



**United
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Department of
Economic and
Social Affairs

World Population Prospects 2024

Summary of Results



Department of Economic and Social Affairs
Population Division

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United Nations Department of Economic and Social Affairs, Population Division

The Department of Economic and Social Affairs of the United Nations Secretariat is a vital interface between global policies in the economic, social and environmental spheres and national action. The Department works in three main interlinked areas: (i) it compiles, generates and analyses a wide range of economic, social and environmental data and information on which States Members of the United Nations draw to review common problems and take stock of policy options; (ii) it facilitates the negotiations of Member States in many intergovernmental bodies on joint courses of action to address ongoing or emerging global challenges; and (iii) it advises interested Governments on the ways and means of translating policy frameworks developed in United Nations conferences and summits into programmes at the country level and, through technical assistance, helps build national capacities.

The Population Division of the Department of Economic and Social Affairs provides the international community with timely and accessible population data and analysis of population trends and development outcomes for all countries and areas of the world. To this end, the Division undertakes regular studies of population size and characteristics and of all three components of population change (fertility, mortality and migration). Founded in 1946, the Population Division provides substantive support on population and development issues to the United Nations General Assembly, the Economic and Social Council and the Commission on Population and Development. It also leads or participates in various interagency coordination mechanisms of the United Nations system. The work of the Division also contributes to strengthening the capacity of Member States to monitor population trends and to address current and emerging population issues.

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Explanatory notes

The following symbols have been used in the tables throughout this report:

A minus sign (-) before a figure indicates a decrease or negative number.

A full stop (.) is used to indicate decimals.

Unless otherwise stated, years given refer to 1 July.

Use of a dash (–) between years, for example, 1995–2000, signifies the full period involved, from 1 July of the first year to 1 July of the second year.

Numbers and percentages in this table do not necessarily add to totals because of rounding.

References to region, development group, country or area:

The designations employed in this publication and the material presented in it do not imply the expression of any opinions whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The term “country” as used in this report also refers, as appropriate, to territories or areas.

In this publication, data for countries and areas are often aggregated in six continental regions: Africa, Asia, Europe, Latin America and the Caribbean, Northern America, and Oceania. Further information on continental regions is available from: <https://unstats.un.org/unsd/methodology/m49/>. Countries and areas have also been grouped into geographic regions based on the classification being used to track progress towards the Sustainable Development Goals of the United Nations (see: <https://unstats.un.org/sdgs/indicators/regional-groups/>).

The designation of “more developed” and “less developed”, or “developed” and “developing”, is intended for statistical purposes and does not express a judgment about the stage in the development process reached by a particular country or area. More developed regions comprise all countries and areas of Europe and Northern America, plus Australia, New Zealand and Japan. Less developed regions comprise all countries and areas of Africa, Asia (excluding Japan), Latin America and the Caribbean, and Oceania (excluding Australia and New Zealand).

The group of least developed countries (LDCs) includes 45 countries, as of 8 May 2024, located in sub-Saharan Africa (32), Northern Africa and Western Asia (2), Central and Southern Asia (3), Eastern and South-Eastern Asia (4), Latin America and the Caribbean (1), and Oceania (3). Further information is available at: <https://www.un.org/ohrls/>.

The classification of countries and areas by income level is based on gross national income (GNI) per capita as reported by the World Bank (May 2024). These income groups are not available for all countries and areas. Further information is available at: <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519>.

List of abbreviations

AIDS	Acquired immune deficiency syndrome
COVID-19	Coronavirus disease 2019
CRVS	Civil registration and vital statistics
DALYs	Disability-adjusted life years
GBD	Global Burden of Diseases
GCC	Cooperation Council for the Arab States of the Gulf
GDP	Gross domestic product
HALE	Healthy life expectancy
HIV	Human immunodeficiency virus
ICPD	International Conference on Population and Development
IHME	Institute of Health Metrics and Evaluation
IIASA	International Institute for Applied Systems Analysis
ISCED	International Standard Classification of Education
SDGs	Sustainable Development Goals
TFR	Total fertility rate
UN DESA	United Nations Department of Economic and Social Affairs
UN IGME	United Nations Inter-Agency Group for Child Mortality Estimation
UNICEF	United Nations Children's Fund
WHO	World Health Organization

Key messages

The world's population is likely to peak within the current century.

- The world's population is expected to continue growing over the coming 50 or 60 years, reaching a peak of around 10.3 billion people in the mid-2080s, up from 8.2 billion in 2024.
- After peaking, the global population is projected to start declining gradually, falling to 10.2 billion people by the end of the century.
- The estimated likelihood that the world's population will peak within the current century is very high (with a probability of 80 per cent).
- This represents a major change compared to projections published by the United Nations in 2013, when the estimated probability that global population growth would end during the twenty-first century was around 30 per cent.
- The size of the world's population in 2100 is now expected to be 6 per cent smaller – or about 700 million people fewer – than anticipated a decade ago.
- The earlier occurrence of a peak in the projected size of the global population is due to several factors including lower-than-expected levels of fertility in recent years in some of the world's largest countries, particularly China.

One in four people globally live in a country whose population has already peaked in size.

- In 63 countries and areas – containing 28 per cent of the world's population in 2024 – the size of the population peaked before 2024. This group includes China, Germany, Japan and the Russian Federation.
- The number of people living in these locations is projected to decline by 14 per cent over the next thirty years, with Albania, Bosnia and Herzegovina, Lithuania, Puerto Rico and the Republic of Moldova recording the largest relative reductions by 2054 among countries and areas with at least 90,000 inhabitants in 2024.
- In 48 countries and areas, representing 10 per cent of the world's population in 2024, the population size is projected to peak between 2025 and 2054. This group includes Brazil, the Islamic Republic of Iran, Türkiye and Viet Nam.
- The size of the population in these locations is projected to increase by 5.3 per cent over the next thirty years, with Bhutan, Colombia, Cyprus and the Islamic Republic of Iran among those recording the largest relative increases by 2054.
- In the remaining 126 countries and areas, the population is likely to continue growing through 2054, potentially reaching a peak later in the century or beyond 2100. This group includes several of the world's most populous countries, such as India, Indonesia, Nigeria, Pakistan and the United States of America.
- The number of people living in these locations is projected to increase by 38 per cent through 2054. In nine of these countries and areas, including Angola, the Central African Republic, the Democratic Republic of the Congo, Niger and Somalia, population growth is likely to be very rapid, with populations doubling between 2024 and 2054.
- The trajectory of population change for this last group will have a major influence on the size and timing of the population peak at the global level.

Women today bear one child fewer, on average, than they did around 1990.

- Currently, the global fertility rate stands at 2.25 live births per woman,¹ down from 3.31 births in 1990.
- More than half of all countries and areas globally have fertility below the replacement level of 2.1 live births per woman. This is the level required for a population to maintain a constant size in the long run without migration, with each generation followed by another of roughly equal size.
- Currently, nearly one fifth of all countries and areas, including China, Italy, the Republic of Korea and Spain, are experiencing what is sometimes referred to as “ultra-low” fertility, with fewer than 1.4 live births per woman over a lifetime.
- For 24 countries with ultra-low fertility in 2024 and where the population has already peaked, a return to 2.1 births per woman or higher within the next 30 years is highly unlikely (probability of 0.1 per cent).
- By the late 2030s, half of the women in countries with populations that have already peaked will be too old to have children by natural means. Because the share of women in the reproductive age range (roughly, between 15 and 49 years) is projected to decline rapidly in such countries, the impact on population size of policies aimed at raising fertility levels is likely to diminish over time.

Early childbearing has harmful effects on young mothers and their children.

- Today, the fertility level is at or above 2.1 live births per woman in 45 per cent of countries and areas globally. Over one in ten countries and areas – mostly in sub-Saharan Africa – have fertility levels of four births or more per woman. This group includes the Central African Republic, Chad, the Democratic Republic of the Congo, Niger and Somalia.
- Fertility above the replacement level is projected to contribute over one fifth of the population increase through 2054 in those countries and areas where the population is likely to continue growing through 2054.
- In 2024, 4.7 million babies, or about 3.5 per cent of the total worldwide, were born to mothers under age 18. Of these, some 340,000 were born to girls under age 15, with serious adverse consequences for the health and well-being of both the young mothers and their children.
- Investing in the education of young people, especially girls, and increasing the average ages at marriage and first childbearing in locations where these milestone events often occur early will have positive effects on women’s health, educational attainment and labour force participation.
- Increasing the age at first childbearing contributes to slowing population growth, reducing the scale of the investments and effort required to achieve sustainable development while ensuring that no one is left behind. If there were no more births to girls under age 18, the population of sub-Saharan Africa in 2054 would be 3.8 per cent smaller than what is currently projected.

Following the COVID-19 pandemic, global life expectancy is rising once again.

- Globally, life expectancy at birth reached 73.3 years in 2024, an increase of 8.4 years since 1995. Further reductions in mortality are projected to result in an average longevity of around 77.4 years globally in 2054.
- Since 2022, life expectancy has returned to levels observed before the emergence of the coronavirus disease (COVID-19) in nearly all countries and areas. At the height of the pandemic (during 2020 and 2021), global life expectancy at birth fell to 70.9 years, down from 72.6 years in 2019.
- By the late 2050s, it is projected that more than half of all deaths globally will occur at age 80 or higher, compared to 17 per cent in 1995.

¹ In this report, “births” refers to live births.

- In 2023, the number of deaths among children under age 5 fell below 5 million for the first time in recent history; 95 per cent of such deaths took place in the 126 countries and areas with populations that are likely to grow through 2054, including the Democratic Republic of the Congo, India, Nigeria and Pakistan.
- Dedicating more resources to critical, low-cost treatments and interventions, such as ensuring access to antenatal and postnatal care, skilled birth attendants, vaccinations and nutritional supplements, would save millions of lives worldwide over the next decade.
- Increasing levels of life expectancy at birth are expected to contribute to population growth, or to help mitigate population decline, in nearly all locations over the coming decades. Among countries and areas with populations that have already peaked, the continuing drop in mortality, together with immigration in some cases, is expected to slow the population decline caused by fertility below the replacement level.

The main driver of global population increase through mid-century will be the momentum created by growth in the past.

- Globally, the number of women in the reproductive age range (roughly, between 15 and 49 years) is projected to grow through the late 2050s, when it will likely peak at around 2.2 billion, up from nearly 2.0 billion in 2024. Growth in the number of women of reproductive age is conducive to continuing population increase even when the number of births per woman falls to the replacement level or lower.
- The momentum of past growth that is embedded in the youthful age structure of today's global population is projected to contribute 79 per cent of the total increase through 2054, or around 1.4 billion people.
- In a population that is closed to migration, when fertility remains below the replacement level for an extended period, the number of women of reproductive age starts to decline as successive cohorts become smaller and smaller. In countries with populations that have already peaked, the number of women in the reproductive age range is projected to shrink by 33 per cent between 2024 and 2054.
- For some populations, a prolonged history of fertility below the replacement level has resulted in a declining population and an age distribution that is significantly older than in the past. For 18 countries and areas, today's older age distribution is likely to be the main driver of population decline between now and 2054. Even assuming a substantial rebound in the fertility level, these populations are likely to continue declining in size because of the momentum of past decline.
- Countries and areas with populations that are projected to peak between now and 2054 tend to have younger age structures, which are conducive to continued growth. In 25 of these locations, including Brazil, the Islamic Republic of Iran and Viet Nam, the momentum of past growth is projected to be the main driver of population growth over the next decades.
- For 88 of the 126 countries and areas with populations likely to grow through 2054, the relative youthfulness of the population is likely to be the main driver of population growth over the next 30 years, adding to the impact of current high levels of fertility.

Countries with youthful populations and declining fertility have a limited time to benefit economically from an increasing concentration of population in the working ages.

- For nearly all countries and areas with populations that have peaked in size by 2024, and for three quarters of those with populations projected to peak between 2025 and 2054, the time-bound window of opportunity for accelerated economic growth associated with a youthful population and declining fertility has already closed.
- In around 100 countries and areas, however, the share of population in the working ages (between 20 and 64 years) will continue to increase more rapidly than the total population between now and 2054, providing a window of opportunity known as the "demographic dividend".

- The demographic dividend presents an opportunity to accelerate sustainable development, when a substantial and sustained decline in fertility leads to an increased concentration of the population in the working ages. To amplify and prolong this opportunity, sound economic and social policies are needed.
- In countries with youthful populations, substantial investments in education, health care and infrastructure, along with reforms to promote the creation of opportunities for decent work and to improve the transparency and efficiency of government institutions, are needed to ensure that this time-bound opportunity is not wasted.

By 2080, persons aged 65 or older will outnumber children under 18.

- By the late 2070s, the number of persons at ages 65 years and higher globally is projected to reach 2.2 billion, surpassing the number of children (under age 18). By the mid-2030s, it is projected that there will be 265 million persons aged 80 years or older, more than the number of infants (1 year of age or less).
- In countries where the size of the population has already peaked or is projected to peak in the coming decades, the crossover between the number of children and persons aged 65 or older will occur sooner.
- Even in countries with populations that are still growing rapidly and have relatively youthful populations, the number of persons aged 65 or older is expected to rise over the next 30 years.
- Countries, especially those with populations that have already peaked or will peak in the next decades, should consider leveraging technology, including automation, to improve productivity at all ages. They should also design more opportunities for lifelong learning and retraining, support multigenerational workforces and create employment opportunities for older persons who want to continue to work.
- For countries with populations that are still growing rapidly, in addition to the policies listed above, foresight will be required to prepare for a society with an age structure that will be very different from the one they have today. This would include strengthening systems of health and long-term care, improving the sustainability of social protection systems and investing in new technologies.
- Because women live longer than men on average, they outnumber men at older ages in almost all populations. Policies should address women's longer life expectancy by ensuring equitable access to retirement benefits, prioritizing gender-specific health care needs, and strengthening social support systems to mitigate potential caregiving burdens.

For some populations, immigration will be the main driver of future growth.

- In 50 countries and areas, immigration is projected to attenuate the decline in population size caused by sustained low levels of fertility and an older age structure.
- For countries such as Italy, Germany and the Russian Federation, where population size has already peaked, the peak would have occurred sooner in the absence of immigration.
- Immigration is projected to be the main driver of population growth in 52 countries and areas through 2054 and in 62 through 2100, including Australia, Canada and the United States of America.
- Emigration generally does not have a major impact on the population size of a country, but in 14 countries and areas already experiencing ultra-low fertility, emigration is likely to be a major driver of population loss between now and 2054.
- In countries where fertility levels are already below the replacement level, the emigration of people in the reproductive age range can further depress population growth. In such countries, creating more opportunities for decent work and promoting return migration could be more effective at slowing population decline in the short run than policies aimed at raising fertility levels.

Gender equality and women's empowerment help to counter rapid population growth or decline.

- Discrimination and legal barriers often prevent women and adolescents from making autonomous decisions about their sexual and reproductive health, including by limiting access to family planning. Such conditions tend to prevent or postpone the reduction of fertility in populations that are growing rapidly.
- Raising the minimum legal age at marriage and integrating family planning and safe motherhood measures into primary health care can help to raise women's levels of education, facilitate their economic participation and reduce the incidence of early childbearing.
- In locations where the population has peaked already or is likely to peak in the next three decades, gender gaps in the division of domestic work within households and inadequate child and family welfare support may prevent or discourage women and couples from having larger families even when they want them.
- Governments wishing to help couples and individuals to achieve their desired family size may consider a variety of policies aimed at balancing family and work life. These may include: providing paid parental leave and flexible working arrangements; supporting affordable, high-quality childcare options and housing; providing comprehensive care for an ageing population; and encouraging an equal distribution of caregiving and household responsibilities between men and women.



Manchester, Jamaica (2023). Shawn Wynter/World Bank.

Introduction

Population growth, population ageing, urbanization and international migration are four major demographic trends shaping our world. Changes in the size, age structure and spatial distribution of populations bring both challenges and opportunities. By managing the challenges and taking advantage of the opportunities, we can accelerate the achievement of inclusive and sustainable development, create opportunities to eradicate poverty, enhance access to social protection, health care and education, promote gender equality, advance more sustainable patterns of production and consumption, and safeguard the environment.

Conversely, achieving the Goals and targets of the 2030 Agenda for Sustainable Development can help avoid the most extreme demographic outcomes, facilitating a shift towards smaller families in populations that are growing rapidly and where individuals and couples often have more children than they desire, and enabling parents to have larger families in populations that are declining and where people often fail to achieve their desired family size. Understanding how population trends are likely to unfold in the short, medium and long terms is critical for achieving a more inclusive, prosperous and sustainable future.

Future population trends are uncertain. Yet, compared to other trends such as transformation of the global economy or technological advances, the speed and direction of population change, at least in the short and medium terms, is far more predictable. This feature makes population trends an invaluable tool for policy design, including for policies to deliver on the promise and aspirations of the 2030 Agenda and other intergovernmental agreements.

The present report comes at a time when the demographic landscape of many countries is changing rapidly, often raising concerns and creating confusion. Due to faster-than-anticipated declines in fertility for some of the world's most populous countries, the size of the global population now appears likely, with a probability of 80 per cent, to peak within the current century. This represents a major shift in perspective from one decade ago, when the estimated probability that global population growth would end during the twenty-first century was around 30 per cent.

The fact that the world's population is likely to peak sooner and at a lower level than previously anticipated has important implications for the sustainability of our current way of living on this planet. Some of these are described in the Programme of Action of the International Conference on Population and Development (ICPD) held in 1994, which recognizes that efforts to slow population growth, reduce poverty, achieve economic progress, improve environmental protection and reduce unsustainable consumption and production patterns are mutually reinforcing.

The demographic outlook of countries today appears quite diverse. Some have high levels of fertility and are growing rapidly, while others have historically low levels of fertility. Those that have experienced low levels of fertility for several decades are seeing their populations age rapidly, with some now beginning to decline in size.

While these differences are striking, it is important to understand that all populations are following a similar path towards longer lives and smaller families, a process known as the "demographic transition". Much of today's demographic diversity stems from the fact that countries are at different stages in this process.

The period of unprecedented population growth, which began in the middle of the twentieth century on a global scale, is a major consequence of the demographic transition, but this period is coming to an end for many countries and, eventually, for the world as a whole. Another major consequence is a shift in the age structure towards older ages, a process known as "population ageing".

The report adopts the analytical framework of the demographic transition, focusing on the timing at which populations peak in size, to explore differences in population trends across countries and regions today and to provide insights into their future trajectories. The report also offers a series of policy recommendations to help countries prepare for population sizes, age structures and spatial distributions that may differ appreciably from those of their recent past.

World Population Prospects 2024 is the twenty-eighth edition of estimates and projections of the global population published by the United Nations since 1951. It provides an authoritative and comprehensive collection of demographic data that can be used for assessing population trends at the global, regional and national levels. Data from previous editions have been used for the calculation of many development indicators, including for about one quarter of the indicators used for the global monitoring of progress towards the achievement of the Sustainable Development Goals (SDGs).

For the first time, the current revision of the *World Population Prospects*² presents probabilistic projections of future trends in international migration. Earlier editions published in 2013 and 2015 introduced probabilistic projections of future trends in fertility and mortality, respectively. In addition to providing a probabilistic assessment of projected trends for all three components of population change (fertility, mortality and international migration), *World Population Prospects 2024* presents all data disaggregated by sex and single-year increments of age and time, as introduced in the 2022 edition.

The report is organized in four chapters, each of which describes the most likely trends in population size, age structure and other characteristics from 2024 to 2100. Each chapter also discusses the projected trends in fertility, mortality and international migration, as well as the momentum created by past trends that is embedded in the current age distribution.

Chapter I presents the global trends and introduces the concept of the population peak, whose timing is used throughout the report to approximate the timing of the demographic transition for different locations. Chapter II focuses on countries with populations that have already peaked in size. This group includes China, Germany, Japan and the Russian Federation, among others. Chapter III examines population trends for countries with populations that are projected to peak between 2025 and 2054. This group includes Brazil, the Islamic Republic of Iran, Türkiye and Viet Nam. Chapter IV provides an overview of countries with populations that are likely to continue growing through 2054, potentially reaching a peak later in the century or beyond 2100. This group includes several of the world's most populous countries, such as India, Indonesia, Nigeria, Pakistan and the United States of America.

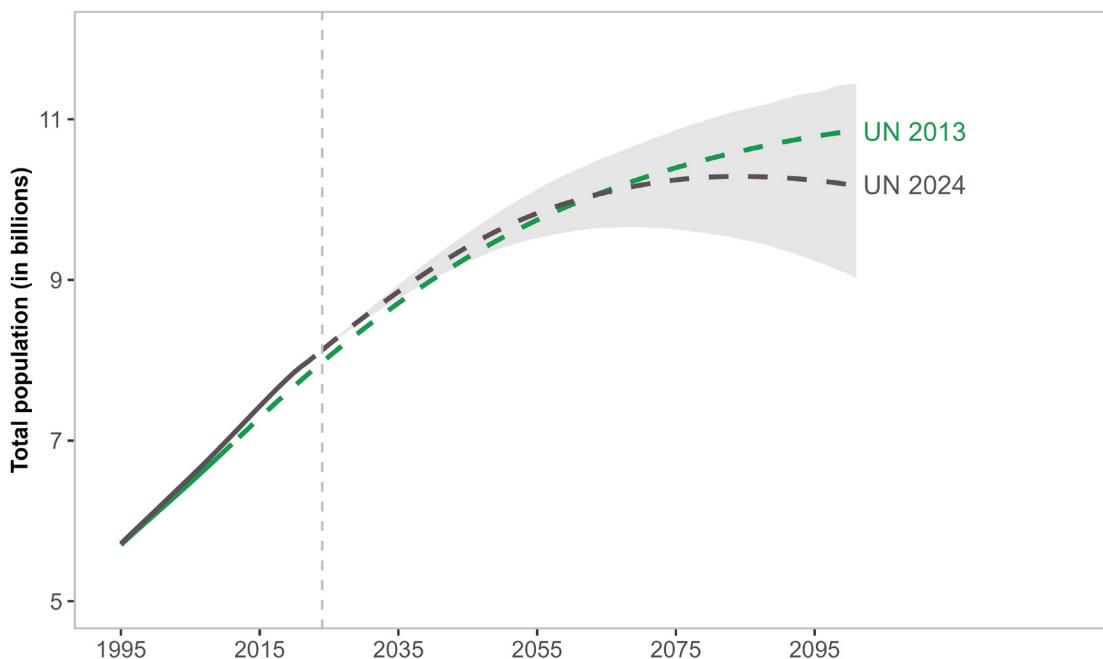
Each chapter includes key policy recommendations for countries in the group. Because the demographic transition unfolds in a series of sequential stages, the policy recommendations for countries that have already peaked in size are relevant also for those that are still growing, albeit with a potential time lag of several decades.

² See <https://population.un.org/wpp/>

Chapter I. Awareness of population trends is critical for achieving a sustainable future

The world's population is expected to continue growing over the coming 50 or 60 years, reaching a peak of around 10.3 billion people in the mid-2080s, up from 8.2 billion in 2024. After peaking, the global population is projected to start declining gradually, returning to 10.2 billion people by the end of the century (figure 1.1). While there is some uncertainty around the future size of the world's population, the estimated likelihood that it will peak within the current century is 80 per cent, with the peak likely to occur sometime between the mid-2060s and 2100 (box 1.1). This represents an important change compared to projections produced by the United Nations a decade ago, when the estimated probability that world population growth would end during the twenty-first century was around 30 per cent (Gerland and others, 2014). The size of the world's population in 2100 is now expected to be 6 per cent smaller – or about 700 million people fewer – than anticipated a decade ago. This earlier occurrence of a peak in the projected size of the global population is due to several factors including lower-than-expected levels of fertility observed in recent years in some of the world's largest countries, particularly China, and slightly faster-than-anticipated fertility declines in some parts of sub-Saharan Africa.³

Figure 1.1
Global population, according to United Nations (*World Population Prospects*) in 2013 and 2024, 1995–2100



Sources: United Nations (2013; 2024a).

Notes: Estimates correspond to the period from 1995 to 2023 in United Nations (2024) and from 1995 to 2010 in United Nations (2013); projections correspond to the period from 2024 to 2100 (with 95 per cent prediction intervals) in United Nations (2024) and from 2010 to 2100 in United Nations (2013). United Nations has been abbreviated as UN.

³ These include Kenya, Niger, Nigeria, Uganda and Zambia. Conversely, some countries, including Afghanistan, the Democratic Republic of the Congo, Ethiopia, Pakistan and Yemen, have experienced slower declines than previously expected.

The fact that the peak in the global population is projected to occur earlier and at a lower level than previously anticipated is important for several reasons. First, it signals the end of the era of rapid population growth, which began around 1800 in some regions and in the middle of the twentieth century on a global scale (United Nations, 2021). Second, given that population growth tends to amplify⁴ environmental pressures by adding to total economic demand, it has implications for progress towards a more sustainable future, since the aggregate demand for food, housing, infrastructure and services, among others, will likely be smaller with the global population peaking earlier and at a lower level.

Box 1.1

The challenge of estimating and forecasting population trends

The quality of population estimates and projections hinges on the availability of reliable and timely demographic data. *World Population Prospects 2024* takes into consideration the full range of available demographic evidence, referencing data from 1,910 censuses and 3,189 sample surveys, as well as information on births and deaths from civil registration and vital statistics systems for 169 countries (see Annex 1). However, data availability, timeliness and coverage remain a challenge for many countries. These gaps can impact the accuracy of population estimates and the reliability of projections, as reflected in the differences in outcomes between revisions (figure 1.1). Improving the reliability, coverage, timeliness and accessibility of demographic data should be a central focus of efforts to strengthen statistical systems for monitoring progress towards the Sustainable Development Goals.

Future population trends are uncertain, especially in the long run. The increase of uncertainty over time is reflected in the widening band of prediction intervals for projections at dates farther into the future (figure 1.1). One of the main sources of this uncertainty is the trend in the annual number of births.⁵ The projections in *World Population Prospects 2024* involve a series of assumptions relating to fertility. For countries where large families are still prevalent, it is assumed that fertility will continue to decline. For countries where women are having or are projected to have, on average, fewer than two live births over a lifetime⁶ and that fulfill a series of other conditions, it is assumed that there will be a slight rebound in fertility levels in the years ahead (see box 2.1; United Nations, 2024b). When applied to populous high-fertility countries such as Nigeria or populous low-fertility countries such as China, these assumptions can influence global population trends long into the future.

Despite the uncertainty around future population trends, compared to other trends such as economic growth or technological advance, the pace and direction of population change is far more predictable, at least in the short and medium terms. Leveraging the foresight that can be gained from a robust understanding of current and future population trends is critical for accelerating progress towards achieving the SDGs and for designing policies that require a longer time horizon, such as those related to macroeconomic planning, social protection, national security and the environment.

⁴ While population growth may exacerbate environmental damage under some circumstances, a sustainable future for all hinges more on human behaviours than on human numbers. For a more detailed discussion, see United Nations (2021).

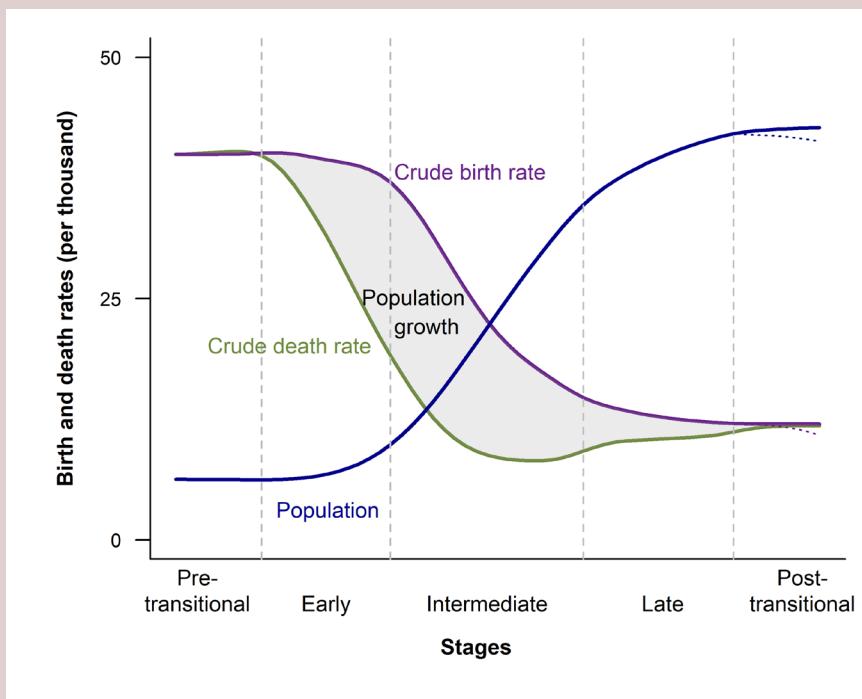
⁵ Pandemics, wars, conflicts, natural disasters and economic shocks and crises can also impact population trends in ways that are difficult to predict.

⁶ Replacement-level fertility refers to the level of childbearing at which each generation exactly replaces the previous one in terms of size. If fertility remains below this level over the long run, the population will eventually decline in size (assuming that immigration levels will be insufficient to compensate for the decline). For populations at late stages of the demographic transition, the replacement level of fertility is approximated by a total fertility rate of 2.1 births per woman.

Box 1.2**Why do populations reach a peak size?**

The fact that contemporary populations tend to grow, reach a peak size and then plateau or decline is a consequence of the demographic transition—the historic shift towards longer lives and smaller families that has been a universal feature of social and economic development in the modern era. The transition unfolds in a series of stages. In the early stage, the transition is characterized by accelerated population growth driven by a drop in mortality rates, especially among infants and children, while fertility levels remain high. In an intermediate stage, fertility begins to decline as well, but the population continues to grow rapidly due to a large and sustained excess of births over deaths. As the transition moves into its final stage, population growth decelerates as birth and death rates come back into balance at historically low levels, until eventually the growth rate approaches zero or becomes negative. At that point, the transition is complete. Once a population reaches its peak size, the population tends to stabilize with a growth rate close to zero (figure 1.2, post-transitional solid trend line) or to decrease in size with a negative growth rate (dashed trend line).

Figure 1.2
Schematic representation of the demographic transition



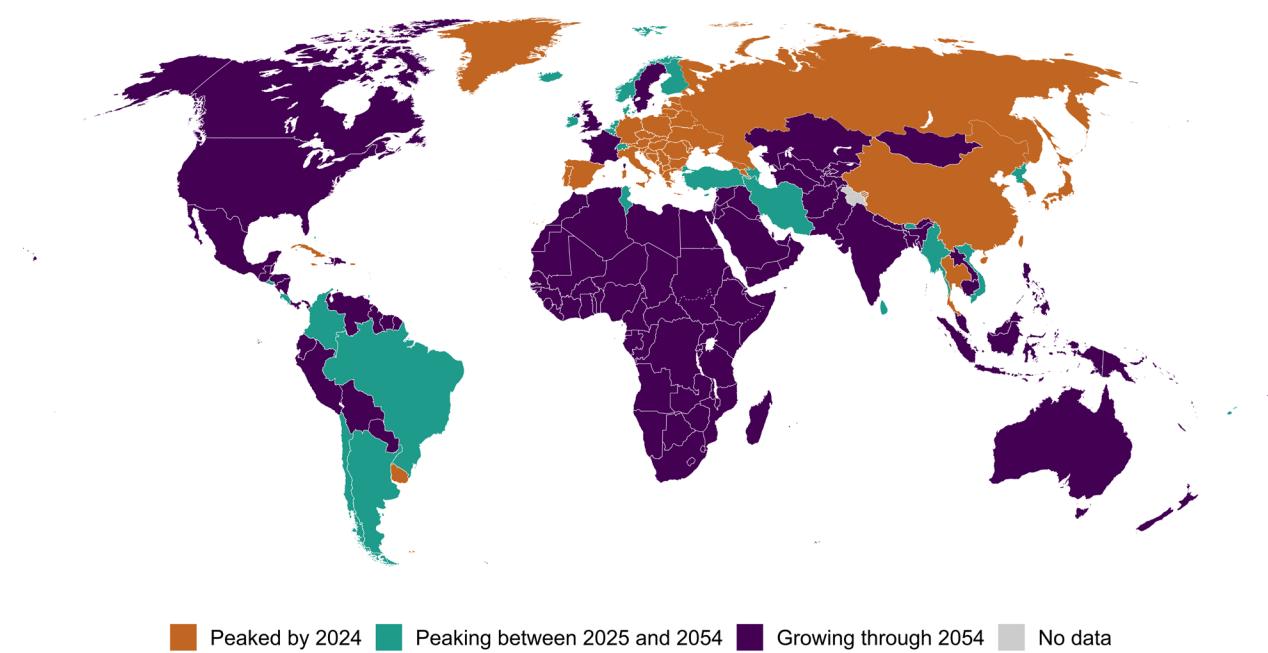
Source: Calculations by the United Nations.

Notes: The crude birth (or death) rate is the annual number of live births (or deaths) divided by the mid-year population size. Both rates are expressed as the number of births or deaths per 1,000 population per year. The schematic representation of the demographic transition refers to a population that is closed to migration, in which growth is due entirely to the gap between numbers of births and deaths.

Today, countries are at very different stages of the demographic transition (box 1.2, map 1.1). In 63 countries and areas, containing 28 per cent of the world's population in 2024, the population peaked in size before or during 2024, meaning that these locations are now in a post-transitional stage (figures 1.3, 1.4). This group, referred to throughout this report as countries with populations that peaked by 2024 or that already peaked, includes China, Germany, Japan and the Russian Federation.⁷

Map 1.1

Countries and areas by timing of the observed or projected population peak



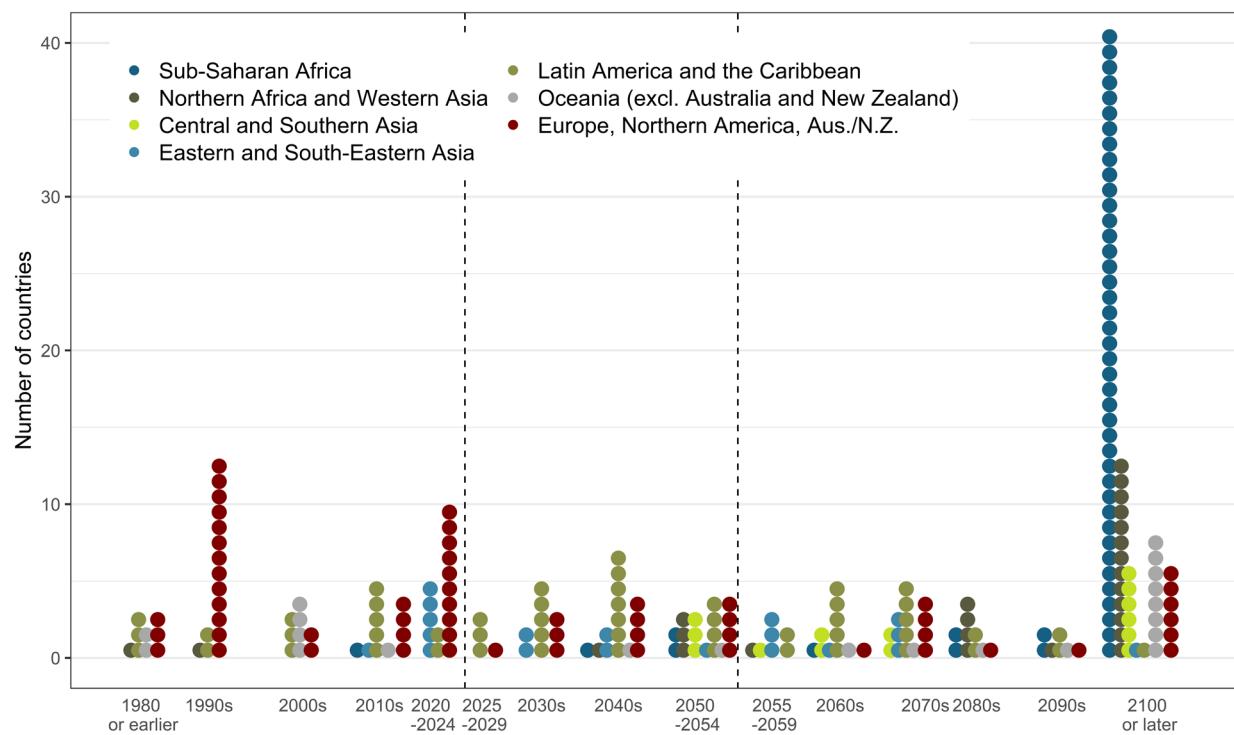
Source: United Nations (2024a).

Disclaimer: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

⁷ All figures and illustrative examples in the report are among countries and areas with at least 90,000 inhabitants in 2024.

Figure 1.3

Number of countries and areas by period of the peak in population size, by region, estimates, 1950–2023, and projections (medium scenario), 2024–2100



Source: United Nations (2024a).

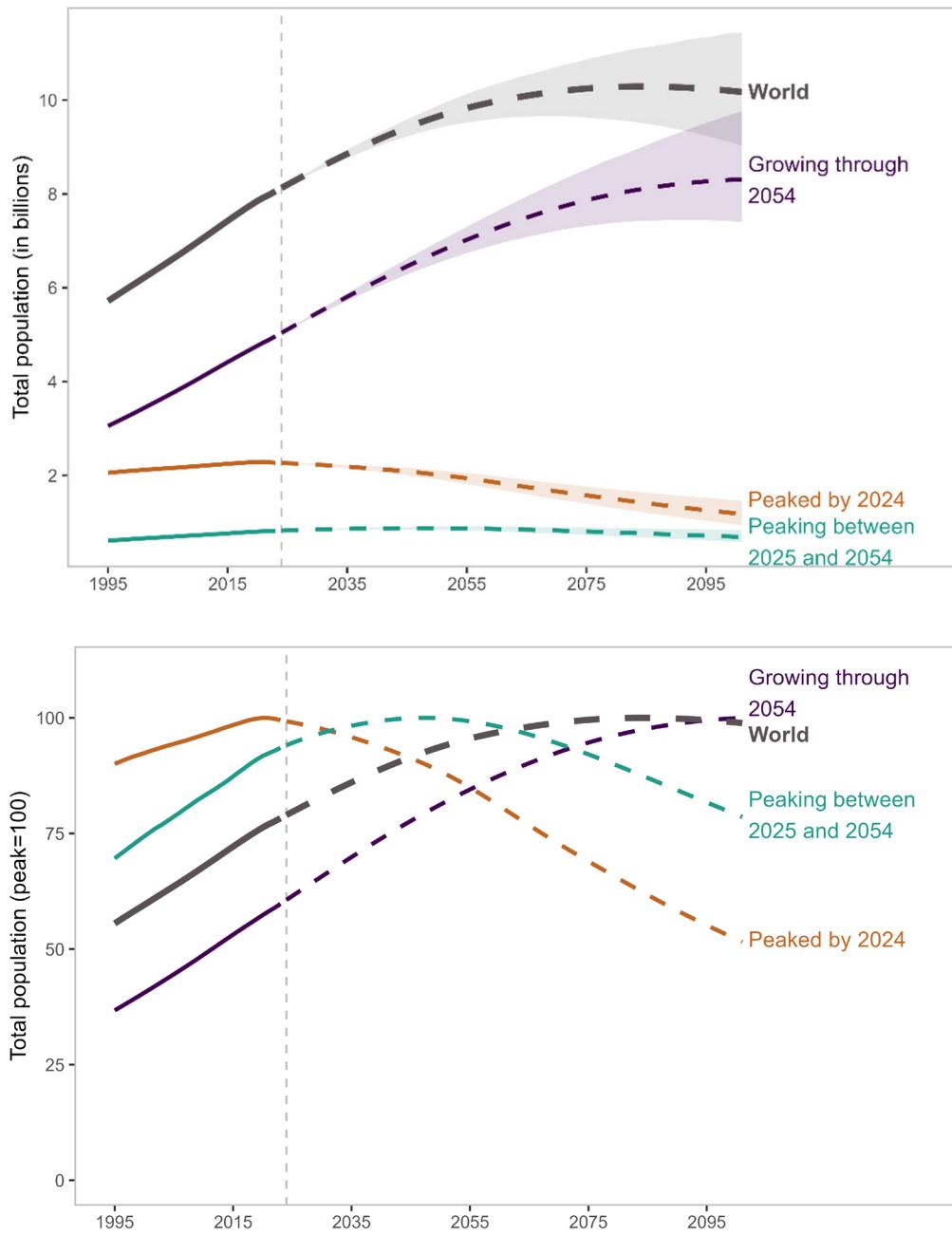
Notes: Each circle refers to a country or area. In 76 locations the size of the populations may potentially peak in or after 2100. The regional grouping that comprises Australia and New Zealand has been abbreviated as Aus./N.Z.

In 48 countries and areas, representing 10 per cent of the world's population in 2024, the size of the population is projected to peak between 2025 and 2054. This group, which is in the late stage of the demographic transition and is referred to here as peaking between 2025 and 2054, includes Brazil, the Islamic Republic of Iran and Viet Nam.

In the remaining 126 countries and areas, the population is likely to continue growing through 2054, potentially reaching a peak later in the century or beyond 2100. Many countries in this group are in the intermediate stage of the transition, when fertility levels have started to decline but remain above the replacement level. These populations continue to grow due also to a youthful age structure that is conducive to population growth. This group, referred to as countries growing through 2054, includes several of the world's most populous countries, including India, Indonesia and Nigeria. It also includes countries such as Australia, Canada and the United States of America, which would likely peak much sooner without immigration (see chap IV). With more than half of the world's population, the trajectory of population change for this group will have a major influence on the size and timing of the population peak at the global level.

Figure 1.4

Total population in absolute numbers (top) and relative to peak size (bottom), estimates, 1995–2023, and projections (medium scenario), 2024–2100, globally and for countries and areas in three groups by timing of the peak



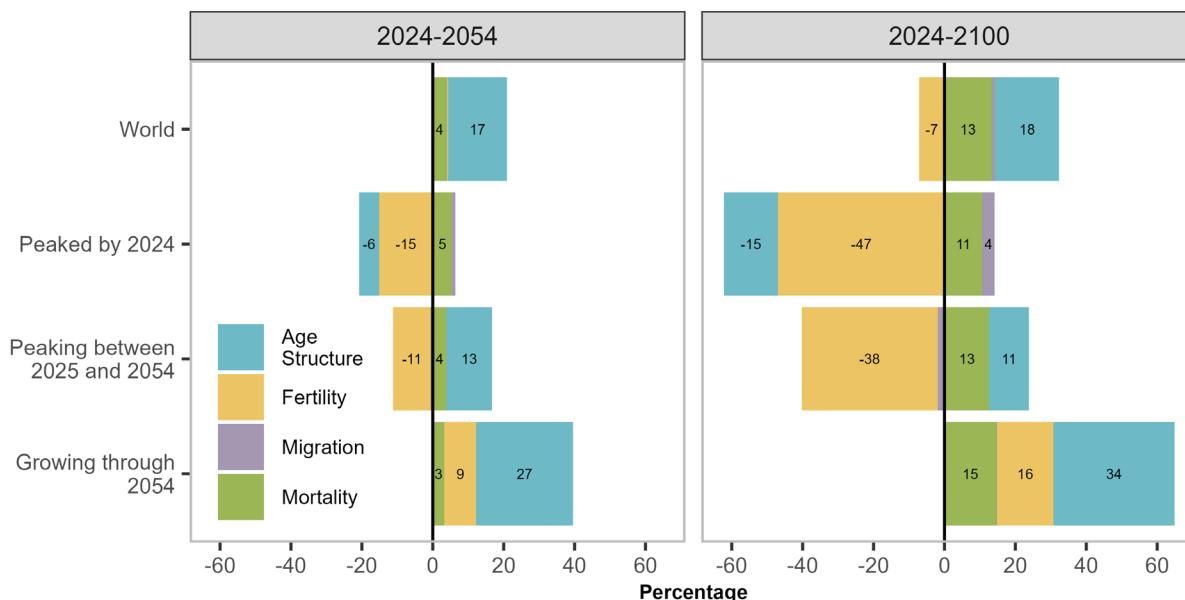
Source: United Nations (2024a).

Notes: For total population in absolute numbers (top), prediction intervals are represented as shaded areas around the projected trend. For a given year, the future trend is expected to lie within the predicted range with an estimated probability of 95 per cent. For total population relative to the maximum (bottom), estimates and projections have been indexed to their maximum value.

National populations grow or decline in size as a function of the balance between three demographic components: fertility, mortality and international migration⁸ (figure 1.5). In addition, the age structure of a population, resulting from trends in these three variables in the past, can be a major driver of population change. This fourth component is referred to as population momentum. Each of these components, depending on their direction and size, can contribute to population change in different ways. They can add to each other, compounding population growth or decline, or they can counterbalance each other, cancelling out each other's effects (figure 1.5).

Figure 1.5

Relative contributions of the components of population change to future population size, globally and for countries and areas in three groups by timing of the peak, projections (medium scenario), 2024–2054 and 2024–2100 (percentage)



Source: Calculations using data from United Nations (2024a), based on a comparison of different projection scenarios.⁹

Notes: The figure refers to population growth in the period specified, in percentage, by component. For further details on the use of different projection scenarios to decompose the projected change in future population size into the four components of change, see Definition of Projection Scenarios and section II.F of the methodological report (United Nations, 2024b).

The fertility level, or the average number of live births per woman over a lifetime, has fallen markedly over recent decades in many countries. Currently, the global fertility rate stands at 2.25 live births per woman, one child fewer than a generation ago (figure 1.6). By the late 2040s, the global fertility rate is projected to decline to 2.1. Since fertility will be close to the replacement level worldwide throughout this period, it will make little or no contribution to growth at the global level between now and 2054 (figure 1.5, "World").¹⁰

Among the three groups of countries, fertility is expected to affect population trends in different ways. For countries and areas with populations that have already peaked, low levels of fertility are one of the major drivers of the continuing population decline. In most of these, the average number of births per woman has, for many decades, been below the level required for zero growth (see chap II). Fertility levels are also already at or below the replacement

⁸ The impact of international migration on population change is only at the national or regional level. At the global level, the direct effect of international migration on population growth is nil.

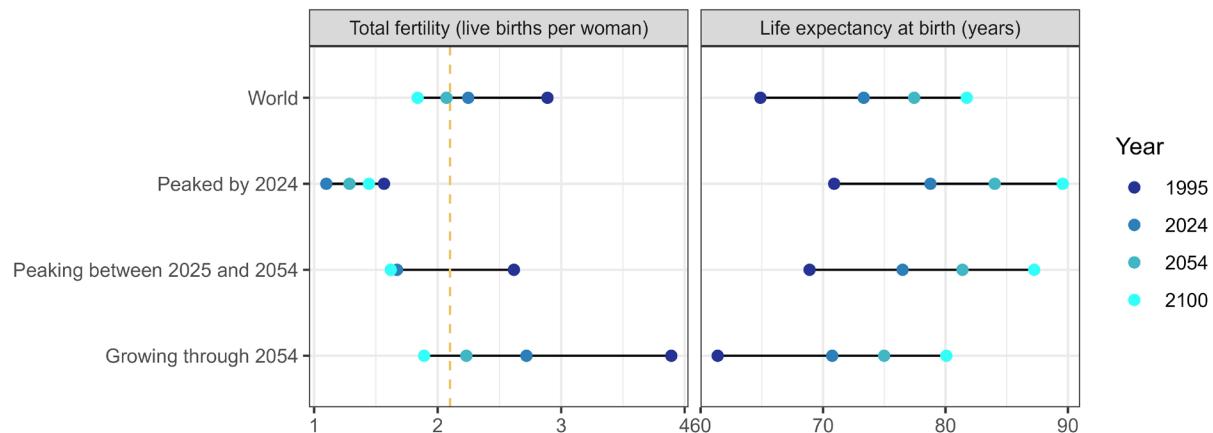
⁹ See Definition of Projection Scenarios and section II.F of the methodological report (United Nations, 2024b) for further details on the use of different projection scenarios to decompose the projected change in future population size into the four demographic components of change.

¹⁰ Fertility has a positive impact on population change when it is above the replacement level and a negative one when it is below (Andreev, Kantorová and Bongaarts, 2013; United Nations, 2024b).

level in nearly all the countries with populations that are likely to peak in the next three decades (see chap III). In the group of countries with populations that are likely to continue growing through 2054, fertility levels are quite variable. In around one fifth of these countries and areas, nearly all in sub-Saharan Africa, women had on average 4 or more births in 2024. In these countries, high levels of fertility are among the main drivers of rapid population growth, adding to the challenges of achieving social and economic development and magnifying the scale of the investments and effort required to ensure that no one is left behind (see chap IV). In all three groups of countries, advances in gender equality and women's empowerment can help to create societies where all couples and individuals are able to achieve their desired family size, in line with principle 8 of the ICPD Programme of Action,¹¹ potentially helping to counter the rapid growth or decline of populations.

Figure 1.6

Total fertility and life expectancy at birth, globally and for countries and areas in three groups by timing of the peak in population size, estimates for 1995 and projections (medium scenario), 2024, 2054 and 2100



Source: United Nations (2024a).

Note: The dashed orange vertical line indicates the level of replacement fertility.

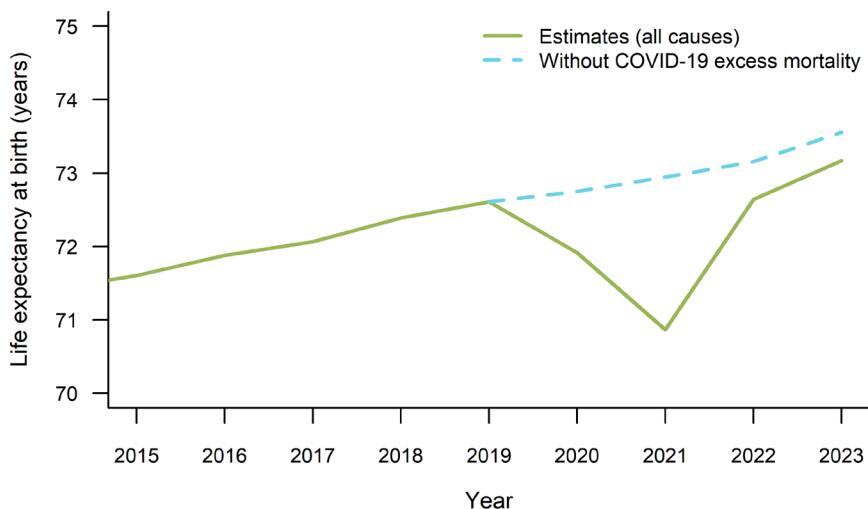
Globally, life expectancy at birth reached 73.3 years in 2024, an increase of more than 8.4 years since 1995 (figure 1.6). Further reductions in mortality are projected to result in an average longevity of around 77.4 years globally in 2054. By the late 2050s, more than half of all deaths globally will occur at age 80 or higher, compared to 17 per cent in 1995. The substantial lengthening of the average human lifespan, which is due to improvements in public health, nutrition, personal hygiene and medicine, represents one of the great triumphs of social and economic development.

This rise in life expectancy at birth halted during 2020 and 2021 due to the impact of the coronavirus disease (COVID-19) pandemic. Since 2022, life expectancy has returned to levels observed before the emergence of COVID-19 in nearly all countries and areas. At the height of the pandemic (during 2020 and 2021), global life expectancy at birth fell to 70.9 years, down from 72.6 in 2019 (figure 1.7).

¹¹ Principle 8 of the ICPD Programme of Action states that "Everyone has the right to the enjoyment of the highest attainable standard of physical and mental health. States should take all appropriate measures to ensure, on a basis of equality of men and women, universal access to health-care services, including those related to reproductive health care, which includes family planning and sexual health. Reproductive health-care programmes should provide the widest range of services without any form of coercion. All couples and individuals have the basic right to decide freely and responsibly the number and spacing of their children and to have the information, education and means to do so".

Figure 1.7

Global life expectancy at birth (as observed) and counterfactual scenario without COVID-19 excess mortality, 2015–2023



Source: United Nations (2024a) including metadata on mortality crises (see Annex 1).

In 2023, the number of deaths among children under age 5 fell below 5 million for the first time in recent history. However, high levels of child mortality persist in many regions even though such deaths are largely preventable. Nearly all deaths of children under age 5 (95 per cent of the total) take place in 126 countries with populations that are still growing, including the Democratic Republic of the Congo, India, Nigeria and Pakistan (see chap IV).

At the global level, 19 per cent of the total population increase through 2054 is likely to be attributable to gains in survival made possible by the reduction of mortality rates.¹² Increasing levels of life expectancy at birth will contribute to population growth or help to mitigate population decline in nearly all locations over the coming decades. For countries with populations that are projected to peak between 2025 and 2054, improvements in life expectancy are expected to contribute 72 per cent of the population growth anticipated through 2054. For countries with populations that have already peaked, reductions in mortality are likely to slow population decline by 5 per cent during the same period.

International migration tends to have a limited effect on population change in most countries.¹³ In a small number of countries and areas, immigration is projected to attenuate the decline in population size caused by sustained low levels of fertility and an older age structure. Immigration is projected to be the main driver of population growth in 52 countries and areas through 2054 and in 62 through 2100. This group includes Australia, Canada, Qatar, Saudi Arabia and the United States of America. Emigration generally does not have a major impact on the population size of countries, but in 14 countries and areas, all with “ultra-low” fertility (fewer than 1.4 live births per woman over a lifetime), emigration is likely to be an additional factor reducing population size between now and 2054 (see chap II).

¹² The contribution of mortality to population growth is positive if mortality is declining and negative if mortality is increasing (Andreev, Kantorová and Bongaarts, 2013).

¹³ Net migration refers to the net number of migrants, that is, the number of immigrants minus the number of emigrants. When net migration is positive it provides a positive contribution to population change. When it is negative, it has the opposite effect.

At the global level, the main driver of global population increase through mid-century will be the momentum created by growth in the past.¹⁴ The population growth of recent decades is reflected in today's youthful age structure, which is projected to contribute 79 per cent of the total increase in the global population through 2054, equal to around 1.4 billion people.

The number of women of reproductive age (roughly, between 15 and 49 years) is an important indicator of the potential for future population growth. Globally, the number of women in the reproductive age range is projected to grow through the late 2050s, when it will likely peak at around 2.2 billion, up from nearly 2.0 billion in 2024. A growing number of women of reproductive age is conducive to continuing population increase. Even if global fertility were to drop immediately to the replacement level, the momentum generated by past growth, which is reflected in the youthful age distribution of the current population, ensures that the population would continue to grow for a few decades.

In populations where fertility levels have been low for several decades, the number of women in the reproductive age range tends to decrease. In some situations, the negative momentum generated by a history of low fertility has resulted in an age distribution that is significantly older than in the past. The older age distribution is likely to be the main driver of population decline in 18 countries and areas between now and 2054. Even assuming a substantial rebound in fertility levels, these populations are likely to continue declining in size for several decades because of this momentum.

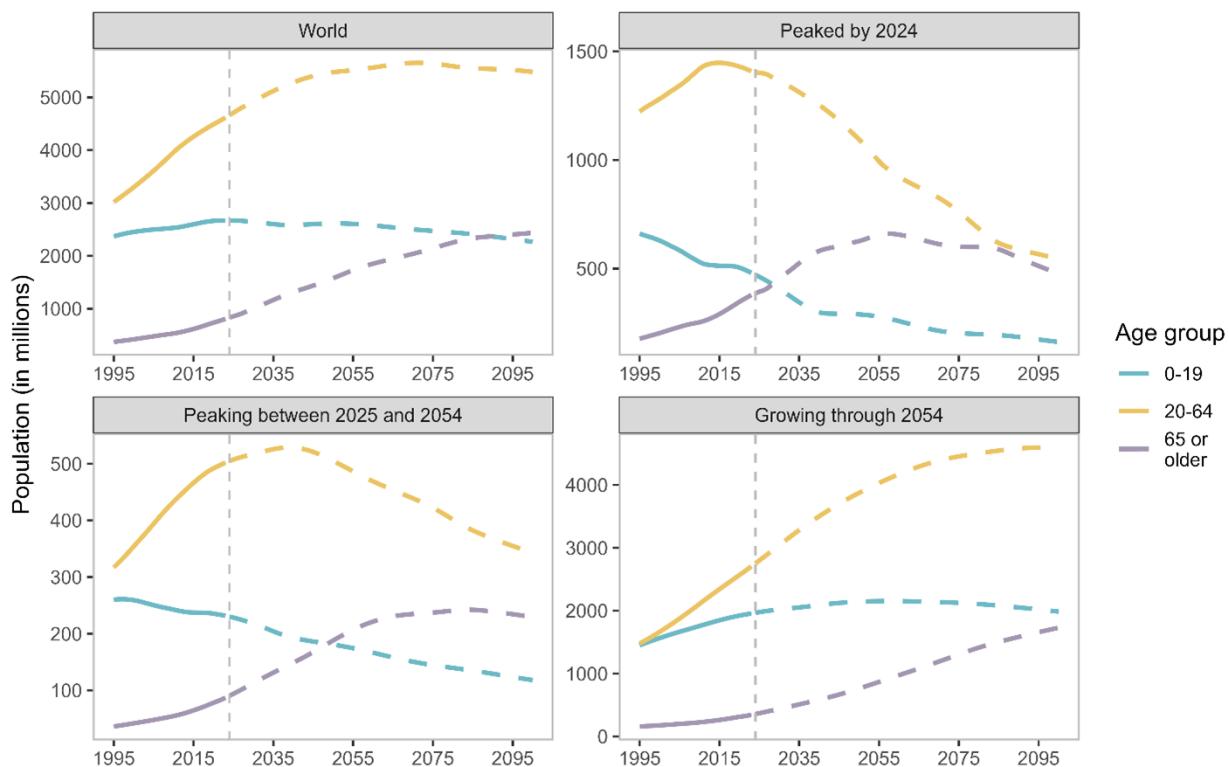
By the late 2070s, the number of persons at ages 65 years and higher globally is projected to reach 2.2 billion, surpassing the number of children (under age 18), while the number of persons aged 80 or older is projected to surpass the number of infants (1 year of age or less) already by the mid-2030s, when it is projected to reach 265 million. For the groups of countries and areas where the size of the population has already peaked or is projected to peak in the coming decades, the crossover between the number of children and the number of persons aged 65 or older will occur by the late 2020s.

These profound changes in age structure are a direct consequence of the demographic transition towards longer lives and smaller families. Specifically, in countries that are in the early stage of this transition, the number of persons at younger ages increases rapidly. Once fertility levels start to fall, in the intermediate stage, the number at younger ages grows more slowly or stops growing. Therefore, the number of persons in the working age range starts to increase relative to that of younger ages, while the number of older persons remains small. In the later stages of the demographic transition, when most people survive to advanced ages, the number of persons at older ages starts to increase. For populations whose fertility drops to very low levels in the post-transitional stage, the age distribution begins to resemble an inverted pyramid with more persons at older ages than children and youth. Many countries that have already peaked in size are beginning to assume this pattern

¹⁴ To determine the direct impact of a population's age structure on change in population size, it is assumed that net migration equals zero, fertility is at the replacement level and mortality is constant (United Nations, 2017).

Figure 1.8

Population by age group, globally and for countries and areas in three groups by timing of the peak, estimates, 1995–2023, and projections (medium scenario), 2024–2100



Source: United Nations (2024a).

Note: The scale of the y axis differs between groups.



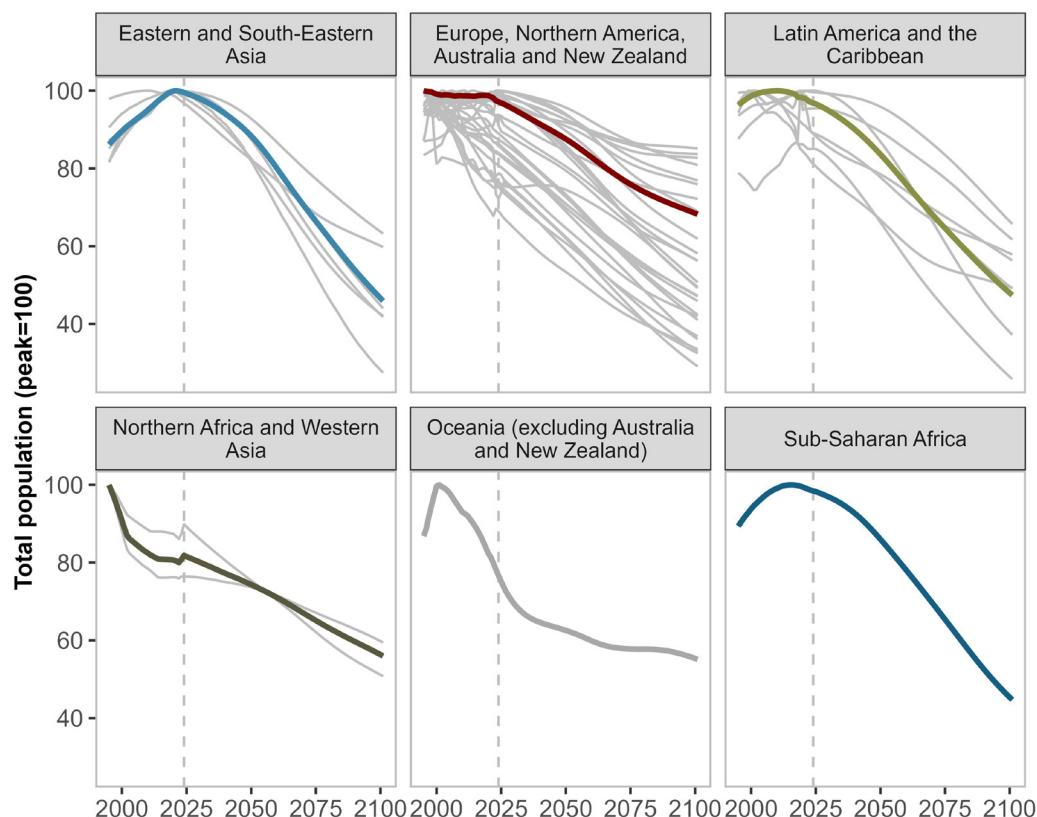
Learning computer skills, Chongqing, China (2013). Li Wenyong/World Bank.

Chapter II. Countries and areas with populations that have already peaked

Over the past decades, there has been growing anxiety about population ageing and decline. For an increasing number of countries and areas, fertility has remained at very low levels for several decades; as a result, the populations have already reached their peak size. In the 1980s, only 14 countries, nearly all in Europe or Northern America, had peaked in size (figure 1.3). Today, that number stands at 63, spanning a wide geographical area that includes Eastern and South-Eastern Asia, Latin America and the Caribbean, and Oceania (excluding Australia and New Zealand), in addition to Europe and Northern America. This group includes some of the world's most populous nations, such as China, Germany, Japan and the Russian Federation.

Figure 2.1

Total population relative to peak size, for countries and areas with populations that have already peaked, regional average and selected countries, by region, estimates, 1995–2023, and projections (medium scenario), 2024–2100



Source: United Nations (2024a).

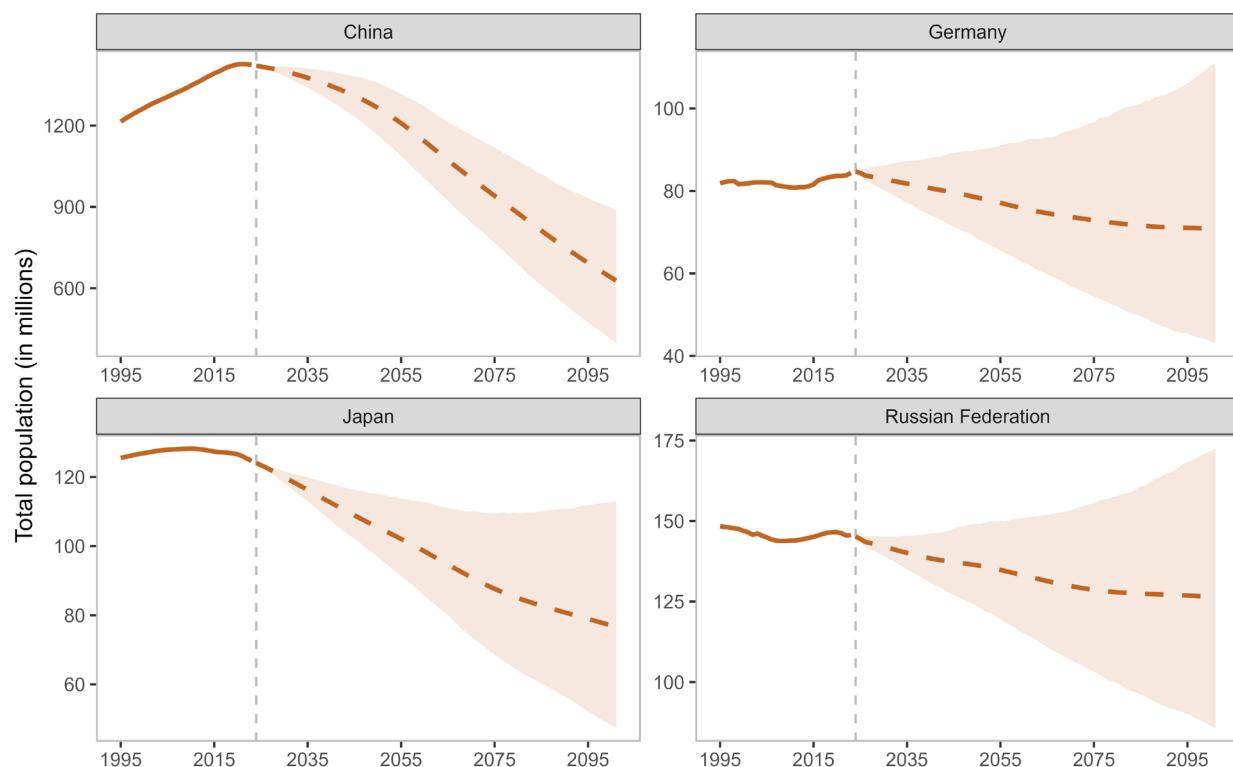
Note: Grey lines represent countries or areas with at least 90,000 inhabitants in 2024.

According to the United Nations' medium projection scenario, the number of people living in these locations is projected to decline by 14 per cent over the next 30 years. Eighteen of the countries and areas in this group are likely to see the size of their populations decline by 20 per cent or more in the next three decades, with Albania, Bosnia and Herzegovina, Lithuania and the Republic of Moldova recording some of the largest relative reductions (figure 2.1). Rapid population decline in some contexts may pose a challenge, requiring innovative policy responses to address potential macroeconomic, labour market, social protection and national security issues.

It is anticipated that China, the country currently with the world's second largest population, will likely experience the largest absolute population loss between 2024 and 2054 (204 million), followed by Japan and the Russian Federation (21 and 10 million, respectively) (figure 2.2). Long-range population projections are less certain. Nevertheless, due to its large size and sustained low level of fertility, China is also likely to record the largest population decline of any country through the end of the century (786 million people). By 2100, China is projected to have lost more than half of its current population and to have returned to a population size comparable to that recorded in the late 1950s (see box 2.1).

Figure 2.2

Total population for selected countries and areas with populations that have already peaked, estimates, 1995–2023, and projections (medium scenario) with prediction intervals, 2024–2100



Source: United Nations (2024a).

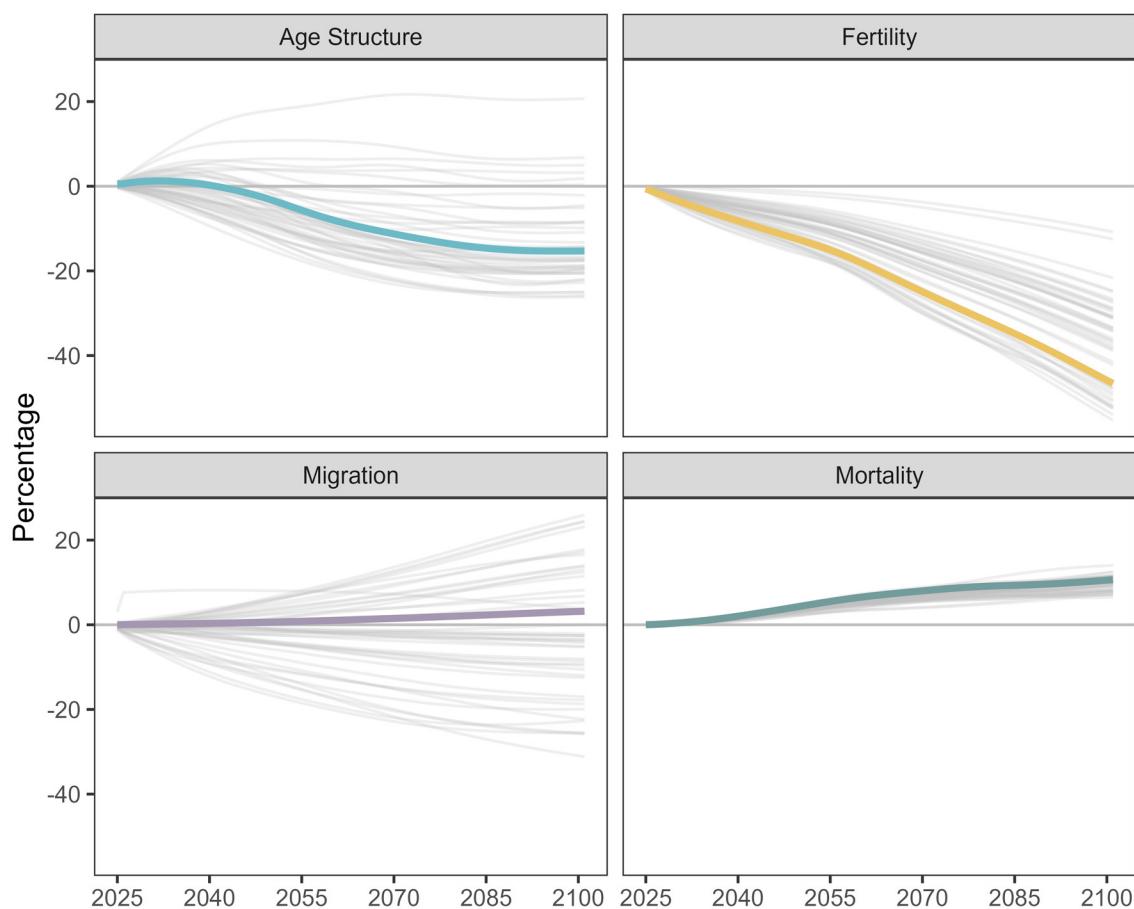
Notes: Prediction intervals are represented as shaded areas around a projected trend. For a given year, the future trend is expected to lie within the predicted range with an estimated probability of 95 per cent. The scale of the y axis differs between locations.

Not all countries in this group are likely to experience a pronounced population decline through the end of the century. In ten of these countries and areas, the population is likely to experience only a limited decline or to plateau over the coming decades. Among the countries that are expected to remain in close range of their present population size until 2054 are Georgia in Western Asia; Germany, Portugal, the Russian Federation and Spain in Europe; and Uruguay in Latin America. Based on the specific circumstances and priorities of each country, population stabilization or limited decline may bring additional opportunities to eradicate poverty, expand access to health care and education, promote gender equality, improve social protection systems, move towards more sustainable patterns of production and consumption, and enact measures to protect the environment and mitigate the negative effects of climate change (see chap IV).

As mentioned in chap I, below-replacement fertility and an older age structure are the main reasons that the populations of many countries in this group are projected to decline. However, there are considerable differences between countries in terms of the relative contribution of each of the components (figure 2.3).

Figure 2.3

Relative contributions of the components of population change, countries and areas with populations that have already peaked, group average and selected countries, by component, projections (medium scenario), 2024–2100 (percentage)



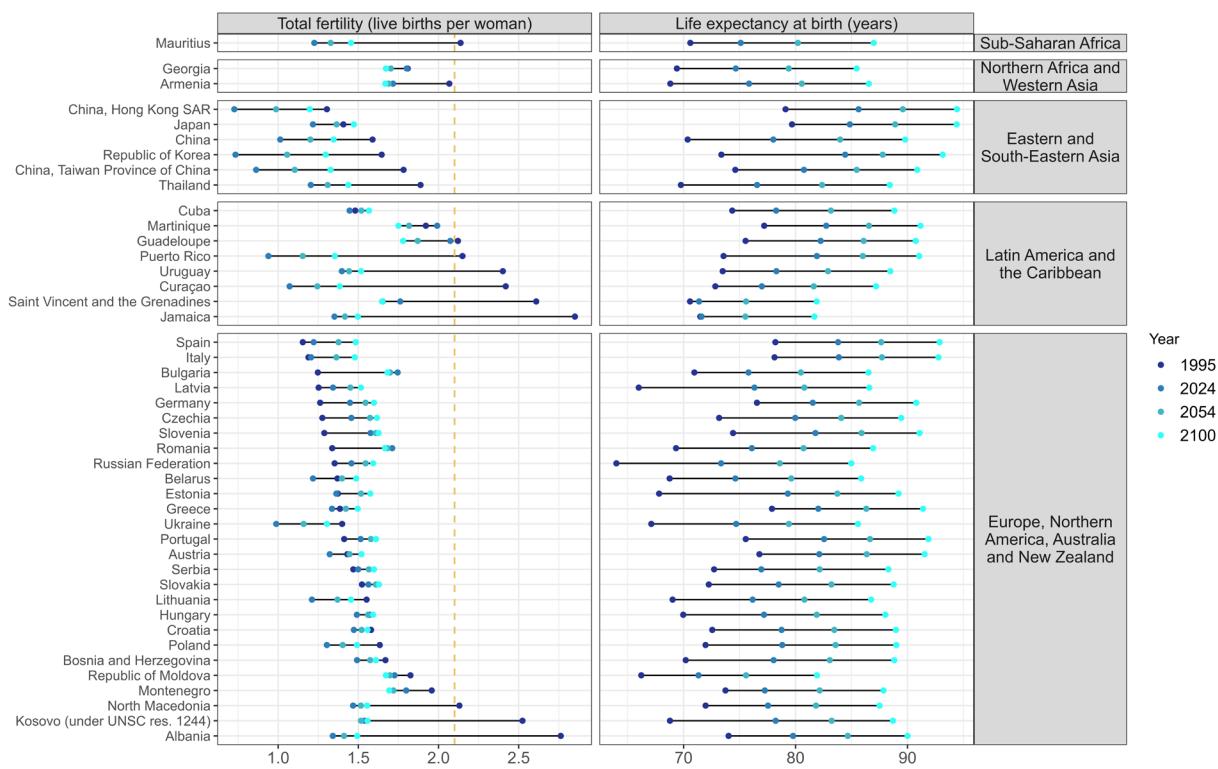
Source: Calculations using data from United Nations (2024a), based on a comparison of different projection scenarios.

Note: Grey lines represent countries or areas with at least 90,000 inhabitants in 2024.

For nearly all of the countries and areas in this group, fertility is already below replacement. Within the group, levels of fertility are lowest for countries in Eastern and South-Eastern Asia, with an average of 1.0 births per woman, and highest in Oceania (excluding Australia and New Zealand), with 2.3 births per woman (figure 2.4). “Ultra-low” fertility levels, meaning fewer than 1.4 births per woman on average, are currently seen in 24 countries, or 38 per cent of all countries and areas in this group, including China and the Republic of Korea in Eastern Asia and Italy and Spain in Europe. Among the countries and areas with populations that have already peaked, Hong Kong Special Administrative region (SAR) of China and the Republic of Korea had the lowest levels of fertility in 2024, with an average below 0.75 births per woman.

Figure 2.4

Total fertility and life expectancy at birth, countries and areas with populations that have already peaked, by region, estimates for 1995 and projections (medium scenario), 2024, 2054 and 2100



Source: United Nations (2024a).

Notes: Countries and areas are ordered by the level of fertility in 1995 within regions. The dashed orange vertical line indicates the level of replacement fertility.

Levels of fertility in these locations are likely to remain relatively stable in the future, with only limited fertility rebounds anticipated until the end of the century (figure 2.4, box 2.1). The return to a level of at least 2.1 births per woman within the next 30 years is highly unlikely in the group of 24 countries with ultra-low fertility, with an estimated probability ranging from 0.1 per cent or less for China and the Republic of Korea to 1.5 per cent for Jamaica.

Box 2.1**Assumptions underlying the “rebound” in future fertility for low-fertility countries**

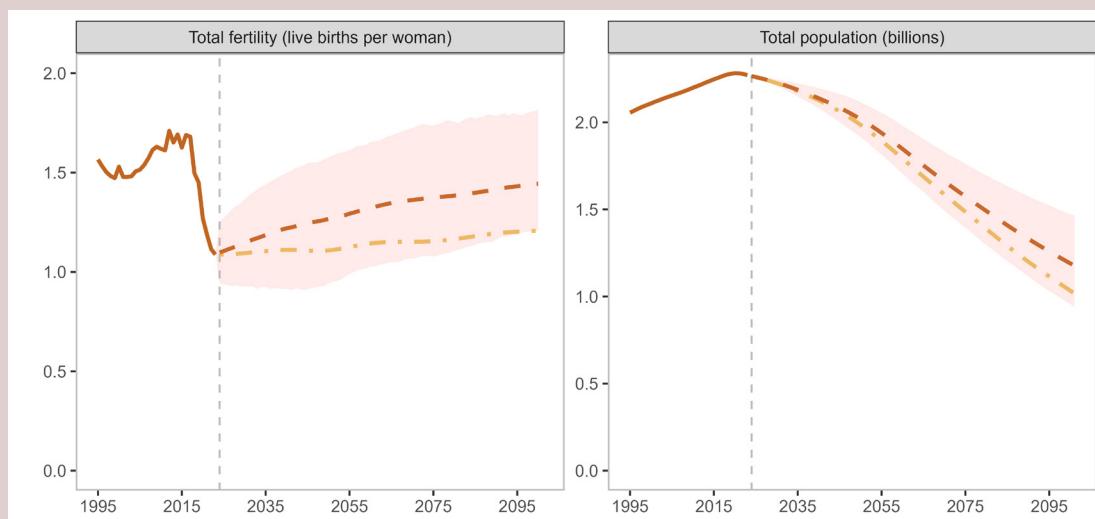
Long-range population projections are highly uncertain, due in large part to uncertainty around the number of children that will be born. For countries with fertility below the replacement level, projecting future fertility levels can be particularly challenging, since there is only limited historical precedent that can be used to inform projections.

For the group of countries and areas with populations that have already peaked as a whole, the medium scenario of *World Population Prospects 2024* assumes that between 2024 and 2100 the level of fertility will gradually increase to 1.4 births per woman (with 95 per cent uncertainty ranging from 1.2 to 1.8 births per woman in 2100) (figure 2.5). This assumption is informed by trends from 39 countries that have experienced declines in total fertility below 2 children per woman, followed by a subsequent rebound over at least two consecutive periods of five years (see United Nations, 2024b). The “rebound” in future fertility for low-fertility countries is consistent with an expectation of continued progress towards gender equality and women’s empowerment and improving social and economic opportunities for young people and families (box 2.2).

The effect of this assumption can be observed by comparing the medium scenario with the constant-fertility scenario, where total fertility of each country is set to remain constant at the level of 2023. For the group of countries with populations that have already peaked, the level of fertility by 2100 would be a quarter of a child less under the constant fertility scenario than under the medium scenario (figure 2.5). Assumptions about future fertility and resulting population change have important implications for the sustainable development of countries. Different fertility assumptions can help explain some of differences in the population projections produced by leading demographic research institutions (see box 4.1).

Figure 2.5

Total fertility and population, countries and areas with populations that have already peaked, estimates, 1995–2023, projections (medium scenario) with prediction intervals and scenario with constant fertility (dash-dotted line), 2024–2100



Source: United Nations (2024a).

Notes: Prediction intervals are represented as shaded areas around a projected trend. For a given year, the future trend is expected to lie within the predicted range with an estimated probability of 95 per cent.

Among countries where population size has already peaked, the ultra-low fertility levels of countries in Eastern and South-Eastern Asia are likely to contribute to faster population declines in the foreseeable future, compared to other countries in this group. These projected trajectories of future fertility are based on the medium projection scenario of the United Nations, which assumes that, with time, individuals and couples will have more social and economic opportunities that will enable them to realize their childbearing intentions in low-fertility countries (see box 2.1). In many of the countries and areas with ultra-low fertility, gender gaps in the division of domestic work within households, challenges in balancing work and family, care responsibilities for ageing parents and inadequate child and family welfare support can prevent or discourage women and couples from having larger families even when they want them. The total annual number of births in this group is projected to decline rapidly, falling from around 15 million in 2024 to 11 million in 2054. In 2024, 11 per cent of all babies worldwide were born in this group of countries and areas. In the future, the share of newborns in this group is likely to decline to 8.8 per cent by 2054 and 6.7 per cent by 2100. Because only a limited rebound in the level of fertility and continued decline in the number of women of reproductive age are projected for this group of countries and areas, the likely range for future numbers of births is relatively small especially when compared to that of other groups, such that the size of the birth cohort in 2054 will lie between 8.2 and 14.6 million with an estimated probability of 95 per cent.

The sex ratio at birth, defined as the number of boys born for every girl, is 1.08 among countries that have already peaked in size. This ratio is high compared to both the global average in 2024 (1.05 boys per girl) and the biological norm (between 1.02 and 1.06), indicating a gender-bias skewed towards males (WHO, 2011). The sex ratio at birth is particularly high for the countries in this group in Eastern and South-Eastern Asia (1.1 boys per girl in 2024) and in Oceania (excluding Australia and New Zealand) (1.09 boys per girl). Countries such as the Republic of Korea have been successful in rebalancing sex ratios at birth through programmes aimed at changing cultural norms surrounding son preference (Chung and Gupta, 2007). Addressing gender-based sex selection, which is closely linked to the achievement of SDG 5 on gender equality, might also contribute to increasing the number of births under some circumstances in these societies.¹⁵

The declining number of births in this group is partly explained by the shrinking number of women of reproductive age in these locations, which generates negative population momentum. In countries with populations that have already peaked, the number of women in the reproductive age range is projected to fall by 33 per cent between 2024 and 2054. By the late 2030s, half of the women in countries with populations that have already peaked will be too old to have children by natural means. By the early 2070s, as many as 61 per cent of the women in this group could be aged 50 or older. Hong Kong, SAR of China and Puerto Rico are likely to have the highest share of women aged 50 or older at that time, with values of 80 per cent and 72 per cent, respectively.

In 18 countries and areas that have already peaked in size, the negative population momentum generated by an older age distribution is likely to be the main driver of population decline through 2054. Because the number of women in the reproductive age range is projected to decline rapidly in such countries, the number of children born would decrease even if fertility were to return to replacement level. The impact on population size of policies aimed at raising fertility levels is, therefore, likely to diminish over time. Such trends have wide-ranging implications for reproduction, family planning and policy formulation (box 2.2). Even assuming a substantial rebound in the fertility level, these populations are likely to continue declining in size because of the momentum of past decline.

Continuing progress in reducing mortality, the only demographic component projected to contribute positively to population change in this group (figure 2.3), has resulted in increasing life expectancy at birth. Across this group of countries and areas, life expectancy increased from 70.9 years in 1995 to 78.8 years in 2024. In 2024, Hong Kong, SAR of China, Japan and the Republic of Korea had the highest levels of life expectancy at birth (at least 84 years) in the group and in the world. Other countries with high life expectancy at birth are Italy, Portugal and Spain in Europe, and Guadeloupe and Martinique in the Caribbean. In contrast, life expectancy at birth is the lowest in Jamaica and Saint-Vincent and the Grenadines in Latin America and the Caribbean, and in the Republic of Moldova in Europe, with levels below 72 years. These differences are projected to narrow, but not disappear, in the coming decades.

¹⁵ Addressing sex selection would mean that the number of girls born would increase. Once those girls move into adulthood, they might choose to become mothers.

Box 2.2

Policies to support families and help couples and individuals to achieve their desired family size

Today, two thirds of the global population live in a country or area where average fertility is below 2.1 births per woman. In several low-fertility countries, women have, on average, fewer children than they had expected, and more often than intended, they remain childless (Beaujouan and Berghammer, 2019). Individuals and couples face multiple obstacles to achieving their desired family size, including demands of higher education, high costs of childcare, challenges to work-family balance, unequal division of household tasks between partners, care responsibilities for ageing parents and biological limits to the reproductive lifespan.

Addressing these constraints will help to ensure that all individuals have the opportunity and means to achieve the family size that they desire. Following the principles set out in the 1994 ICPD Programme of Action and implementing policies based on inclusive, rights-based and gender-sensitive approaches is more likely to deliver a sustainable response to low levels of fertility than policies focused on aggregate-level demographic outcomes, which could have harmful effects on the sexual and reproductive health of couples and individuals and accentuate gender inequality (Gietel-Basten and others, 2022).

Many countries have implemented or tested a range of family-friendly and gender-responsive policies that could contribute to stabilising or reversing low fertility rates. While their impact is contingent on many contextual and societal factors, Governments wishing to help couples and individuals to achieve their desired family size may consider a variety of policies aimed at balancing family and work life. These may include: providing paid parental leave and flexible working arrangements; supporting affordable, high-quality childcare options and housing; providing comprehensive care for an ageing population; and encouraging an equal distribution of caregiving and household responsibilities between men and women (Bergsvik and others, 2021; Sobotka and others, 2019).

Making reproductive technologies such as in-vitro fertilization (IVF) more affordable and widely accessible is another policy response that might be considered, given the postponement of childbearing and the evidence that human fertility declines with age (Pino and others, 2020; Te Velde and Pearson, 2002). While each country's approach varies based on its unique cultural, economic and social context, the central principle remains consistent: supporting families and maintaining a holistic and inclusive approach to sexual and reproductive health and rights is key to addressing some of the reasons why individuals and couples might be hesitant to have children in a modern society.

For countries and areas that have already peaked in size, gains in life expectancy are projected to contribute positively to population growth in the coming decades, with the effect likely to increase throughout the century (figure 2.3). Still, reductions in mortality will compensate for only one third of the negative effect of fertility and therefore will not be enough to counter the negative effect on population change.

In 2024, life expectancy at birth for women in this group of countries exceeded that for men by 6.4 years, with female and male life expectancies standing at 82.0 and 75.6, respectively. Due to differences linked to gender-associated behavioral factors, as well as biological differences, women outlive men in all countries of the group. It is important to consider gender differences in life expectancy when formulating policies to ensure equitable access to retirement benefits, address gender-specific health-care needs, and strengthen social support systems to mitigate potential caregiving burdens (United Nations, 2023a). Future increases in life expectancy at birth are projected to be higher for males than females at similar levels of life expectancy at birth, and as a result the gap between the two will narrow.

Changes in fertility and mortality not only impact a population's size, but also its age structure. For the group of countries with populations that have already peaked, the share of people at younger ages (under age 20) is expected to decline from 21 per cent in 2024 to 14 per cent in 2054 and remain at that level until the end of the century (figure 1.8). Inversely, the share of persons aged 65 or older is likely to grow rapidly, nearly doubling between 2024 and 2054 from 17 per cent to 33 per cent. By 2100, older persons are likely to comprise around 40 per cent of the total population of the group of countries that have already peaked in size (for the group as a whole, the share of persons aged 65 or older will lie between 33 and 49 per cent in 2100 with an estimated probability of 95 per cent).

Box 2.3

Different approaches to measuring population ageing

Population ageing is a global phenomenon driven by the decline in fertility rates and the continuing improvement in survival to older ages. Understanding and measuring population ageing is crucial to plan and adopt policies and to develop and take appropriate actions to effectively address its implications.

Various measures of population ageing are available. All aim to reflect changes in the distribution of individual characteristics (such as chronological age, health status or functioning capacities) within a population (Skirbekk and others, 2019). A first typology of indicators assesses population ageing from the point of view of changes in the age structure of a population. The proportion of persons above a given age – typically aged 65 or older – or the median age of a population has been traditionally used to measure shifts in population age structure. Further indicators, such as the ratio of the older population to the working-age population (typically defined as the population between the age of 20 and 64), are also used. This first set of indicators are simple to compute and easily comparable across time and space, and are the ones referenced in this report.

Alternative approaches measure population ageing by considering the expected time until death (i.e., the prospective old-age dependency ratio) or the ratio of the effective number of consumers aged 65 years or older to the effective number of workers at all ages (i.e., the economic old-age dependency ratio) (United Nations, 2019). These indicators were developed to account better for the characteristics and behaviours of the older population, including that not all people stop working at age 65. However, they require more detailed data that are not always available and involve greater computational complexity.

Finally, a last series of indicators, including the disability-adjusted life years (DALYs) or the healthy life expectancy (HALE) at birth, try to capture the diversity and heterogeneity of the older population, including differences in their health, functional ability and socioeconomic status. These approaches focus mostly on assessing specific characteristics of older persons and their application is often limited by data availability.

Under the medium projection scenario, the share of older persons will continue to increase in the countries and areas with populations that have already peaked. In 2054, older persons could comprise one third or more of the population in 16 of these locations, with Hong Kong, SAR of China, and the Republic of Korea recording some of the highest values. The number of persons aged 65 or older in countries and areas with populations that have already peaked is projected to reach 409 million by 2027, surpassing the number of children under age 18. The number of persons aged 80 or older in the same group is increasing even faster and is likely to triple, rising from 85 million in 2024 to around 267 million by 2100 (the size of the population aged 80 or older in 2100 will lie between 203 and 358 million with an estimated probability of 95 per cent). In 2024, the number of persons aged 80 or older in this group of countries is already larger than the number of infants (1 year of age or less).

As populations in this group of countries and areas continue to age, long-term planning is needed, including to strengthen systems of health care and long-term care, improve the sustainability of social protection systems and invest in new technologies. Countries with populations that have already peaked in size and are ageing rapidly (box 2.3) should consider leveraging technology, including automation, to improve productivity at all ages. They should also strengthen efforts to provide lifelong learning and retraining, support multigenerational workforces and create employment opportunities for older persons who want to continue to work.

For nearly all countries and areas with populations that have already peaked in size, the time-bound window of opportunity for accelerated economic growth associated with a youthful population and declining fertility has already closed (see box 3.1). However, even in countries where the share of population at the working ages (between 20 and 64 years) is shrinking, there are ways to foster an increase in per capita economic growth. One strategy is to become more inclusive, by bringing into the formal labour market groups that have been traditionally excluded, such as women, older persons and persons with disabilities. Another approach is boosting worker productivity by investing in human capital formation and lifelong training and leveraging the use of technology, including robotics, automation and artificial intelligence (AI) (United Nations, 2023a). Immigration can also help alleviate labour force shortages associated with population ageing, at least in the short term. Enhancing the availability and flexibility of pathways for safe and orderly migration not only protects the human rights of migrants, but also benefits communities at the place of origin, along transit routes and in the final destination.

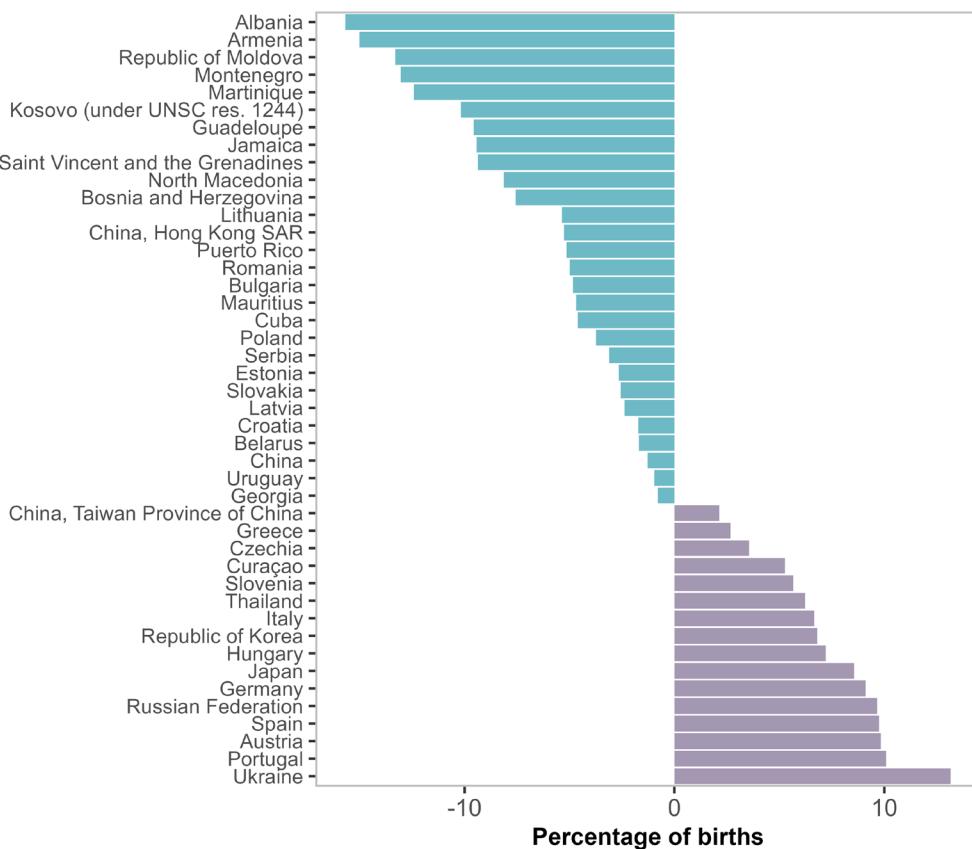
Compared to fertility and mortality, international migration generally does not have a major impact on the population size of countries in this group (figure 2.3), although for some countries, net immigration helps counter population decline. The population of some 19 countries in this group, including Germany, Japan, Italy, the Russian Federation and Thailand would have peaked earlier and at a lower level in the absence of immigration. International migration alone, however, cannot offset population decline or population ageing in the long term and should not be seen as a “solution” to what is ultimately a universal and irreversible process: the demographic transition.

In countries where fertility levels are already below replacement, the emigration of people in the reproductive age range can contribute to further population decline. In 62 per cent of the countries and areas of the group already experiencing low levels of fertility, emigration is likely to contribute to reducing further population size between now and 2054. International migration also indirectly impacts the number of births in countries of destination and in countries of origin (figure 2.6). In countries and areas such as Albania, Armenia, Guadeloupe and Jamaica, the emigration of large numbers of women of reproductive age can reduce the number of births taking place in those locations, while in countries such as Portugal, the Russian Federation and Spain immigration has the opposite effect. From a demographic perspective, the births “lost to emigration” or “gained through immigration” have both short-term and long-term consequences, since the girls born today are the women of reproductive age of the next generation. In countries with high rates of emigration, creating more opportunities for decent work and promoting return migration may be approaches to explore and could be more effective at slowing population decline in the short term than policies aimed at raising fertility levels.

It seems unlikely that countries with populations that have already peaked by 2024 will renew their population growth between now and 2100. Even if fertility were to return instantly to the replacement level and stay there for several decades, the population of the group would start to decline after 2040 and would become stable (with a growth rate around zero) only in the long term due to the negative momentum embedded in the age structure of the current population, which will continue to influence the demographic trajectories of these countries and areas for decades to come. Thus, under the instant replacement scenario, the total population at the end of the century for the group of countries whose populations have already peaked would remain below its present level.

Figure 2.6

Projected number of births lost due to emigration (negative values) and gained through immigration (positive values) as percentage of total births in the medium scenario, countries and areas with populations that have already peaked, 2024–2054



Source: United Nations (2024a).

Notes: The percentage of births lost and gained are computed as the relative difference between the total births in the medium scenario and the total births in the zero net migration scenario. Countries and areas are listed by percentage of births in ascending order.

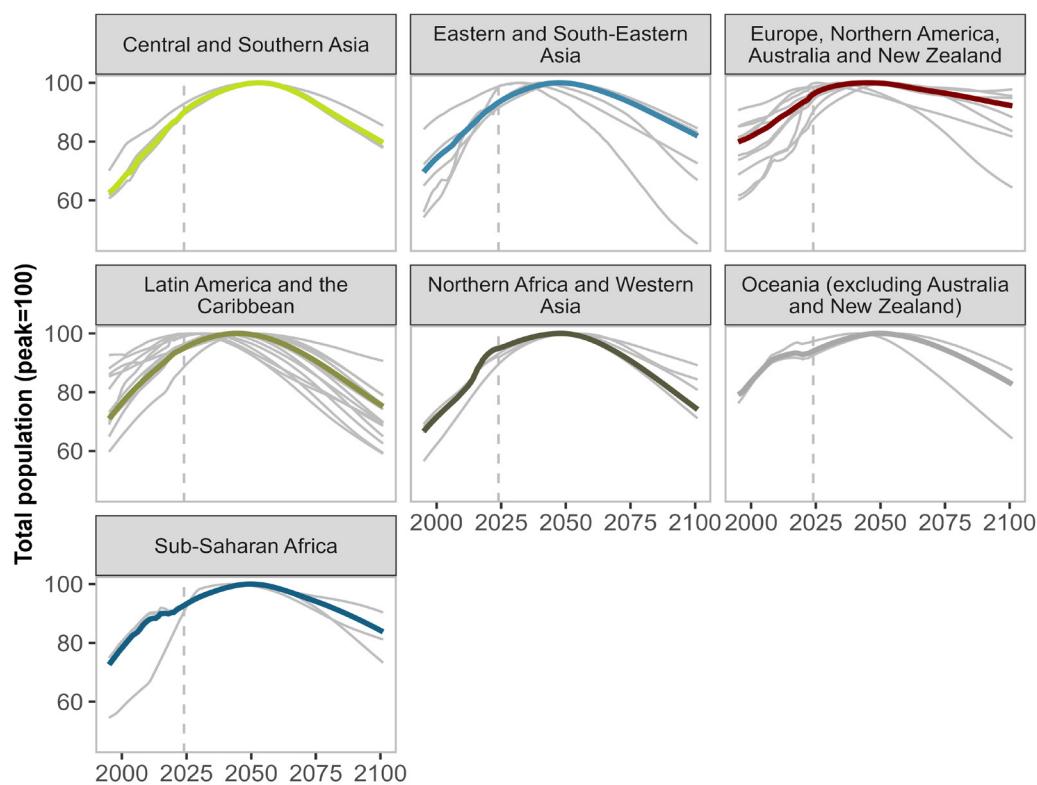
Chapter III. Countries and areas with populations likely to peak within 30 years

Between 2025 and 2054, the populations of 48 countries and areas are projected to reach their peak size. Brazil, the Islamic Republic of Iran, Türkiye and Viet Nam are among the most populous members of this group. While the populations that have already peaked are predominantly in Europe, the largest number among those likely to peak within 30 years are found in Latin America and the Caribbean—19 countries and areas, or 40 per cent of the total.

The countries and areas in this group are in the later stages of the demographic transition, when fertility falls below the replacement level and growth slows as the population approaches its peak size. They face many of the same challenges and opportunities as those with populations that have already peaked (see chap II) and those with populations likely to grow through 2054 (see chap IV). Over the next three decades, members of this group will need to balance the immediate demands of a population that is younger and still growing with the emerging demands of a population that is older and no longer growing.

Figure 3.1

Total population indexed to peak size, for countries and areas with populations likely to peak within 30 years, regional average and selected countries, by region, estimates, 1995–2023, and projections (medium scenario), 2024–2100



Source: United Nations (2024a).

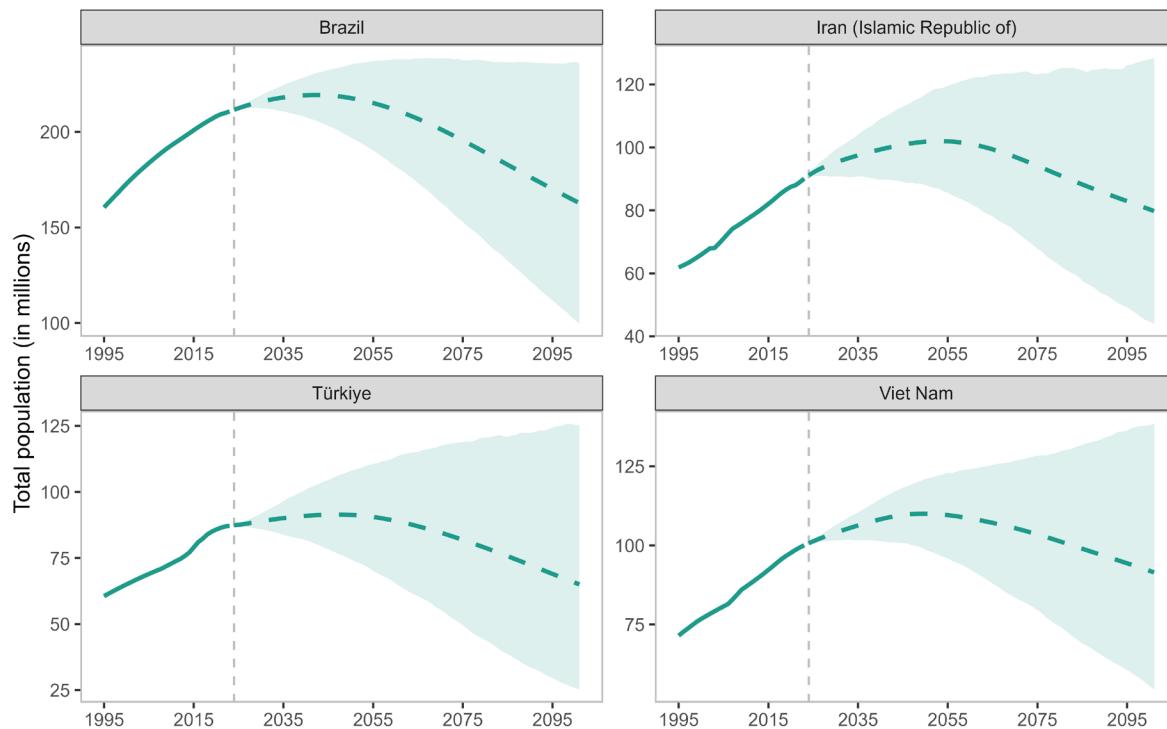
Note: Grey lines represent countries or areas with at least 90,000 inhabitants in 2024.

The size of the population in these locations is projected to increase by 5.3 per cent over the next 30 years, with Bhutan, Colombia, Cyprus, the Islamic Republic of Iran and Ireland among the countries recording the largest relative increases by 2054. According to the United Nations' medium projection scenario, the group's population will reach a peak of 875 million by the late 2040s (with 95 per cent probability that the peak will occur between 2038 and 2059), up from 825 million in 2024, and then start to decline. By 2100, it is projected to have fallen to 690 million (with 95 per cent probability that the size of the population of the group will lie between 583 million and 834 million), roughly returning to the size it had in 2004. By that date, the group will likely be home to 6.8 per cent of the world's population, down from 10 per cent in 2024. At the end of the century, all but two countries and areas in the group – Ireland and Switzerland – are projected to have a smaller population than they have today (figure 3.1).

After reaching their peak size between 2025 and 2054, countries in this group are likely to follow somewhat different trajectories. Nineteen of them are likely to see their population decline by 20 per cent or more by the end of the century. The population of Brazil, the largest country in the group and the seventh-largest country globally in 2024, is likely to peak in the early 2040s at around 220 million people (figure 3.2). After that, the population of Brazil is projected to start to decline, falling to 163 million by 2100. At the end of the century, Brazil's population is projected to be 26 per cent smaller than at its peak and 23 per cent smaller than in 2024 (with 92 per cent probability that the size of the population will have declined by 2100). Because of this decline, and the rapid population growth of other countries, Brazil is likely to see its position in the ranking of the world's most populous countries drop by 2100 (figure 4.4). Other countries with populations that are likely to decline rapidly after reaching their peak size between 2025 and 2054 are the Islamic Republic of Iran in Central Asia, Singapore in Eastern Asia, Argentina, Chile and Colombia in Latin America, and Türkiye in Western Asia. For other countries in the group, the decline is likely to be more gradual.

Figure 3.2

Total population for selected countries with populations likely to peak within 30 years, estimates, 1995–2023, and projections (medium scenario) with prediction intervals, 2024–2100



Source: United Nations (2024a).

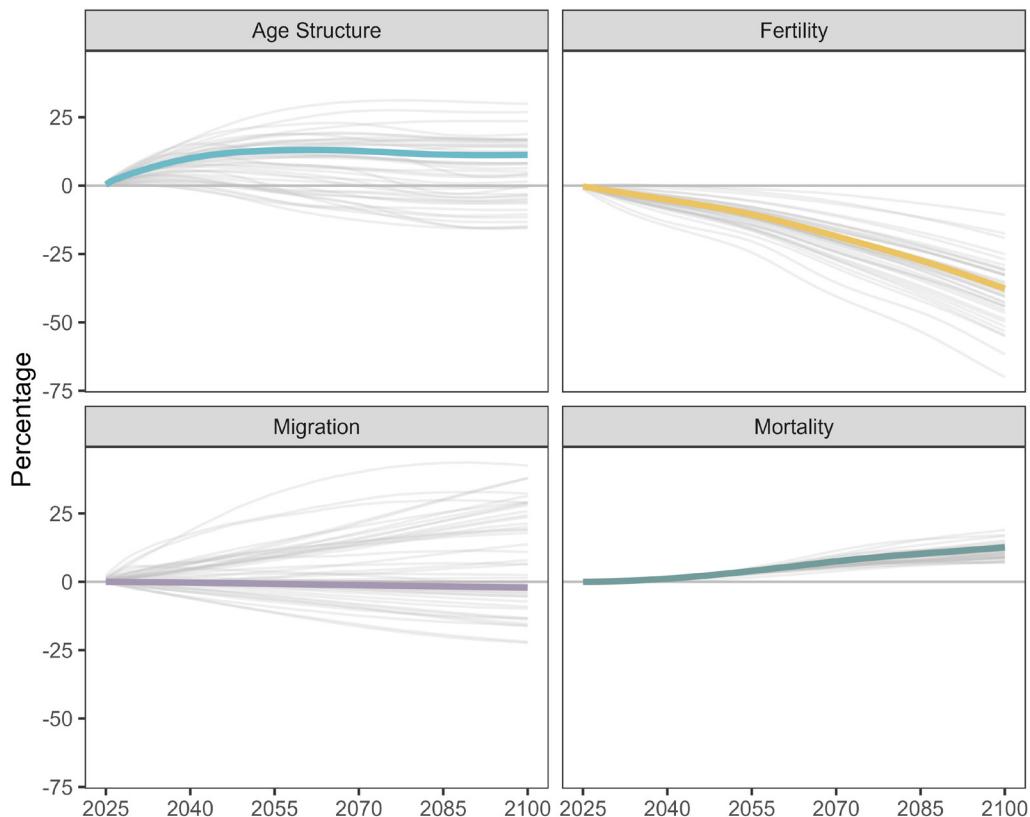
Notes: Prediction intervals are represented as shaded areas around a projected trend. For a given year, the future trend is expected to lie within the predicted range with an estimated probability of 95 per cent. The scale of the y axis differs between locations.

Based on the United Nations' medium scenario, Belgium, Denmark, Netherlands, Norway and Switzerland have a 50 per cent chance that their population will plateau, remaining within a close range of their peak population size. The policies implemented by countries with populations that have already peaked may be of great interest to countries that are likely to peak in size in the next 30 years (see chap II). Leveraging the understanding of how such trends are likely to unfold in the short and longer terms is critical to plan for a more inclusive, prosperous and sustainable future, both in the context of rapid population decline and in the context of relative population stabilization.

The relative contribution of fertility, mortality and international migration to population change in these locations is likely to resemble that of countries with populations that have already peaked, with fertility contributing negatively to population change, mortality positively and international migration having a limited impact (see chap II). However, because of the momentum of past growth, this group of countries and areas is characterized by an age structure that is more conducive to population growth (figure 1.8). In 25 such countries and areas, including Brazil, the Islamic Republic of Iran and Viet Nam, momentum is projected to be the main driver of population growth in the next decades. Over time, the relative contribution of momentum to population growth in these locations is likely to decline, and by the 2090s gains in mortality will overtake momentum as the main driver of positive population change. However, based on the medium projection scenario of the United Nations it is unlikely that the combined effect of these components will be enough to counterbalance the negative effect of the projected decline in fertility through the end of the century (with 1 per cent probability) that will drive population decline in this group after its peak.

Figure 3.3

Relative contributions of components of population change, countries and areas with populations likely to peak within 30 years, group average and selected countries, by component, projections (medium scenario), 2024–2100 (percentage)



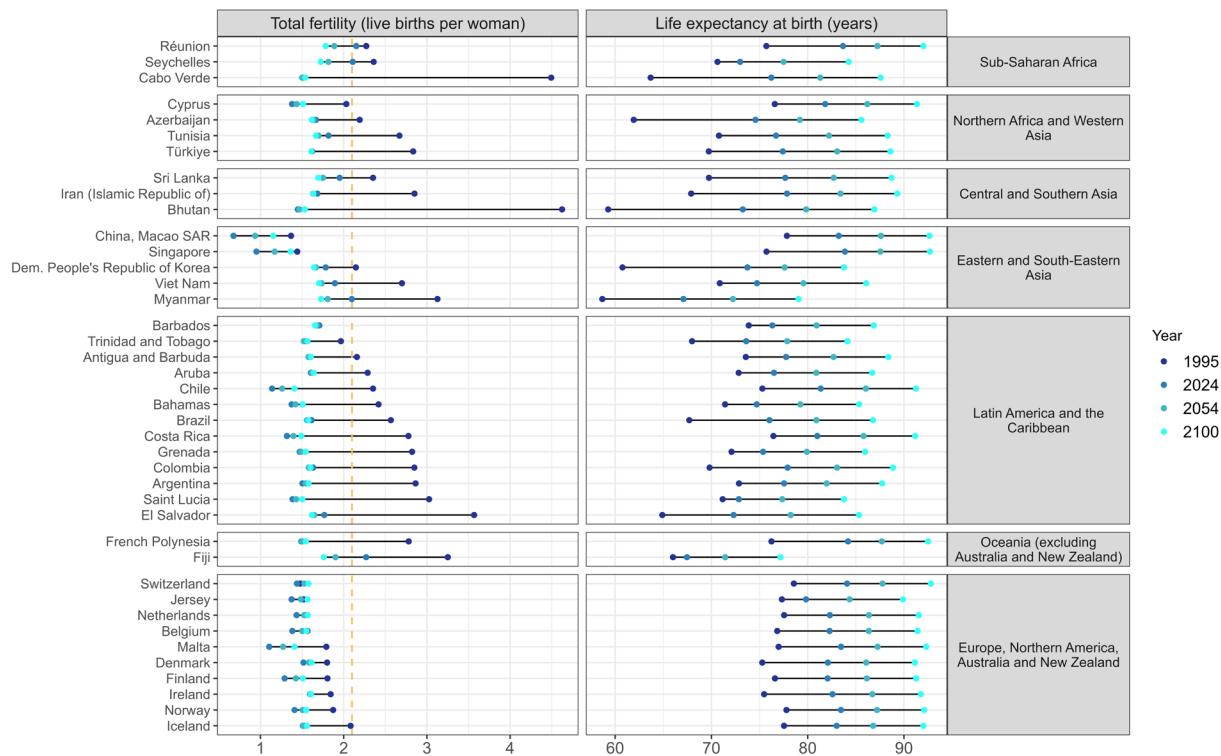
Source: Calculations using data from United Nations (2024a), based on a comparison of different projection scenarios.

Note: Grey lines represent countries or areas with at least 90,000 inhabitants in 2024.

Fertility levels are already at or below replacement in nearly all the countries of the group. However, in three countries or areas (Fiji, Réunion and Seychelles), fertility may play a very small, positive role on population change until the late 2030s. Sixteen countries in the group have an ultra-low level of fertility, defined as an average of less than 1.4 births per woman (figure 3.4). Macao Special Administrative region (SAR) of China and Singapore, both in Eastern Asia, had the lowest levels of fertility in the group in 2024, at 0.68 and 0.95 births per woman, respectively.

Figure 3.4

Total fertility and life expectancy at birth, countries and areas with populations likely to peak in 30 years, by region, estimates for 1995 and projections (medium scenario), 2024, 2054 and 2100



Source: United Nations (2024a).

Note: Countries and areas are ordered by the level of fertility in 1995 within regions. The dashed orange vertical line indicates the level of replacement fertility.

Based on the medium projection scenario, by 2054 the average number of births per woman will range between 0.94 and 1.90 for countries in this group. A slight rebound in fertility levels is assumed by the end of the century, but even with that, total fertility is likely to remain well below 2 children per woman in all countries in the group, with values ranging between 1.15 and 1.78 births per woman at the end of the century. These levels are not high enough to guarantee the replacement of the population. The estimated likelihood that countries and areas in this group with ultra-low fertility today return to 2.1 births per woman in 30 years is low, ranging from 0.0 per cent for Macao, SAR of China to 2.2 per cent for Saint-Lucia.

Progress in reducing mortality is likely to contribute positively to population change in all countries in the group (figures 3.3, 3.4). At the group level, average life expectancy at birth reached 76.5 years in 2024, with one third of countries, including Macao, SAR of China and Singapore in Eastern Asia, and Denmark, Finland, Netherlands, Norway and Switzerland in Europe having levels of life expectancy above 82 years (figure 3.4). Due to continuing progress in

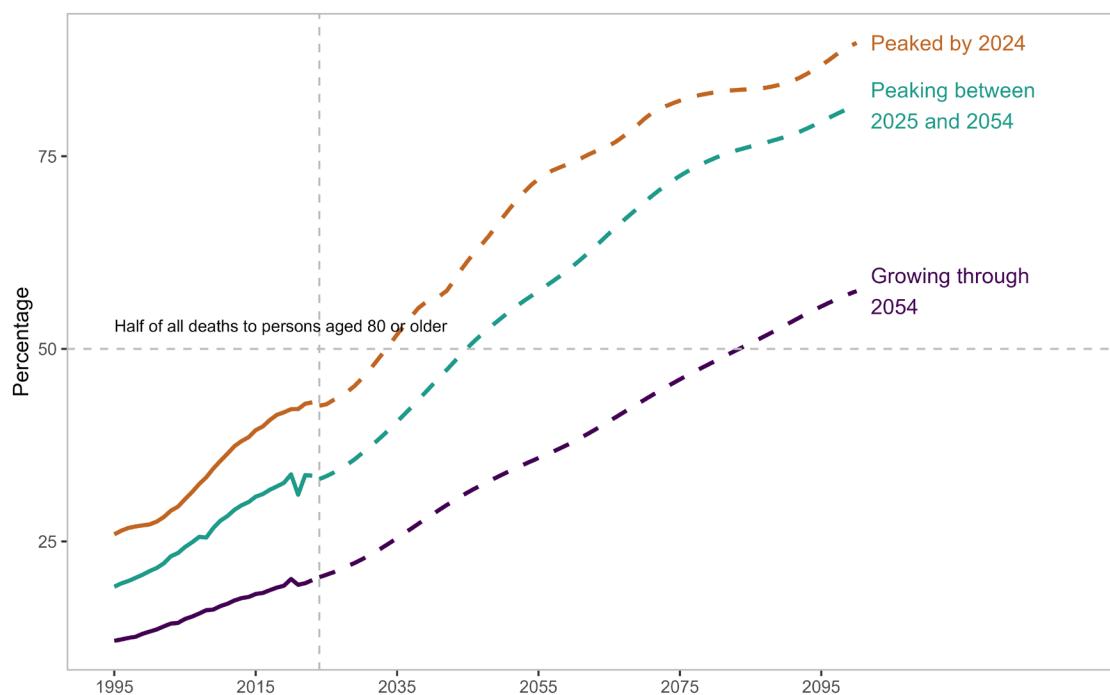
preventing premature mortality among children and adults, life expectancy in this group of 48 countries is projected to increase to more than 87.2 years by the end of the century.

In all countries in this group, women live longer than men, with female life expectancy exceeding male life expectancy by more than 2.8 years in 2024. By 2100, this gap is likely to narrow slightly, with male and female life expectancy at birth reaching 85.6 and 88.9 years, respectively. Since women live longer than men, promoting income-generating opportunities and financial literacy among women, including at older ages, and strengthening their productive capacities throughout the life course can play a crucial role in improving their autonomy, health and well-being and in enhancing dignity at older ages, with positive effects on overall productivity and economic growth for societies at large.

One of the effects of people enjoying longer lives is that there are fewer people dying at younger ages. By the mid-2040s, over half of all deaths in the countries in this group will be among persons aged 80 or older (figure 3.5). In comparison, less than one third of all deaths occurred at ages 80 and higher in 1995. These important gains in human survival will likely increase the demand for health care and long-term care and raise the cost of public pensions (United Nations, 2023a).

Figure 3.5

Percentage of deaths at age 80 or above for countries and areas in three groups by timing of the peak in population size, estimates, 1995–2023, and projections (medium scenario), 2024–2100



Source: United Nations (2024a).

International migration is projected to play a negligible role in shaping population change at the aggregate level of the group (figure 3.3). In 19 countries, however, net migration is likely to positively impact population change through 2054. Added to the positive contribution of reductions in mortality, migration will help counteract the negative effect on population growth of below replacement level fertility in some countries. For countries such as Denmark, Finland, Iceland, Ireland, Netherlands, Norway and Switzerland, migration is one of the reasons why their population is

projected to continue to grow over the coming decades. Without positive net immigration, the population of these countries would have peaked earlier. In many countries of the group, migration, in addition to the timing and level of their population peaks, is also likely to influence their age structure. Because immigrants tend to be concentrated in the young adult age ranges (roughly, between 20 and 39 years) they tend to boost the number and proportion of the working-age group in host countries.

Compared to countries and areas with populations that have peaked already, most of those with populations that are likely to peak in the next 30 years are characterized by an age structure that is more conducive to population growth, with a relatively larger share of the population at working ages. In many of these countries and areas, the decline in fertility occurred later and the share of people at younger ages has not yet been counterbalanced by an increase in those at older ages. As a result, the share of population in the working ages in this group has continued to grow while in countries and areas with populations that have peaked already the share has been declining. The growth in the share of the population at working ages can provide an opportunity for accelerated economic growth and social development known as the demographic dividend (box 3.1).

Box 3.1

The demographic dividend as a window of opportunity to accelerate sustainable development

In most societies, children and older persons consume on average more than they produce.¹⁶ A rapid and sustained reduction in the fertility level results in a population age distribution in which the most highly productive years are temporarily overrepresented relative to the combined shares of people at younger and older ages (Lee and Mason, 2006). The enlarged share of potential workers leads automatically to an increase in income per capita, assuming that output per worker and levels of engagement in the labour force remain unchanged (Mason and Lee, 2018).

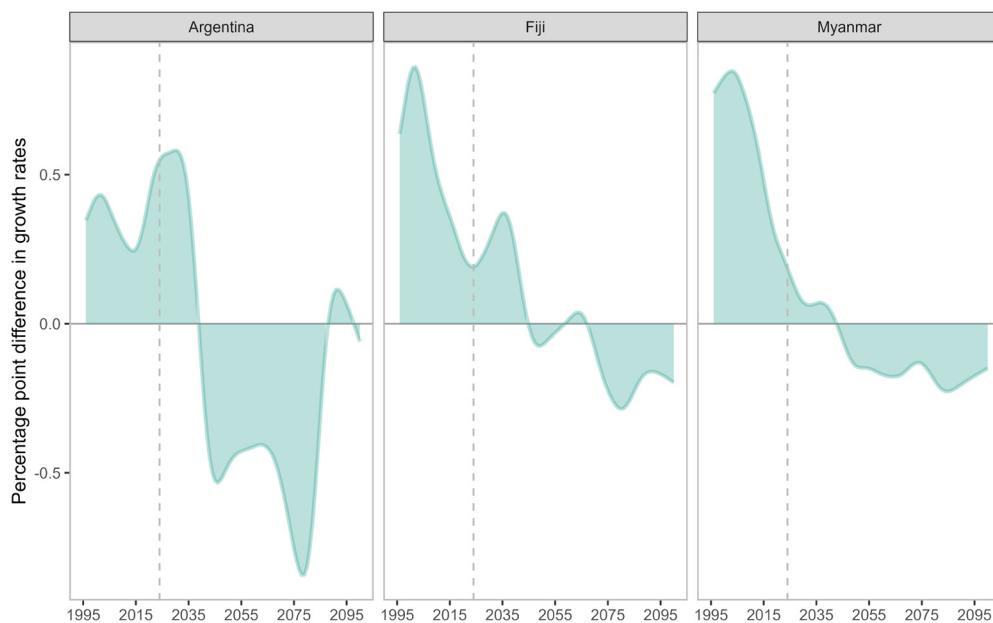
The dividend is usually described as a window of opportunity for countries with relatively youthful populations to accelerate their economic and social development by redirecting resources freed up by having fewer children, at both the societal and familial levels, towards improving educational and health outcomes and raising standards of living (Bloom and others, 2003). While the demographic circumstances underlying the dividend are conducive to rapid economic growth on a per capita basis, reaping the maximum potential benefit requires sufficient improvements in education, health, gender equality and gainful employment.

For most countries with populations that are likely to peak over the next 30 years, the share of persons of working ages was already declining in 2024. However, for one quarter of the countries and areas in this group, the demographic window of opportunity remains open (figure 3.6). These include Bhutan in Southern Asia, Myanmar in South-Eastern Asia, Argentina, Colombia and El Salvador in Latin America, and Fiji in Oceania. These countries and areas have between 10 and 20 years to realize their demographic dividend. Many of them, however, will need to urgently increase investments in education, health care, employment and social protection on a per capita basis to fully take advantage of this time-bound opportunity for accelerated economic growth (see also chap IV). By 2054, the share of population at working ages is likely to have declined compared to 2024 in all but 6 of the 48 countries of the group and the window associated with a youthful population and declining fertility will have closed. At the end of the century, all countries with populations that are likely to peak by 2054 will have lower shares of working age population than in 2024.

¹⁶ The following discussion draws on United Nations (2021).

Figure 3.6

Relative difference between population growth rates in working ages and in total population, countries with populations likely to peak in 30 years, selected countries, estimates, 1995–2023 and projections (medium scenario), 2024–2100



Source: United Nations (2024a).

Notes: For analytical purposes, it is assumed that the working age range extends from 20 to 64 years. The difference between the growth rate of the population of working age and the growth rate of the total population equals the theoretical contribution of changes in the age distribution to the growth of GDP per capita. Such changes can be positive or negative. The shaded areas in the graph represent the dividend, and the vertical dash line indicates the year 2024.

High levels of emigration from some of the countries and areas in the group are expected to contribute to reducing the size of their working-age population, potentially undermining their opportunity to benefit from a demographic dividend. For example, in French Polynesia and El Salvador, two of the locations in the group with the highest emigration rates, the working age population in 2054 would have been more than 11 per cent higher without international migration. For the countries experiencing high levels of emigration, minimizing the adverse drivers and structural factors that compel people to leave their country of origin and promoting return migration could bolster the size of their working-age population and prolong their demographic window of opportunity.¹⁷ This, however, would be contingent on progress in creating conditions for people to fulfil their personal aspirations and lead peaceful, productive and sustainable lives in their own country.

In locations where the size of the population is projected to peak in the next 30 years, a crossover between the number of children under age 18 and the number of persons aged 65 or older is likely to occur by the mid-2040s. The number of persons aged 65 or older in this group is likely to double over the next 30 years, reaching 203 million in 2054 and representing 23 per cent of the total population. Between 2054 and 2100, the number of persons aged 65 or older is expected to grow by an additional 13 per cent. The share of persons at older ages will increase by 42 per cent and reach one third of the total population in 2100. It is likely that more than one third of the population in 26 countries and areas in this group will be aged 65 or older by 2100. These will include Brazil, Chile and Colombia in Latin America, Tunisia and Türkiye in Northern Africa and Western Asia, and Singapore in South-Eastern Asia. Faced with a future of rapidly growing numbers and proportions of older persons, countries and areas in this group may consider measures to strengthen their systems of health care and long-term care, promote lifelong learning, expand employment opportunities for older persons who want to continue to work, address age-based prejudice and discrimination, invest in and explore new industries that cater to this growing population group, and improve the sustainability and equity of social protection systems (United Nations, 2023a).

¹⁷ In countries of origin, the earnings that migrants send home as cash or goods can reduce poverty and improve the educational and health outcomes of members of their families and communities. International migrants also make positive contributions to sustainable development in communities of destination (United Nations, 2024c).



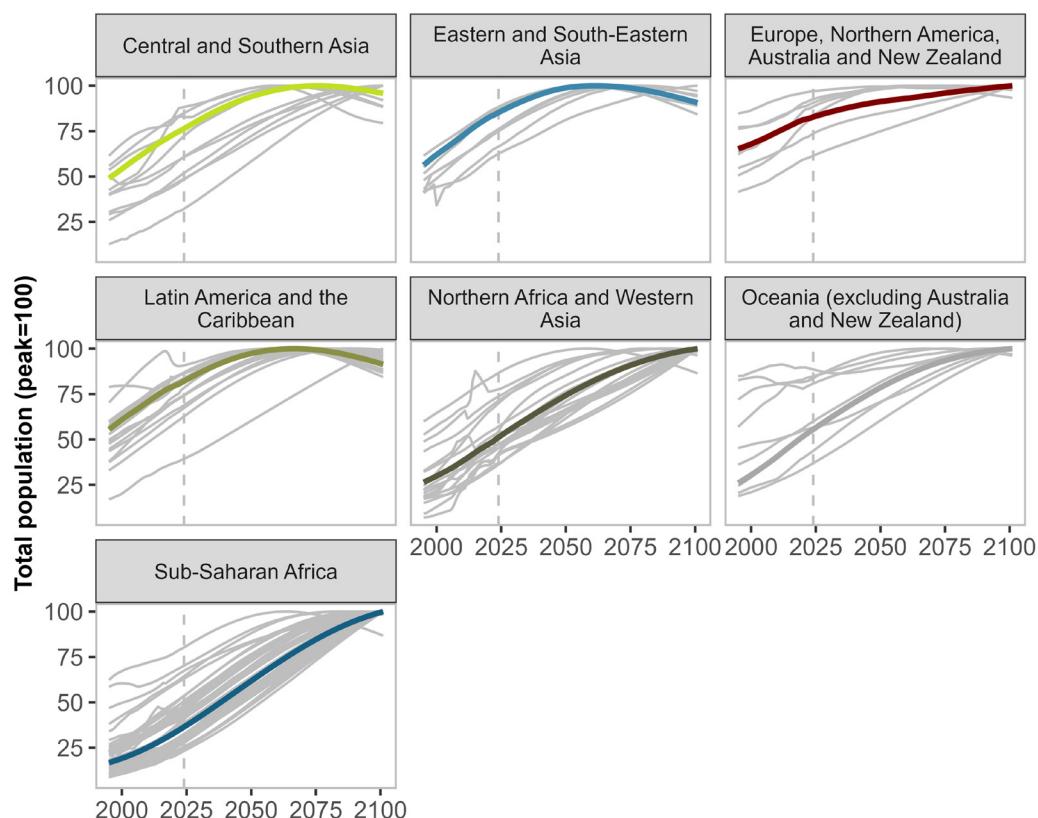
Residents in the northern mountain region of Viet Nam (2024). Simone D. McCourtie/World Bank.

Chapter IV. Countries and areas with populations likely to grow through 2054

For decades, there has been widespread concern about the impact of rapid population growth on the planet. Today, the global population is still increasing, albeit at a decelerating pace. Still, the populations of 126 countries and areas are likely to continue growing through 2054, potentially reaching their peak size later in the century or beyond 2100.¹⁸ This group includes some of the world's most populous countries, such as India, Indonesia, Nigeria, Pakistan and the United States of America.

Figure 4.1

Total population indexed to peak size, countries and areas with populations likely to grow through 2054, regional average and selected countries, by region, estimates, 1995–2023, and projections (medium scenario), 2024–2100



Source: United Nations (2024a).

Note: Grey lines represent countries and areas with at least 90,000 inhabitants in 2024.

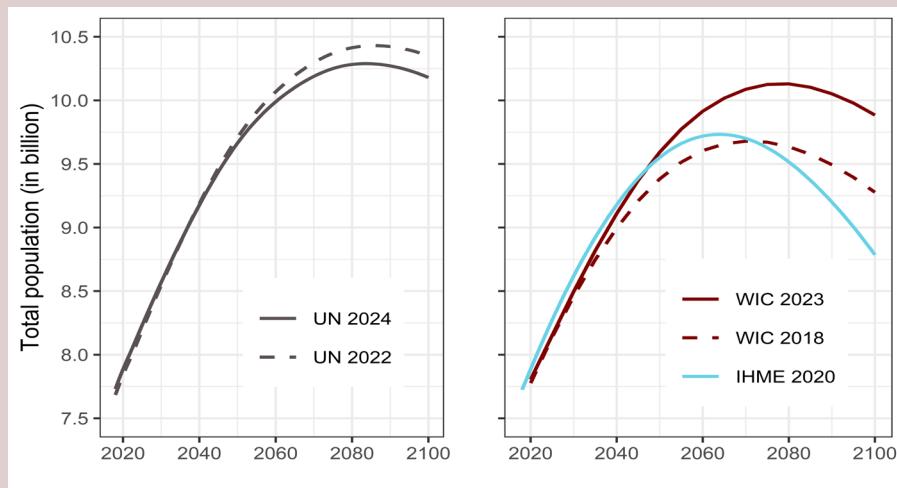
¹⁸ Populations may potentially peak in or after 2100 in 76 of these countries and areas.

Box 4.1**Are global population projections getting closer?**

Long-term global population projections are crucial for planning and policymaking, but they can vary significantly due to differences in methodologies, assumptions, data sources and when they were produced. Three leading institutions currently produce global population projections: (a) the United Nations (*World Population Prospects*), (b) the Wittgenstein Center for Demography and Human Capital (WIC), and (c) the Institute for Health Metrics and Evaluation (IHME).

All three sets of global projections use the cohort component method to project future population by age and sex. Under the cohort component method, the population by age and sex in a given year is projected forward by applying mortality, fertility and migration patterns that differ by age and sex. These rates are obtained by the application of different models and/or methods that are based on distinct assumptions. The methodology used by the United Nations is described in a separate report (United Nations, 2024b).

At the global level, the different sets of population projections agree until about 2050, and thereafter they diverge progressively (figure 4.2). In their most recent assessments (WPP 2024 and WIC 2023), the projections of the global population by the United Nations and by WIC have become closer and depict a very similar future trajectory until the end of the century when the world could count 10.2 billion (ranging from 9.0 billion to 11.4 billion, with a probability of 95 per cent) (UN 2024) or 9.9 billion (WIC 2023) respectively. In contrast, IHME (2020) projects a future global population of 8.8 billion (ranging from 6.8 billion to 11.8 billion, with a probability of 95 per cent) in 2100 – a figure 1.4 billion, or almost 14 per cent, lower than that produced by the United Nations.

Figure 4.2**Global population projections, according to the United Nations, the Wittgenstein Center for Demography and Human Capital (WIC), and the Institute for Health Metrics and Evaluation (IHME)**

Source: United Nations (2022a; 2024a); Wittgenstein Centre for Demography and Global Human Capital (WIC) (2018, 2023); Institute for Health Metrics and Evaluation (IHME) (2020).

The approach taken by the United Nations to project future fertility trends is based on historical and present fertility levels and trends. These projected fertility trajectories implicitly consider past progress made in development, education and contraceptive use, among others. By contrast, the models of fertility projections developed by IHME and WIC are based on assumptions made on women's future educational attainment and, in the case of IHME, on the satisfied demand for contraception as well.

The medium scenario of the United Nations assumes that continued progress towards gender equity and women's empowerment will mean that as time progresses, individuals will be better able to realize their childbearing intentions (see boxes 2.1, 2.2).

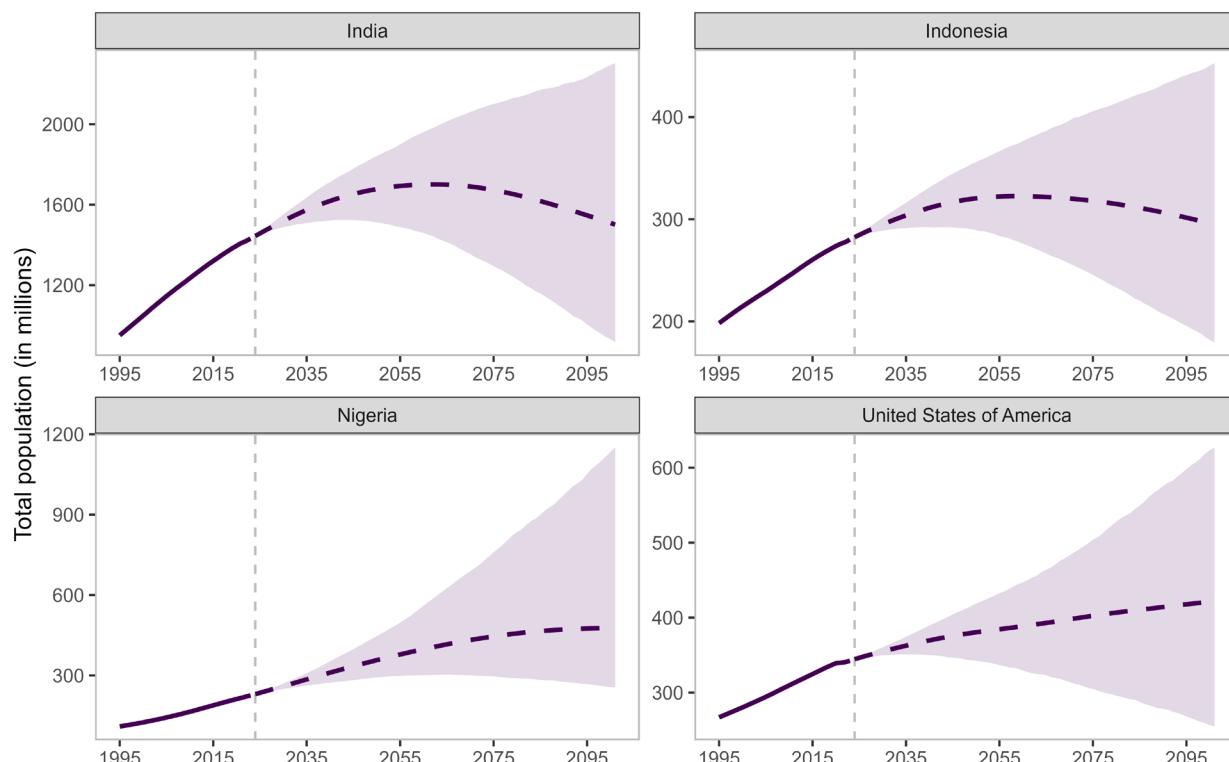
Countries and areas in this group are at different stages of the demographic transition (see box 1.1). Around three quarters are in the intermediate stages, when fertility levels remain above the replacement level. These include 46 countries and areas in sub-Saharan Africa, 15 in Northern Africa and Western Asia, 11 in Latin America and the Caribbean, 11 in Oceania (excluding Australia and New Zealand), 8 in Central and Southern Asia, 5 in Eastern and South-Eastern Asia and 2 in Europe and Northern America. The other one quarter in the later stages of the demographic transition, with fertility already below the replacement level in 2024. These include 16 countries and areas—mostly in Europe, Northern America, Australia and New Zealand, but also some in Northern Africa and Western Asia, where immigration is projected to be the principal driver of population growth through 2054.

According to the medium scenario, the total population of countries and areas likely to grow through 2054 will increase by 38 per cent, rising from 5.1 billion in 2024 to 7.0 billion in 2054 (with a probability of 95 per cent that the population size in 2054 will lie between 6.7 and 7.3 billion). After 2054, the growth of this group is expected to decelerate, leading to a further increase of 19 per cent through the end of the century. By 2100, the group is projected to be home to 8.3 billion people (ranging from 7.4 to 9.7 billion with a probability of 95 per cent), a cumulative increase of 64 per cent compared to 2024.

Because the total population of this group will continue growing, while the rest of the world is projected to decline, by 2100 it will contain 82 per cent of the global population, up from 62 per cent in 2024. The trajectories of population change among countries and areas in this group will have a major influence on the size and timing of the population peak at the global level (see box 4.1).

Figure 4.3

Total population for selected countries with populations likely to grow through 2054, estimates, 1995–2023, and projections (medium scenario) with prediction intervals, 2024–2100



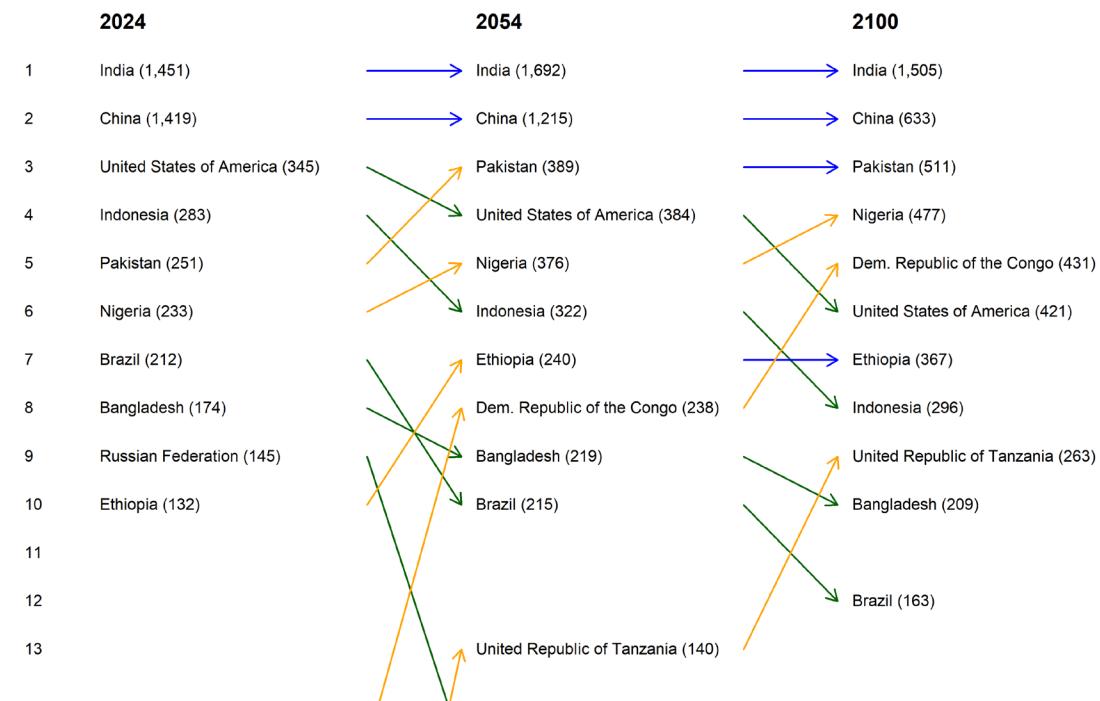
Source: United Nations (2024a).

Notes: Prediction intervals are represented as shaded areas around a projected trend. For a given year, the future trend is expected to lie within the predicted range with an estimated probability of 95 per cent. The scale of the y axis differs between locations.

Countries and areas with populations that are likely to continue growing through 2054 are likely to follow very different growth trajectories (figures 4.1, 4.3). Over the next 30 years, the total population of those located in sub-Saharan Africa is projected to see an increase of 79 per cent, reaching 2.2 billion in 2054 (ranging from 2.1 billion to 2.4 billion, with a probability of 95 per cent), followed by an additional increase of 51 per cent, reaching 3.3 billion at the end of the century (ranging from 2.7 billion to 4.5 billion, with a probability of 95 per cent).

The populations of nine locations, including Angola, the Central African Republic, Chad, the Democratic Republic of Congo, Mali, Mayotte, Niger, Somalia and the United Republic of Tanzania, are likely to at least double in size between 2024 and 2054. More than one fifth of the projected increase in the global population between 2024 and 2054 is expected to be concentrated in these nine countries. Due to this rapid growth, the ranking of the most populous countries in the world will likely change, with Pakistan and eventually Nigeria and the Democratic Republic of the Congo overtaking the United States of America in terms of population size, and the United Republic of Tanzania likely joining the list of the ten largest countries by the end of the century (figures 4.3, 4.4).

Figure 4.4
Rankings of the world's ten most populous countries and total population (in parentheses), 2024, 2054 and 2100 (in millions)



Source: United Nations (2024a).

Note: A blue arrow indicates that a country has the same rank in the two given years, a yellow arrow indicates that a country has increased in rank and a green arrow indicates that a country's ranking has fallen.

Many countries and areas with rapidly growing populations already face severe economic, social and environmental impediments. Rapid growth is likely to pose a serious challenge to their sustainable development, increasing the scale of investments and efforts required to eradicate poverty, end hunger and malnutrition, and ensure universal access to health care, education and other essential services (United Nations, 2021, 2023b, 2023c). Stepping up access to family planning services, including for a wide range of effective contraceptive methods, may help individuals and couples who aspire to have smaller families to achieve their desired family size (United Nations, 2022a).

Other countries and areas of this group are likely to experience slower population growth. Twenty-eight of these are already in the later stages of the demographic transition, when growth starts to slow as population size nears its peak. Countries such as France, Sweden and the United Kingdom in Europe are likely to continue to increase in population size through the second half of the century, albeit at a relatively slow pace, with their populations stabilizing at around the size of their peak (figures 4.1, 4.3). Other countries where growth is likely to stabilize after reaching peak population size are Cambodia in South-Eastern Asia; Plurinational State of Bolivia, Haiti and Honduras in Latin America and the Caribbean; and Algeria in Northern Africa.

In a small number of mostly high-income countries, including Australia, Canada, Oman, Saudi Arabia, the United Arab Emirates and the United States of America, the population is projected to grow by over 20 per cent between 2024 and 2100 largely as a result of immigration.

In addition, the population of 10 countries in this group, mostly in Eastern and South-Eastern Asia and in Latin America and the Caribbean, is projected to decline by 10 per cent or more by 2100 after peaking in size. The population of India, which is expected to remain the world's largest throughout the century, will likely decline by 12 per cent after reaching its peak in the early 2060s at about 1.7 billion (figure 4.3). Other countries in this group that are projected to see the size of their populations shrink during the second half of the twenty-first century include Bangladesh, Indonesia, Morocco, Peru and the Philippines.

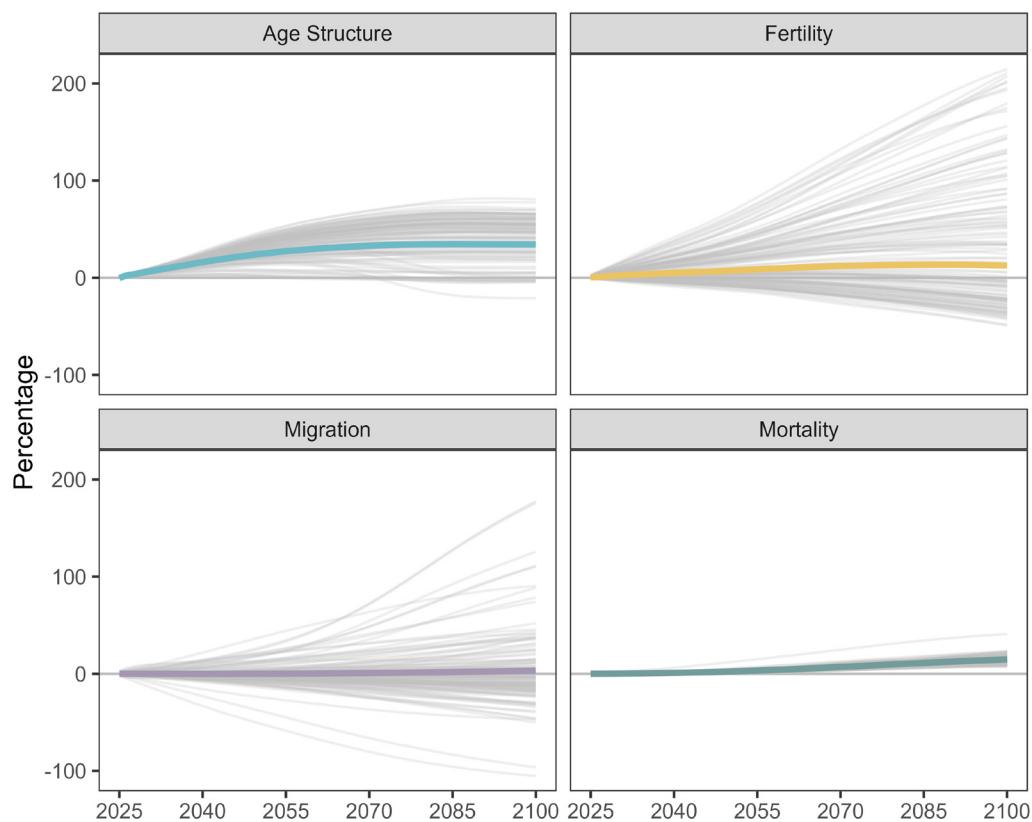
One of the pressing considerations for this group is how to minimize future environmental impacts while meeting the needs of growing populations. Environmental damage often arises from economic processes that lead to higher standards of living, and population growth amplifies such environmental pressures by adding to total economic demand. Most of the countries and areas facing rapid population growth over the next decades are classified today as "low-income economies". Although until now they have been responsible for only a small share of the global consumption of material resources and emissions of greenhouse gases (GHGs), they will need to increase their energy consumption substantially if they are to develop economically and achieve the Goals and targets of the 2030 Agenda (United Nations, 2021).

Promoting sustained economic growth in such locations without further damaging the environment will require support from the international community. The high- and middle-income countries that have contributed most to unsustainable patterns of resource use bear the greatest responsibility for moving rapidly to achieve net-zero GHG emissions and for implementing strategies to decouple human economic activity from environmental degradation, regardless of whether their populations are currently growing or declining. Because of the multiplicative effect of population on GHG emissions, however, the need to decouple economic activity from the current overreliance on fossil-fuel energy is especially urgent where populations are projected to continue growing through the end of the century.

For countries with populations that are likely to continue growing through 2054, all three demographic components – fertility, mortality and international migration – as well as population momentum, make a positive contribution to population growth (figure 4.5). Across the group, the potential for growth that is embedded in the age structure will have the largest influence on the future population growth, contributing 69 per cent of growth through 2054 and 53 per cent through 2100. There is a wide variability within the group in terms of the relative contribution of each of the components. Fertility is likely to have a strong influence in most of the sub-Saharan African countries in the group, while net migration is likely to be the main driver of future population growth in many of the members of the Cooperation Council for the Arab States of the Gulf (GCC), as well as in many countries in Europe, Northern America, and Australia and New Zealand.

Figure 4.5

Relative contributions of components of population change, countries and areas with populations likely to grow through 2054, group average and selected countries, by component, projections (medium scenario), 2024–2100 (percentage)



Source: Calculations using data from United Nations (2024a), based on a comparison of different projection scenarios.

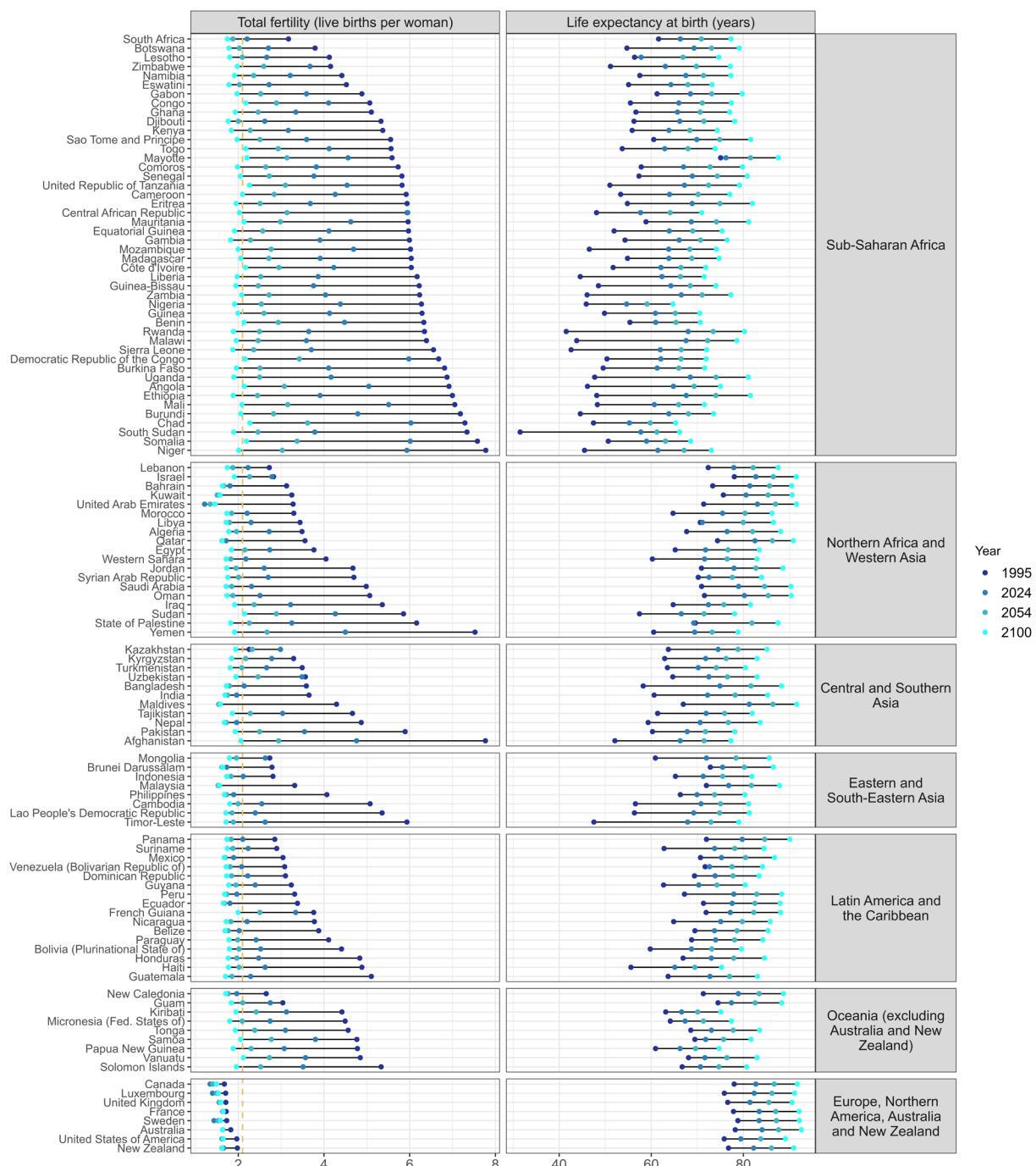
Note: Grey lines represent countries and areas with at least 90,000 inhabitants in 2024.

In 2024, the average number of births per woman across the group of countries with populations that are likely to continue growing through 2054 was 2.72. Three quarters of the countries in the group had fertility at or above replacement level and in one fifth – all in sub-Saharan Africa except for Afghanistan – women had on average 4 or more births in 2024. The high fertility levels in these locations will continue to drive strong population growth for the rest of the century. In contrast, 28 countries, or 22 per cent of the countries in this group, already had fertility levels below replacement in 2024. Among them, three countries – Canada, Luxembourg and the United Arab Emirates – had ultra-low levels of fertility (below 1.4 births per woman).

Over the next 30 years, fertility is expected to continue to decline in the group (figure 4.6). By the late 2060s, the average level of fertility for these locations is projected to fall below replacement level, further declining to 1.89 by 2100 (ranging from 1.77 birth per woman to 2.47 birth per woman, with a probability of 95 per cent). Although there is a high degree of uncertainty surrounding future levels of fertility, according to the medium projection, no country in the group will have fertility levels above 3.7 births per woman by 2054, or above 2.3 births per woman by 2100.

Figure 4.6

Total fertility and life expectancy at birth, countries and areas with populations likely to grow through 2054, by region, estimates for 1995 and projections (medium scenario), 2024, 2054 and 2100



Source: United Nations (2024a).

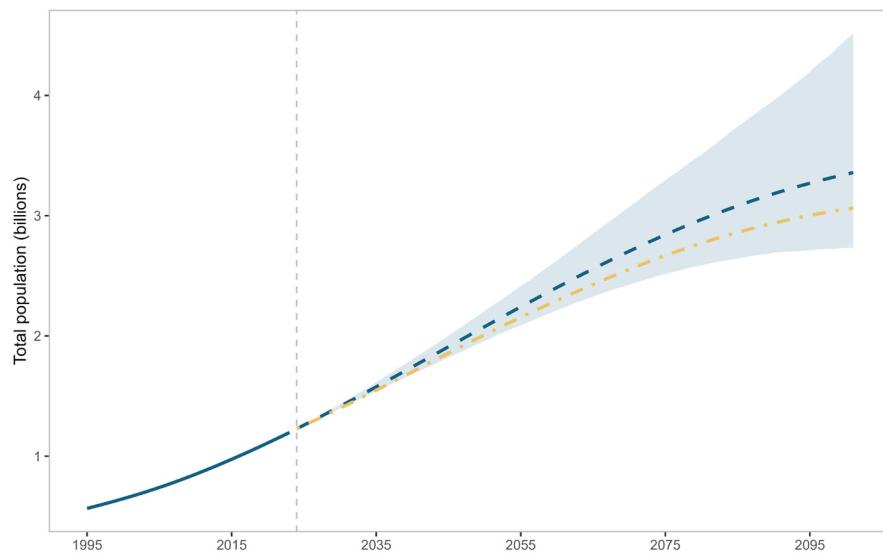
Note: Countries and areas are ordered by level of fertility in 1995 within regions. The dashed orange vertical line indicates the level of replacement fertility.

In most high-fertility countries in this group, early childbearing is prevalent. This has been identified as an important issue to address as reflected by the inclusion of the adolescent birth rate among one of the indicators to monitor SDG target 3.7 on ensuring universal access to sexual and reproductive health-care services, including for family planning, information and education. In 2024, 4.7 million babies globally, or about 3.5 per cent of the total live births worldwide, were born to mothers under age 18. Of these, some 340,000 were to girls under age 15, with serious adverse consequences for the health and well-being of both the young mothers and their children. In low-income countries, the number of births to mothers under age 18 is 21 times as high as in high-income countries. Investing in the education of young people, especially girls, and increasing the ages at marriage and first childbearing in countries where these milestone events tend to occur early will have positive effects on women's health, educational attainment and labour force participation.

Increasing the age at first childbearing contributes also to slowing population growth, reducing the scale of the investments and effort required to achieve sustainable development while ensuring that no one is left behind. If there were no births to girls under age 18, the population of countries in sub-Saharan Africa in 2054 would be 3.8 per cent smaller than it would have been otherwise. Under this scenario, the size of the population of the countries in sub-Saharan Africa would be smaller by 85 million by 2054 and by 292 million by 2100 (figure 4.7).

Figure 4.7

Total population of sub-Saharan Africa, estimates, 1995–2023, projections (medium scenario) with predication intervals and scenario without fertility below age 18 (dash-dotted line), 2024–2100



Source: United Nations (2024a).

Note: Prediction intervals are represented as shaded areas around a projected trend. For a given year, the future trend is expected to lie within the predicted range with an estimated probability of 95 per cent.

Reductions in mortality are also anticipated to contribute to future population growth in this group of countries and areas, though to a smaller extent than fertility. Increasing levels of life expectancy at birth are likely to contribute to population increase in all countries in the group over the coming decades. Among countries with populations that are projected to continue growing through 2054, life expectancy at birth is lowest in sub-Saharan African countries (62.3 years) and highest in Europe and Northern America, Australia and New Zealand (80.7 years). This group comprises some of the countries with the lowest levels of life expectancy at birth in the world as well as some of the highest. Countries with the lowest levels of life expectancy in 2024, many of which are in sub-Saharan Africa, are

projected to experience large gains over the course of the century. Despite these gains, by 2100, life expectancy for these locations in sub-Saharan Africa is still expected to lag 6.3 years behind the average of the group.

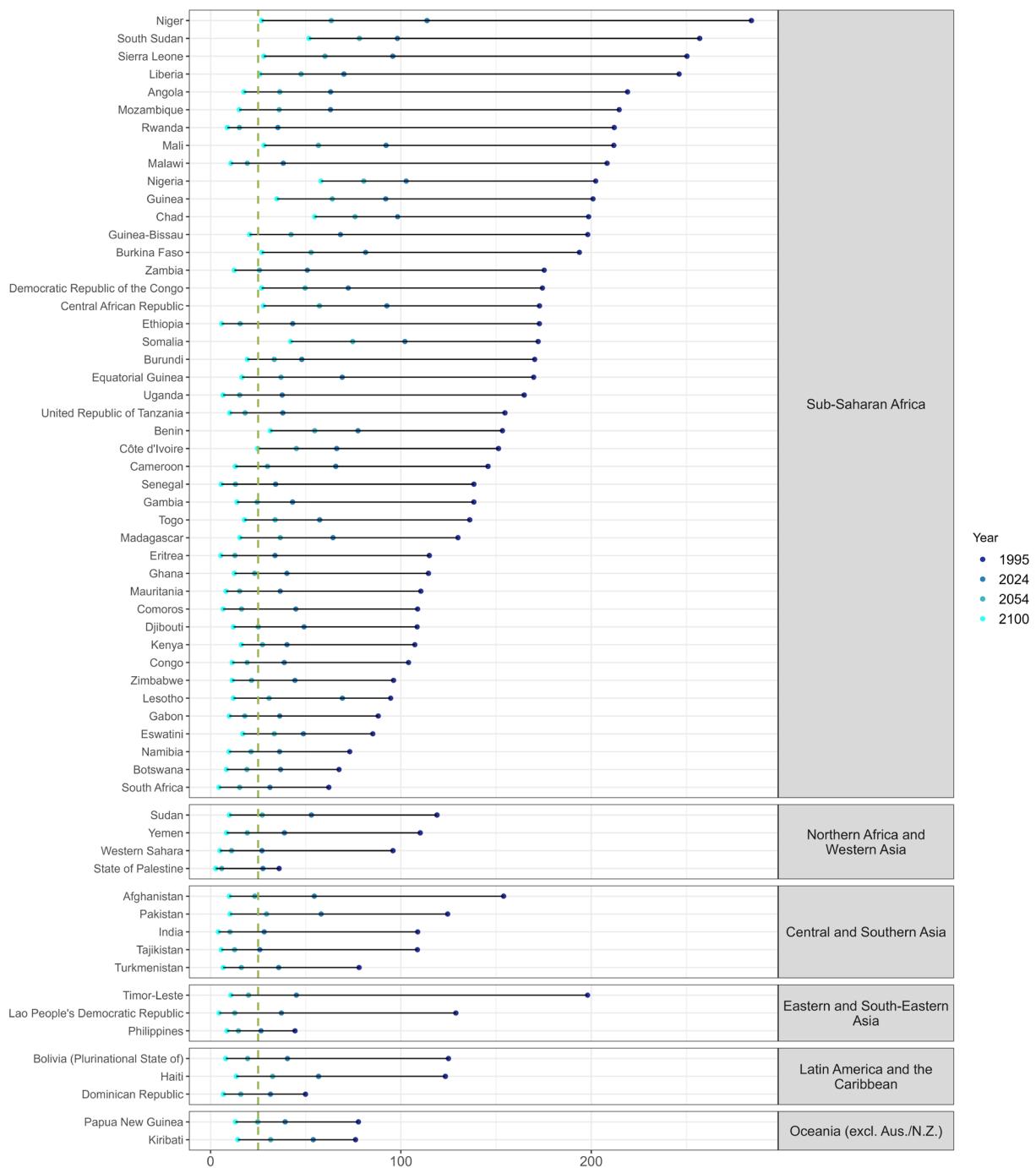
For many locations in this group, particularly those in sub-Saharan Africa and in Central and Southern Asia, the increase in longevity projected over the next three decades is contingent on substantial reductions in mortality during childhood. In 2023, the global number of deaths among children under age 5 fell below 5 million for the first time in recent history. However, 95 per cent of such deaths took place in the 126 countries with populations that are still growing, including the Democratic Republic of the Congo, India, Nigeria and Pakistan. While many of these locations have witnessed important reductions in both the number and mortality rates among children under age 5, 57 countries in this group, including Chad, Niger, Nigeria, Somalia and South Sudan, are likely to fall short of the target of reducing under-5 mortality to at least as low as 25 deaths per 1,000 live births by 2030 (SDG target 3.2) (figure 4.8). Dedicating more resources to critical, low-cost treatments and interventions, such as ensuring access to antenatal and postnatal care, skilled birth attendants, vaccinations and nutritional supplements, is imperative and would save millions of lives worldwide over the next decade.



Ola During Children's Hospital in Freetown, Sierra Leone (2016). Dominic Chavez/World Bank.

Figure 4.8

Under-5 mortality rate, countries and areas with populations likely to grow through 2054, by region, estimates for 1995 and projections (medium scenario), 2024, 2054 and 2100



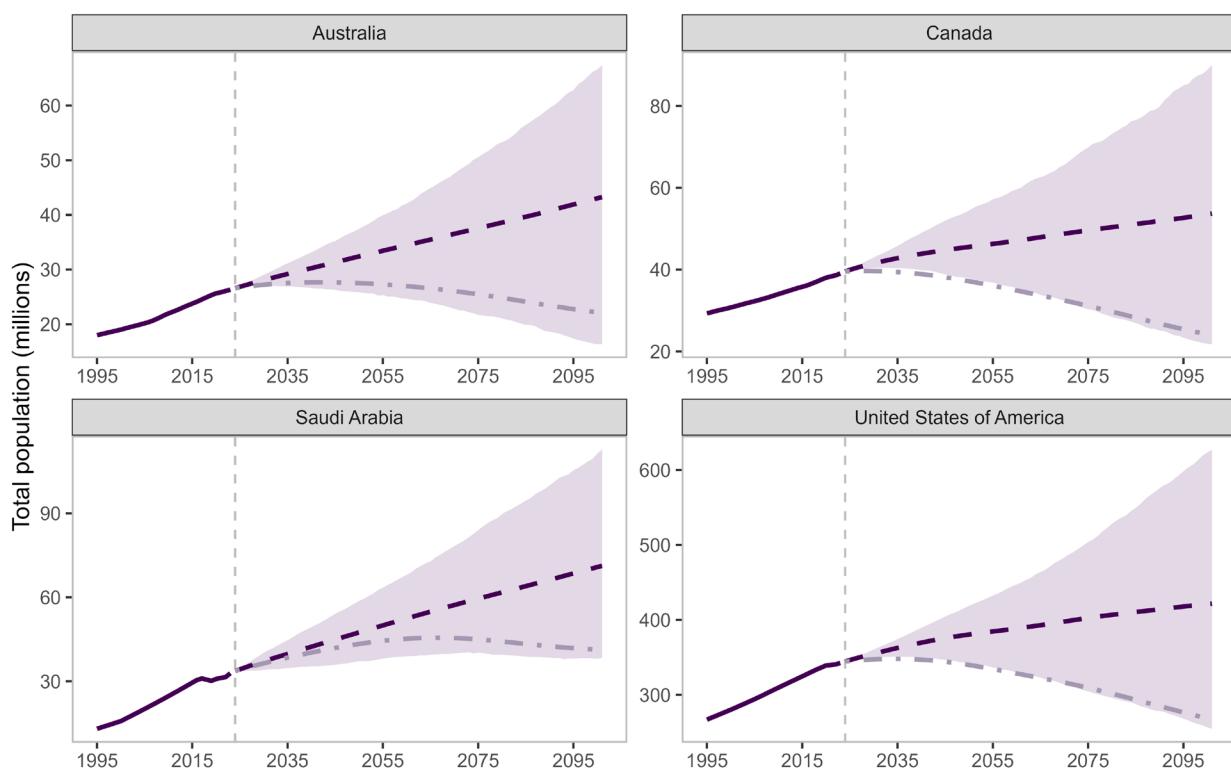
Source: United Nations (2024a).

Notes: The under-5 mortality rate represents the probability of dying between birth and exact age 5. Results shown for countries with a rate of 25 deaths under age 5 per 1,000 live births or higher in 2024. Countries are ordered by level of under-5 mortality rate in 1995 within regions. The dashed green vertical line indicates a rate of 25. Oceania refers to the region excluding Australia and New Zealand.

The contribution of international migration to population change varies across the countries and areas in this group. In most of the countries where the average fertility level is high, emigration is likely to have a limited impact in offsetting population growth. Conversely, for many of the countries in the group with relatively low levels of fertility, immigration is projected to be the main driver of future population growth. These countries include Australia, Canada, Qatar, Saudi Arabia, the United Arab Emirates and the United States of America. In the absence of migration, the population of these locations would likely peak much earlier and at a lower level (figure 4.9). In the United States of America, for example, the population in 2054 and in 2100 would be, respectively, 13 per cent and 36 per cent smaller without the contribution of immigration. Without immigration, the population of the United States of America would likely peak already in the mid-2030s instead of continuing to grow until the end of the century, and its peak would occur at a level 17 per cent lower.

Figure 4.9

Total population for selected countries with populations likely to grow through 2054, estimates, 1995–2023, projections (medium scenario) with prediction intervals, and zero net migration scenario (dash-dotted line), 2024–2100



Source: United Nations (2024a).

Note: Prediction intervals are represented as shaded areas around a projected trend. For a given year, the future trend is expected to lie within the predicted range with an estimated probability of 95 per cent. The scale of the y axis differs between locations.

In the countries of the group with high levels of fertility, rapid growth in the past, combined with present and future fertility will result in large cohorts of children and young people in the decades to come, adding to the challenges of ensuring healthy lives and promoting well-being for all at all ages (SDG 3) and ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all (SDG 4) (box 4.2).

Over the coming decades, the global population of youth (generally between 15 and 24 years), which stood at 1.3 billion in 2024, is projected to continue to grow slowly, reaching a peak of 1.4 billion in the early 2030s. However, owing to pronounced differences in population trends across countries, much of this growth is likely to take place in the group of countries with populations that are still growing rapidly, particularly those in sub-Saharan Africa. As a result, an increasing share of young people worldwide will be concentrated in these locations, many of which already confront substantial barriers to sustainable development and lag critically behind in per capita investments in health, education and job creation.

Box 4.2

Empowering youth and the relevance of population trends for the Summit of the Future

The Summit of the Future is a high-level event taking place in September 2024 that will bring together world leaders to forge a new international consensus on how to deliver a better present and safeguard the future. One of its key components is the youth pillar, which emphasizes the crucial role of young people in driving innovation, progress and positive change. As recognized in the 2030 Agenda for Sustainable Development, leaving a better future for generations to come depends greatly on the full participation of youth in the processes of social, economic and political development. However, inequalities among youth and between generations can critically undermine the capacity of young people to achieve their full potential and play that distinct role, with differences in early life conditions having lasting effects throughout the life course.

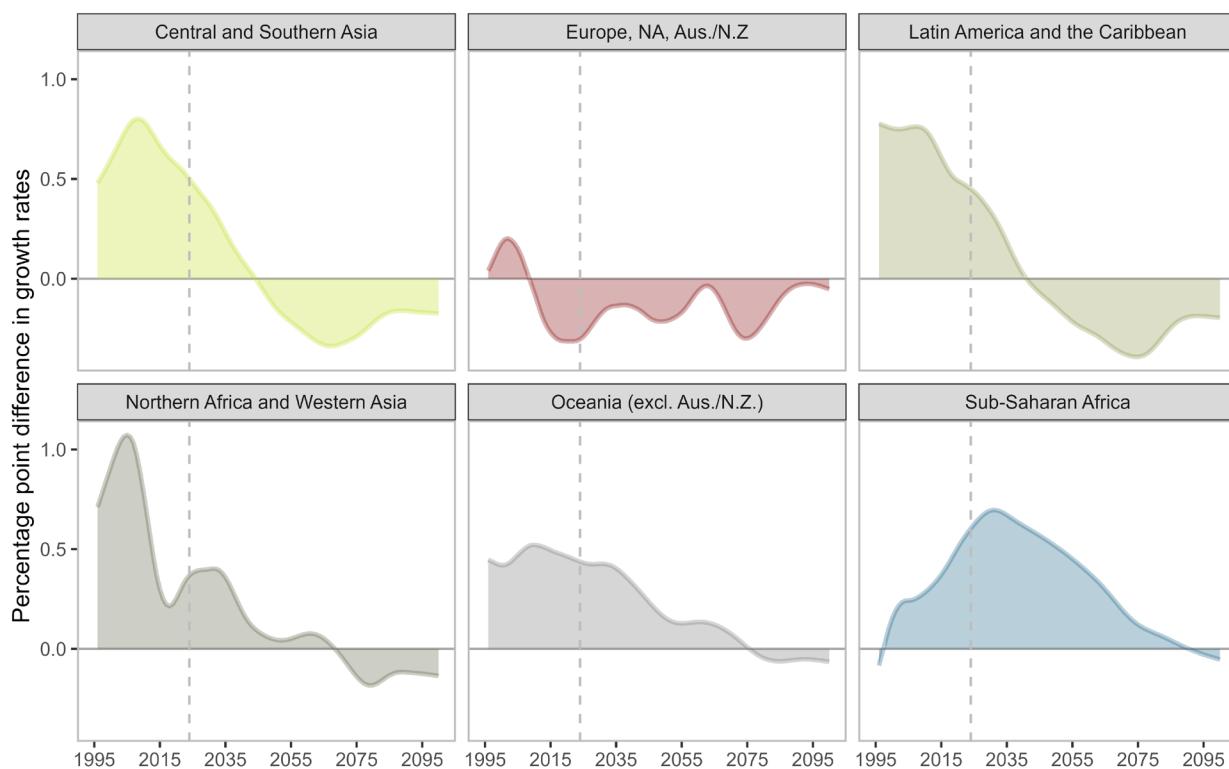
The rapid increase in the number of young people can place an additional strain on governments to ensure access to quality education, health care and decent job opportunities for youth. A significant increase in public expenditures will be required just to maintain current levels of per capita funding for such programmes in many of the countries with populations that are projected to grow rapidly over the coming decades. The returns on investing in young people's human capital, however, are manifold, generating virtuous cycles that can lift individuals, families and societies out of poverty, reduce inequality and help build more resilient and peaceful societies.

Another priority is to mainstream gender equality into youth policies. Continued investments in education and training opportunities for girls and young women are needed everywhere. In 2022, the proportion of youth not in education, employment or training (SDG 8.6.1) was higher for young women than for young men in 73 countries with available data. Strengthening sexual and reproductive health services for young women can prevent unintended pregnancies, saving lives and improving health outcomes. Advancing generational change for gender equality by empowering youth, and female youth in particular, and increasing their agency, will have multiplier effects across the SDGs and safeguard the needs and interests of future generations worldwide.

In around 75 per cent of the countries and areas in this group, the share of population in the working ages (between 20 and 64 years) will continue to increase more rapidly than the total population over the next 30 years, providing a window of opportunity for accelerated economic growth on a per capita basis (figure 1.8, box 3.1). In 2024, countries in this group still had, on average, 30 years to capture the benefits of a changing population age structure to accelerate economic growth. The countries in sub-Saharan Africa had the largest window of time still available to take advantage of their youthful age structures (figure 4.10). In these locations, substantial investments in education, health care and infrastructure, as well as reforms to promote the creation of decent jobs and more transparent and efficient government institutions, are needed to ensure that this time-bound opportunity is not wasted.

Figure 4.10

Relative difference between population growth rates in working ages and in total population, countries and areas with populations likely to grow through 2054, by region, estimates, 1995–2023 and projections (medium scenario), 2024–2100



Source: United Nations (2024a).

Notes: For analytical purposes, it is assumed that the working age range extends from 20 to 64 years. The difference between the growth rate of the population of working age and the growth rate of the total population equals the theoretical contribution of changes in the age distribution to the growth of GDP per capita. Such changes can be positive or negative. The shaded areas in the graph represent the dividend, and the vertical dash line indicates the year 2024.

Because the countries in the group are at different stages in the demographic transition, some of them are also more advanced in the process of population ageing. In Canada, France and Sweden, for example, more than 20 per cent of the population was already aged 65 or older in 2024. Even in the countries where high rates of immigration counterbalance the low levels of fertility, such as Bahrain, Kuwait, Qatar and the United Arab Emirates, the share of older persons will more than triple by the end of the century (box 2.3). By 2054, population ageing will be advanced in all countries in the group that have low levels of fertility.

The countries of the group with high fertility will also experience a continuing increase in the number and share of older persons in their populations. Nigeria, for example, the country with the largest population in sub-Saharan Africa, is projected to see its share of persons aged 65 or older climb from 5 per cent of the total population in 2054 to 12 per cent in 2100. At that date, the number of persons aged 65 or older in Nigeria is projected to reach 58.6 million, compared to 7.1 million in 2024. The increase in the proportion and number of persons at ages 65 and higher among countries with populations that are likely to continue growing through 2054 highlights the need to develop and strengthen health care and social protection systems and support national policies to create equitable, fair and inclusive societies for people of all ages (United Nations, 2023a).¹⁹ Many of the countries in this group, which at present have youthful populations, will need to prepare for a society with an age structure that will be very different. This will require long-term planning and foresight, with appreciation for the time that will be required to establish such systems in countries where they do not yet exist.

¹⁹ These efforts should build on the Madrid International Plan of Action on Ageing.



Daily life in Barranco, Lima, Peru (2013). Dominic Chavez/World Bank.

References

- Andreev, K., V. Kantorová and J. Bongaarts (2013). *Demographic components of future population growth*. Technical Paper, No. 2013/3. New York: United Nations. Available at: <https://www.un.org/en/development/desa/population/publications/pdf/technical/TP2013-3.pdf>.
- Azose, J., and A. E. Raftery (2015). Bayesian probabilistic projection of international migration. *Demography*, vol. 52, No. 5, pp. 1627–1650. Available at: <https://doi.org/10.1007/s13524-015-0415-0>.
- Azose J., H. Ševčíková and A. E. Raftery (2016). Probabilistic population projections with migration uncertainty. *Proceedings of the National Academy of Sciences*, vol. 113, No. 23, pp. 6460–6465. Available at: <https://doi.org/10.1073/pnas.1606119113>.
- Bergsvik, J., A. Fauske and R. K. Hart (2021). Can policies stall the fertility fall? A systematic review of the (quasi-) experimental literature. *Population and Development Review*, vol. 47, No. 4, pp. 913–964. Available at: <https://doi.org/10.1111/padr.12431>.
- Bloom, D. E. D., and others (2003). *The Demographic Dividend: A new perspective on the economic consequences of population change*. RAND Population Matters Program, No. MR1274. Santa Monica. Available at: https://www.rand.org/content/dam/rand/pubs/monograph_reports/2007/MR1274.pdf.
- Chao, F., and others (2023). *Estimating age-specific fertility rate in the World Population Prospects: a Bayesian modelling approach*. Technical Paper, No. UN DESA/POP/2023/TP/No. 6. New York: United Nations. Available at: https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/undesa_pd_2023_technical-paper_asfr.pdf.
- Chung, W., and M. D., Gupta (2007). Why is son preference declining in South Korea? The Role of Development and Public Policy, and the Implications for China and India. Policy Research Working Paper, No. 4373. Washington D.C.: World Bank.
- Gerland, P., and others (2014). World population stabilization unlikely this century. *Science*, vol. 346, No. 6206, pp. 234–237. Available at: <https://doi.org/10.1126/science.1257469>.
- Gietel-Basten S., A. Rotkirch and T. Sobotka (2022). Changing the perspective on low birth rates: Why simplistic solutions won't work. *BMJ*, 379, e072670. Available at: <https://doi.org/10.1136/bmj-2022-072670>.
- Institute for Health Metrics and Evaluation (IHME) (2020). *Global Fertility, Mortality, Migration, and Population Forecasts 2017–2100*, IHME. Available at: <https://doi.org/10.6069/MJND-3671>.
- Lee, R., and A. Mason (2006). What is the demographic dividend? *Finance and Development*, vol. 43, No. 3. Available at: www.imf.org/external/pubs/ft/fandd/2006/09/basics.htm. Accessed on 11 June 2024.
- Mason, A., and R. Lee (2018). Intergenerational transfers and the older population. In *Future Directions for the Demography of Aging: Proceedings of a workshop*, M. D. Hayward, and M. K. Majmundar, eds. National Academies of Sciences, Engineering, and Medicine. The National Academies Press, pp. 187–214. Available at: <https://doi.org/10.17226/25064>.
- Mathers, C., and others (2023). *Age-Sex Patterns of Crisis Deaths: Towards a more standard mortality estimation approach*. Working paper, United Nations Children's Fund, New York, 2023. Available at: <https://data.unicef.org/wp-content/uploads/2023/09/UN-IGME-Working-Paper.-Age-sex-Patterns-of-Crisis-Deaths.pdf>.

- Msemburi, W., and others (2023). The WHO estimates of excess mortality associated with the COVID-19 pandemic. *Nature*, vol. 613, No. 7942, pp. 130–137. Available at: <https://doi.org/10.1038/s41586-022-05522-2>.
- Pino, V. A., and others (2020). The effects of aging on semen parameters and sperm DNA fragmentation. *JBRA Assisted Reproduction*, vol. 30, No. 24 (1), pp. 82–86. Available at: <https://doi.org/10.5935/1518-0557.20190058>.
- Raymer, J., and others (2023). *Modelling the Age and Sex Profiles of Net International Migration*. Technical Paper, No. UN DESA/POP/2023/TP/No. 7. New York: United Nations. Available at: https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/undesa_pd_2023_tp_net_migration.pdf.
- Skirbekk, V. F., U. M. Staudinger and J. E. Cohen (2019). How to measure population aging? The answer is less than obvious: A review. *Gerontology*, vol. 65, No. 2, pp. 136–144. Available at: <https://doi.org/10.1159/000494025>.
- Te Velde, E. R., and P. L. Pearson (2002). The variability of female reproductive ageing. *Human Reproduction Update*, vol. 8, No. 2, pp. 141–154. Available at: <https://doi.org/10.1093/humupd/8.2.141>.
- United Nations (2013). *World Population Prospects: The 2012 Revision*, CD-ROM Edition. Available at: <https://population.un.org/wpp/Download/Archive/Standard/>.
- _____(2017). The impact of population momentum on future population growth. *Population Facts*, No. 2017/4. Available at: https://population.un.org/wpp/Publications/Files/PopFacts_2017-4_Population-Momentum.pdf.
- _____(2019). *World Population Ageing 2019: Highlights*. ST/ESA/SER.A/430. New York: United Nations. Available at: https://www.un.org/en/development/desa/population/publications/pdf/ageing/WorldPopulation_Ageing2019-Highlights.pdf.
- _____(2021). *Global Population Growth and Sustainable Development*. UN DESA/POP/2021/TR/NO. 2. New York: United Nations. Available at: https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/undesa_pd_2022_global_population_growth.pdf.
- _____(2022a). *World Family Planning 2022: Meeting the changing needs for family planning: Contraceptive use by age and method*. UN DESA/POP/2022/TR/NO. 4. New York: United Nations. Available at: https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/documents/2023/Feb/undesa_pd_2022_world-family-planning.pdf
- _____(2022b). *World Population Prospects 2022, Archive*. New York: United Nations. Available at: <https://population.un.org/wpp/Download/Archive/Standard/>.
- _____(2023a). *World Social Report 2023: Leaving no one behind in an ageing world*. ST/ESA/379. New York: United Nations. Available at https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/undesa_pd_2023_wsr-fullreport.pdf.

- _____ (2023b). *World Population Ageing 2023: Challenges and opportunities of population ageing in the least developed countries*. UN DESA/ POP/2023/TR/NO.5. New York: United Nations. Available at: https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/undesa_pd_2024_wpa2023-report.pdf.
- _____ (2023c). *Population Prospects of Countries in Special Situations: Tracking demographic change among the least developed countries, landlocked developing countries and small island developing States*. UN DESA/POP/2023/TR/NO. 6. New York: United Nations. Available at: https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/files/documents/2024/Jan/undesa_pd_2024_report-countries-special-situations_web.pdf.
- _____ (2024a). *World Population Prospects 2024, Online Edition*. Available at: <https://population.un.org/wpp/>.
- _____ (2024b). *World Population Prospects 2024: Methodology of the United Nations population estimates and projections*. UN DESA/POP/2024/DC/NO.10. New York: United Nations. Available at: <https://population.un.org/wpp/>.
- _____ (2024c). *International Migration and Sustainable Development*. New York: United Nations. (Forthcoming). Available at: <https://population.un.org/wpp/>.
- Wittgenstein Centre for Demography and Global Human Capital (2018). *Wittgenstein Centre Data Explorer Version 2.0*. Available at: <https://dataexplorer.wittgensteincentre.org/wcde-v2/>.
- Wittgenstein Centre for Demography and Global Human Capital (2023). *Wittgenstein Centre Data Explorer Version 3.0*. Available at: <https://dataexplorer.wittgensteincentre.org/wcde-v3/>.
- World Health Organization (WHO) (2011). *Preventing Gender-biased Sex Selection: An interagency statement-OHCHR, UNFPA, UNICEF, UN Women and WHO*. Geneva: World Health Organization. Available at: https://www.unfpa.org/sites/default/files/resource-pdf/Preventing_gender-biased_sex_selection.pdf.



A patient with age-related hearing loss at All Ears Cambodia (2023). Miguel Jeronimo/World Health Organization.

Annex 1: What's new in WPP 2024?

In the previous edition of the *World Population Prospects*, published in 2022, several major methodological enhancements were implemented to improve the standards, transparency and replicability of the estimates and projections. Chief among these was a transition from the historical practice of estimating and projecting population for five-year age groups over five-year periods of time towards a framework defined by single years of age and one-year time intervals. Additional enhancements included: (1) a more systematic and comprehensive compilation of national-level empirical data for the three components of population change (fertility, mortality and migration); (2) the application of probabilistic models for estimating key indicators of fertility and mortality; (3) a new protocol for evaluating and adjusting census population counts; (4) a new assessment of mortality associated with different types of crises such as those due to conflicts, natural disasters and epidemics, including the COVID-19 pandemic; (5) a new model life table system to estimate mortality for countries affected by HIV and AIDS; (6) the application of standardized methods for estimating levels and patterns of net international migration; and (7) the upgrade of probabilistic projection models of fertility and mortality to accommodate annual time series (see United Nations, 2022b).

The 2024 revision builds on the progress achieved in 2022 with further enhancements to the methods that underpin the *World Population Prospects*. In the 2024 edition, the projections of net migration are probabilistic for the first time, with the magnitude of past variability in annual net migration rates being incorporated into the uncertainty of the migration projection for each country and adding additional uncertainty to the projection of total population (Azose and Raftery, 2015; Azose, Ševčíková and Raftery, 2016). As a result, it is now possible to show how uncertainty around future migration trends contributes to the overall uncertainty around future population trends and to compare the uncertainty attributable to migration to that associated with future trends in fertility and mortality.

In addition, three new scenarios were introduced to consider the potential impact of changes in fertility rates among adolescent women and girls, and several methodological refinements were implemented regarding the estimation of age-specific fertility rates (Chao and others, 2023), the modelling of age and sex profiles of net international migration (Raymer and others, 2023), additional options for smoothing mortality schedules over age and time, expanded use of official population estimates as benchmark populations for estimating net international migration, refinements of age-sex patterns of crisis-related deaths (Mathers and others, 2023) and an update of crisis-related mortality estimates including a new category of deaths due to heat waves with information for 56 countries.

Compared to the 2022 revision, the medium scenario now uses the mean rather than the median of the Bayesian posterior distribution for projected values of the total fertility rate and sex-specific life expectancy at birth. This change increases the coherence between the deterministic medium projections and the probabilistic projections for countries with highly skewed probabilistic distributions.

The quality of population estimates and projections hinges on the availability of reliable and timely demographic data, including data collected through civil registration and vital statistics (CRVS) systems, population censuses, population registers and household surveys. For the estimation period between 1950 and 2023, the 2024 edition used data from 1,910 censuses, 79 more than in the 2022 revision. In some countries, population registers based on administrative data systems provide the necessary information. Population data from censuses or registers referring to 2019 or later were available for 114 countries and areas, representing 48 per cent of the 237 countries and areas included in this analysis (and 54 per cent of the global population). For 100 countries and areas, the most recent available population count was from the period 2009–2018. For the remaining 23 countries and areas, the most recent available census data were from before 2009, that is, more than 15 years ago.

Civil registration and vital statistics systems are the preferred source of information for computing statistics on levels and trends in the fertility and mortality of a population, and for estimating changes in the size of a population and in its distribution by age and sex between censuses. Information on births and deaths from civil registration and vital statistics systems was available for 169 countries. Additionally, demographic indicators derived from 3,189 surveys (423 more than in the 2022 revision) were considered in the present evaluation.

Among the 236 countries and areas with 1,000 inhabitants or more in 2023, all but 40 had available data on fertility collected in 2019 or later. For 2023, 35 countries and areas had data on total and age-specific fertility, and an additional six had data on the number of births.

Among the 236 countries and areas with 1,000 inhabitants or more in 2023, the most recent available data on child mortality referred to 2019 or later for 184 countries and on adult mortality for 154 countries. The mortality estimates considered the impact of the COVID-19 pandemic by incorporating estimates of excess mortality through 2021 produced by the WHO (Msemburi and others, 2023).²⁰ Information on age- and sex-specific deaths coming from vital registration systems with 90 per cent or higher completeness of registration was available for 2020 for 106 countries covering 35 per cent of deaths worldwide, and for 2023 for five countries covering one per cent of deaths.

Table A1
Number of countries with data on age- and sex-specific deaths from “complete” vital registration (VR) for years 2020 to 2023

	<i>Number of countries with 90 per cent or higher death registration</i>	<i>Proportion of total global deaths covered by complete VR (per cent)</i>
2020	106	35
2021	100	30
2022	51	15
2023	5	1

Source: United Nations (2024b).

Notes: A registration system was considered sufficiently “complete” for use in this analysis (with adjustments, as appropriate) if it contained at least 90 per cent of deaths occurring in the population. Describes the situation as of March 2024.

All components of the data information system for producing, documenting and presenting the *World Population Prospects* were updated for the 2024 edition, including (a) an inventory of available data ([DataCatalog](#)), (b) a repository ([DataArchive](#)) of input data sources, (c) a database ([DemoData](#)) to store and update the information used in preparing estimates of population size and of the components of population change (fertility, mortality and migration), (d) a structured set of metadata used for data analysis, statistical modelling and public documentation ([ShortNotes](#)), and (e) a dissemination platform ([DataPortal](#)) to give access to all output and input data in tabular form and to tools for creating interactive visualizations.

²⁰ See <https://www.who.int/data/sets/global-excess-deaths-associated-with-covid-19-modelled-estimates>.

Annex 2: Selected indicators

Table A2

Total population for the world, groups by timing of the peak, countries and areas, estimates for 1995, projections (medium scenario), 2024, 2054 and 2100, and year of population peak (1 January, in thousands)

Groups, countries and areas	Total population (thousands)				Population peak	
	1995	2024	2054	2100	Year	Total population (thousands)
World	5,717,157	8,126,964	9,796,364	10,186,608	2084	10,289,515
Populations that peaked by 2024	2,055,112	2,265,404	1,955,783	1,189,942	2020	2,282,063
Sub-Saharan Africa (peaked by 2024)	1,160	1,278	1,076	588	2015	1,298
Mauritius	1,153	1,273	1,072	586	2015	1,292
Saint Helena	6	5	4	3	1987	7
Northern Africa and Western Asia (peaked by 2024)	8,303	6,792	6,066	4,676	1990	9,002
Armenia	3,321	2,984	2,437	1,698	1992	3,645
Georgia	4,982	3,808	3,630	2,978	1989	5,519
Eastern and South-Eastern Asia (peaked by 2024)	1,471,600	1,699,105	1,456,627	795,639	2021	1,707,538
China	1,214,590	1,420,909	1,221,005	638,685	2021	1,426,776
China, Hong Kong SAR	6,111	7,433	5,789	2,106	2020	7,491
China, Taiwan Province of China	21,447	23,264	18,717	10,077	2020	23,680
Japan	125,516	124,071	102,763	77,038	2010	128,202
Republic of Korea	45,252	51,738	43,416	22,007	2021	51,891
Thailand	58,683	71,689	64,937	45,726	2022	71,755
Latin America and the Caribbean (peaked by 2024)	21,589	21,712	18,085	10,755	2010	22,422
Cuba	10,907	11,001	9,083	5,607	2012	11,304
Curaçao	153	185	171	121	2019	194
Dominica	69	66	63	49	1981	73
Guadeloupe	408	376	317	245	1999	422
Jamaica	2,488	2,840	2,365	1,076	2024	2,840

Groups, countries and areas	Total population (thousands)				Population peak	
	1995	2024	2054	2100	Year	Total population (thousands)
Martinique	400	345	273	210	1999	424
Montserrat	9	4	4	3	1950	13
Puerto Rico	3,680	3,244	2,377	1,007	2001	3,814
Saint Kitts and Nevis	42	47	43	30	1960	56
Saint Martin (French part)	29	27	19	20	2014	37
St. Vincent and the Grenadines	113	101	87	64	2001	114
United States Virgin Islands	107	85	70	62	2000	109
Falkland Islands (Malvinas)	3	3	3	2	2018	4
Uruguay	3,181	3,387	3,211	2,257	2021	3,400
Oceania (excluding Australia and New Zealand) (peaked by 2024)	198	175	141	126	2001	228
American Samoa	52	47	37	32	2002	57
Cook Islands	18	14	9	8	1972	21
Marshall Islands	48	38	25	24	2011	52
Niue	2	2	2	2	1967	5
Northern Mariana Islands	47	45	43	42	2001	69
Palau	17	18	15	11	2005	20
Wallis and Futuna Islands	14	11	10	7	2003	15
Europe, Northern America, Australia and New Zealand (peaked by 2024)	552,262	536,343	473,788	378,156	1992	552,490
Albania	3,264	2,802	2,162	1,193	1992	3,284
Austria	7,946	9,125	8,620	7,407	2023	9,136
Belarus	10,213	9,086	7,220	4,376	1994	10,247
Bermuda	59	65	55	36	2022	65
Bosnia and Herzegovina	3,649	3,176	2,355	1,374	1992	4,462

<i>Groups, countries and areas</i>	<i>Total population (thousands)</i>				<i>Population peak</i>	
	<i>1995</i>	<i>2024</i>	<i>2054</i>	<i>2100</i>	<i>Year</i>	<i>Total population (thousands)</i>
Bulgaria	8,390	6,778	5,235	3,544	1989	8,991
Croatia	4,648	3,889	3,144	2,150	1991	4,842
Czechia	10,320	10,792	9,714	8,239	2023	10,828
Estonia	1,463	1,367	1,150	828	1991	1,570
Germany	81,877	84,696	77,403	70,917	2024	84,696
Greece	10,494	10,137	8,617	6,296	2011	11,128
Greenland	56	56	49	37	2005	57
Hungary	10,332	9,690	8,616	7,469	1980	10,702
Isle of Man	71	84	76	58	2012	84
Italy	57,659	59,435	50,483	35,496	2014	60,689
Kosovo (under UNSC res. 1244)	2,121	1,691	1,620	1,101	1998	2,211
Latvia	2,502	1,880	1,467	930	1990	2,665
Lithuania	3,641	2,867	2,176	1,217	1992	3,704
Montenegro	631	639	518	328	2024	639
North Macedonia	1,992	1,828	1,465	868	2006	2,091
Poland	38,367	38,712	31,918	19,430	2023	38,814
Portugal	10,015	10,431	9,641	8,756	2010	10,583
Republic of Moldova	4,426	3,053	2,278	1,495	1992	4,458
Romania	22,711	19,068	15,604	10,810	1991	22,953
Russian Federation	148,382	145,206	135,151	126,439	1992	149,580
Saint Pierre and Miquelon	6	6	4	2	1995	6
San Marino	25	34	33	31	2021	35
Serbia	7,831	6,758	5,385	3,716	1988	7,885
Slovakia	5,350	5,520	4,839	3,439	2024	5,520

Groups, countries and areas	Total population (thousands)				Population peak	
	1995	2024	2054	2100	Year	Total population (thousands)
Slovenia	1,988	2,119	1,952	1,634	2024	2,119
Spain	39,959	47,916	44,100	33,216	2024	47,916
Ukraine	51,873	37,441	30,736	15,323	1993	52,422
Populations peaking between 2025-2054	609,034	823,087	870,099	692,105	2047	874,987
Sub-Saharan Africa (peaking between 2025-2054)	1,197	1,529	1,645	1,389	2050	1,650
Cabo Verde	414	524	566	419	2052	566
Réunion	705	877	939	854	2050	942
Seychelles	78	129	141	116	2043	143
Northern Africa and Western Asia (peaking between 2025-2054)	78,164	111,269	116,593	87,674	2048	117,266
Azerbaijan	7,663	10,305	11,214	10,038	2051	11,225
Cyprus	854	1,352	1,510	1,278	2052	1,510
Tunisia	9,093	12,240	13,138	10,691	2052	13,148
Türkiye	60,554	87,372	90,731	65,667	2047	91,432
Central and Southern Asia (peaking between 2025-2054)	79,823	114,942	127,674	102,316	2053	127,695
Bhutan	552	789	883	693	2052	884
Iran (Islamic Republic of)	61,876	91,115	101,992	80,314	2053	102,001
Sri Lanka	17,394	23,038	24,800	21,309	2051	24,815
Eastern and South-Eastern Asia (peaking between 2025-2054)	140,226	187,987	200,333	165,831	2047	201,413
China, Macao SAR	394	719	650	333	2032	728
Dem. People's Rep. of Korea	22,554	26,460	25,437	19,576	2032	26,802
Myanmar	42,333	54,320	58,504	49,784	2049	58,636
Singapore	3,471	5,812	6,029	4,183	2040	6,196
Viet Nam	71,474	100,675	109,713	91,954	2050	110,021

Groups, countries and areas	Total population (thousands)				Population peak	
	1995	2024	2054	2100	Year	Total population (thousands)
Latin America and the Caribbean (peaking between 2025-2054)	256,809	343,830	358,054	273,986	2045	361,829
Anguilla	10	15	14	9	2036	15
Antigua and Barbuda	67	94	94	68	2039	97
Argentina	34,845	45,618	48,213	38,406	2050	48,312
Aruba	75	108	98	75	2026	108
Bahamas	299	400	424	385	2050	424
Barbados	262	282	260	195	2028	283
Bonaire, Sint Eustatius and Saba	13	30	35	28	2046	35
Brazil	160,497	211,574	215,723	163,966	2042	219,328
British Virgin Islands	18	39	40	28	2039	41
Chile	14,422	19,714	20,112	13,508	2041	20,544
Colombia	35,474	52,610	59,325	47,251	2051	59,387
Costa Rica	3,493	5,118	5,312	3,795	2045	5,382
El Salvador	5,739	6,324	6,641	5,095	2048	6,670
Grenada	104	117	112	74	2032	117
Saint Barthélemy	6	11	13	9	2048	13
Saint Lucia	147	180	169	109	2032	181
Sint Maarten (Dutch part)	32	43	51	42	2051	51
Trinidad and Tobago	1,292	1,506	1,369	903	2028	1,515
Turks and Caicos Islands	15	46	51	39	2049	51
Oceania (excluding Australia and New Zealand) (peaking between 2025-2054)	1,017	1,208	1,282	1,070	2049	1,285
Fiji	797	927	1,002	882	2054	1,002
French Polynesia	220	281	281	188	2041	289

Groups, countries and areas	Total population (thousands)				Population peak	
	1995	2024	2054	2100	Year	Total population (thousands)
Europe, Northern America, Australia and New Zealand (peaking between 2025-2054)	51,798	62,321	64,518	59,839	2045	64,846
Andorra	64	81	80	48	2036	86
Belgium	10,131	11,728	11,818	11,070	2045	11,902
Denmark	5,216	5,964	6,111	5,867	2043	6,136
Finland	5,099	5,612	5,299	4,609	2026	5,624
Guernsey	59	64	62	53	2031	65
Iceland	267	391	433	363	2050	433
Ireland	3,597	5,227	5,977	5,298	2053	5,977
Jersey	86	104	104	100	2043	105
Malta	383	536	528	361	2034	557
Netherlands	15,528	18,166	18,871	17,525	2042	19,066
Norway	4,348	5,550	5,895	5,420	2051	5,900
Switzerland	7,019	8,898	9,338	9,124	2052	9,344
Populations growing through 2054	3,053,011	5,038,473	6,970,482	8,304,561	Beyond 2100	8,309,705
Sub-Saharan Africa (growing through 2054)	563,007	1,224,913	2,206,340	3,342,751	Beyond 2100	3,356,227
Angola	13,469	37,313	79,935	149,486	Beyond 2100	150,605
Benin	6,152	14,288	25,804	39,506	Beyond 2100	39,669
Botswana	1,480	2,501	3,533	3,840	2088	3,886
Burkina Faso	10,253	23,286	38,929	49,846	Beyond 2100	49,863
Burundi	6,029	13,875	25,432	37,823	Beyond 2100	37,925
Cameroon	12,881	28,748	54,226	88,622	Beyond 2100	89,130
Central African Republic	3,308	5,240	11,382	18,743	Beyond 2100	18,816
Chad	6,896	19,870	41,589	69,387	Beyond 2100	69,706

Groups, countries and areas	Total population (thousands)				Population peak	
	1995	2024	2054	2100	Year	Total population (thousands)
Comoros	486	859	1,367	1,908	Beyond 2100	1,914
Congo	2,710	6,258	11,686	19,957	Beyond 2100	20,094
Côte d'Ivoire	14,566	31,548	59,288	103,651	Beyond 2100	104,435
Dem. Republic of the Congo	43,873	107,516	235,083	429,293	Beyond 2100	432,126
Djibouti	627	1,161	1,570	1,841	Beyond 2100	1,842
Equatorial Guinea	560	1,870	3,308	4,992	Beyond 2100	5,014
Eritrea	1,929	3,502	5,982	8,433	Beyond 2100	8,456
Eswatini	960	1,236	1,523	1,345	2063	1,541
Ethiopia	56,576	130,355	237,759	366,401	Beyond 2100	368,178
Gabon	1,109	2,512	4,305	6,882	Beyond 2100	6,925
Gambia	1,246	2,729	4,485	5,703	Beyond 2100	5,703
Ghana	17,194	34,108	52,469	67,500	Beyond 2100	67,595
Guinea	7,441	14,582	24,486	31,996	Beyond 2100	32,018
Guinea-Bissau	1,108	2,177	3,588	4,662	Beyond 2100	4,669
Kenya	26,233	55,884	86,531	104,215	2098	104,235
Lesotho	1,940	2,324	3,061	3,263	2083	3,313
Liberia	2,115	5,553	9,303	12,653	Beyond 2100	12,677
Madagascar	13,827	31,578	56,083	85,155	Beyond 2100	85,527
Malawi	10,050	21,376	39,479	59,016	Beyond 2100	59,266
Mali	10,076	24,122	49,209	79,202	Beyond 2100	79,506
Mauritania	2,287	5,097	10,036	17,066	Beyond 2100	17,171
Mayotte	119	321	695	1,369	Beyond 2100	1,382
Mozambique	15,695	34,130	67,427	104,153	Beyond 2100	104,541
Namibia	1,580	2,998	4,692	5,895	Beyond 2100	5,901

Groups, countries and areas	Total population (thousands)				Population peak	
	1995	2024	2054	2100	Year	Total population (thousands)
Niger	9,551	26,592	56,128	90,650	Beyond 2100	90,989
Nigeria	109,367	230,271	374,118	476,693	Beyond 2100	476,803
Rwanda	5,394	14,106	23,724	32,744	Beyond 2100	32,815
Sao Tome and Principe	134	233	382	533	Beyond 2100	535
Senegal	8,737	18,288	31,940	46,933	Beyond 2100	47,096
Sierra Leone	4,185	8,553	13,440	15,945	2093	16,011
Somalia	7,125	18,686	39,824	67,221	Beyond 2100	67,507
South Africa	44,219	63,628	80,774	94,206	Beyond 2100	94,423
South Sudan	5,162	11,820	19,058	23,838	Beyond 2100	23,844
Togo	4,324	9,412	16,442	26,225	Beyond 2100	26,376
Uganda	20,438	49,332	89,888	120,825	Beyond 2100	120,846
United Republic of Tanzania	30,019	67,578	138,965	261,694	Beyond 2100	263,975
Zambia	8,680	21,018	40,336	64,307	Beyond 2100	64,640
Zimbabwe	10,894	16,478	27,076	37,132	Beyond 2100	37,202
Northern Africa and Western Asia (growing through 2054)	236,825	458,912	693,377	894,223	Beyond 2100	895,956
Algeria	28,185	46,497	60,890	64,547	2091	65,116
Bahrain	586	1,588	2,204	3,080	Beyond 2100	3,100
Egypt	64,969	115,578	166,533	201,847	Beyond 2100	201,944
Iraq	20,484	45,558	75,060	100,564	Beyond 2100	100,734
Israel	5,284	9,322	13,625	19,700	Beyond 2100	19,794
Jordan	4,664	11,531	16,890	21,306	Beyond 2100	21,340
Kuwait	1,662	4,884	6,555	9,564	Beyond 2100	9,640
Lebanon	3,924	5,786	7,083	7,204	2080	7,458
Libya	4,866	7,343	9,429	9,793	2087	9,971
Morocco	26,194	37,901	43,659	38,001	2058	43,737

Groups, countries and areas	Total population (thousands)				Population peak	
	1995	2024	2054	2100	Year	Total population (thousands)
Oman	2,102	5,165	8,154	12,055	Beyond 2100	12,135
Qatar	507	3,012	4,336	7,236	Beyond 2100	7,309
Saudi Arabia	13,019	33,661	49,454	70,784	Beyond 2100	71,230
State of Palestine	2,582	5,450	8,817	11,479	Beyond 2100	11,486
Sudan	24,354	50,049	89,991	136,603	Beyond 2100	137,178
Syrian Arab Republic	14,416	24,175	38,890	43,719	2086	44,159
United Arab Emirates	2,381	10,839	15,990	26,015	Beyond 2100	26,253
Western Sahara	205	585	792	832	2089	837
Yemen	16,444	39,987	75,026	109,894	Beyond 2100	110,177
Central and Southern Asia (growing through 2054)	1,297,934	2,020,052	2,530,980	2,540,895	2075	2,644,949
Afghanistan	16,713	42,045	81,508	129,941	Beyond 2100	130,493
Bangladesh	121,477	172,507	218,178	209,120	2071	226,139
India	950,632	1,444,436	1,690,865	1,509,107	2062	1,701,356
Kazakhstan	16,867	20,464	27,283	33,638	Beyond 2100	33,707
Kyrgyzstan	4,678	7,131	9,908	11,729	Beyond 2100	11,731
Maldives	254	527	595	476	2058	597
Nepal	21,993	29,674	35,077	31,927	2067	35,802
Pakistan	132,588	249,336	387,300	510,572	Beyond 2100	511,429
Tajikistan	5,884	10,492	16,133	20,199	Beyond 2100	20,204
Turkmenistan	4,155	7,431	9,817	9,961	2079	10,282
Uzbekistan	22,694	36,010	54,315	74,226	Beyond 2100	74,474
Eastern and South-Eastern Asia (growing through 2054)	306,035	463,627	541,320	494,764	2061	543,704
Brunei Darussalam	288	461	521	466	2055	521
Cambodia	9,627	17,533	22,310	22,769	2078	23,388
Indonesia	198,237	282,354	322,031	296,074	2059	322,609

Groups, countries and areas	Total population (thousands)				Population peak	
	1995	2024	2054	2100	Year	Total population (thousands)
Lao People's Dem. Republic	4,870	7,718	9,906	9,280	2068	10,167
Malaysia	20,073	35,344	44,981	44,087	2073	46,391
Mongolia	2,321	3,454	4,616	5,517	Beyond 2100	5,522
Philippines	69,763	115,371	135,018	114,596	2057	135,182
Timor-Leste	856	1,392	1,937	1,975	2077	2,093
Latin America and the Caribbean (growing through 2054)	199,931	295,665	354,636	330,564	2067	360,149
Belize	201	414	522	449	2063	528
Bolivia (Plurinational State of)	7,801	12,329	16,461	17,772	2087	17,910
Cayman Islands	32	74	107	118	2098	118
Dominican Republic	7,815	11,380	13,083	11,707	2061	13,154
Ecuador	11,481	18,058	21,529	19,148	2063	21,740
French Guiana	132	306	495	773	Beyond 2100	778
Guatemala	10,178	18,265	25,260	25,957	2078	27,155
Guyana	757	829	948	891	2067	960
Haiti	7,491	11,705	14,987	15,172	2076	15,724
Honduras	5,658	10,735	15,259	17,040	2090	17,136
Mexico	90,062	130,308	149,629	130,629	2059	149,941
Nicaragua	4,597	6,870	8,905	8,630	2072	9,237
Panama	2,697	4,487	5,723	5,911	2081	6,030
Paraguay	4,526	6,887	8,800	9,059	2078	9,287
Peru	24,118	34,035	41,013	38,247	2067	41,702
Suriname	425	632	740	710	2072	753
Venezuela (Bolivarian Republic of)	21,959	28,351	31,177	28,354	2057	31,215

<i>Groups, countries and areas</i>	<i>Total population (thousands)</i>				<i>Population peak</i>	
	<i>1995</i>	<i>2024</i>	<i>2054</i>	<i>2100</i>	<i>Year</i>	<i>Total population (thousands)</i>
Oceania (excluding Australia and New Zealand) (growing through 2054)	5,938	12,667	18,585	22,789	Beyond 2100	22,806
Guam	149	167	194	206	2091	207
Kiribati	81	134	188	223	2100	223
Micronesia (Fed. States of)	110	113	128	128	2075	133
Nauru	10	12	16	21	Beyond 2100	21
New Caledonia	198	291	343	338	2067	348
Papua New Guinea	4,561	10,483	15,386	18,636	Beyond 2100	18,645
Samoa	174	217	281	383	Beyond 2100	384
Solomon Islands	379	810	1,366	1,847	Beyond 2100	1,851
Tokelau	2	2	4	4	2082	4
Tonga	100	104	106	118	2100	118
Tuvalu	9	10	10	12	Beyond 2100	12
Vanuatu	165	324	563	873	Beyond 2100	878
Europe, Northern America, Australia and New Zealand (growing through 2054)	443,341	562,636	625,243	678,574	Beyond 2100	679,339
Australia	17,990	26,581	33,228	43,035	Beyond 2100	43,252
Canada	29,304	39,538	46,142	53,525	Beyond 2100	53,700
Faroe Islands	44	55	64	63	2079	65
France	58,097	66,496	68,130	68,496	2096	68,533
Gibraltar	27	39	50	49	2070	51
Holy See	1	0	1	1	Beyond 2100	1
Liechtenstein	31	40	43	44	2100	44
Luxembourg	405	669	797	749	2062	801
Monaco	31	39	37	47	Beyond 2100	48

<i>Groups, countries and areas</i>	<i>Total population (thousands)</i>				<i>Population peak</i>	
	<i>1995</i>	<i>2024</i>	<i>2054</i>	<i>2100</i>	<i>Year</i>	<i>Total population (thousands)</i>
New Zealand	3,646	5,194	5,791	5,815	2078	5,868
Sweden	8,816	10,581	11,360	11,370	2080	11,433
United Kingdom	58,083	68,923	75,834	74,374	2073	76,072
United States of America	266,865	344,480	383,767	421,007	Beyond 2100	421,551



World Population Prospects 2024: Summary of Results adopts the analytical framework of the demographic transition—the historic shift towards longer lives and smaller families—approximated here by the timing at which populations peak in size, to explore differences in population trends that characterise countries and regions today and provide insight into their future trajectories. The report also offers policy recommendations to prepare countries for a population size, age structure and spatial distribution that may differ appreciably from that of their recent past.

World Population Prospects 2024 is the twenty-eighth edition of the official United Nations population estimates and projections. It presents population estimates from the 1950s to the present for 237 countries or areas, underpinned by analyses of historical demographic trends. The 2024 revision also presents population projections to the year 2100 that reflect a range of plausible outcomes at the global, regional and national levels.

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