73.5	75.5	77.1	79.2	80.4	81.6
Total Life Expectancy	70.7	72.6	74.1	75.8	77.1	78.4
Infant Mortality Rate	52.3	45.5	39.9	34.2	29.8	26.1
Under Five Mortality Rate	63.3	53.8	46.9	39.8	34.5	30.0
Annual net migration rates						
Male	-2526	-2491	-2474	-2466	-2462	-2460
Female	-3037	-3411	-3691	-3888	-4019	-4105
Total	-5563	-5902	-6165	-6354	-6481	-6565
Vital rates						
Crude Birth Rate per 1000	18.2	15.5	13.5	12.5	11.8	11.2
Crude Death Rate per 1000	6.3	6.1	6.0	6.2	6.7	7.2
Rate of Natural Increase [percent]	1.2	0.9	0.8	0.6	0.5	0.4
Annual births and deaths [in million]						
Births	1.54	1.38	1.26	1.20	1.17	1.13
Deaths	0.53	0.54	0.56	0.60	0.66	0.73
Population [in million]						
Total	85.1	89.7	93.5	96.5	99.3	101.4
Male	44.1	46.4	48.3	49.7	51.0	52.0
Female	41.0	43.3	45.2	46.8	48.3	49.4
Percent 0–4	8.8	7.7	6.7	6.1	5.8	5.5
Percent 5–14	17.7	16.7	15.3	13.5	12.1	11.3
Percent 15–24	17.8	16.3	16.0	15.5	14.3	12.8
Percent 15–49	55.0	55.1	55.2	54.4	52.5	49.3
Percent 15–59	63.9	64.6	65.3	65.9	65.6	64.0
Percent 60 and above	9.6	11	12.7	14.5	16.6	19.2
Percent Females 15–49	54.4	54.2	54.1	53.2	51.3	48.1
Sex Ratio	107.5	107.2	106.8	106.3	105.7	105.3
Overall Dependency Ratio	57.5	56.4	54.8	53.1	51.7	52.5
Median Age	28.0	30.0	33.0	35.0	37.0	39.0

Appendix Table 4.54: Projected age structure of Rajasthan, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	3932365	3555968	7488333	3615541	3270729	6886270	3260659	2963176	6223835
5–9	3998023	3594448	7592471	3896401	3531823	7428224	3590375	3253204	6843579
10–14	3947576	3512809	7460385	3988812	3589604	7578416	3889155	3527839	7416994
15–19	3796631	3405995	7202626	3936156	3507375	7443531	3979139	3584885	7564024
20–24	4222982	3769889	7992871	3780418	3397296	7177714	3922343	3499665	7422008
25–29	4377881	3924733	8302614	4201541	3756799	7958340	3764384	3386661	7151045
30–34	3826635	3390499	7217134	4351179	3908884	8260063	4179914	3743429	7923343
35–39	3308248	3009600	6317848	3797436	3374107	7171543	4323148	3892737	8215885
40–44	2689370	2542314	5231684	3273949	2990616	6264565	3763761	3355883	7119644
45–49	2295105	2285697	4580802	2647043	2519919	5166962	3229030	2968061	6197091
50–54	2078205	2064442	4142647	2237955	2255951	4493906	2588459	2491719	5080178
55–59	1760489	1722824	3483313	1995987	2024690	4020677	2157650	2218449	4376099
60–64	1396553	1426511	2823064	1653677	1671709	3325386	1885028	1972937	3857965
65–69	1079608	1037104	2116712	1266875	1354339	2621214	1512434	1598445	3110879
70–74	657236	773347	1430583	918332	940389	1858721	1090508	1243716	2334224
75–79	483783	589111	1072894	490180	637406	1127586	698999	794957	1493956
80+	287487	440199	727686	370929	566610	937539	419779	685479	1105258
Total	44138177	41045490	85183667	46422411	43298246	89720657	48254765	45181242	93436007

Appendix Table 4.54: Projected age structure of Rajasthan, 2026-2051

Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0-4	3059646	2791410	5851056	2987733	2722867	5710600	2923142	2658014	5581156
5-9	3241760	2949967	6191727	3045239	2781301	5826540	2976946	2714234	5691180
10-14	3584705	3250066	6834771	3237513	2947489	6185002	3042010	2779171	5821181
15-19	3880979	3523880	7404859	3578250	3246874	6825124	3232543	2944840	6177383
20-24	3967159	3578060	7545219	3871121	3517914	7389035	3570613	3241719	6812332
25-29	3908141	3490082	7398223	3955112	3569339	7524451	3861370	3509925	7371295
30-34	3747431	3375884	7123315	3893382	3480315	7373697	3942650	3560206	7502856
35-39	4156502	3729986	7886488	3729435	3365010	7094445	3877801	3470189	7347990
40-44	4289749	3875036	8164785	4128785	3715176	7843961	3708107	3352746	7060853
45-49	3718296	3334612	7052908	4244641	3854113	8098754	4091166	3697146	7788312
50-54	3165217	2940269	6105486	3653340	3308032	6961372	4179385	3826954	8006339
55-59	2504780	2457050	4961830	3073501	2905540	5979041	3559017	3273571	6832588
60-64	2048622	2170986	4219608	2390937	2412494	4803431	2948170	2859150	5807320
65-69	1737547	1900275	3637822	1903164	2102580	4005744	2238164	2345390	4583554
70-74	1318153	1487194	2805347	1532249	1785632	3317881	1697925	1989017	3686942
75-79	846084	1077471	1923555	1042922	1312381	2355303	1234612	1595873	2830485
80+	572998	890830	1463828	740989	1232808	1973797	955786	1623986	2579772
Total	49747769	46823058	96570827	51008313	48259865	99268178	52039407	49442131	101481538

Appendix Table 4.55: Projected percentage distribution of population by age and gender for Rajasthan, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	8.91	8.66	8.79	7.79	7.55	7.68	6.76	6.56	6.66
5–9	9.06	8.76	8.91	8.39	8.16	8.28	7.44	7.20	7.32
10–14	8.94	8.56	8.76	8.59	8.29	8.45	8.06	7.81	7.94
15–19	8.60	8.30	8.46	8.48	8.10	8.30	8.25	7.93	8.10
20–24	9.57	9.18	9.38	8.14	7.85	8.00	8.13	7.75	7.94
25–29	9.92	9.56	9.75	9.05	8.68	8.87	7.80	7.50	7.65
30–34	8.67	8.26	8.47	9.37	9.03	9.21	8.66	8.29	8.48
35–39	7.50	7.33	7.42	8.18	7.79	7.99	8.96	8.62	8.79
40–44	6.09	6.19	6.14	7.05	6.91	6.98	7.80	7.43	7.62
45–49	5.20	5.57	5.38	5.70	5.82	5.76	6.69	6.57	6.63
50–54	4.71	5.03	4.86	4.82	5.21	5.01	5.36	5.51	5.44
55–59	3.99	4.20	4.09	4.30	4.68	4.48	4.47	4.91	4.68
60–64	3.16	3.48	3.31	3.56	3.86	3.71	3.91	4.37	4.13
65–69	2.45	2.53	2.48	2.73	3.13	2.92	3.13	3.54	3.33
70–74	1.49	1.88	1.68	1.98	2.17	2.07	2.26	2.75	2.50
75–79	1.10	1.44	1.26	1.06	1.47	1.26	1.45	1.76	1.60
80+	0.65	1.07	0.85	0.80	1.31	1.04	0.87	1.52	1.18
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	6.15	5.96	6.06	5.86	5.64	5.75	5.62	5.38	5.50
5–9	6.52	6.30	6.41	5.97	5.76	5.87	5.72	5.49	5.61
10–14	7.21	6.94	7.08	6.35	6.11	6.23	5.85	5.62	5.74
15–19	7.80	7.53	7.67	7.02	6.73	6.88	6.21	5.96	6.09
20–24	7.97	7.64	7.81	7.59	7.29	7.44	6.86	6.56	6.71
25–29	7.86	7.45	7.66	7.75	7.40	7.58	7.42	7.10	7.26
30–34	7.53	7.21	7.38	7.63	7.21	7.43	7.58	7.20	7.39
35–39	8.36	7.97	8.17	7.31	6.97	7.15	7.45	7.02	7.24
40–44	8.62	8.28	8.45	8.09	7.70	7.90	7.13	6.78	6.96
45–49	7.47	7.12	7.30	8.32	7.99	8.16	7.86	7.48	7.67
50–54	6.36	6.28	6.32	7.16	6.85	7.01	8.03	7.74	7.89
55–59	5.03	5.25	5.14	6.03	6.02	6.02	6.84	6.62	6.73
60–64	4.12	4.64	4.37	4.69	5.00	4.84	5.67	5.78	5.72
65–69	3.49	4.06	3.77	3.73	4.36	4.04	4.30	4.74	4.52
70–74	2.65	3.18	2.90	3.00	3.70	3.34	3.26	4.02	3.63
75–79	1.70	2.30	1.99	2.04	2.72	2.37	2.37	3.23	2.79
80+	1.15	1.90	1.52	1.45	2.55	1.99	1.84	3.28	2.54
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.56: Projected summary of demographic indicators for Tamil Nadu, 2026–2051

Indicators	2026	2031	2036	2041	2046	2051
Fertility indicators						
Total Fertility Rate	1.43	1.41	1.40	1.40	1.40	1.40
Gross Reproduction Rate	0.69	0.68	0.68	0.68	0.68	0.68
Net Reproduction Rate	0.68	0.67	0.67	0.67	0.67	0.67
Mean Age of Childbearing	26.20	26.40	26.60	26.70	26.90	27.10
Child-Woman Ratio	0.20	0.19	0.19	0.19	0.19	0.19
Mortality indicators						
Male Life Expectancy	71.1	72.9	74.6	76.0	77.4	78.7
Female Life Expectancy	76.2	78.1	80.0	81.4	82.8	84.2
Total Life Expectancy	73.7	75.5	77.3	78.7	80.1	81.5
Infant Mortality Rate	19.2	15.3	11.9	10.0	8.6	7.3
Under Five Mortality Rate	22.4	17.8	13.7	11.5	9.9	8.4
Annual net migration rates						
Male	567	1079	1591	2104	2616	3129
Female	-968	-529	-91	347	785	1224
Total	-401	550	1500	2451	3401	4353
Vital rates						
Crude Birth Rate per 1000	10.6	9.7	9.1	8.6	7.9	7.4
Crude Death Rate per 1000	8.2	8.4	8.7	9.2	9.9	10.6
Rate of Natural Increase [percent]	0.2	0.1	0.0	-0.1	-0.2	-0.3
GR percent	0.2	0.1	0.0	-0.1	-0.2	-0.3
Annual births and deaths [in million]						
Births	0.82	0.76	0.72	0.68	0.62	0.57
Deaths	0.64	0.66	0.68	0.73	0.78	0.82
Population [in million]						
Total	77.8	78.4	78.7	78.7	78.1	77.0
Male	38.7	38.9	38.9	38.8	38.4	37.8
Female	39.1	39.5	39.8	39.9	39.7	39.2
Percent 0–4	5.3	4.9	4.6	4.4	4.1	3.8
Percent 5–14	12.5	11.1	10.1	9.5	9.0	8.6
Percent 15–24	13.8	13.2	12.3	11.0	10.2	9.7
Percent 15–49	53.4	52.0	49.2	46.4	43.8	41.2
Percent 15–59	66.6	66.0	64.1	62.1	59.2	56.6
Percent 60 and above	15.6	18.1	21.2	24.0	27.7	31.1
Percent Females 15–49	52.7	51.1	47.7	44.6	42.0	39.5
Sex Ratio	98.9	98.4	97.8	97.2	96.7	96.4
overall Dependency Ratio	48.9	50.2	51.6	56.0	61.0	69.0
Median Age	37.0	39.0	41.0	43.0	46.0	47.0

Appendix Table 4.57: Projected age structure of Tamil Nadu, 2026-2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0-4	2124572	2021069	4145641	1975340	1875059	3850399	1862645	1764257	3626902
5-9	2334687	2223934	4558621	2117609	2016309	4133918	1970744	1871509	3842253
10-14	2640346	2511866	5152212	2330625	2221393	4552018	2114955	2014464	4129419
15-19	2688232	2547288	5235520	2634128	2508427	5142555	2326570	2218956	4545526
20-24	2823437	2684940	5508377	2677333	2541604	5218937	2626023	2504013	5130036
25-29	3146563	2965468	6112031	2810876	2677054	5487930	2668709	2535740	5204449
30-34	3177547	2991578	6169125	3132039	2954969	6087008	2801580	2669559	5471139
35-39	3096352	3211545	6307897	3159271	2978016	6137287	3118529	2944380	6062909
40-44	3161667	3364340	6526007	3070558	3191463	6262021	3138926	2963205	6102131
45-49	2809324	2832048	5641372	3118057	3332607	6450664	3036456	3167173	6203629
50-54	2661959	2905456	5567415	2743531	2790604	5534135	3057236	3293366	6350602
55-59	2322624	2368442	4691066	2555329	2840223	5395552	2649142	2739854	5388996
60-64	2034795	2130238	4165033	2169716	2285410	4455126	2407378	2759172	5166550
65-69	1459041	1573119	3032160	1821522	2004936	3826458	1965797	2174903	4140700
70-74	1024106	1207391	2231497	1216612	1412285	2628897	1544531	1832376	3376907
75-79	713015	900613	1613628	759104	995215	1754319	926306	1201021	2127327
80+	446483	651983	1098466	588630	907498	1496128	697322	1151998	1849320
Total	38664750	39091318	77756068	38880280	39533072	78413352	38912849	39805946	78718795

Appendix Table 4.57: Projected age structure of Tamil Nadu, 2026-2051

Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0-4	1761707	1665943	3427650	1637638	1547945	3185583	1504252	1421308	2925560
5-9	1859677	1761522	3621199	1759382	1663758	3423140	1635881	1546261	3182142
10-14	1969016	1870122	3839138	1858431	1760459	3618890	1758551	1662972	3421523
15-19	2112312	2012674	4124986	1967149	1868765	3835914	1857201	1759452	3616653
20-24	2321212	2215862	4537074	2108496	2010506	4119002	1964503	1867326	3831829
25-29	2620062	2499457	5119519	2317505	2212752	4530257	2106515	2008529	4115044
30-34	2662591	2530088	5192679	2615645	2495016	5110661	2315173	2209830	4525003
35-39	2792638	2661851	5454489	2655853	2524189	5180042	2610567	2490476	5101043
40-44	3102833	2932428	6035261	2781017	26522908	5433925	2646951	2517369	5164320
45-49	3110779	2944670	6055449	3079297	2917054	5996351	2763614	2641488	5405102
50-54	2986963	3136145	6123108	3067645	2920420	5988065	3043269	2897137	5940406
55-59	2966726	3243576	6210302	2910537	3095762	6006299	3000710	2889078	5889788
60-64	2514990	2674726	5189716	2836148	3178224	6014372	2800123	3043278	5843401
65-69	2206142	2646561	4852703	2331111	2581473	4912584	2655720	3084663	5740383
70-74	1694724	2014934	3709658	1936005	2477389	4413394	2079545	2439977	4519522
75-79	1205013	1593317	2798330	1359099	1784182	3143281	1592657	2229039	3821696
80+	876488	1484426	2360914	1175889	2009313	3185202	1474811	2527966	4002777
Total	38763873	39888302	78652175	38396847	39700115	78096962	37810043	39236149	77046192

Appendix Table 4.58: Projected percentage distribution of population by age and gender for Tamil Nadu, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	5.49	5.17	5.33	5.08	4.74	4.91	4.79	4.43	4.61
5–9	6.04	5.69	5.86	5.45	5.10	5.27	5.06	4.70	4.88
10–14	6.83	6.43	6.63	5.99	5.62	5.81	5.44	5.06	5.25
15–19	6.95	6.52	6.73	6.77	6.35	6.56	5.98	5.57	5.77
20–24	7.30	6.87	7.08	6.89	6.43	6.66	6.75	6.29	6.52
25–29	8.14	7.59	7.86	7.23	6.77	7.00	6.86	6.37	6.61
30–34	8.22	7.65	7.93	8.06	7.47	7.76	7.20	6.71	6.95
35–39	8.01	8.22	8.11	8.13	7.53	7.83	8.01	7.40	7.70
40–44	8.18	8.61	8.39	7.90	8.07	7.99	8.07	7.44	7.75
45–49	7.27	7.24	7.26	8.02	8.43	8.23	7.80	7.96	7.88
50–54	6.88	7.43	7.16	7.06	7.06	7.06	7.86	8.27	8.07
55–59	6.01	6.06	6.03	6.57	7.18	6.88	6.81	6.88	6.85
60–64	5.26	5.45	5.36	5.58	5.78	5.68	6.19	6.93	6.56
65–69	3.77	4.02	3.90	4.68	5.07	4.88	5.05	5.46	5.26
70–74	2.65	3.09	2.87	3.13	3.57	3.35	3.97	4.60	4.29
75–79	1.84	2.30	2.08	1.95	2.52	2.24	2.38	3.02	2.70
80+	1.15	1.67	1.41	1.51	2.30	1.91	1.79	2.89	2.35
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	4.54	4.18	4.36	4.27	3.90	4.08	3.98	3.62	3.80
5–9	4.80	4.42	4.60	4.58	4.19	4.38	4.33	3.94	4.13
10–14	5.08	4.69	4.88	4.84	4.43	4.63	4.65	4.24	4.44
15–19	5.45	5.05	5.24	5.12	4.71	4.91	4.91	4.48	4.69
20–24	5.99	5.56	5.77	5.49	5.06	5.27	5.20	4.76	4.97
25–29	6.76	6.27	6.51	6.04	5.57	5.80	5.57	5.12	5.34
30–34	6.87	6.34	6.60	6.81	6.28	6.54	6.12	5.63	5.87
35–39	7.20	6.67	6.93	6.92	6.36	6.63	6.90	6.35	6.62
40–44	8.00	7.35	7.67	7.24	6.68	6.96	7.00	6.42	6.70
45–49	8.02	7.38	7.70	8.02	7.35	7.68	7.31	6.73	7.02
50–54	7.71	7.86	7.79	7.99	7.36	7.67	8.05	7.38	7.71
55–59	7.65	8.13	7.90	7.58	7.80	7.69	7.94	7.36	7.64
60–64	6.49	6.71	6.60	7.39	8.01	7.70	7.41	7.76	7.58
65–69	5.69	6.63	6.17	6.07	6.50	6.29	7.02	7.86	7.45
70–74	4.37	5.05	4.72	5.04	6.24	5.65	5.50	6.22	5.87
75–79	3.11	3.99	3.56	3.54	4.49	4.02	4.21	5.68	4.96
80+	2.26	3.72	3.00	3.06	5.06	4.08	3.90	6.44	5.20
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.59: Projected summary of demographic indicators for Telangana, 2026-2051

Summary demographic indicators- Telangana						
Indicators	2026	2031	2036	2041	2046	2051
Fertility Indicators						
Total Fertility Rate	1.52	1.50	1.50	1.50	1.50	1.50
Gross Reproduction Rate	0.73	0.72	0.72	0.72	0.72	0.72
Net Reproduction Rate	0.69	0.68	0.68	0.69	0.70	0.70
Mean Age of Childbearing	25.30	25.70	26.00	26.40	26.80	27.10
Child-Woman Ratio	0.22	0.20	0.19	0.19	0.20	0.20
Mortality Indicators						
Male Life Expectancy	69.7	71.3	72.8	74.4	75.8	77.0
Female Life Expectancy	75.9	73.9	75.8	77.3	78.9	80.3
Total Life Expectancy	72.8	72.6	74.3	75.8	77.3	78.7
Infant Mortality Rate	45.3	44.4	38.7	33.5	28.8	25.1
Under Five Mortality Rate	53.3	53.1	45.3	38.8	33.3	29.0
Annual net migration rates						
Male	231	280	337	404	480	566
Female	1584	1855	2088	2275	2416	2518
Total	1815	2135	2425	2679	2896	3084
Vital rates						
Crude Birth Rate per 1000	12.4	10.9	10.0	9.4	8.8	8.3
Crude Death Rate per 1000	6.8	7.8	7.7	8.1	8.8	9.7
Rate of Natural Increase [percent]	0.6	0.3	0.2	0.1	0.0	-0.1
Annual births and deaths [in million]						
Births	0.49	0.44	0.41	0.39	0.37	0.34
Deaths	0.27	0.31	0.32	0.34	0.37	0.40
Population [in million]						
Total	39.6	40.5	41.0	41.3	41.5	41.3
Male	19.9	20.3	20.6	20.7	20.8	20.7
Female	19.7	20.2	20.4	20.6	20.7	20.6
Percent 0-4	6.1	5.4	4.9	4.6	4.4	4.1
Percent 5-14	13.4	12.2	11.2	10.1	9.4	9.0
Percent 15-24	14.7	13.5	13.0	11.9	11.0	10.1
Percent 15-49	56.2	54.9	52.2	49.3	46.1	42.5
Percent 15-59	67.8	67.7	66.4	64.9	62.0	58.9
Percent 60 and above	12.6	14.6	17.5	20.4	24.2	28.0
Percent Females 15-49	55.8	54.4	51.3	48.0	44.9	41.3
Sex Ratio	100.7	100.7	100.8	100.7	100.5	100.2
Overall Dependency Ratio	47.0	47.4	47.6	50.6	54.2	61.4
Median Age	34.0	36.0	39.0	42.0	44.0	46.0

Appendix Table 4.60: Projected age structure of Telangana, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	1246799	1165743	2412542	1136636	1057902	2194538	1045733	968822	2014555
5–9	1313924	1221432	2535356	1238169	1159008	2397177	1130307	1051439	2181746
10–14	1440506	1348126	2788632	1311636	1220173	2531809	1236415	1157913	2394328
15–19	1383456	1299266	2682722	1437390	1346436	2783826	1309280	1218814	2528094
20–24	1618159	1526221	3144380	1379154	1296853	2676007	1433736	1344168	2777904
25–29	1832449	1750239	3582688	1612189	1522832	3135021	1375024	1294448	2669472
30–34	1761818	1661340	3423158	1823940	1745363	3569303	1605983	1519166	3125149
35–39	1697045	1718804	3415849	1751136	1655291	3406427	1814619	1739428	3554047
40–44	1600204	1689644	3289848	1682741	1709681	3392422	1738573	1647115	3385688
45–49	1355517	1357350	2712867	1578914	1676323	3255237	1663281	1696800	3360081
50–54	1268682	1312753	2581435	1325891	1341002	2666893	1548476	1656914	3205390
55–59	1038749	989423	2028172	1223532	1288483	2512015	1283713	1317243	2600956
60–64	819018	832378	1651396	981594	960562	1942156	1162733	1252247	2414980
65–69	590125	625695	1215820	749499	790279	1539778	906084	914010	1820094
70–74	377357	498043	875400	508610	566908	1075518	654429	718591	1373020
75–79	331699	453257	784956	286562	409069	695631	396226	470077	866303
80+	197127	279435	476562	260963	407740	668703	271469	442109	713578
Total	19872634	19729149	39601783	20288556	20153905	40442461	20576081	20409304	40985385

Appendix Table 4.60: Projected age structure of Telangana, 2026-2051

Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0-4	987187	919223	1906410	938164	876422	1814586	884674	827162	1711836
5-9	1041156	963981	2005137	984016	915399	1899415	935652	873475	1809127
10-14	1129056	1050704	2179760	1040287	963497	2003784	983324	915096	1898420
15-19	1234631	1156916	2391547	1127771	1050035	2177806	1039274	963084	2002358
20-24	1306653	1217250	2523903	1232722	1155799	2388521	1126300	1049356	2175656
25-29	1430372	1342315	2772687	1304354	1216192	2520546	1230940	1155287	2386227
30-34	1370808	1292335	2663143	1426963	1340736	2767699	1301761	1215457	2517218
35-39	1599272	1515185	3114457	1366240	1289886	2656126	1422892	1338837	2761729
40-44	1803735	1732272	3536007	1591394	1510189	3101583	1360437	1286671	2647108
45-49	1721433	1636691	3358124	1788703	1722982	3511685	1579760	1503577	3083337
50-54	1635216	1679930	3315146	1696412	1622929	3319341	1765698	1710751	3476449
55-59	1504784	1631539	3136323	1594647	1657783	3252430	1659173	1604878	3264051
60-64	1226731	1285277	2512008	1445787	1597429	3043216	1539052	1628102	3167154
65-69	1081970	1199212	2281182	1150959	1238187	2389146	1366216	1547210	2913426
70-74	801358	841391	1642749	968903	1115248	2084151	1042845	1162854	2205699
75-79	520078	609177	1129255	650608	728166	1378774	802365	982202	1784567
80+	351533	521890	873423	474672	677679	1152351	633157	870712	1503869
Total	20745973	20595288	41341261	20782602	20678558	41461160	20673520	20634711	41308231

Appendix Table 4.61: Projected percentage distribution of population by age and gender for Telangana, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	6.27	5.91	6.09	5.60	5.25	5.43	5.08	4.75	4.92
5–9	6.61	6.19	6.40	6.10	5.75	5.93	5.49	5.15	5.32
10–14	7.25	6.83	7.04	6.46	6.05	6.26	6.01	5.67	5.84
15–19	6.96	6.59	6.77	7.08	6.68	6.88	6.36	5.97	6.17
20–24	8.14	7.74	7.94	6.80	6.43	6.62	6.97	6.59	6.78
25–29	9.22	8.87	9.05	7.95	7.56	7.75	6.68	6.34	6.51
30–34	8.87	8.42	8.64	8.99	8.66	8.83	7.81	7.44	7.63
35–39	8.54	8.71	8.63	8.63	8.21	8.42	8.82	8.52	8.67
40–44	8.05	8.56	8.31	8.29	8.48	8.39	8.45	8.07	8.26
45–49	6.82	6.88	6.85	7.78	8.32	8.05	8.08	8.31	8.20
50–54	6.38	6.65	6.52	6.54	6.65	6.59	7.53	8.12	7.82
55–59	5.23	5.02	5.12	6.03	6.39	6.21	6.24	6.45	6.35
60–64	4.12	4.22	4.17	4.84	4.77	4.80	5.65	6.14	5.89
65–69	2.97	3.17	3.07	3.69	3.92	3.81	4.40	4.48	4.44
70–74	1.90	2.52	2.21	2.51	2.81	2.66	3.18	3.52	3.35
75–79	1.67	2.30	1.98	1.41	2.03	1.72	1.93	2.30	2.11
80+	0.99	1.42	1.20	1.29	2.02	1.65	1.32	2.17	1.74
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	4.76	4.46	4.61	4.51	4.24	4.38	4.28	4.01	4.14
5–9	5.02	4.68	4.85	4.73	4.43	4.58	4.53	4.23	4.38
10–14	5.44	5.10	5.27	5.01	4.66	4.83	4.76	4.43	4.60
15–19	5.95	5.62	5.78	5.43	5.08	5.25	5.03	4.67	4.85
20–24	6.30	5.91	6.11	5.93	5.59	5.76	5.45	5.09	5.27
25–29	6.89	6.52	6.71	6.28	5.88	6.08	5.95	5.60	5.78
30–34	6.61	6.27	6.44	6.87	6.48	6.68	6.30	5.89	6.09
35–39	7.71	7.36	7.53	6.57	6.24	6.41	6.88	6.49	6.69
40–44	8.69	8.41	8.55	7.66	7.30	7.48	6.58	6.24	6.41
45–49	8.30	7.95	8.12	8.61	8.33	8.47	7.64	7.29	7.46
50–54	7.88	8.16	8.02	8.16	7.85	8.01	8.54	8.29	8.42
55–59	7.25	7.92	7.59	7.67	8.02	7.84	8.03	7.78	7.90
60–64	5.91	6.24	6.08	6.96	7.73	7.34	7.44	7.89	7.67
65–69	5.22	5.82	5.52	5.54	5.99	5.76	6.61	7.50	7.05
70–74	3.86	4.09	3.97	4.66	5.39	5.03	5.04	5.64	5.34
75–79	2.51	2.96	2.73	3.13	3.52	3.33	3.88	4.76	4.32
80+	1.69	2.53	2.11	2.28	3.28	2.78	3.06	4.22	3.64
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.62: Projected summary of demographic indicators for Uttar Pradesh, 2026– 2051

Indicators	2026	2031	2036	2041	2046	2051
Total Fertility Rate	2.30	2.07	1.92	1.85	1.82	1.81
Gross Reproduction Rate	1.09	0.98	0.91	0.88	0.86	0.86
Net Reproduction Rate	0.99	0.90	0.84	0.82	0.82	0.82
Mean Age of Childbearing	27.60	27.50	27.40	27.30	27.20	27.10
Child-Woman Ratio	0.37	0.32	0.27	0.25	0.25	0.26
Mortality indicators						
Male Life Expectancy	66.4	67.8	69.4	70.7	71.9	73.2
Female Life Expectancy	69.3	70.9	72.6	74.4	75.8	77.1
Total Life Expectancy	67.8	69.3	70.9	72.4	73.8	75.1
Infant Mortality Rate	63.5	57.6	51.2	45.3	40.3	35.9
Under Five Mortality Rate	79.5	70.7	61.6	53.7	47.5	41.9
Annual net migration rates						
Male	-1912	-1893	-1888	-1887	-1886	-1886
Female	-19119	-19009	-18946	-18911	-18890	-18879
Total	-21031	-20902	-20834	-20798	-20776	-20765
Vital rates						
Crude Birth Rate per 1000	20.3	17.0	14.6	13.8	13.5	12.8
Crude Death Rate per 1000	7.2	6.9	6.6	6.7	7.0	7.4
Rate of Natural Increase[percent]	1.3	1.0	0.8	0.7	0.7	0.5
Annual births and deaths [in million]						
Births	5.08	4.51	4.05	3.97	4.01	3.93
Deaths	1.81	1.83	1.83	1.92	2.09	2.27
Population [in million]						
Total	251.9	266.6	278.4	288.7	298.4	307.3
Male	131.4	139.0	145.0	150.2	155.0	159.4
Female	120.5	127.6	133.4	138.5	143.4	147.9
Percent 0–4	9.6	8.4	7.1	6.5	6.4	6.2
Percent 5–14	18.8	18.2	16.5	14.5	12.9	12.3
Percent 15–24	17.8	16.0	16.9	16.7	15.3	13.5
Percent 15–49	54.4	54.9	56.0	56.1	54.0	50.5
Percent 15–59	63.3	63.8	65.1	66.4	66.6	65.3
Percent 60 and above	8.7	9.7	11.2	12.6	14.1	16.2
Percent Females 15–49	54.1	54.2	55.1	55.3	53.2	49.8
Sex Ratio	109.1	108.9	108.7	108.4	108.1	107.8
Overall Dependency Ratio	58.5	59.0	56.8	53.6	50.6	50.1
Median Age	27.0	29.0	31.0	33.0	35.0	37.0

Appendix Table 4.63: Projected age structure of Uttar Pradesh, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	12736792	11494852	24231644	11713506	10581193	22294699	10418521	9411068	19829589
5–9	12950459	11636830	24587289	12585205	11356110	23941315	11602212	10477181	22079393
10–14	11992094	10745178	22737272	12913466	11608952	24522418	12555637	11333499	23889136
15–19	10483278	9538268	20021546	11951850	10716500	22668350	12877083	11583014	24460097
20–24	13170663	11746806	24917469	10429881	9495269	19925150	11902217	10676306	22578523
25–29	13543935	12071987	25615922	13090755	11676992	24767747	10376912	9443836	19820748
30–34	12121776	10566815	22688591	13446233	11989842	25436075	13010568	11607564	24618132
35–39	9214925	8001291	17216216	12012578	10482311	22494889	13342315	11907771	25250086
40–44	7265152	6926856	14192008	9104692	7919401	17024093	11887669	10391259	22278928
45–49	6181276	6305051	12486327	7134778	6832942	13967720	8960284	7825869	16786153
50–54	6024374	5878434	11902808	6008016	6184973	12192989	6954494	6717752	13672246
55–59	4903050	4526626	9429676	5761056	5716950	11478006	5765779	6032971	11798750
60–64	3770541	3680931	7451472	4578210	4336440	8914650	5404922	5502854	10907776
65–69	2826091	2563758	5389849	3389986	3423882	6813868	4146830	4064878	8211708
70–74	1797547	2139419	3936966	2371301	2246584	4617885	2874710	3039989	5914699
75–79	1562238	1643712	3205950	1310603	1661886	2972489	1763247	1788547	3551794
80+	891282	996437	1887719	1149619	1345115	2494734	1142449	1546686	2689135
Total	131435473	120463251	251898724	138951735	127575342	266527077	144985849	133351044	278336893

Appendix Table 4.63: Projected age structure of Uttar Pradesh, 2026-2051

Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0-4	9906246	8956266	18862512	10009350	9057848	19067198	10031258	9071931	19103189
5-9	10340850	9336078	19676928	9843084	8899588	18742672	9956224	9008309	18964533
10-14	11580144	10460285	22040429	10324011	9323825	19647836	9829608	8889129	18718737
15-19	12526081	11312848	23838929	11556399	10444572	22000971	10305916	9311191	19617107
20-24	12833006	11547095	24380101	12488935	11283132	23772067	11527190	10419178	21946368
25-29	11852815	10628507	22481322	12787030	11503558	24290588	12450850	11243930	23694780
30-34	10322830	9393530	19716360	11799829	10581442	22381271	12737918	11458092	24196010
35-39	12924639	11539396	24464035	10262454	9343896	19606350	11740714	10532445	22273159
40-44	13221744	11820006	25041750	12820761	11465765	24286526	10189569	9288063	19477632
45-49	11720685	10287124	22007809	13054655	11717946	24772601	12676607	11376644	24053251
50-54	8756360	7711644	16468004	11478245	10157680	21635925	12810717	11586663	24397380
55-59	6698066	6572951	13271017	8461541	7566848	16028389	11126256	9989548	21115804
60-64	5435323	5833400	11268723	6346351	6382444	12728795	8056863	7373635	15430498
65-69	4928222	5197346	10125568	4991560	5546054	10537614	5873141	6103176	11976317
70-74	3554615	3655525	7210140	4268191	4727008	8995199	4371750	5093222	9464972
75-79	2170959	2474103	4645062	2733927	3035991	5769918	3337464	3997763	7335227
80+	1419501	1778993	3198494	1799873	2381821	4181694	2336713	3131154	5467867
Total	150192086	138505097	288697183	155026196	143419418	298445614	159358758	147874073	307232831

Appendix Table 4.64: Projected percentage distribution of population by age and gender for Uttar Pradesh, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	9.69	9.54	9.62	8.43	8.29	8.36	7.19	7.06	7.12
5–9	9.85	9.66	9.76	9.06	8.90	8.98	8.00	7.86	7.93
10–14	9.12	8.92	9.03	9.29	9.10	9.20	8.66	8.50	8.58
15–19	7.98	7.92	7.95	8.60	8.40	8.51	8.88	8.69	8.79
20–24	10.02	9.75	9.89	7.51	7.44	7.48	8.21	8.01	8.11
25–29	10.30	10.02	10.17	9.42	9.15	9.29	7.16	7.08	7.12
30–34	9.22	8.77	9.01	9.68	9.40	9.54	8.97	8.70	8.84
35–39	7.01	6.64	6.83	8.65	8.22	8.44	9.20	8.93	9.07
40–44	5.53	5.75	5.63	6.55	6.21	6.39	8.20	7.79	8.00
45–49	4.70	5.23	4.96	5.13	5.36	5.24	6.18	5.87	6.03
50–54	4.58	4.88	4.73	4.32	4.85	4.57	4.80	5.04	4.91
55–59	3.73	3.76	3.74	4.15	4.48	4.31	3.98	4.52	4.24
60–64	2.87	3.06	2.96	3.29	3.40	3.34	3.73	4.13	3.92
65–69	2.15	2.13	2.14	2.44	2.68	2.56	2.86	3.05	2.95
70–74	1.37	1.78	1.56	1.71	1.76	1.73	1.98	2.28	2.13
75–79	1.19	1.36	1.27	0.94	1.30	1.12	1.22	1.34	1.28
80+	0.68	0.83	0.75	0.83	1.05	0.94	0.79	1.16	0.97
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	6.60	6.47	6.53	6.46	6.32	6.39	6.29	6.13	6.22
5–9	6.89	6.74	6.82	6.35	6.21	6.28	6.25	6.09	6.17
10–14	7.71	7.55	7.63	6.66	6.50	6.58	6.17	6.01	6.09
15–19	8.34	8.17	8.26	7.45	7.28	7.37	6.47	6.30	6.39
20–24	8.54	8.34	8.44	8.06	7.87	7.97	7.23	7.05	7.14
25–29	7.89	7.67	7.79	8.25	8.02	8.14	7.81	7.60	7.71
30–34	6.87	6.78	6.83	7.61	7.38	7.50	7.99	7.75	7.88
35–39	8.61	8.33	8.47	6.62	6.52	6.57	7.37	7.12	7.25
40–44	8.80	8.53	8.67	8.27	7.99	8.14	6.39	6.28	6.34
45–49	7.80	7.43	7.62	8.42	8.17	8.30	7.95	7.69	7.83
50–54	5.83	5.57	5.70	7.40	7.08	7.25	8.04	7.84	7.94
55–59	4.46	4.75	4.60	5.46	5.28	5.37	6.98	6.76	6.87
60–64	3.62	4.21	3.90	4.09	4.45	4.27	5.06	4.99	5.02
65–69	3.28	3.75	3.51	3.22	3.87	3.53	3.69	4.13	3.90
70–74	2.37	2.64	2.50	2.75	3.30	3.01	2.74	3.44	3.08
75–79	1.45	1.79	1.61	1.76	2.12	1.93	2.09	2.70	2.39
80+	0.95	1.28	1.11	1.16	1.66	1.40	1.47	2.12	1.78
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.65: Projected summary of demographic indicators for Uttarakhand, 2026– 2051

Indicators	2026	2031	2036	2041	2046	2051
Total Fertility Rate	1.64	1.57	1.53	1.51	1.50	1.50
Gross Reproduction Rate	0.77	0.74	0.73	0.72	0.71	0.71
Net Reproduction Rate	0.74	0.71	0.70	0.70	0.70	0.70
Mean Age of Childbearing	27.00	27.00	27.00	27.10	27.10	27.10
Child-Woman Ratio	0.26	0.24	0.21	0.20	0.20	0.21
Mortality indicators						
Male Life Expectancy	67.7	69.3	70.7	72.1	73.5	74.9
Female Life Expectancy	72.2	74.1	75.8	77.4	79.0	80.4
Total Life Expectancy	69.9	71.7	73.2	74.7	76.2	77.6
Infant Mortality Rate	30.4	24.6	20.1	16.9	13.9	11.3
Under Five Mortality Rate	36.7	29.0	23.5	19.7	16.2	13.0
Annual net migration rates						
Male	610	372	134	-104	-342	-580
Female	259	-61	-382	-702	-1023	-1344
Total	869	311	-248	-806	-1365	-1924
Vital rates						
Crude Birth Rate per 1000	14.6	12.7	11.1	10.3	9.8	9.3
Crude Death Rate per 1000	7.8	7.7	7.7	7.9	8.3	8.8
Rate of Natural Increase [percent]	0.7	0.5	0.3	0.2	0.2	0.1
Annual births and deaths [in million]						
Births	0.17	0.15	0.13	0.13	0.12	0.12
Deaths	0.09	0.09	0.09	0.10	0.10	0.11
Population [in million]						
Total	11.6	11.9	12.2	12.3	12.4	12.4
Male	5.9	6.1	6.2	6.3	6.3	6.3
Female	5.7	5.8	6.0	6.0	6.1	6.1
Percent 0–4	7.2	6.5	5.7	5.1	4.9	4.7
Percent 5–14	15.1	14.4	13.1	11.8	10.6	9.9
Percent 15–24	17.0	14.8	14.3	13.9	12.8	11.6
Percent 15–49	57.1	56.5	56.0	54.1	50.8	47.1
Percent 15–59	66.9	67.1	67.4	67.4	66.4	64.0
Percent 60 and above	10.8	12	13.8	15.7	18.1	21.4
Percent Females 15–49	56.6	55.7	54.6	52.4	49.1	45.4
Sex Ratio	103.7	103.7	103.6	103.4	103.1	102.8
Overall Dependency Ratio	51.0	49.4	49.1	48.5	48.4	50.6
Median Age	31.0	33.0	36.0	38.0	40.0	43.0

Appendix Table 4.66: Projected age structure of Uttarakhand, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	439712	396942	836654	403392	363831	767223	359692	325717	685409
5–9	464885	420778	885663	436994	395249	832243	401576	362741	764317
10–14	449977	404490	854467	463558	419993	883551	435988	394672	830660
15–19	481119	431066	912185	448374	403600	851974	462158	419261	881419
20–24	552333	494549	1046882	478162	429554	907716	446066	402430	848496
25–29	591887	535910	1127797	548433	492329	1040762	475357	427906	903263
30–34	574774	527420	1102194	587544	532993	1120537	545088	490064	1035152
35–39	471671	476147	947818	569638	523767	1093405	583156	529890	1113046
40–44	384546	402546	787092	465897	471639	937536	563664	519649	1083313
45–49	329651	340972	670623	377167	396908	774075	458053	466043	924096
50–54	307918	318151	626069	319283	333726	653009	366574	389653	756227
55–59	254897	260541	515438	292237	307912	600149	304369	324396	628765
60–64	206663	214890	421553	234327	247580	481907	270218	294498	564716
65–69	151471	162078	313549	180748	197404	378152	206661	229762	436423
70–74	96067	122164	218231	122365	139954	262319	147502	173106	320608
75–79	78637	97912	176549	68007	94552	162559	88150	111173	199323
80+	49218	66844	116062	60859	87427	148286	61111	97922	159033
Total	5885426	5673400	11558826	6056985	5838418	11895403	6175383	5958883	12134266

Appendix Table 4.66: Projected age structure of Uttarakhand, 2026-2051

Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0-4	331704	300987	632691	319939	289812	609751	307190	277756	584946
5-9	358389	324892	683281	330734	300321	631055	319223	289253	608476
10-14	400781	362255	763036	357776	324476	682252	330247	299943	630190
15-19	434828	394044	828872	399842	361714	761556	357035	324004	681039
20-24	460063	418099	878162	433107	392957	826064	398465	360680	759145
25-29	443782	400902	844684	458023	416516	874539	431457	391395	822852
30-34	472838	425986	898824	441747	399102	840849	456229	414663	870892
35-39	541574	487401	1028975	470225	423724	893949	439696	397005	836701
40-44	577806	526209	1104015	537279	484368	1021647	467018	421293	888311
45-49	555267	514269	1069536	570291	521457	1091748	531266	480509	1011775
50-54	446632	458632	905264	543082	507204	1050286	559398	515254	1074652
55-59	351147	380246	731393	429844	449149	878993	524922	498248	1023170
60-64	283391	312172	595563	329277	368060	697337	405778	436945	842723
65-69	240678	276045	516723	254968	295372	550340	299245	351238	650483
70-74	171063	204891	375954	201976	249969	451945	216892	271182	488074
75-79	108362	141356	249718	128298	171701	299999	154396	214232	368628
80+	74465	118815	193280	93728	154972	248700	116495	201571	318066
Total	6252770	6047201	12299971	6300136	6110874	12411010	6314952	6145171	12460123

Appendix Table 4.67: Projected percentage distribution of population by age and gender for Uttarakhand, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	7.47	7.00	7.24	6.66	6.23	6.45	5.82	5.47	5.65
5–9	7.90	7.42	7.66	7.21	6.77	7.00	6.50	6.09	6.30
10–14	7.65	7.13	7.39	7.65	7.19	7.43	7.06	6.62	6.85
15–19	8.17	7.60	7.89	7.40	6.91	7.16	7.48	7.04	7.26
20–24	9.38	8.72	9.06	7.89	7.36	7.63	7.22	6.75	6.99
25–29	10.06	9.45	9.76	9.05	8.43	8.75	7.70	7.18	7.44
30–34	9.77	9.30	9.54	9.70	9.13	9.42	8.83	8.22	8.53
35–39	8.01	8.39	8.20	9.40	8.97	9.19	9.44	8.89	9.17
40–44	6.53	7.10	6.81	7.69	8.08	7.88	9.13	8.72	8.93
45–49	5.60	6.01	5.80	6.23	6.80	6.51	7.42	7.82	7.62
50–54	5.23	5.61	5.42	5.27	5.72	5.49	5.94	6.54	6.23
55–59	4.33	4.59	4.46	4.82	5.27	5.05	4.93	5.44	5.18
60–64	3.51	3.79	3.65	3.87	4.24	4.05	4.38	4.94	4.65
65–69	2.57	2.86	2.71	2.98	3.38	3.18	3.35	3.86	3.60
70–74	1.63	2.15	1.89	2.02	2.40	2.21	2.39	2.91	2.64
75–79	1.34	1.73	1.53	1.12	1.62	1.37	1.43	1.87	1.64
80+	0.84	1.18	1.00	1.00	1.50	1.25	0.99	1.64	1.31
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	5.30	4.98	5.14	5.08	4.74	4.91	4.86	4.52	4.69
5–9	5.73	5.37	5.56	5.25	4.91	5.08	5.06	4.71	4.88
10–14	6.41	5.99	6.20	5.68	5.31	5.50	5.23	4.88	5.06
15–19	6.95	6.52	6.74	6.35	5.92	6.14	5.65	5.27	5.47
20–24	7.36	6.91	7.14	6.87	6.43	6.66	6.31	5.87	6.09
25–29	7.10	6.63	6.87	7.27	6.82	7.05	6.83	6.37	6.60
30–34	7.56	7.04	7.31	7.01	6.53	6.78	7.22	6.75	6.99
35–39	8.66	8.06	8.37	7.46	6.93	7.20	6.96	6.46	6.72
40–44	9.24	8.70	8.98	8.53	7.93	8.23	7.40	6.86	7.13
45–49	8.88	8.50	8.70	9.05	8.53	8.80	8.41	7.82	8.12
50–54	7.14	7.58	7.36	8.62	8.30	8.46	8.86	8.38	8.62
55–59	5.62	6.29	5.95	6.82	7.35	7.08	8.31	8.11	8.21
60–64	4.53	5.16	4.84	5.23	6.02	5.62	6.43	7.11	6.76
65–69	3.85	4.56	4.20	4.05	4.83	4.43	4.74	5.72	5.22
70–74	2.74	3.39	3.06	3.21	4.09	3.64	3.43	4.41	3.92
75–79	1.73	2.34	2.03	2.04	2.81	2.42	2.44	3.49	2.96
80+	1.19	1.96	1.57	1.49	2.54	2.00	1.84	3.28	2.55
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.68: Projected summary of demographic indicators for West Bengal, 2026–2051

Indicators	2026	2031	2036	2041	2046	2051
Total Fertility Rater	1.40	1.40	1.40	1.40	1.40	1.40
Gross Reproduction Rate	0.68	0.68	0.68	0.68	0.68	0.68
Net Reproduction Rate	0.66	0.66	0.67	0.67	0.67	0.67
Mean Age of Childbearing	25.60	25.90	26.20	26.50	26.80	27.10
Child-Woman Ratio	0.21	0.20	0.19	0.18	0.18	0.19
Mortality indicators						
Male Life Expectancy	71.0	72.7	74.4	75.8	77.2	78.5
Female Life Expectancy	74.4	76.2	77.8	79.7	81.0	82.3
Total Life Expectancy	72.7	74.4	76.1	77.7	79.1	80.4
Infant Mortality Rate	21.1	16.9	13.6	11.0	9.4	8.1
Under Five Mortality Rate	24.7	19.7	15.7	12.7	10.9	9.4
Annual net migration rates						
Male	6344	7546	8635	9554	10282	10831
Female	1932	1892	1875	1868	1865	1863
Total	8276	9438	10510	11422	12147	12694
Vital rates						
Crude Birth Rate per 1000	11.6	10.6	9.5	8.7	8.1	7.7
Crude Death Rate per 1000	7.4	7.6	7.9	8.4	9.1	9.9
Rate of Natural Increase [percent]	0.41	0.29	0.16	0.03	-0.1	-0.22
Annual births and deaths [in million]						
Births	1.16	1.08	0.98	0.90	0.84	0.79
Deaths	0.75	0.78	0.82	0.87	0.94	1.02
Population [in million]						
Total	100.5	102.3	103.5	103.9	103.7	102.9
Male	51.2	52.0	52.4	52.4	52.1	51.6
Female	49.3	50.3	51.1	51.5	51.6	51.3
Percent 0–4	5.8	5.3	4.9	4.5	4.1	3.9
Percent 5–14	12.7	11.7	10.9	10.1	9.3	8.7
Percent 15–24	15.4	13.5	12.3	11.5	10.8	10.2
Percent 15–49	56.3	54.9	52.6	49.6	46.3	42.8
Percent 15–59	68.6	67.6	66.0	64.7	62.5	59.7
Percent 60 and above	13.0	15.4	18.3	20.7	24.0	27.8
Percent Females 15–49	56.2	54.6	52.0	48.7	45.5	41.9
Sex Ratio	103.9	103.2	102.5	101.8	101.0	100.5
Overall Dependency Ratio	45.8	45.9	48.0	51.5	54.5	59.9
Median Age	34.0	37.0	39.0	42.0	44.0	47.0

Appendix Table 4.69: Projected age structure of West Bengal, 2026-2051

Age group	2026			2031			2036		
	M		F	T		M	T		F
	M	F		T	F		T	M	
0-4	2962396	2831088	5793484	2795182	2671694	5466876	2574643	2455828	5030471
5-9	3155646	3012328	6167974	2952885	2823231	5776116	2788884	2665598	5454482
10-14	3358615	3200132	6558747	3150552	3008548	6159100	2949547	2820292	5769839
15-19	3712182	3560747	7272929	3351214	3195238	6546452	3145467	3004708	6150175
20-24	4180498	4004126	8184624	3698908	3552423	7251331	3342939	3189168	6532107
25-29	4624074	4437272	9061346	4164945	3991827	8156772	3690233	3543493	7233726
30-34	4637774	4300726	8938500	4605952	4419983	9025935	4154445	3978957	8133402
35-39	4354310	4265484	8619794	4615103	4278892	8893995	4590370	4401264	8991634
40-44	3965119	3869102	7834221	4321126	4234759	8555885	4588516	4253156	8841672
45-49	3358807	3276259	6635066	3912268	3826384	7738652	4274721	4195314	8470035
50-54	3341347	3334706	6676053	3280860	3219457	6500317	3836553	3770575	7607128
55-59	2941349	2738414	5679763	3207128	3245234	6452362	3167616	3146411	6314027
60-64	2419018	2266641	4685659	2747224	2623865	5371089	3019803	3129595	6149398
65-69	1808959	1636040	3444999	2163860	2108825	4272685	2486671	2467517	4954188
70-74	1167777	1141091	2308868	1506348	1440767	2947115	1831809	1889704	3721513
75-79	731125	815854	1546979	865073	911155	1776228	1143758	1186009	2329767
80+	483187	613681	1096868	612762	788411	1401173	768641	977305	1745946
Total	51202183	49303691	100505874	51951390	50340693	102292083	52354616	51074894	103429510

Appendix Table 4.69: Projected age structure of West Bengal, 2026-2051									
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0-4	2366064	2254087	4620151	2196300	2092702	4289002	2055321	1957671	4012992
5-9	2570936	2451247	5022183	2363442	2250676	4614118	2194448	2089964	4284412
10-14	2786859	2663349	5450208	2569636	2449579	5019215	2362717	2249386	4612103
15-19	2946296	2817399	5763695	2784575	2661126	5445701	2568212	2447856	5016068
20-24	3140478	3000148	6140626	2943281	2814030	5757311	2783088	2658515	5441603
25-29	3339050	3182838	6521888	3139056	2995413	6134469	2943854	2810392	5754246
30-34	3685517	3534332	7219849	3337417	3176265	6513682	3139559	2990212	6129771
35-39	4146149	3965365	8111514	3681543	3524597	7206140	3336605	3168946	6505551
40-44	4571124	4379687	8950811	4133048	3949487	8082535	3673545	3512598	7186143
45-49	4549289	4220744	8770033	4538477	4352112	8890589	4109155	3928125	8037280
50-54	4205893	4144804	8350697	4486750	4178646	8665396	4485748	4314600	8800348
55-59	3723297	3700132	7423429	4098462	4080159	8178621	4388479	4122306	8510785
60-64	3006204	3053760	6059964	3558781	3609688	7168469	3941984	3993627	7935611
65-69	2763708	2972760	5736468	2783145	2925101	5708246	3329298	3478018	6807316
70-74	2139883	2249052	4388935	2419606	2746211	5165817	2477486	2729110	5206596
75-79	1424555	1598934	3023489	1710690	1947526	3658216	1982808	2416549	4399357
80+	1034117	1312054	2346171	1381594	1837276	3218870	1797513	2445143	4242656
Total	52399419	51500692	103900111	52125803	51590594	103716397	51569820	51313018	102882838

Appendix Table 4.70: Projected percentage distribution of population by age and gender for West Bengal, 2026–2051

Age group	2026			2031			2036		
	M	F	T	M	F	T	M	F	T
0–4	5.79	5.74	5.76	5.38	5.31	5.34	4.92	4.81	4.86
5–9	6.16	6.11	6.14	5.68	5.61	5.65	5.33	5.22	5.27
10–14	6.56	6.49	6.53	6.06	5.98	6.02	5.63	5.52	5.58
15–19	7.25	7.22	7.24	6.45	6.35	6.40	6.01	5.88	5.95
20–24	8.16	8.12	8.14	7.12	7.06	7.09	6.39	6.24	6.32
25–29	9.03	9.00	9.02	8.02	7.93	7.97	7.05	6.94	6.99
30–34	9.06	8.72	8.89	8.87	8.78	8.82	7.94	7.79	7.86
35–39	8.50	8.65	8.58	8.88	8.50	8.69	8.77	8.62	8.69
40–44	7.74	7.85	7.79	8.32	8.41	8.36	8.76	8.33	8.55
45–49	6.56	6.65	6.60	7.53	7.60	7.57	8.16	8.21	8.19
50–54	6.53	6.76	6.64	6.32	6.40	6.35	7.33	7.38	7.35
55–59	5.74	5.55	5.65	6.17	6.45	6.31	6.05	6.16	6.10
60–64	4.72	4.60	4.66	5.29	5.21	5.25	5.77	6.13	5.95
65–69	3.53	3.32	3.43	4.17	4.19	4.18	4.75	4.83	4.79
70–74	2.28	2.31	2.30	2.90	2.86	2.88	3.50	3.70	3.60
75–79	1.43	1.65	1.54	1.67	1.81	1.74	2.18	2.32	2.25
80+	0.94	1.24	1.09	1.18	1.57	1.37	1.47	1.91	1.69
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Age group	2041			2046			2051		
	M	F	T	M	F	T	M	F	T
0–4	4.52	4.38	4.45	4.21	4.06	4.14	3.99	3.82	3.90
5–9	4.91	4.76	4.83	4.53	4.36	4.45	4.26	4.07	4.16
10–14	5.32	5.17	5.25	4.93	4.75	4.84	4.58	4.38	4.48
15–19	5.62	5.47	5.55	5.34	5.16	5.25	4.98	4.77	4.88
20–24	5.99	5.83	5.91	5.65	5.45	5.55	5.40	5.18	5.29
25–29	6.37	6.18	6.28	6.02	5.81	5.91	5.71	5.48	5.59
30–34	7.03	6.86	6.95	6.40	6.16	6.28	6.09	5.83	5.96
35–39	7.91	7.70	7.81	7.06	6.83	6.95	6.47	6.18	6.32
40–44	8.72	8.50	8.61	7.93	7.66	7.79	7.12	6.85	6.98
45–49	8.68	8.20	8.44	8.71	8.44	8.57	7.97	7.66	7.81
50–54	8.03	8.05	8.04	8.61	8.10	8.35	8.70	8.41	8.55
55–59	7.11	7.18	7.14	7.86	7.91	7.89	8.51	8.03	8.27
60–64	5.74	5.93	5.83	6.83	7.00	6.91	7.64	7.78	7.71
65–69	5.27	5.77	5.52	5.34	5.67	5.50	6.46	6.78	6.62
70–74	4.08	4.37	4.22	4.64	5.32	4.98	4.80	5.32	5.06
75–79	2.72	3.10	2.91	3.28	3.77	3.53	3.84	4.71	4.28
80+	1.97	2.55	2.26	2.65	3.56	3.10	3.49	4.77	4.12
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix Table 4.71: Ranking of states by their population size, 2011 and 2051 [in millions]

Census Population [2011]			Projected population [2051] [Medium-variant]		
States	In million	Rank	States	In million	Rank
Uttar Pradesh	199.8	1	Uttar Pradesh	307.2	1
Maharashtra	112.4	2	Bihar	170.5	2
Bihar	104.1	3	Maharashtra	126.9	3
West Bengal	91.3	4	Madhya Pradesh	106.3	4
Madhya Pradesh	72.6	5	West Bengal	102.9	5
Tamil Nadu	72.1	6	Rajasthan	101.4	6
Rajasthan	68.5	7	Tamil Nadu	77	7
Karnataka	61.1	8	Gujarat	75.7	8
Gujarat	60.4	9	Karnataka	69.1	9
Andhra Pradesh	49.4	10	Andhra Pradesh	53.2	10
Odisha	42	11	Odisha	50.4	11
Telangana	35.2	12	Punjab	50.4	12
Kerala	33.4	13	Jharkhand	47.6	13
Jharkhand	33	14	Assam	42.1	14
Assam	31.2	15	Telangana	41.3	15
Punjab	27.7	16	Kerala	35.5	16
Chhattisgarh	25.5	17	Chhattisgarh	33.8	17
Haryana	25.4	18	Haryana	32	18
NCT of Delhi	16.8	19	NCT of Delhi	20.5	19
Jammu and Kashmir [UT]	12.3	20	Jammu and Kashmir [UT]	15.5	20
Uttarakhand	10.1	21	Uttarakhand	12.4	21
Himachal Pradesh	6.9	22	Himachal Pradesh	7.7	22

Appendix: Table 4.72: Projected state-wise dependency ratios for India, 2021–2051

2021	Andhra Pradesh	Assam	Bihar	Chhattisgarh	NCT of Delhi	Gujarat
0–14	10582905	9140021	37298175	7755298	3777228	16193693
15–59	36012208	23351334	75761910	18772419	13084264	44634517
60+	6626970	2934256	9920636	2636931	1808189	6998408
AI	62.6	32.1	26.6	34.0	47.9	43.2
YDR	29.4	39.1	49.2	41.3	28.9	36.3
ODR	18.4	12.6	13.1	14	13.8	15.7
2026						
0–14	9928614	8823960	38022084	7650106	3443819	15440869
15–59	36456660	24711635	83402887	19724528	13541394	46381787
60+	7715160	3698947	11463293	3154371	2296458	8474087
AI	77.7	41.9	30.1	41.2	66.7	54.9
YDR	27.2	35.7	45.6	38.8	25.4	33.3
ODR	21.2	15.0	13.7	16.0	17.0	18.3
2031						
0–14	8863495	8596446	39861914	7207241	3148130	14332270
15–59	36763128	25701570	89380214	20639107	13748219	47768111
60+	8961812	4536006	13487478	3768687	2896911	10184376
AI	101.1	52.8	33.8	52.3	92.0	71.1
YDR	24.1	33.4	44.6	34.9	22.9	30.0
ODR	24.4	17.6	15.1	18.3	21.1	21.3
2036						
0–14	8110183	8158724	39411500	6686476	2982042	13244355
15–59	36070784	26355132	95331715	21319657	13565132	48516564
60+	10601152	5612489	16431653	4445154	3645412	12039513
AI	130.7	68.8	41.7	66.5	122.2	90.9
YDR	22.5	31.0	41.3	31.4	22.0	27.3
ODR	29.4	21.3	17.2	20.9	26.9	24.8
2041						
0–14	7482686	7657394	37131483	6242012	2797877	12528056
15–59	35094856	26836614	101447454	21826457	13213901	48379469
60+	11871670	6589083	19625938	5028356	4439408	13982837
AI	158.7	86.0	52.9	80.6	158.7	111.6
YDR	21.3	28.5	36.6	28.6	21.2	25.9
ODR	33.8	24.6	19.3	23.0	33.6	28.9
2046						
0–14	6958185	7154945	34349579	5938290	2591114	11944042
15–59	33331855	26793228	107220721	21942559	12584812	47518596
60+	13611536	7810294	22955131	5665583	5356575	16070869
AI	195.6	109.2	66.8	95.4	206.7	134.6
YDR	20.9	26.7	32.0	27.1	20.6	25.1
ODR	40.8	29.2	21.4	25.8	42.6	33.8
2051						
0–14	6485215	6756656	32962831	5730836	2384064	11393998
15–59	31214488	26485383	111424004	21620297	11805484	45980499
60+	15464316	8936810	26155623	6453183	6282053	18305547
AI	238.5	132.3	79.3	112.6	263.5	160.7
YDR	20.8	25.5	29.6	26.5	20.2	24.8
ODR	49.5	33.7	23.5	29.8	53.2	39.8

Appendix: Table 4.72: Projected state-wise dependency ratios for India, 2021–2051

2021	Haryana	Himachal Pradesh	Jammu and Kashmir [UT]	Jharkhand	Karnataka	Kerala
0–14	7010910	1520267	3021190	10431544	14467352	6956997
15–59	18748275	4927011	9053467	24304514	44329221	22744098
60+	2777186	902637	1271376	3329134	7218212	5718464
AI	39.6	59.4	42.1	31.9	49.9	82.2
YDR	37.4	30.9	33.4	42.9	32.6	30.6
ODR	14.8	18.3	14.0	13.7	16.3	25.1
2026						
0–14	6643170	1420646	2453231	10223666	13617204	6412154
15–59	19696872	5041927	9806270	26179928	45404828	22739898
60+	3254088	1046082	1572256	3979700	8466253	6639983
AI	49.0	73.6	64.1	38.9	62.2	103.6
YDR	33.7	28.2	25.0	39.1	30.0	28.2
ODR	16.5	20.7	16.0	15.2	18.6	29.2
2031						
0–14	6080474	1330291	2468668	10144490	12488732	5814279
15–59	20466842	5086182	9901723	27623812	46303522	22709273
60+	3872514	1218383	1954143	4725827	9753326	7531721
AI	63.7	91.6	79.2	46.6	78.1	129.5
YDR	29.7	26.2	24.9	36.7	27.0	25.6
ODR	18.9	24.0	19.7	17.1	21.1	33.2
2036						
0–14	5524961	1252025	2464697	9747076	11739702	5447120
15–59	20908820	5033794	9872508	28788265	45958519	22241566
60+	4641904	1437113	2414731	5678468	11599790	8485241
AI	84.0	114.8	98.0	58.3	98.8	155.8
YDR	26.4	24.9	25.0	33.9	25.5	24.5
ODR	22.2	28.5	24.5	19.7	25.2	38.2
2041						
0–14	5203462	1173834	2328914	9062136	11072011	5175990
15–59	20952480	4937296	9777646	29835810	45380937	21723427
60+	5440051	1660121	2913761	6673017	13150332	9248073
AI	104.5	141.4	125.1	73.6	118.8	178.7
YDR	24.8	23.8	23.8	30.4	24.4	23.8
ODR	26.0	33.6	29.8	22.4	29.0	42.6
2046						
0–14	4967368	1102038	2050183	8356009	10501185	4875253
15–59	20539356	4776425	9563744	30477610	43615918	20985231
60+	6414751	1897242	3502260	7837085	15444817	10063155
AI	129.1	172.2	170.8	93.8	147.1	206.4
YDR	24.2	23.1	21.4	27.4	24.1	23.2
ODR	31.2	39.7	36.6	25.7	35.4	48.0
2051						
0–14	4731642	1037772	1764438	7911483	9913673	4542351
15–59	19721721	4539957	9239343	30658504	41480964	20104561
60+	7550894	2159675	4091655	9008609	17764705	10855774
AI	159.6	208.1	231.9	113.9	179.2	239
YDR	24.0	22.9	19.1	25.8	23.9	22.6
ODR	38.3	47.6	44.3	29.4	42.8	54.0

Appendix: Table 4.72: Projected state-wise dependency ratios for India, 2021–2051

2021	Ladakh [UT]	Madhya Pradesh	Maharashtra	Odisha	Punjab	Rajasthan
0–14	51321	23315026	25937677	10455614	6001063	22374845
15–59	228305	53468284	81786421	30365229	20133188	50744169
60+	29908	7211342	13959008	5233786	3475198	6798937
AI	58.3	30.9	53.8	50.1	57.9	30.4
YDR	22.5	43.6	31.7	34.4	29.8	44.1
ODR	13.1	13.5	17.1	17.2	17.3	13.4
2026						
0–14	41252	24006083	23545240	9979335	5475200	22541189
15–59	247747	56781012	84558783	31417929	20481505	54471539
60+	37198	8608739	16018888	6181189	3993787	8170939
AI	90.2	35.9	68.0	61.9	72.9	36.2
YDR	16.7	42.3	27.8	31.8	26.7	41.4
ODR	15.0	15.2	18.9	19.7	19.5	15.0
2031						
0–14	41468	23640563	21297477	9414275	4909582	21892910
15–59	252790	60109884	85842295	32084233	20622024	57957301
60+	46009	10365828	18872671	7286019	4600633	9870446
AI	111.0	43.8	88.6	77.4	93.7	45.1
YDR	16.4	39.3	24.8	29.3	23.8	37.8
ODR	18.2	17.2	22.0	22.7	22.3	17.0
2036						
0–14	41479	22616095	19629323	8775461	4465318	20484408
15–59	250913	62955758	85298267	32292026	20400244	61049317
60+	57162	12433690	22454334	8576728	5315939	11902282
AI	137.8	55.0	114.4	97.7	119	58.1
YDR	16.5	35.9	23.0	27.2	21.9	33.6
ODR	22.8	19.7	26.3	26.6	26.1	19.5
2041						
0–14	39369	21155506	18377390	8118326	4156191	18877554
15–59	243765	65648272	83522219	32302419	19873546	63643113
60+	69195	14494888	26217290	9769915	6070979	14050160
AI	175.8	68.5	142.7	120.3	146.1	74.4
YDR	16.2	32.2	22.0	25.1	20.9	29.7
ODR	28.4	22.1	31.4	30.2	30.5	22.1
2046						
0–14	34749	20057358	17137641	7543587	3887303	17722142
15–59	235211	67368367	80091627	31694202	18927003	65089880
60+	83419	16674102	30751536	11195801	7029963	16456156
AI	240.1	83.1	179.4	148.4	180.8	92.9
YDR	14.8	29.8	21.4	23.8	20.5	27.2
ODR	35.5	24.8	38.4	35.3	37.1	25.3
2051						
0–14	29850	19430176	15848379	7101777	3619566	17093517
15–59	226486	67644886	75420123	30660934	17617795	64899948
60+	97787	19287201	35660918	12619768	8150654	19488073
AI	327.6	99.3	225.0	177.7	225.2	114
YDR	13.2	28.7	21.0	23.2	20.5	26.3
ODR	43.2	28.5	47.3	41.2	46.3	30.0

Appendix: Table 4.72: Projected state-wise dependency ratios for India, 2021–2051

2021	Tamil Nadu	Telangana	Uttar Pradesh	Uttarakhand	West Bengal	India
0–14	14984934	8040900	67867472	2664389	20056683	341458173
15–59	51516964	26141986	148167765	7376373	67375852	883880685
60+	10191330	4235491	18882837	1095973	10793738	130493906
AI	68.0	52.7	27.8	41.1	53.8	38.2
YDR	29.1	30.8	45.8	36.1	29.8	38.6
ODR	19.8	16.2	12.7	14.9	16.0	14.8
2026						
0–14	13856474	7736530	71556205	2576784	18520205	336981459
15–59	51758810	26861119	158470563	7736098	68902296	925759096
60+	12140784	5004134	21871956	1245944	13083373	152317135
AI	87.6	64.7	30.6	48.4	70.6	45.2
YDR	26.8	28.8	45.2	33.3	26.9	36.4
ODR	23.5	18.6	13.8	16.1	19.0	16.5
2031						
0–14	12536335	7123524	70758432	2483017	17402092	322599230
15–59	51716089	27397151	169955019	7979163	69121701	964177230
60+	14160928	5921786	25813626	1433223	15768290	178548824
AI	113.0	83.1	36.5	57.7	90.6	55.3
YDR	24.2	26.0	41.6	31.1	25.2	33.5
ODR	27.4	21.6	15.2	18.0	22.8	18.5
2036						
0–14	11598574	6590629	65798118	2280386	16254792	304866664
15–59	50459417	27206781	181263663	8173777	68273906	989963470
60+	16660804	7187975	31275112	1680103	18900812	211963324
AI	143.6	109.1	47.5	73.7	116.3	69.5
YDR	23.0	24.2	36.3	27.9	23.8	30.8
ODR	33.0	26.4	17.3	20.6	27.7	21.4
2041						
0–14	10887987	6091307	60579869	2079008	15092542	288204311
15–59	48852867	26811337	191669327	8289725	67252542	1009086535
60+	18911321	8438617	36447987	1931238	21555027	244270151
AI	173.7	138.5	60.2	92.9	142.8	84.8
YDR	22.3	22.7	31.6	25.1	22.4	28.6
ODR	38.7	31.5	19	23.3	32.1	24.2
2046						
0–14	10227613	5717785	57457706	1923058	13922335	275653936
15–59	46200516	25695737	198774688	8239631	64874444	1011011465
60+	21668833	10047638	42213220	2248321	24919618	282967075
AI	211.9	175.7	73.5	116.9	179.0	102.7
YDR	22.1	22.3	28.9	23.3	21.5	27.3
ODR	46.9	39.1	21.2	27.3	38.4	28.0
2051						
0–14	9529225	5419383	56786459	1823612	12909507	266767831
15–59	43589188	24314133	200771491	7968537	61381795	998112942
60+	23927779	11574715	49674881	2667974	28591536	325263881
AI	251.1	213.6	87.5	146.3	221.5	121.9
YDR	21.9	22.3	28.3	22.9	21.0	26.7
ODR	54.9	47.6	24.7	33.5	46.6	32.6

Notes: The Ageing Index [AI] is defined as the ratio of the population aged 60+ to the population aged 0–14. The Young Dependency Ratio [YDR] represents the ratio of the population aged 0–14 to those aged 15–59, while the Old Dependency Ratio [ODR] denotes the ratio of the population aged 60+ to those aged 15–59. All ratios are expressed as percentages.

Appendix Table 4.73: Share of regional population by gender and their contribution to India's total population, 1971–2011

Region	[In million]			[Percentage share]
	Male	Female	Total	
Northern region				
1971	35.1	31.2	66.3	12.1
1981	45.7	41.0	86.7	12.7
1991	58.6	52.3	110.9	13.1
2001	74.7	66.8	141.5	13.8
2011	88.5	80.5	169.0	14.0
Central region				
1971	87.7	79.9	167.6	30.6
1981	109.6	100.0	209.6	30.7
1991	138.5	124.3	262.8	31.0
2001	172.7	157.7	330.4	32.1
2011	209.2	192.9	402.1	33.2
Eastern region				
1971	41.8	38.7	80.5	14.7
1981	51.0	47.6	98.6	14.4
1991	62.9	58.6	121.5	14.4
2001	74.0	69.9	143.9	14.0
2011	85.0	81.3	166.3	13.7
Western region				
1971	40.0	37.3	77.3	14.1
1981	50.1	47.0	97.1	14.2
1991	62.3	58.2	120.5	14.2
2001	77.0	70.9	147.9	14.4
2011	90.1	83.3	173.4	14.3
Southern region				
1971	69.1	67.6	136.7	24.9
1981	84.0	82.4	166.4	24.3
1991	100.4	98.3	198.7	23.5
2001	113.7	112.4	226.1	22.0
2011	127.2	127.2	254.4	21.0
North-eastern region				
1971	10.4	9.4	19.8	3.6
1981	13.1	12.0	25.1	3.7
1991	16.6	15.4	32.0	3.8
2001	20.1	18.9	39.0	3.8
2011	23.4	22.4	45.8	3.8
India				
1971	284.0	264.1	548.1	
1981	353.4	330.0	683.4	
1991	439.4	407.1	846.5	
2001	532.2	496.5	1028.7	
2011	623.3	587.6	1210.9	

Appendix Table 4.74: Projected regional distribution of total population and percentage share by gender, 2021–2051

Year	Male	Female	Total	Male	Female	Total
	[In million]			[In percentages]		
Northern region						
2021	99.4	90.7	190.1	14.2	13.7	14.0
2026	103.6	94.9	198.5	14.2	13.7	14.0
2031	107.0	98.5	205.5	14.2	13.7	13.9
2036	109.7	101.4	211.1	14.2	13.7	13.9
2041	111.6	103.9	215.5	14.1	13.7	13.9
2046	112.9	105.7	218.5	14.1	13.7	13.9
2051	113.5	106.9	220.3	14.1	13.7	13.9
Central region						
2021	244.8	226.3	471.1	35.0	34.3	34.6
2026	262.0	242.7	504.7	35.9	35.1	35.5
2031	277.4	257.6	535	36.8	35.8	36.4
2036	290.0	270.0	560.0	37.4	36.4	37.0
2041	300.5	280.8	581.3	38.1	37.0	37.6
2046	310	290.6	600.6	38.7	37.6	38.2
2051	318.4	299.5	617.9	39.4	38.2	38.8
Eastern region						
2021	93.0	89.4	182.3	13.4	13.5	13.4
2026	95.9	92.6	188.5	13.2	13.4	13.3
2031	98.3	95.3	193.6	13.0	13.3	13.2
2036	99.9	97.4	197.3	12.9	13.1	13.0
2041	100.9	98.8	199.7	12.8	13.0	12.9
2046	101.2	99.6	200.8	12.6	12.9	12.8
2051	101.0	99.9	200.8	12.5	12.8	12.6
Western region						
2021	98.7	91.5	190.3	14.1	13.9	14
2026	101.1	94.2	195.3	13.9	13.6	13.7
2031	102.9	96.5	199.3	13.6	13.4	13.5
2036	104.0	98.3	202.4	13.4	13.3	13.4
2041	104.6	99.7	204.3	13.3	13.2	13.2
2046	104.5	100.5	205.0	13.1	13.0	13.0
2051	103.7	100.6	204.3	12.9	12.9	12.9

Appendix Table 4.74: Projected regional distribution of total population and percentage share by gender, 2021–2051

Year	Male	Female	Total	Male	Female	Total
	[In million]			[In percentages]		
Southern region						
2021	136.2	137.1	273.3	19.5	20.7	20.1
2026	138.5	139.9	278.5	19.0	20.2	19.6
2031	139.9	142.0	281.9	18.5	19.8	19.1
2036	140.6	143.4	284.0	18.2	19.4	18.7
2041	140.7	143.8	284.4	17.8	19.0	18.4
2046	139.8	143.6	283.4	17.5	18.6	18.0
2051	138.1	142.6	280.8	17.1	18.2	17.7
North-eastern region						
2021	26.6	25.8	52.4	3.8	3.9	3.9
2026	2.08	27.4	55.4	3.8	4.0	3.9
2031	29.2	28.8	58.0	3.9	4.0	3.9
2036	30.3	30.1	60.4	3.9	4.1	4.0
2041	31.1	31.2	62.3	3.9	4.1	4.0
2046	31.8	32.1	64.0	4.0	4.2	4.1
2051	32.3	33.0	65.3	4.0	4.2	4.1
Total						
2021	698.7	660.8	1359.5	100.0	100.0	100.0
2026	729.1	691.7	1420.9	100.0	100.0	100.0
2031	754.7	718.7	1473.3	100.0	100.0	100.0
2036	774.5	740.6	1515.2	100.0	100.0	100.0
2041	789.4	758.2	1547.5	100.0	100.0	100.0
2046	800.2	772.1	1572.3	100.0	100.0	100.0
2051	807.0	782.5	1589.4	100.0	100.0	100.0

Notes: The region-wise total population reported in Table 4.74 may not match the figures shown in other tables presenting age-wise distributions. This discrepancy arises because as the age-specific population figures are not compiled for the smaller states.

Appendix Table 4.75: Projected percentage distribution of population by region and age groups, 2021–2051

Regions	2021	2026	2031	2036	2041	2046	2051
Northern region							
0–14	24.6	22.6	20.7	18.8	17.1	15.8	14.8
15–59	65.8	66.4	66.6	66.4	65.8	64.4	62.1
60+	9.6	11.0	12.7	14.8	17.1	19.8	23.1
80+	0.9	1.0	1.3	1.4	1.8	2.4	3.1
Total Pop	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Central region							
0–14	28.9	28.0	26.4	24.0	21.5	19.6	18.6
15–59	62.9	63.1	63.6	64.4	65.5	65.8	65.0
60+	8.2	8.9	10.0	11.5	13.0	14.6	16.4
80+	0.7	0.8	1.0	1.0	1.2	1.5	1.9
Total Pop	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Eastern region							
0–14	22.5	20.5	19.1	17.6	16.2	14.9	13.9
15–59	66.9	67.1	66.6	65.6	64.8	63.3	61.1
60+	10.6	12.3	14.4	16.8	19.0	21.9	25.0
80+	0.9	1.0	1.3	1.6	2.0	2.7	3.6
Total Pop	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Western region							
0–14	22.2	20.1	18.0	16.3	15.2	14.3	13.4
15–59	66.7	67.3	67.4	66.5	65.0	62.7	59.9
60+	11.1	12.6	14.7	17.1	19.8	23.0	26.6
80+	1.1	1.2	1.5	1.7	2.2	2.8	3.7
Total Pop	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Southern region							
0–14	20.4	18.8	16.8	15.5	14.5	13.7	13.0
15–59	67.0	66.7	66.5	65.0	63.5	60.9	58.2
60+	12.6	14.5	16.7	19.5	22.0	25.4	28.8
80+	1.1	1.4	1.8	2.1	2.6	3.4	4.3
Total Pop	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Appendix Table 4.76: Projected age distribution of the regional population by age groups within the total regional population, 2021–2051

Regions	2021	2026	2031	2036	2041	2046	2051
Northern region							
0–14	46.4	44.6	42.4	39.5	36.7	34.3	32.5
15–59	124.3	131	136	139.3	140.9	140	136
60+	18.2	21.6	25.9	31.1	36.6	43	50.5
80+	1.7	1.9	2.6	2.9	3.8	5.2	6.8
Total Pop	188.9	197.2	204.3	209.8	214.2	217.2	219
Central region							
0–14	136.2	141.2	141.5	134.5	125.1	117.8	114.9
15–59	296.2	318.4	340.1	360.9	380.6	395.3	401.5
60+	38.7	45.1	53.4	64.6	75.6	87.5	101.6
80+	3.2	3.9	5.1	5.6	6.7	8.9	11.6
Total Pop	471.1	504.7	535	560	581.3	600.6	617.9
Eastern region							
0–14	40.9	38.7	37	34.8	32.3	29.8	27.9
15–59	122	126.5	128.8	129.4	129.4	127	122.7
60+	19.4	23.2	27.8	33.2	38	44	50.2
80+	1.6	2	2.6	3.1	4.1	5.5	7.2
Total Pop	182.3	188.5	193.6	197.3	199.7	200.8	200.8
Western region							
0–14	42.1	39	35.6	32.9	30.9	29.1	27.2
15–59	126.4	130.9	133.6	133.8	131.9	127.6	121.4
60+	21	24.5	29.1	34.5	40.2	46.8	54
80+	2	2.4	2.9	3.4	4.4	5.7	7.5
Total Pop	189.5	194.4	198.3	201.2	203	203.5	202.6
Southern region							
0–14	55	51.6	46.8	43.5	40.7	38.3	35.9
15–59	180.7	183.2	184.9	181.9	177.9	169.8	160.7
60+	34	40	46.3	54.5	61.6	70.8	79.6
80+	3.1	3.8	5	5.8	7.2	9.5	11.9
Total Pop	269.8	274.7	278	280	280.2	278.9	276.2

Appendix Table 4.77: Projected regional distribution of population by gender, 2021–2051
[In million]

Regions	2021		2026		2031		2036	
	Male	Female	Male	Female	Male	Female	Male	Female
Northern region								
0–14	24.7	21.7	23.6	21	22.4	20.0	20.8	18.7
15–59	65.2	59.1	68.8	62.2	71.5	64.5	73.4	65.9
60+	8.8	9.4	10.4	11.2	12.5	13.4	14.8	16.3
80+	0.7	1.0	0.8	1.1	1.0	1.5	1.2	1.8
Total Pop	98.7	90.2	102.9	94.3	106.4	97.9	109	100.8
Central region								
0–14	71.2	65.0	74.0	67.3	74.0	67.5	70.3	64.2
15–59	154.3	141.9	165.7	152.7	177.0	163.1	188.1	172.7
60+	19.3	19.4	22.3	22.8	26.4	27.0	31.6	33.0
80+	1.6	1.6	1.8	2.1	2.3	2.8	2.4	3.2
Total Pop	244.8	226.3	262	242.7	277.4	257.6	290	270
Eastern region								
0–14	21.1	19.9	19.9	18.8	19	17.9	17.9	16.9
15–59	62.2	59.8	64.3	62.2	65.5	63.4	65.9	63.5
60+	9.7	9.7	11.6	11.6	13.8	14	16.2	17.0
80+	0.7	0.9	0.9	1.1	1.1	1.5	1.4	1.8
Total Pop	93	89.4	95.9	92.6	98.3	95.3	99.9	97.4
Western region								
0–14	22.2	19.9	20.6	18.4	18.7	16.9	17.3	15.6
15–59	66.1	60.3	68.4	62.6	69.8	63.8	69.9	63.9
60+	10	11.0	11.6	12.9	13.7	15.3	16.1	18.4
80+	0.8	1.1	1.0	1.5	1.1	1.8	1.3	2.1
Total Pop	98.3	91.2	100.6	93.9	102.2	96.1	103.3	97.9
Southern region								
0–14	28.2	26.9	26.3	25.2	23.9	22.9	22.2	21.3
15–59	90.5	90.2	91.8	91.4	92.7	92.2	91.7	90.2
60+	15.8	18.2	18.5	21.5	21.4	24.9	24.8	29.8
80+	1.3	1.8	1.5	2.3	1.9	3.1	2.2	3.6
Total Pop	134.5	135.3	136.7	138.1	138	140	138.7	141.3

Appendix Table 4.77: Projected regional distribution of population by gender, 2021–2051
[In million]

Regions	2041		2046		2051	
	Male	Female	Male	Female	Male	Female
Northern region						
0–14	19.3	17.4	18.0	16.3	17.0	15.5
15–59	74.4	66.5	74.0	66.0	71.9	64.1
60+	17.2	19.4	20.2	22.8	23.8	26.7
80+	1.5	2.3	2.0	3.2	2.6	4.2
Total Pop	110.9	103.3	112.1	105.1	112.7	106.3
Central region						
0–14	65.3	59.8	61.5	56.3	60.0	54.9
15–59	198.9	181.7	206.9	188.4	209.9	191.6
60+	36.3	39.3	41.6	45.9	48.6	53.0
80+	3.0	3.8	3.8	5.1	4.9	6.7
Total Pop	300.5	280.8	310	290.6	318.4	299.5
Eastern region						
0–14	16.6	15.7	15.4	14.5	14.4	13.5
15–59	66	63.4	65.0	62.1	62.9	59.8
60+	18.2	19.8	20.9	23.1	23.7	26.5
80+	1.8	2.3	2.4	3.1	3.0	4.1
Total Pop	100.9	98.8	101.2	99.6	101	99.9
Western region						
0–14	16.2	14.7	15.3	13.8	14.3	12.9
15–59	69	62.9	66.8	60.8	63.5	57.9
60+	18.6	21.6	21.5	25.3	24.9	29.1
80+	1.6	2.8	2.1	3.7	2.6	4.8
Total Pop	103.8	99.2	103.6	99.9	102.7	99.9
Southern region						
0–14	20.8	19.9	19.6	18.7	18.4	17.5
15–59	89.9	88	86.3	83.5	82.0	78.7
60+	27.9	33.7	31.8	39	35.6	44
80+	2.7	4.4	3.6	5.9	4.5	7.4
Total Pop	138.6	141.6	137.7	141.2	136	140.2

Appendix: Table 4.78: Projected regional percentage distribution of population within the total regional population by gender, 2021–2051

Regions	2021		2026		2031		2036		2041		2046		2051	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Northern region														
0–14	25.0	24.1	23.0	22.2	21.0	20.4	19.1	18.5	17.4	16.8	16.0	15.5	15.1	14.6
15–59	66.1	65.5	66.8	65.9	67.3	65.9	67.3	65.3	67.1	64.4	66.0	62.8	63.8	60.3
60+	8.9	10.4	10.2	11.9	11.7	13.7	13.6	16.2	15.5	18.8	18.0	21.7	21.1	25.1
80+	0.8	1.1	0.8	1.2	1.0	1.6	1.1	1.8	1.4	2.2	1.8	3.0	2.3	3.9
Total Pop	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Central region														
0–14	29.1	28.7	28.2	27.7	26.7	26.2	24.2	23.8	21.7	21.3	19.8	19.4	18.8	18.3
15–59	63.0	62.7	63.3	62.9	63.8	63.3	64.9	64.0	66.2	64.7	66.7	64.8	65.9	64.0
60+	7.9	8.6	8.5	9.4	9.5	10.5	10.9	12.2	12.1	14.0	13.5	15.8	15.3	17.7
80+	0.7	0.7	0.7	0.9	0.8	1.1	0.8	1.2	1.0	1.3	1.2	1.7	1.5	2.2
Total Pop	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Eastern region														
0–14	22.7	22.3	20.8	20.3	19.4	18.8	17.9	17.3	16.5	15.9	15.2	14.5	14.2	13.6
15–59	66.9	66.9	67.1	67.1	66.6	66.5	65.9	65.2	65.4	64.1	64.2	62.3	62.3	59.8
60+	10.4	10.8	12.1	12.6	14.0	14.7	16.2	17.5	18.1	20.0	20.6	23.2	23.5	26.6
80+	0.8	1.0	0.9	1.2	1.2	1.5	1.4	1.8	1.8	2.3	2.3	3.1	3.0	4.1
Total Pop	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Western region														
0–14	22.6	21.8	20.4	19.6	18.3	17.6	16.7	16.0	15.6	14.8	14.7	13.8	13.9	13.0
15–59	67.3	66.2	68.0	66.7	68.3	66.4	67.7	65.3	66.5	63.4	64.5	60.9	61.9	57.9
60+	10.1	12.0	11.6	13.7	13.4	16.0	15.6	18.7	17.9	21.8	20.8	25.3	24.2	29.1
80+	0.9	1.3	0.9	1.5	1.1	1.9	1.2	2.2	1.6	2.8	2.0	3.7	2.6	4.8
Total Pop	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Southern region														
0–14	20.9	19.9	19.3	18.3	17.3	16.4	16.0	15.0	15.0	14.0	14.2	13.2	13.5	12.5
15–59	67.3	66.6	67.2	66.1	67.2	65.8	66.1	63.9	64.8	62.2	62.7	59.1	60.3	56.2
60+	11.8	13.5	13.5	15.6	15.5	17.8	17.9	21.1	20.2	23.8	23.1	27.7	26.2	31.3
80+	1.0	1.3	1.1	1.6	1.4	2.2	1.6	2.6	2.0	3.1	2.6	4.2	3.3	5.3
Total Pop	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Notes: As the cohort-component method was not implemented for most of the north-eastern states, their corresponding age distributions are excluded from the table.

Appendix Table 4.79: Comparison of results from the current population projections with selected projections, 2021–2051 [in million]

Major states	1. IIMAD and PFI Projection [2025]				2. Kulkarni [2021] [12]				3. Technical Group [2]				4. Dyson [6]	
	Population		Difference [2–1]		Population		Difference [3–1]		Population		Difference [4–1]		Population	
	2021	2036	2051	2021	2021	2036	2021	2036	2021	2036	2021	2036	2021	2051
Andhra Pradesh	53.2	54.7	53.2	91.4	-0.2	52.7	-0.5	54.2	-0.5	93.9	-0.6	93.9	-0.6	-0.6
Assam	35.4	40.1	42.1	35.2	-0.2	35	-0.4	39.3	-0.8	39.4	-2.7	39.4	-2.7	-2.7
Bihar	122.9	151.2	170.5	125.2	2.3	123	0.1	148.5	-2.7	194.2	-23.9	194.2	-23.9	-23.9
Chhattisgarh	29.1	32.5	33.8	29.2	0.1	29.4	0.3	34.0	1.5	-	-	-	-	-
NCT of Delhi	18.6	20.2	20.5	18.5	-0.1	20.5	1.9	26.5	6.3	NA	NA	NA	NA	NA
Gujarat	67.8	73.8	75.7	67.7	-0.1	69.7	1.9	81.3	7.5	75.4	-0.3	75.4	-0.3	-0.3
Haryana	28.5	31.1	32	28.3	-0.2	29.4	0.9	34.4	3.3	33.3	1.3	33.3	1.3	1.3
Himachal Pradesh	7.3	7.7	7.7	7.3	0.0	7.3	0.0	7.7	0.0	NA	NA	NA	NA	NA
Jammu and Kashmir [undivided]	13.6	15.1	15.5	13.7	0.1	13.4	-0.2	14.7	-0.4	NA	NA	NA	NA	NA
Jharkhand	38.1	44.2	47.6	38.1	0.0	38.4	0.3	45.1	0.9	-	-	-	-	-
Karnataka	66.1	69.3	69.1	66.3	0.2	66.8	0.7	71.9	2.6	68.6	-0.5	68.6	-0.5	-0.5
Kerala	35.5	36.1	35.5	35.4	-0.1	35.4	-0.1	36.9	0.8	39	3.5	39	3.5	3.5
Madhya Pradesh	84.0	98.0	106.3	84.5	0.5	84.5	0.5	97.8	-0.2	137.2	-2.9	137.2	-2.9	-2.9
Maharashtra	121.6	127.4	126.9	121.6	0.0	124.4	2.8	136.7	9.3	133.0	6.1	133.0	6.1	6.1
Odisha	46.1	49.7	50.4	45.8	-0.3	44.0	-2.1	45.0	-4.7	47.4	-3	47.4	-3	-3
Punjab	29.6	30.2	29.4	29.7	0.1	32.6	3.0	30.3	0.1	37.2	7.8	37.2	7.8	7.8
Rajasthan	80.0	93.5	101.4	80.6	0.6	79.2	-0.8	90.5	-3.0	96.6	-4.8	96.6	-4.8	-4.8
Tamil Nadu	76.7	78.7	77.0	76.5	-0.2	76.4	-0.3	78	-0.7	71.3	-5.7	71.3	-5.7	-5.7
Telangana	38.4	41	41.3	-	-	37.7	-0.7	39.4	-1.6	-	-	-	-	-
Uttar Pradesh	234.9	278.3	307.2	237.1	2.2	230.9	-4	258.9	-19.4	319.3	-0.3	319.3	-0.3	-0.3
Uttarakhand	11.2	12.2	12.4	11.1	-0.1	11.4	0.2	13	0.8	-	-	-	-	-
West Bengal	98.2	103.5	102.9	98.4	0.2	98.1	-0.1	102.9	-0.6	113.7	10.8	113.7	10.8	10.8
India	1355.8	1507	1590.1	1368.1	12.3	1361.3	5.5	1518.3	11.3	1578.6	NA	1578.6	NA	NA

Appendix Table 4.79: Comparison of results from the current population projections with selected projections, 2021–2051 [in million]										
Major states	1. IIMAD and PFI Projection [2025]				2. Kulkarni [2021] [12]				3. Technical Group [2]	
	Population		Difference [2–1]		Population		Difference [3–1]		Population	
	2021	2036	2051	2021	2021	2036	2021	2036	2021	2051
Smaller states [Population in '000]										
Arunachal Pradesh	1653	2047	2377		1533	1719	-120	-328		
Goa	1555	1647	1700		1663	4	16			
Manipur	3412	4284	5091		3549	-247	-735			
Meghalaya	3734	5059	6487		3687	-446	-1372			
Mizoram	1257	1440	1548		1363	-41	-77			
Nagaland	2333	2460	2499		2458	-141	-2			
Sikkim	689	757	791		758	-12	1			
Tripura	3938	4205	4335		4565	133	360			
Union Territories [Population in '000]										
Andaman Nicobar Islands	406	417	421		400	414	-6	-3		
Chandigarh	1189	1292	1334		1208	1360	19	68		
Dadra and Nagar and Daman and Diu	750	1175	1699		1078	3670	328	2495		
Lakshadweep	69	72	74194		68	72	-1	0		
Puducherry	1496	1934	2399		1572	2184	76	250		

Notes: Population projections are based on medium-variant assumptions. Figures of the bifurcated states since 2000 are aggregated with parent states and excluded from newly formed states. As an example, the projected population of undivided Madhya Pradesh in 2051, obtained by adding Madhya Pradesh [106.3 million] and the newly created Chhattisgarh [33.8 million], amounts to 140.1 million—2.9 million higher than Dyson's estimate of 137.2 million. Kulkarni's projections [12] follow the C-variant [TFR declines to 1.7 and then remains constant], while Dyson's projections [6] are based on the standard variant. Negative values in the difference column indicate that IIMD and PFI [2025] project higher population figures than the other sources. Hyphen denotes states excluded; NA - indicates population projections are not available.

Sources References: 2, 6 and 12

SECTION
7

APPENDIX: V

**OUTPUT TABLES FOR URBAN-RURAL
POPULATION PROJECTIONS**



Appendix Table 5.1: State-level population projections and percentage distribution by urban-rural population, 2011-2051

States	In million			In percentage	
	Total	Urban	Rural	Urban	Rural
Andhra Pradesh					
2011	49.3	14.6	34.7	29.6	70.4
2016	51.7	16.8	34.9	32.5	67.5
2021	53.2	18.9	34.3	35.6	64.4
2026	54.1	21.0	33.1	38.9	61.1
2031	54.6	23.0	31.6	42.2	57.8
2036	54.7	24.9	29.8	45.6	54.4
2041	54.4	26.7	27.7	49.1	50.9
2046	53.9	28.3	25.6	52.5	47.5
2051	53.2	29.8	23.4	56.0	44.0
Assam					
2011	31.2	4.4	26.8	14.1	85.9
2016	33.3	5.1	28.2	15.4	84.6
2021	35.4	5.9	29.5	16.7	83.3
2026	37.2	6.8	30.4	18.2	81.8
2031	38.8	7.7	31.1	19.8	80.2
2036	40.1	8.6	31.5	21.4	78.6
2041	41.1	9.5	31.6	23.2	76.8
2046	41.8	10.5	31.4	25.0	75.0
2051	42.1	11.4	30.7	27.0	73.0
Bihar					
2011	104.1	11.8	92.3	11.3	88.7
2016	113.2	13.9	99.3	12.3	87.7
2021	122.9	16.5	106.4	13.4	86.6
2026	132.9	19.4	113.5	14.6	85.4
2031	142.8	22.7	120.1	15.9	84.1
2036	151.2	26.2	125.0	17.3	82.7
2041	158.2	29.6	128.6	18.7	81.3
2046	164.5	33.2	131.3	20.2	79.8
2051	170.5	37.3	133.2	21.9	78.1
Chhattisgarh					
2011	25.5	5.9	19.6	23.2	76.8
2016	27.5	7.0	20.5	25.4	74.6
2021	29.2	8.1	21.1	27.8	72.2
2026	30.5	9.2	21.3	30.2	69.8
2031	31.6	10.4	21.2	32.8	67.2
2036	32.5	11.5	21.0	35.4	64.6
2041	33.1	12.6	20.5	38.2	61.8
2046	33.5	13.7	19.8	41.0	59.0
2051	33.8	14.9	18.9	44.0	56.0
NCT of Delhi					
2011	16.8	16.4	0.4	97.5	2.5
2016	17.9	17.6	0.3	98.2	1.8
2021	18.7	18.4	0.3	98.6	1.4
2026	19.3	19.1	0.2	99.0	1.0
2031	19.8	19.7	0.1	99.3	0.7
2036	20.2	20.1	0.1	99.5	0.5

Appendix Table 5.1: State-level population projections and percentage distribution by urban-rural population, 2011-2051

States	In million			In percentage	
	Total	Urban	Rural	Urban	Rural
2041	20.5	20.4	0.1	99.6	0.4
2046	20.5	20.4	0.1	99.7	0.3
2051	20.5	20.5	0.0	99.8	0.2
Gujarat					
2011	60.4	25.8	34.7	42.6	57.4
2016	64.4	29.3	35.1	45.5	54.5
2021	67.8	32.9	34.9	48.5	51.5
2026	70.3	36.2	34.1	51.5	48.5
2031	72.3	39.4	32.9	54.5	45.5
2036	73.8	42.4	31.4	57.4	42.6
2041	74.9	45.2	29.7	60.3	39.7
2046	75.5	47.7	27.8	63.2	36.8
2051	75.7	49.9	25.8	65.9	34.1
Haryana					
2011	25.4	8.8	16.5	34.9	65.1
2016	27.1	10.3	16.8	38.0	62.0
2021	28.5	11.8	16.7	41.3	58.7
2026	29.6	13.2	16.4	44.7	55.3
2031	30.4	14.6	15.8	48.1	51.9
2036	31.1	16.0	15.1	51.5	48.5
2041	31.6	17.3	14.3	54.9	45.1
2046	31.9	18.6	13.3	58.2	41.8
2051	32.0	19.7	12.3	61.5	38.5
Himachal Pradesh					
2011	6.9	0.7	6.2	10.0	90.0
2016	7.1	0.8	6.3	10.8	89.2
2021	7.3	0.9	6.4	11.7	88.3
2026	7.5	0.9	6.6	12.5	87.5
2031	7.6	1.0	6.6	13.5	86.5
2036	7.7	1.1	6.6	14.5	85.5
2041	7.8	1.2	6.6	15.6	84.4
2046	7.8	1.3	6.5	16.7	83.3
2051	7.7	1.4	6.3	17.9	82.1
Jammu and Kashmir [undivided]					
2011	12.5	3.4	9.1	27.4	72.6
2016	13.1	3.9	9.2	29.5	70.5
2021	13.7	4.3	9.4	31.7	68.3
2026	14.2	4.8	9.4	34.0	66.0
2031	14.7	5.4	9.3	36.4	63.6
2036	15.1	5.9	9.2	38.8	61.2
2041	15.4	6.4	9.0	41.3	58.7
2046	15.5	6.8	8.7	43.9	56.1
2051	15.4	7.1	8.3	46.4	53.6
Jharkhand					
2011	33.0	7.9	25.1	24.0	76.0
2016	35.6	9.2	26.4	25.9	74.1
2021	38.1	10.6	27.5	27.8	72.2
2026	40.4	12.0	28.4	29.8	70.2

Appendix Table 5.1: State-level population projections and percentage distribution by urban-rural population, 2011-2051

States	In million			In percentage	
	Total	Urban	Rural	Urban	Rural
2031	42.5	13.6	28.9	31.9	68.1
2036	44.2	15.0	29.2	34.0	66.0
2041	45.6	16.5	29.1	36.2	63.8
2046	46.7	18.0	28.7	38.5	61.5
2051	47.6	19.5	28.1	40.9	59.1
Karnataka					
2011	61.1	23.6	37.5	38.7	61.3
2016	64.0	26.6	37.4	41.5	58.5
2021	66.0	29.3	36.7	44.4	55.6
2026	67.5	31.9	35.6	47.3	52.7
2031	68.5	34.4	34.1	50.2	49.8
2036	69.3	36.8	32.5	53.1	46.9
2041	69.6	39.0	30.6	56.0	44.0
2046	69.6	41.0	28.6	58.9	41.1
2051	69.2	42.7	26.5	61.7	38.3
Kerala					
2011	33.4	15.9	17.5	47.7	52.3
2016	34.6	19.1	15.5	55.2	44.8
2021	35.5	22.2	13.3	62.5	37.5
2026	35.8	24.8	11.0	69.3	30.7
2031	36.1	27.2	8.9	75.3	24.7
2036	36.1	29.1	7.0	80.5	19.5
2041	36.2	30.7	5.5	84.8	15.2
2046	35.9	31.7	4.2	88.3	11.7
2051	35.5	32.3	3.2	91.1	8.9
Madhya Pradesh					
2011	72.6	20.1	52.5	27.6	72.4
2016	78.3	23.0	55.3	29.4	70.6
2021	84.0	26.2	57.8	31.2	68.8
2026	89.4	29.6	59.8	33.1	66.9
2031	94.1	32.9	61.2	35.0	65.0
2036	98.0	36.3	61.7	37.0	63.0
2041	101.3	39.5	61.8	39.0	61.0
2046	104.1	42.7	61.4	41.0	59.0
2051	106.3	45.8	60.5	43.1	56.9
Maharashtra					
2011	112.3	50.8	61.5	45.3	54.7
2016	117.8	56.0	61.8	47.5	52.5
2021	121.6	60.6	61.0	49.8	50.2
2026	124.1	64.7	59.4	52.1	47.9
2031	126	68.5	57.5	54.4	45.6
2036	127.4	72.2	55.2	56.7	43.3
2041	128.1	75.6	52.5	59.0	41.0
2046	127.9	78.3	49.6	61.2	38.8
2051	126.9	80.5	46.4	63.4	36.6

Appendix Table 5.1: State-level population projections and percentage distribution by urban-rural population, 2011-2051

States	In million			In percentage	
	Total	Urban	Rural	Urban	Rural
Odisha					
2011	42.0	7.0	35.0	16.7	83.3
2016	44.2	8.0	36.2	18.2	81.8
2021	46.1	9.2	36.9	19.9	80.1
2026	47.6	10.3	37.3	21.6	78.4
2031	48.8	11.5	37.3	23.5	76.5
2036	49.7	12.7	37.0	25.5	74.5
2041	50.2	13.8	36.4	27.5	72.5
2046	50.4	15.0	35.4	29.7	70.3
2051	50.4	16.1	34.3	32.0	68.0
Punjab					
2011	27.7	10.4	17.3	37.5	62.5
2016	28.9	11.6	17.3	40.0	60.0
2021	29.6	12.6	17.0	42.6	57.4
2026	29.9	13.5	16.4	45.2	54.8
2031	30.1	14.4	15.7	47.8	52.2
2036	30.2	15.2	15.0	50.4	49.6
2041	30.1	16.0	14.1	53.1	46.9
2046	29.9	16.7	13.2	55.7	44.3
2051	29.4	17.1	12.3	58.3	41.7
Rajasthan					
2011	68.6	17.0	51.6	24.9	75.1
2016	74.2	19.7	54.5	26.6	73.4
2021	80.0	22.8	57.2	28.5	71.5
2026	85.1	25.9	59.2	30.4	69.6
2031	89.7	29.1	60.6	32.4	67.6
2036	93.5	32.2	61.3	34.4	65.6
2041	96.5	35.2	61.3	36.5	63.5
2046	99.3	38.4	60.9	38.7	61.3
2051	101.4	41.5	59.9	40.9	59.1
Tamil Nadu					
2011	72.1	34.9	37.2	48.4	51.6
2016	74.8	38.2	36.6	51.1	48.9
2021	76.7	41.2	35.5	53.7	46.3
2026	77.8	43.9	33.9	56.4	43.6
2031	78.4	46.3	32.1	59.0	41.0
2036	78.7	48.4	30.3	61.5	38.5
2041	78.7	50.4	28.3	64.0	36.0
2046	78.1	51.9	26.2	66.4	33.6
2051	77.0	53.0	24.0	68.8	31.2
Telangana					
2011	35.2	13.6	21.6	38.7	61.3
2016	37.0	15.6	21.4	42.1	57.9
2021	38.4	17.5	20.9	45.6	54.4
2026	39.6	19.4	20.2	49.1	50.9

Appendix Table 5.1: State-level population projections and percentage distribution by urban-rural population, 2011-2051

States	In million			In percentage	
	Total	Urban	Rural	Urban	Rural
2031	40.5	21.3	19.2	52.7	47.3
2036	41.0	23.0	18.0	56.2	43.8
2041	41.3	24.6	16.7	59.6	40.4
2046	41.5	26.1	15.4	63.0	37.0
2051	41.3	27.4	13.9	66.3	33.7
Uttar Pradesh					
2011	199.8	44.5	155.3	22.3	77.7
2016	216.6	52.0	164.6	24.0	76.0
2021	234.9	55.7	179.2	25.7	76.3
2026	251.9	59.8	192.1	27.6	76.3
2031	266.6	63.9	202.7	29.5	76.0
2036	278.4	68.2	210.2	31.5	75.5
2041	288.7	72.8	215.9	33.6	74.8
2046	298.4	77.5	220.9	35.8	74.0
2051	307.3	82.3	225.0	38.0	73.2
Uttarakhand					
2011	10.0	3.0	7.0	30.5	69.5
2016	10.6	3.5	7.1	33.0	67.0
2021	11.2	4.0	7.2	35.8	64.2
2026	11.6	4.5	7.1	38.8	61.2
2031	11.9	5.0	6.9	41.8	58.2
2036	12.2	5.5	6.7	44.9	55.1
2041	12.3	5.9	6.4	48.1	51.9
2046	12.4	6.3	6.1	51.2	48.8
2051	12.4	6.7	5.7	54.4	45.6
West Bengal					
2011	91.3	29.1	62.2	31.9	68.1
2016	95.1	32.7	62.4	34.4	65.6
2021	98.2	36.4	61.8	37.1	62.9
2026	100.5	40.0	60.5	39.8	60.2
2031	102.3	43.6	58.7	42.6	57.4
2036	103.5	47.1	56.4	45.5	54.5
2041	103.9	50.3	53.6	48.4	51.6
2046	103.7	53.2	50.5	51.3	48.7
2051	102.9	55.7	47.2	54.1	45.9
India					
2011	1210.9	377.1	833.8	31.1	68.9
2016	1286.6	431.5	855.1	33.5	66.5
2021	1355.8	488.4	867.4	36.0	64.0
2026	1415.1	546.2	868.9	38.6	61.4
2031	1465.3	603.7	861.6	41.2	58.8
2036	1506.8	661.5	845.3	43.9	56.1
2041	1541.5	718.3	823.2	46.6	53.4
2046	1569.6	773.8	795.8	49.3	50.7
2051	1590.1	828.4	761.7	52.1	47.9

Notes: The 2011 population figures are obtained from the Census, whereas the subsequent population estimates are derived from the medium-variant projections.

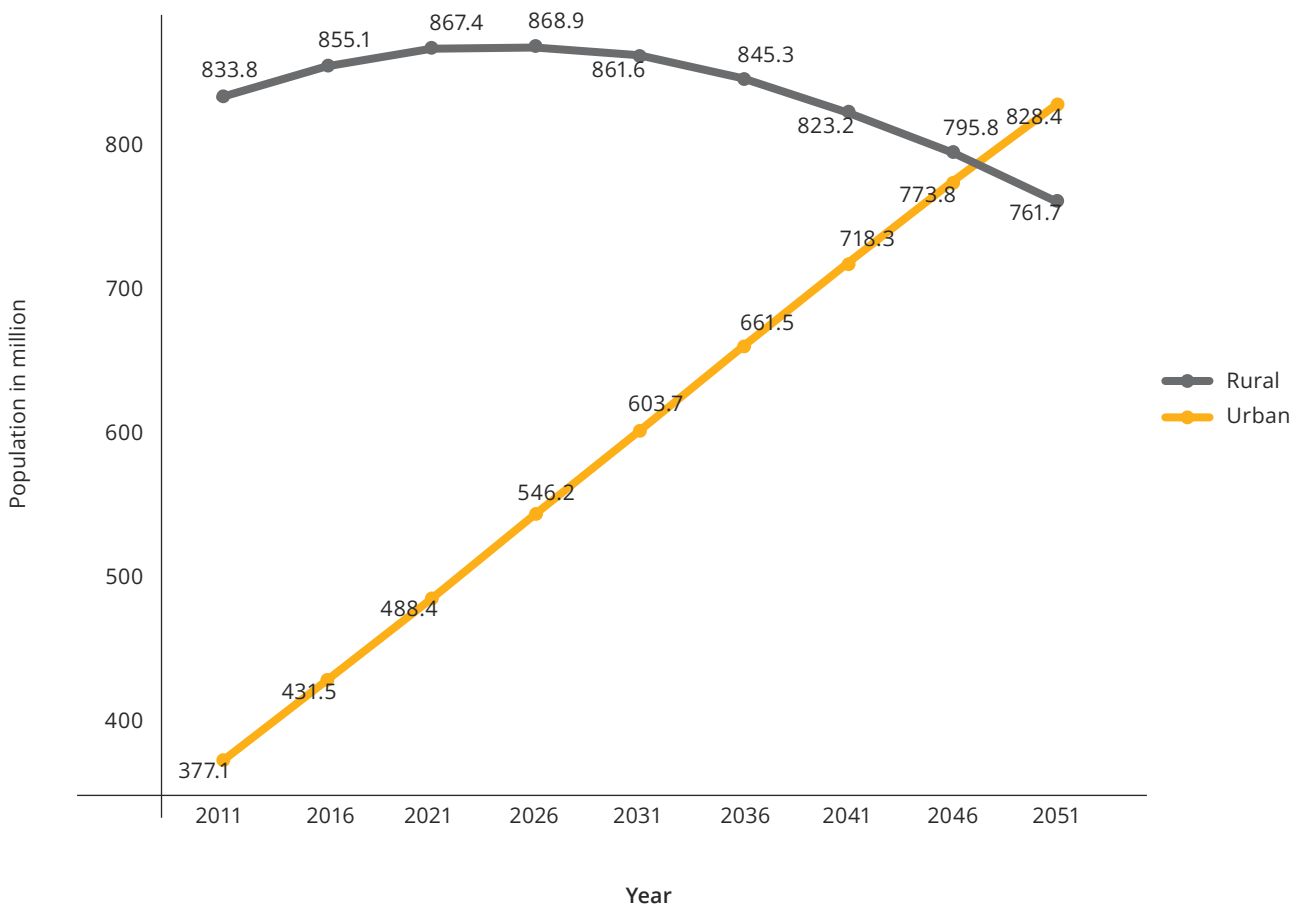
SECTION
8

APPENDIX: VI

**OUTPUT FIGURES FOR URBAN-RURAL
POPULATION PROJECTIONS**



Appendix Figure 6.1: Projected urban-rural population, 2011-2051



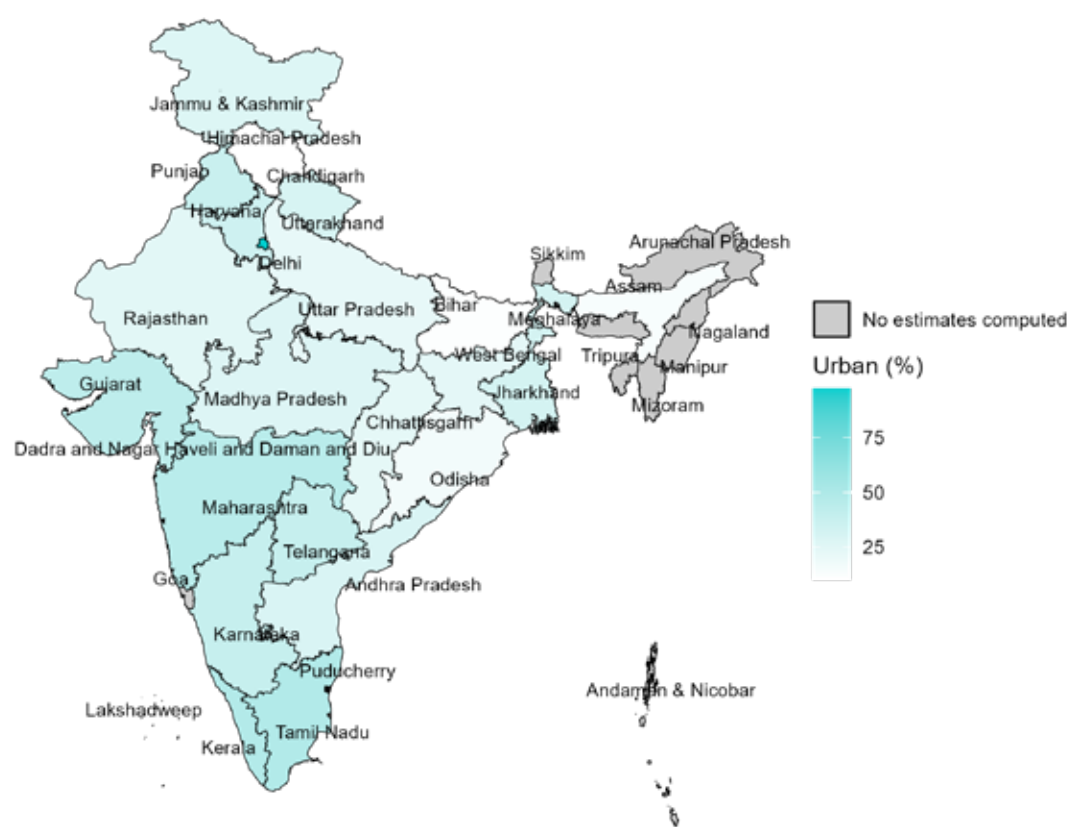
SECTION
9

APPENDIX: VII

**MAPS OF PROJECTED URBAN-RURAL
POPULATION 2011-2051**

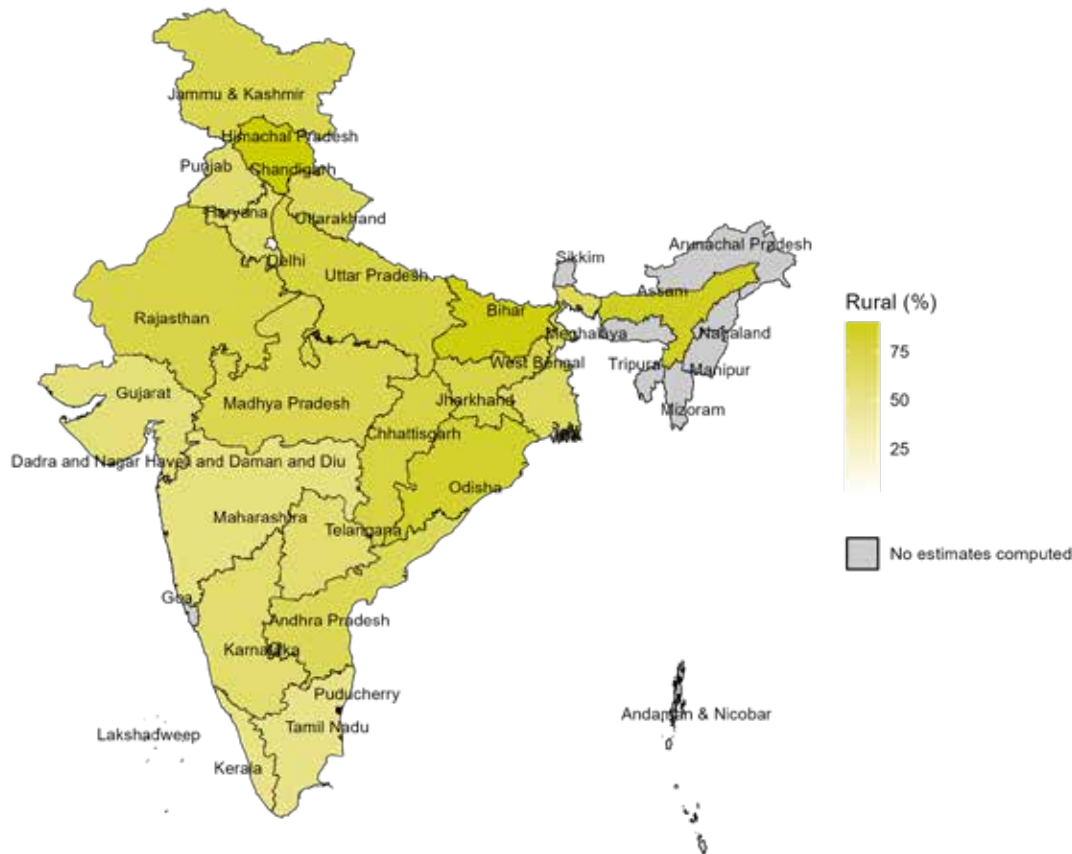


Appendix Map 7.1: Share of urban population, 2011



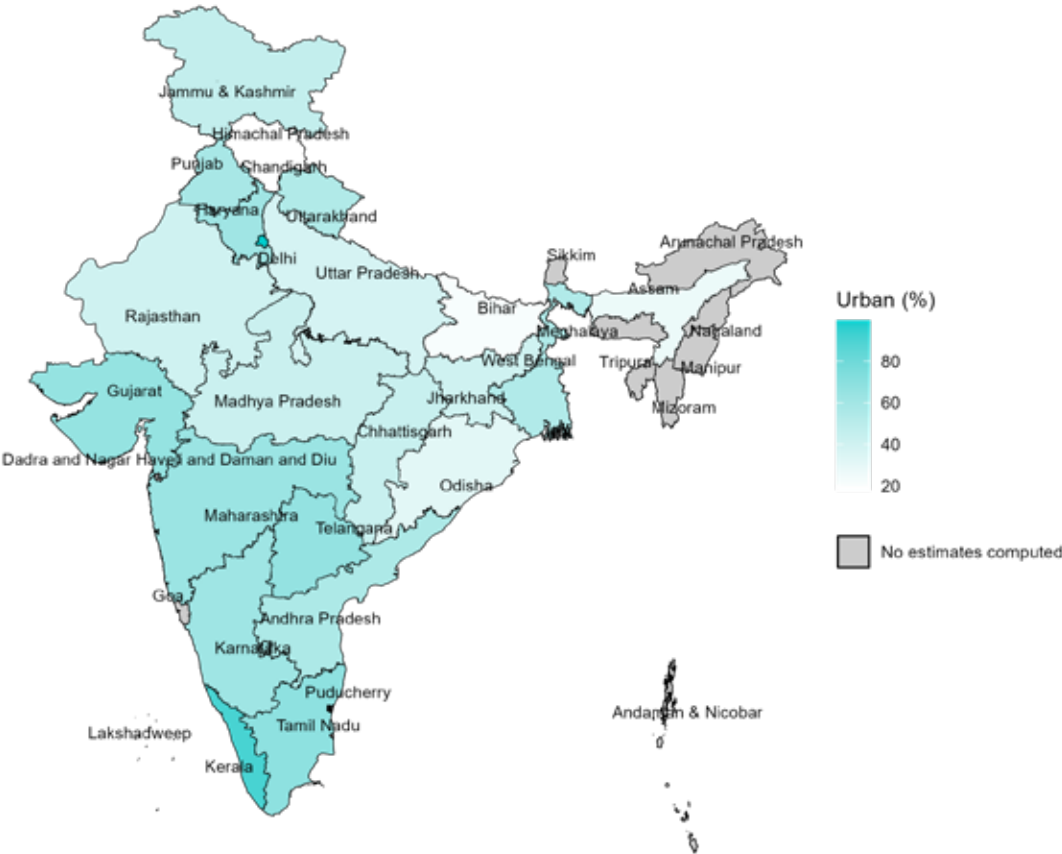
Source: Urban 2011 Data

Appendix Map 7.2: Share of rural population, 2011

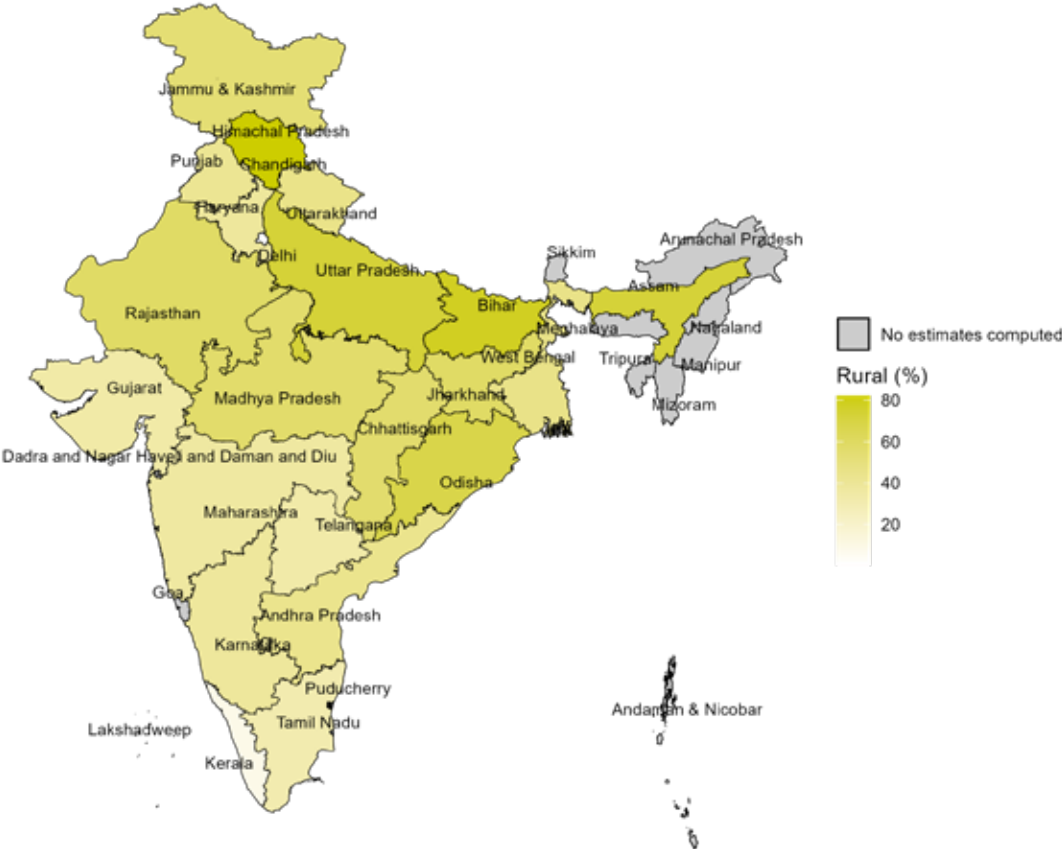


Source: Rural 2011 Data

Appendix Map 7.3: Projected percentage share of urban population, 2051



Appendix Map 7.4: Projected percentage share of rural population, 2051



Source: rural 2051 Data

SECTION
10

APPENDIX: VIII

**PROJECTED POPULATION FIGURES
FOR SMALLER STATES**



Appendix Table 8.1: Projected population of smaller states and Union Territories, 2016–2051

Andaman and Nicobar Islands [UT]				Arunachal Pradesh [SS]			Chandigarh [UT]		
Year	M	F	T	M	F	T	M	F	T
2016	213467	184843	398310	767987	746328	1514315	625150	507830	1132980
2021	217793	188600	406393	823836	829460	1653296	654516	535321	1189837
2026	220773	191059	411832	875070	914547	1789617	677113	556927	1234040
2031	222805	192648	415453	921195	1000252	1921447	694139	573515	1267654
2036	224179	193668	417847	962021	1085195	2047216	706766	586023	1292789
2041	225103	194319	419422	997618	1168047	2165665	716019	595328	1311347
2046	225724	194733	420457	1028251	1247607	2275858	722742	602180	1324922
2051	226139	194996	421135	1054315	1322868	2377183	727595	607187	1334782
Dadra and Nagar Haveli and Daman and Diu [UT]				Goa [SS]			Lakshadweep [UT]		
Year	M	F	T	M	F	T	M	F	T
2016	377310	259923	637233	766984	745039	1512023	34716	32926	67642
2021	451453	299044	750497	787951	767437	1555388	35585	33812	69397
2026	535360	342893	878253	805414	786565	1591979	36260	34518	70778
2031	628531	391692	1020223	819825	802751	1622576	36780	35076	71856
2036	729837	445567	1175404	831627	816340	1647967	37177	35513	72690
2041	837500	504529	1342029	841233	827673	1668906	37477	35853	73330
2046	949178	568439	1517617	849010	837075	1686085	37704	36116	73820
2051	1062140	636997	1699137	855282	844838	1700120	37875	36319	74194
Manipur [SS]				Meghalaya [SS]			Mizoram [SS]		
Year	M	F	T	M	F	T	M	F	T
2016	1559895	1562885	3122780	1668017	1669462	3337479	589647	587561	1177208
2021	1691345	1721192	3412537	1854715	1880231	3734946	622935	634645	1257580
2026	1819982	1885032	3705014	2049604	2107255	4156859	650806	677485	1328291
2031	1943993	2052697	3996690	2250498	2349317	4599815	673671	715603	1389274
2036	2061829	2222308	4284137	2454912	2604634	5059546	692116	748851	1440967
2041	2172271	2391898	4564169	2660181	2870877	5531058	706796	777351	1484147
2046	2274456	2559499	4833955	2863592	3145228	6008820	718354	801419	1519773
2051	2367882	2723236	5091118	3062533	3424492	6487025	727377	821490	1548867

Appendix Table 8.1: Projected population of smaller states and Union Territories, 2016–2051

Nagaland [SS]				Puducherry [UT]			Sikkim [SS]		
Year	M	F	T	M	F	T	M	F	T
2016	1166494	1083001	2249495	658008	702564	1360572	347290	309691	656981
2021	1207291	1126154	2333445	712380	784233	1496613	364063	325730	689793
2026	1235762	1156622	2392384	765628	872579	1638207	377998	339093	717091
2031	1255264	1177686	2432950	817027	967509	1784536	389375	350018	739393
2036	1268450	1192038	2460488	865956	1068782	1934738	398532	358815	757347
2041	1277289	1201720	2479009	911921	1175998	2087919	405816	365810	771626
2046	1283180	1208208	2491388	954566	1288585	2243151	411559	371319	782878
2051	1287090	1212535	2499625	993676	1405809	2399485	416053	375622	791675
Tripura [SS]									
Year	M	F	T						
2016	1938825	1864256	3803081						
2021	2004116	1933995	3938111						
2026	2056608	1991119	4047727						
2031	2098262	2037270	4135532						
2036	2130974	2074140	4205114						
2041	2156455	2103334	4259789						
2046	2176177	2126287	4302464						
2051	2191368	2144232	4335600						

Notes: UT- Union Territories, SS- Smaller States. Population projections for the Union Territories of Jammu and Kashmir and Ladakh are presented in Section 5.

Appendix Table 8.2: Projected population, percentage change in population and annual growth rate of population in smaller states and Union Territories, 2011-2051

Smaller states/UTs	2011	2051	Percentage change in population [2011-2051]	Average annual exponential growth
Andaman and Nicobar Islands [UT]	380581	421135	10.7	0.3
Arunachal Pradesh [SS]	1383727	2377183	261.0	1.4
Chandigarh [UT]	1055450	1334782	73.4	0.6
Dadra and Nagar Haveli and Daman and Diu [UT]	586956	1699137	292.2	2.7
Goa [SS]	1458545	1700120	63.5	0.4
Lakshadweep [UT]	64473	74194	2.6	0.4
Manipur [SS]	2855794	5091118	587.3	1.4
Meghalaya [SS]	2966889	6487025	924.9	2.0
Mizoram [SS]	1097206	1548867	118.7	0.9
Nagaland [SS]	1978502	2499625	136.9	0.6
Puducherry [UT]	1247953	2399485	302.6	1.6
Sikkim [SS]	610577	791675	47.6	0.6
Tripura [SS]	3673917	4335600	173.9	0.4

Notes: Same as Appendix Table 8.1

REFERENCES

1. Technical Group on Population Projections. *Population Projections for India and the States: 2001–2026.*; Registrar General of India, 2006.
2. Technical Group on Population Projections. *Population Projections for India and the States: 2011–2036.*; Registrar General of India, 2019.
3. Natarajan KS, Jayachandran V. Population Growth in 21st Century India. In: Srinivasan K, Vlassoff M, eds. *Population–Development Nexus in India*. Tata McGraw-Hill; 2001:35-58.
4. Srinivasan K, Shastri VD. *A Set of Population Projections of India and the Larger States Based on 2001 Census Results*. Accessed September 14, 2025. https://www.researchgate.net/publication/237294278_A_SET_OF_POPULATION_PROJECTIONS_OF_INDIA_AND_THE_LARGER_STATES_BASED_ON_2001_CENSUS_RESULTS.
5. Visaria L, Visaria P. Long-term population projections for major states 1991–2101. *Econ Polit Wkly*. 2003; [38[45]]:4763-4775.
6. Dyson T, Cassen R, Visaria L. *Twenty-First Century India: Population, Economy, Human Development, And, The Environment*. Oxford University Press; 2004. Accessed September 14, 2025. <https://doi.org/10.1093/oso/9780199243358.001.0001>.
7. Bhat PNM. Indian demographic scenario. In: Planning Commission, ed. *Report of the Committee on India Vision 2020*. Academic Foundation; 2004.
8. Population Foundation of India, Population Reference Bureau. *The Future Population of India: A Long-Range Demographic View.*; 2007.
9. United Nations. World Population to 2300.; 2004. Accessed September 14, 2025. https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/files/documents/2020/Jan/un_2002_world_population_to_2300.pdf.
10. United Nations. *World Population Prospects: The 2004 Revision.*; 2005. Accessed September 14, 2025. https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/files/documents/2020/Jan/un_2004_world_population_prospects-2004_revision_volume-iii.pdf
11. <https://population.un.org/wpp/downloads?folder=Standard%20Projections&group=Most%20used>.
12. <https://population.un.org/wpp/downloads?folder=Probabilistic%20Projections&group=Most%20used>.
13. Kulkarni PM. Demographic and regional decomposition of prospective population growth for India, 2021 to 2101. *Demography India*. 2021; [50[2]]:1-5.
14. Rajan SI, Retnakumar J. Demography, democracy, and delimitation. *Econ Polit Wkly*. 2025; [60[17]]:15-18.

15. United Nations. *India Overtakes China as the World's Most Populous Country* [Population Policy Brief No. 153].; Accessed September 14, 2025. <https://desapublications.un.org/policy-briefs/un-desa-policy-brief-no-153-india-overtakes-china-worlds-mostpopulous-country>.
16. World Population Prospects 2024. Accessed September 14, 2025. <https://population.un.org/wpp/downloads?folder=Standard%20Projections&group=Most%20used>.
17. International Institute for Population Sciences and United Nations Population Fund. *India Ageing Report 2023, Caring for Our Elders: Institutional Responses*. United Nations Population Fund, New Delhi; 2023.
18. Press Information Bureau. 2023. Migration of Labour in the Country. <https://www.pib.gov.in/PressReleaselframePage.aspx?PRID=1941077>.
19. Rajan SI. [2024]. Migration and Development: New Evidence from the Kerala Migration Survey 2023. *Migration and Development*, 13[2], 139-175.
20. Rajan SI, Peter B, Singh K, Adhikari S. Unravelling labour migration from Jharkhand: Key findings from the Jharkhand Migration Survey 2023. *Econ Polit Wkly*. 2025; [60[20]].
21. Rajan SI, Datta A. Odisha Migration Survey 2023. *Econ Polit Wkly*. 2025; [60[36]].
22. United Nations Population Fund. *The Real Fertility Crisis: The Pursuit of Reproductive Agency in a Changing World* [State of World Population 2025].; 2025. Accessed September. 14, 2025. https://www.unfpa.org/sites/default/files/pub-pdf/EN_State%20of%20World%20Population%20report%202025.pdf.
23. Yadav AK, Ram F. Examination of the Quality of Sample Registration System Data on Births and Deaths Data in India and Major States. In: Population Association of America. Accessed September 14, 2025. <https://ipc2021.popconf.org/uploads/211302>.
24. World Urbanisation Prospects 2018. Accessed September 14, 2025. <https://population.un.org/wup/downloads>.
25. Annual Status of Education Report. *Annual Status of Education Report [Rural] 2024 [Provisional]*.; 2025. Accessed September 14, 2025. https://asercentre.org/wpcontent/uploads/2022/12/ASER_2024_Final-Report_13_2_24.pdf.
26. Retnakumar J, Arokiasamy P. Explaining School Enrolment Trends in Kerala, India. *Journal of South Asian Development*. 2006; [1[2]]. <https://doi.org/10.1177/097317410600100204>.
27. Hans-Peter Kohler and Jere R. Behrman. *Benefits and Costs of the Population and Demography Targets for the Post-2015 Development Agenda*, Population and demography assessment paper, Working Paper, Copenhagen consensus center, 2014, https://copenhagenconsensus.com/sites/default/files/population_assessment_-_kohler_behrman.

28. Government of India. '*National Population Policy-2000.*'; 2000. Accessed September 14, 2025. <https://mohfw.gov.in/sites/default/files/26953755641410949469%20%281%29.pdf>.
29. International Institute for Population Sciences, ICF. *National Family Health Survey [NFHS-5], 2019-21: India Report*. Accessed September 14, 2025. <https://dhsprogram.com/pubs/pdf/FR375/FR375.pdf>.
30. Stover J, Kirmeyer S. DemProj [Version 4]: A computer program for making population projections. Published online 2005.
31. United Nations. [1989]. *World population prospects: 1988 revision*. United Nations Publications. New York.
32. Coale, A. J., and Demeny, P., with Vaughan, B. [1983]. *Regional model life tables and stable populations* [2nd ed.]. Academic Press. New York.
33. Buettner T. Approaches and experiences in projecting mortality patterns for the oldest-old. *North American Actuarial Journal*. 2002; [6[3]:14-29. <https://doi.org/10.1080/10920277.2002.10596053>.
34. United Nations. *Notes for the Extended Model Life Tables [Version 1.3].*; 2011. Accessed September 14, 2025. <https://www.un.org/development/desa/pd/data/model-lifetables>.
35. United Nations. *World Population Prospects: The 2000 Revision, Volume I: Comprehensive Tables.*; 2001.
36. Vaupel JW. The remarkable improvements in survival at older ages. *The Royal Society of London Series B: Biological Sciences*. 1997; [352 [1363]]:1799-1804. <https://doi.org/10.1098/rstb.1997.0162>.
37. Vaupel JW. The average French baby may live 95 or 100 years. In: Robine JM, Vaupel JW, Jeune B, Allard M, eds. *Longevity: To the Limits and Beyond*. 1997:11-25. <https://doi.org/10.1007/978-3-642-60813-12>.
38. World Health Organization, 2025. Child deaths in infants, infant mortality rate [between birth and 11 months per 1000 live births]. [https://www.who.int/data/gho/data/indicators/indicator-details/GHO/infant-mortality-rate-\(probability-of-dyingbetween-birth-and-age-1-per-1000-live-births\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/infant-mortality-rate-(probability-of-dyingbetween-birth-and-age-1-per-1000-live-births)).
39. United State Census Bureau. Mortality indicators by sex. Published online 2018.
40. Ministry of Finance Department of Economic Affairs, Economics Division, *Indian Economic Survey 2016-17.*; 2017. Accessed September 14, 2025. <https://www.indiabudget.gov.in/budget2017-2018/es2016-17/echapter.pdf>.
41. Debroy B, Misra DP. *400 Million Dreams!* 2025. Accessed September 14, 2025. <https://eacpm.gov.in/wp-content/uploads/2024/12/FINAL-Internal-Migration-Project.docx-Publication-Version.pdf>.

42. Deshingkar P, Akter S. *Migration and Human Development in India [Human Development Research Paper 2009/13].*; 2009. Accessed September 14, 2025. <https://hdr.undp.org/system/files/documents/hdrp200913.pdf>.
43. Mazumdar I, Neetha N, Agnihotri I. Migration and gender in India. *Econ Polit Wkly*. 2013; [48[10]]:54-64.
44. Population of Overseas Indians. <https://www.mea.gov.in/population-of-overseasindians.htm>. Accessed September 14, 2025. <https://www.mea.gov.in/populationof-overseas-indians.htm>.
45. Internal Displacement Monitoring Centre. *Global Report on Internal Displacement 2025.*; 2025. <https://doi.org/10.55363/IDMC.XTGW2833>.
46. Martin SF. *Climate Change, Migration and Adaptation.*; 2010. Accessed on September 14, https://www.preventionweb.net/files/14679_MartinV3.pdf?startDownload=true
47. Singh H, Faleiro J, Anderson T, Vashist S. *Costs of Climate Inaction: Displacement and Distress Migration.*; 2020.
48. Chandrasekhar S, Sharma A. *Patterns in Internal Migration and labour Market Transitions in India.*; 2022.
49. Jia N, Molloy R, Smith C, Wozniak A. *The Economics of Internal Migration: Advances and Policy Questions.*; 2022. <https://doi.org/10.17016/FEDS.2022.003>.
50. Ratha D, Mohapatra S, Scheja J. *Impact of Migration on Economic and Social Development.*; 2011. Accessed September 14, 2025.
51. Chao F, Gerland P, Cook AR, Alkema L. Systematic assessment of the sex ratio at birth for all countries and estimation of national imbalances and regional reference levels. In: Bijak J, ed. *Proceedings of the National Academy of Sciences of the United States of America*. 2019:9303-9311. <https://doi.org/10.1073/pnas.1812593116>.
52. Guilmoto CZ. Skewed Sex Ratios at Birth and Future Marriage Squeeze in China and India, 2005–2100. *Demography*. 2012; [49[1]]:77-100. <https://doi.org/10.1007/s13524-011-0083-7>.
53. Kundu A. Politics and economics of urban growth. *Econ Polit Wkly*. 2011; [40[20]]:10-12.
54. Bhagat RB. Urbanisation in India: *Trend, Pattern and Policy Issues.*; 2018. Accessed September 14, 2025. https://www.iipsindia.ac.in/sites/default/files/IIPS_Working_Paper_No_17.pdf.
55. United Nations. *World Urbanization Prospects: The 2018 Revision, Methodology.*; 2018. Accessed September 14, 2025. <https://population.un.org/wup/assets/WUP2018-Methodology.pdf>.

HEAD OFFICE

B-28, Qutab Institutional Area

New Delhi – 110016

T: +91 11 43894 100



@PopFoundIndia



@PopFoundIndia

STATE OFFICES

Bihar

Uttar Pradesh



@populationfoundationindia



www.populationfoundation.in