

# Population dynamics in German development cooperation

Handbook

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Sector Initiative Population Dynamics,  
Sexual and Reproductive Health and Rights  
Friedrich-Ebert-Allee 36 + 40  
53113 Bonn, Germany  
T +49 228 44 60-0  
F +49 228 4460-17 66

E [demografie@giz.de](mailto:demografie@giz.de)

I [www.giz.de](http://www.giz.de)

**Authors:**

Christine Schuster, Thérèse Carolin Tasche, Mareike Theisling, Lea Gernemann

**Editor:**

Dr. Mary White-Kaba, Montréal

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## List of abbreviations

<b>AfDB</b>	African Development Bank	<b>EDF</b>	European Development Fund
<b>APAI-CRVS</b>	African Programme for Accelerated Improvement of Civil Registration and Vital Statistics	<b>ESA</b>	European Space Agency
		<b>EU</b>	European Union
<b>AU</b>	African Union	<b>FAO</b>	Food and Agriculture Organization of the United Nations
<b>BiB</b>	German Federal Institute for Population Research	<b>GFATM</b>	The Global Fund to Fight AIDS, Tuberculosis and Malaria
<b>BMI</b>	German Federal Ministry of the Interior, Building and Community	<b>GFF</b>	Global Financing Facility
<b>BMZ</b>	German Federal Ministry for Economic Cooperation and Development	<b>GHPC</b>	German Health Practice Collection
		<b>GIZ</b>	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
<b>CoE</b>	Centre of Excellence for Civil Registration and Vital Statistics Systems	<b>HCD</b>	Human Capacity Development
<b>CPD</b>	Commission on Population and Development	<b>IAEG-SDGs</b>	Inter-agency and Expert Group on SDG Indicators
<b>CRS</b>	Creditor Reporting System	<b>ICPD</b>	International Conference on Population and Development
<b>CRVS</b>	Civil registration and vital statistics	<b>ICT</b>	Information and communication technologies
<b>D4DP</b>	Initiative Demography for Development Planning	<b>IDP</b>	Internally displaced person
<b>Destatis</b>	German Federal Statistical Office	<b>IDRC</b>	International Development Research Center
<b>DHIS2</b>	District Health Information System 2	<b>IHSN</b>	International Household Survey Network
<b>DHS</b>	Demographic and Health Survey	<b>IIASA</b>	International Institute for Applied Systems Analysis
<b>DSW</b>	Deutsche Stiftung Weltbevölkerung		



<b>ILO</b>	International Labour Organization	<b>PaRD</b>	International Partnership on Religion and Sustainable Development
<b>IOM</b>	International Organization for Migration	<b>PARIS21</b>	Partnership in Statistics for Development in the 21 <sup>st</sup> Century
<b>IPPF</b>	International Planned Parenthood Federation	<b>PPF</b>	KfW Project Preparation Fund
<b>ITU</b>	International Telecommunication Union	<b>PRB</b>	Population Reference Bureau
<b>IUSSP</b>	International Union for the Scientific Study of Population	<b>SDGs</b>	Sustainable Development Goals
<b>KfW</b>	KfW Development Bank	<b>SEF</b>	GIZ Study and Expert Fund
<b>M&amp;E</b>	Monitoring and evaluation	<b>SRHR</b>	Sexual and reproductive health and rights
<b>MDGs</b>	Millennium Development Goals	<b>SWP</b>	German Institute for International and Security Affairs
<b>MENA</b>	Middle East and North Africa	<b>TVET</b>	Technical and vocational education and training
<b>MICS</b>	Multiple Indicator Cluster Survey	<b>UN DESA</b>	United Nations Department of Economic and Social Affairs
<b>NGOs</b>	Non-governmental Organisations	<b>UNDP</b>	United Nations Development Programme
<b>NPC</b>	National Population Council	<b>UNECA</b>	United Nations Economic Commission for Africa
<b>ODA</b>	Official Development Assistance	<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>OECD</b>	Organisation for Economic Co-operation and Development	<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>OECD-DAC</b>	OECD-Development Assistance Committee		

<b>UNFPA</b>	United Nations Population Fund	<b>USAID</b>	United States Agency for International Development
<b>UN HABITAT</b>	United Nations Human Settlements Programme	<b>UNSD</b>	United Nations Statistics Division
<b>UNHCR</b>	United Nations High Commissioner for Refugees	<b>UN</b>	United Nations
<b>UNICEF</b>	United Nations Children's Fund	<b>WHO</b>	World Health Organization
<b>UNRWA</b>	United Nations Relief and Works Agency for Palestine Refugees in the Near East	<b>WMO</b>	World Meteorological Organization
		<b>WSTF</b>	Water Sector Trust Fund

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# 1 Overview

Demographic trends such as population growth or increasing migration and urbanisation affect nearly all spheres of a society's existence, and thus also its potential for development. Taking population dynamics into account in German development cooperation and in its partner countries is therefore an important prerequisite for shaping sustainable development processes.

This chapter starts with a basic overview of major global demographic trends and explains why German development cooperation pays special attention to the cross-cutting issue of population dynamics. The (➡ Chapter 1.1) **introduction** presents the concept of population dynamics as it is used in this handbook and in German development cooperation. It explains the structure and intended use of the handbook and indicates which audience it is targeting. The introduction also provides a preview of the individual chapters, which include tried and tested approaches and selected examples from development practice.

The following section on the (➡ Chapter 1.2) **guiding principles** of German development cooperation provides an introduction to the key national and international documents that underpin the work of German development cooperation in the cross-cutting field of population dynamics. Building on the results of the 1994 International Conference on Population and Development (ICPD) in Cairo, German development cooperation applies a holistic approach and strives to anchor demographic developments in its activities across all sectors. With this commitment Germany had taken on a pioneering role among bilateral donors well before adoption of the 2030 Agenda in 2015. The all-encompassing Sustainable Development Goals (SDGs) exemplify the close interplay between the global community's progress and demographic development.

The chapter concludes with a graphic overview of population dynamics in numbers (see Figure 1). The numbers, facts and forecasts offer insights into the many facets of global population trends.

## 1.1 Introduction

Demographic changes are unfolding world-wide. Each country's population is constantly changing in size, composition and geographical distribution. These shifts directly affect each individual and the social, economic and ecological dimensions of life in society.

Global megatrends such as rapid population growth, changes in age structure, and increasing migration and urbanisation are among the main challenges of the 21<sup>st</sup> century. All of these demographic changes strongly influence development progress in Germany's partner countries.

Population trends should therefore be a key consideration when framing policies, so that these reflect the country's demographic changes, explore new opportunities and confront obstacles at an early stage.

### Defining population dynamics

Population dynamics describes how populations change over time in terms of size, composition and geographical distribution. Terms such as 'population development' and 'demographic changes' are used as synonyms in this handbook.



### About this handbook

This handbook provides a summary of global and regional population trends, proven approaches and practical examples, as well as regional and sectoral entry points for mainstreaming population dynamics in German development cooperation. It supports its readers in identifying the opportunities and challenges that demographic changes can present and in effectively factoring these into their work.

The handbook is primarily intended for the regional divisions of the German Federal Ministry for Economic Cooperation and Development (BMZ), economic cooperation officers working in partner countries and the implementing organisations of German development cooperation. It can also offer Germany's numerous cooperation partners practical insights and tools for taking population dynamics into account.



### **In focus: Tried and tested approaches and examples from practice**

The handbook introduces (➡ Chapter 2) **global and regional population trends**, and gives an overview of worldwide developments as well as regional differences and particularities.

The core element of the handbook are the proven (➡ Chapter 3) **approaches of German development cooperation and practical examples** for integrating population dynamics into development work. This chapter presents concrete approaches, funding possibilities and support options. It also illustrates the importance of population dynamics in the management of bilateral cooperation and in the planning and implementation of development measures.

The handbook also explores interlinkages and interactions between (➡ Chapter 4) **population dynamics and selected sectors of German development cooperation** and examines in depth the subject of (➡ Chapter 5) **population data** as an important basis for policy and programme planning.

Each chapter comprehensively covers a different topic and can be read on its own. Together they provide an overall picture of population dynamics and its role in German development cooperation. A reference structure featuring contextual links between the different chapters facilitates the search for more detailed information and highlights interfaces.



## 1.2 Guiding principles

German development cooperation bases its approach concerning the cross-cutting issue of population dynamics on certain key documents. At the international level, these include the *Programme of Action* adopted at the 1994 ICPD in Cairo and the *2030 Agenda* with its 17 SDGs. At the national level, German development cooperation is guided by BMZ's position paper *Population dynamics in German development cooperation* (2014 version).

### ICPD Programme of Action

The ICPD held in Cairo in 1994 marked an important paradigm shift. From that point on, it was agreed that population policy should no longer be about setting certain thresholds for population growth but should instead focus on people and their needs.

In this spirit, the Cairo Programme of Action, which was adopted by 179 countries, addresses a wide spectrum of issues that have a direct link to demographic and sustainable development. These include gender equality (➡ Chapter 4.1: Human rights and gender), the universal right to sexual and reproductive (➡ Chapter 4.2) health and reproductive rights, and access to (➡ Chapter 4.3) education, as well as (➡ Chapter 2.1) global population trends such as urbanisation (➡ Chapter 4.8: Decentralisation and urban development) and (➡ Chapter 4.6) migration and displacement.

Originally scheduled for implementation by 2014, the Cairo Programme of Action was extended in 2010 by a resolution of the United Nations (UN) until the time of its final realisation. Twenty years after that first major international conference on population, in 2014, a comprehensive report by the UN Secretary General examining the implementation of the Cairo Programme of Action was presented at a Special Session of the UN General Assembly. Based on this report, the UN resolved to incorporate the key priorities of this programme into the 2030 Agenda.

The German government supports the implementation of the Programme of Action in the national and international policy dialogue and in bilateral cooperation with the partner countries of German development cooperation. Observance of human rights, particularly the principle of self-determination and gender equality, are central objectives of its efforts in the field of population policy.



## BMZ position paper: Population dynamics in German development cooperation

Population dynamics and its effect on sustainable development are the particular focus of BMZ's position paper *Population dynamics in German development cooperation*.

In this paper, BMZ explores prevailing population trends in its partner countries, notably the high proportion of young people relative to the population as a whole, as well as urbanisation and migration processes. The position paper describes the opportunities and challenges that these developments present for the partner countries and defines three priority areas of intervention for German development cooperation:

1. Establishing population dynamics in the international and policy dialogues,
2. Data-based development – knowledge facilitates action and
3. Investments in a demographic dividend – fostering youth.

By firmly anchoring the topic in the (➔ Chapter 3.2.7) **international and national policy dialogue**, BMZ underlines the relevance of population dynamics for development processes in its partner countries. To enable these countries to formulate evidence-based development plans in line with demographic changes, Germany is

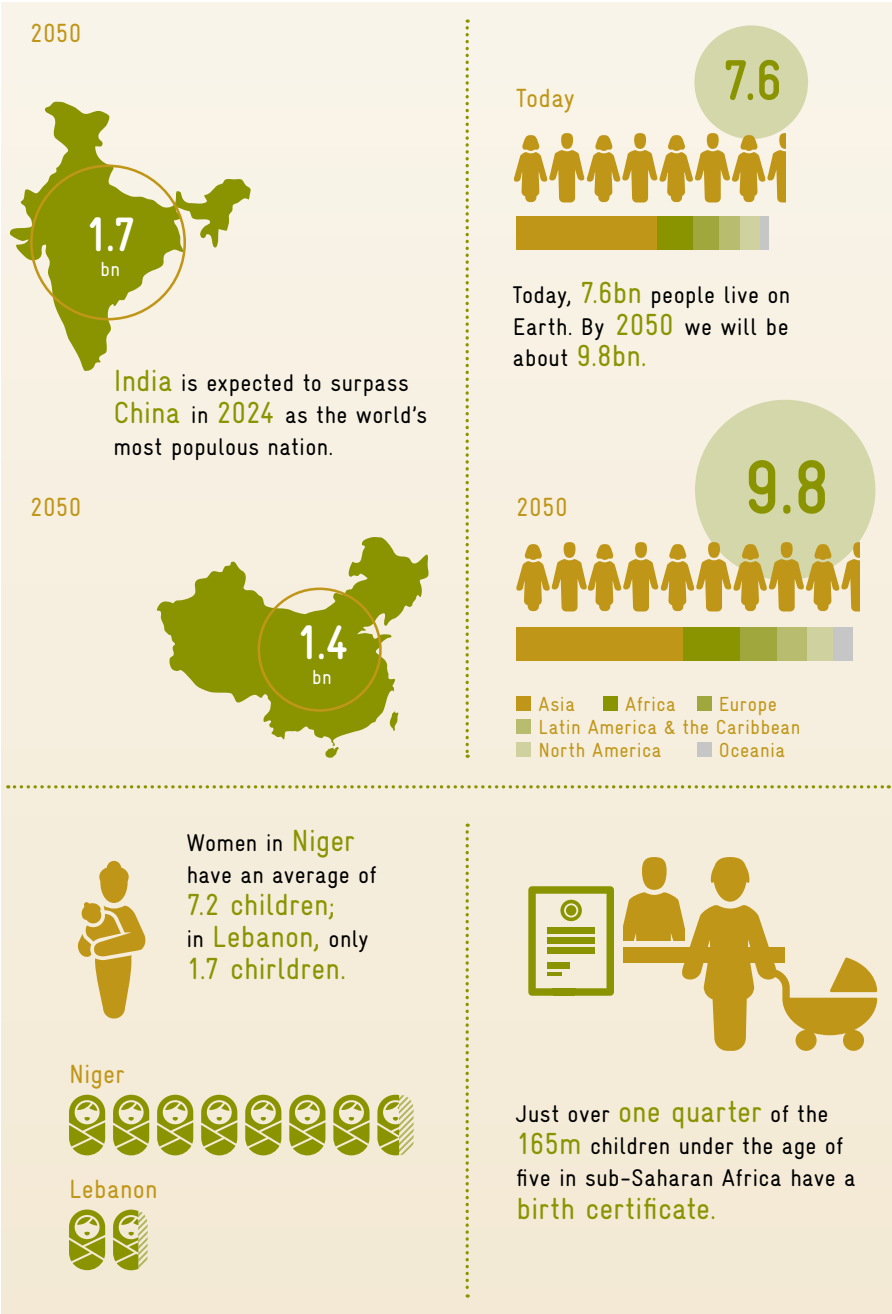
supporting their efforts to collect, analyse and utilise (➔ Chapter 5) **population data**. In many partner countries, young people account for a very large share of the population. With support from German development cooperation, these countries can better orient their development planning toward promoting young people in order to pave the way for a demographic dividend (➔ Chapter 2.1: **Global population trends**).

## 2030 Agenda

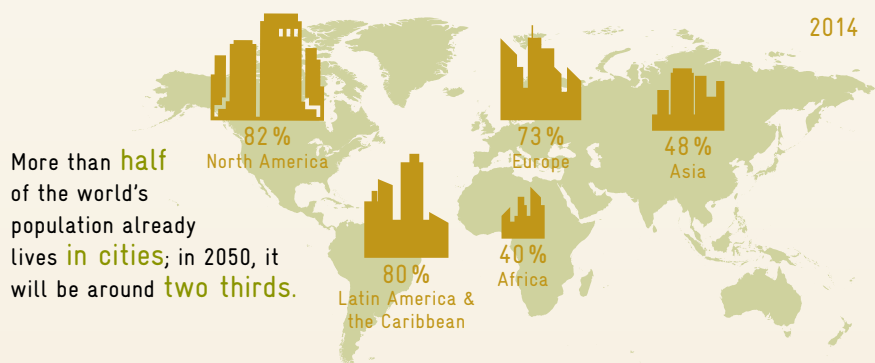
With its position paper and cross-cutting approach, Germany had taken a leading role on population dynamics among bilateral donors even before the adoption of the 2030 Agenda in 2015. The 2030 Agenda establishes ecological, social and economic sustainability as worldwide goals to which all countries must contribute. Demographic changes, empowerment, gender equality, health and education are all key elements. With the Agenda, the global community acknowledges how strongly development and sustainability depend on demographic factors. The central importance of population dynamics in the 2030 Agenda is attested not least by the SDG indicators, of which some 43% are based on population data (➔ Chapter 5.6: **Monitoring the 2030 Agenda**).



Figure 1: Population dynamics in numbers



Sources: Authors' own representation based on UN DESA Population Division: International Migration Report 2017; World Population Prospects:



In 2020,

... the **average age** of the Vietnamese population will be **almost double** that of Uganda.

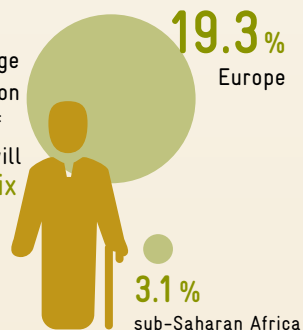


Viet Nam  
Ø 32.6 years



Uganda  
Ø 16.4 years

... the percentage of the population over the age of **65** in Europe will be more than **six times higher** than that in sub-Saharan Africa.



In 2017, more than **257m** people were not living in their **country of birth**.



A **girl** born today in the Philippines will live on average **seven years** longer than a boy.





## 2 Global and regional population trends

Population trends in each country depend on numerous demographic factors. They are apparent in changing birth and death rates and age and gender structures, or express themselves in the form of migration and urbanisation. While demographic changes manifest themselves differently in each region of the world, global megatrends such as population growth and ageing can be recognised. In the course of their development, all the world's countries, at different times and each at its own pace, pass through the stages of the demographic transition. Recognising at which stage individual countries and regions are in their demographic transition is important, to facilitate reciprocal learning and awareness of opportunities and challenges.

Early recognition of demographic developments and taking them into account when designing programmes and policies is a fundamental cross-cutting responsibility for each country and for the international community, including German development cooperation. This is an essential prerequisite for playing an active role in shaping population dynamics, interrelated as it is with global social, economic and environmental development. This chapter provides an initial orientation with an introduction to (➡ Chapter 2.1) global population trends and a presentation of demographic profiles for five of the world's regions (➡ Chapter 2.2.: Regional population trends).

While (➡ Chapter 2.2.1) Asia is simultaneously confronted with continuing high fertility rates in some countries and rapid ageing of the population in others, (➡ Chapter 2.2.2) Latin America and the Caribbean have the world's highest rate of urbanisation. Population development in the (➡ Chapter 2.2.3) Middle East and North Africa (MENA) is characterised by a high proportion of youth, but also by migration and displacement. In (➡ Chapter 2.2.4) Eastern and South-Eastern Europe as well, many young people emigrate out of the region, which contributes to an ageing society in these countries. The population in (➡ Chapter 2.2.5) sub-Saharan Africa, by contrast, is still very young and characterised by a high proportion of children. A (➡ Chapter 2.2.6) Supplement: Germany illustrates how strongly, in a global comparison, the challenges and opportunities of demographic development can differ.





## 2.1 Global population trends

Demographic changes concerning the size, composition or geographical distribution of a country's population may together and over time evolve into regional or even global demographic trends. At present, population development – particularly population growth – still varies widely from region to region (see Figure 2). However, the following demographic megatrends can be observed in all regions, if not always with the same characteristics.

### The world's population is growing

Projections of global population growth by the United Nations (UN) Population Division (most recent: *World Population Prospects: The 2017 Revision*) indicate that the world's population is expected to grow from over 7.6 billion today to 9.8 billion by 2050. This growth will be unevenly distributed between regions and individual countries. With the exception of Europe, where population figures have already begun to decline, the number of inhabitants in all other parts of the world will continue to grow, particularly in sub-Saharan Africa. Here the population will more than double by mid-century, from one billion at present to an estimated 2.2 billion people.

### The world's population is ageing

In the coming decades, according to the *World Population Prospects*, the world will undergo pronounced changes in the age structure of its population. In 2017, some

26% of people worldwide were younger than 15, and barely 13% older than 59 years of age. By 2050 the relative weight of these two age groups will converge due to the sharp rise in the number of older people worldwide (► [Chapter 4.5: Social protection](#)). Asia alone, where the number of people aged 60 and over is expected to grow by 674 million from 2017 to 2050, will be responsible for 60% of this global increase. In the least developed countries, the portion of the population under the age of 15 will drop from nearly 40% in 2017 to about 30% in 2050, and that of 15 to 24-year-olds from 20% to 17.8%.

### The world's population is moving

Urbanisation will lead to a worldwide increase in the proportion of city dwellers from 54% in 2014 to 66% in 2050, according to the UN forecasts on urban population growth (*World Urbanization Prospects: The 2014 Revision*). This means some 2.5 billion more people will live in urban areas



Figure 2: If the world were a village

2017

If the world were a village with only 100 inhabitants, it would have:

16

Africans

5

North Americans

10

Europeans

8

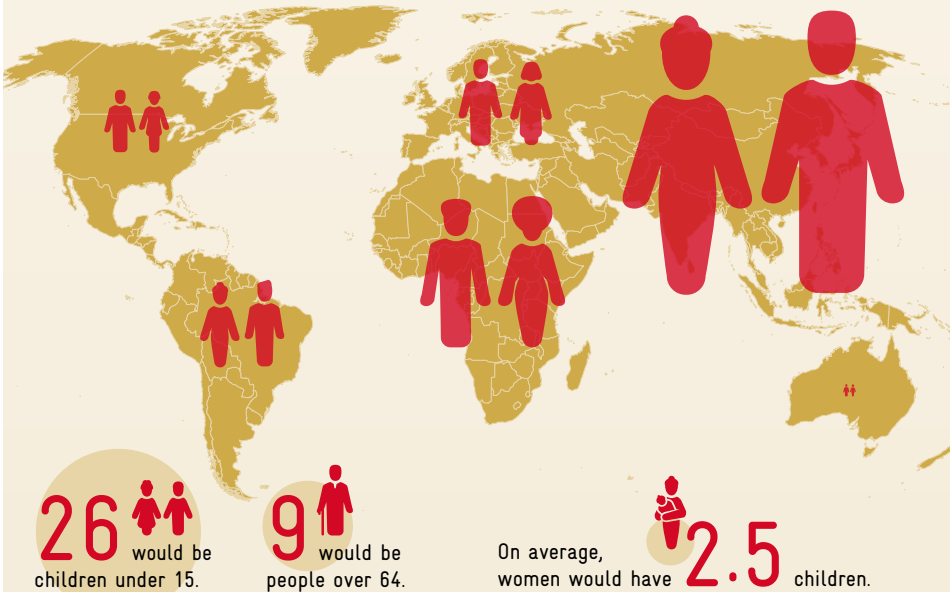
Latin Americans

1

Oceanian and

60

Asians.



2050

The number of inhabitants would grow by about one person per year.

By 2050, the village would have grown to 131 people, including:

34

Africans

6

North Americans

10

Europeans

10

Latin Americans

1

Oceanian and

70

Asians.

Illustration: Deutsche Stiftung Weltbevölkerung (DSW): DSW-Datenreport 2017;  
Source: Population Reference Bureau (PRB): World Population Data Sheet 2017.

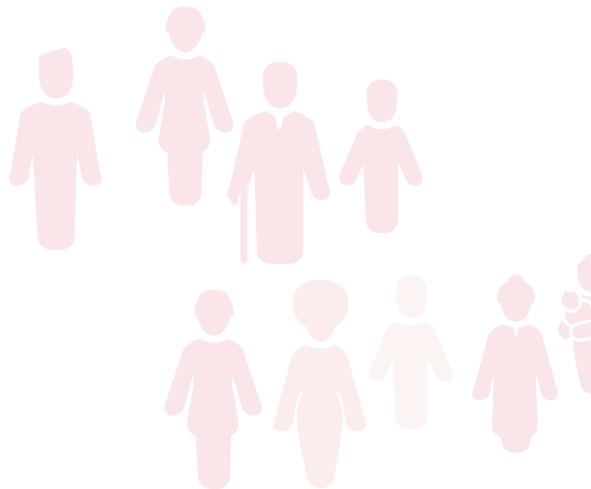


than at present. 90% of this growth will take place in Africa and Asia, where in some countries the population is still largely rural. By contrast, the most industrialized and emerging countries all over the world, are already largely urbanised.

Most people will move to small towns and medium-sized cities. However, including in Asia and Africa, there are already megacities with over 10 million inhabitants. In order to cope with the often rapid and uncontrolled influx of people, the cities must develop their infrastructure and services in function of the population's needs (➡ [Chapter 4.8: Decentralisation and urban development](#)). Young people in particular are moving out of rural areas, leaving children and the elderly behind. This affects traditional family structures as well as agriculture, since the required workforce is often no longer available (➡ [Chapter 4.7: Rural development and food and nutrition security](#)).

The number of international migrants is also on the rise. According to the UN's *International Migration Report 2017*, almost 258 million people no longer live in the country where they were born. In 2017, over 60% of all international migrants lived in Europe and Asia. Around 80 million people living in Asia were not born in the country where they currently reside. In Europe, this applies to some 78 million people. Fully half of them come from another country in the same region; in Asia, the figure is almost 80%.

The global rise in the number of conflicts and crises has also led to a growing number of refugees, which increases the pressure both on the countries of origin and on the host countries to adjust and adapt. The current statistical report *Global Trends: Forced Displacement in 2016* produced by the United Nations High Commissioner for Refugees (UNHCR) indicates that worldwide in 2016 a total of 65.6 million people were displaced, half of them children. More than eight of ten refugees were hosted in emerging and developing countries rather than in industrialised states. If all refugees worldwide were to converge on one country, it would rank 22nd on the list of the world's most populous countries (➡ [Chapter 4.6: Migration and displacement](#)).



### The demographic transition

The demographic transition, a process of gradual change in the age structure of the population, started in the course of the last 150 years. This process began in the second half of the 19<sup>th</sup> century in Europe and in countries on other continents that were undergoing industrialisation at the time. Meanwhile, all the world's countries, from Asia to Latin America and the Caribbean to the Middle East and North Africa (MENA) as well as sub-Saharan Africa, have started to undergo this transition. Depending on the evolution of birth and death rates, the pace of the demographic transition is different in each region and country.

Each society goes through four stages (see Figure 3). In **Stage 1**, death and birth rates are very high and life expectancy is therefore low. Consequently, children represent an extremely large portion of the overall population, while adults and old people account for a very small share. In this stage the population's size remains relatively stable. At the end of this stage, the death rate starts to drop, which gives rise to an initially modest population growth. This heralds the start of Stage 2.

In **Stage 2**, the death rate begins to drop rapidly due to improvements in the overall standard of living, working conditions and the health and education systems. Child mortality in particular declines due, among other factors, to higher vaccination rates. This leads to a gradual increase in life expectancy, coupled with sudden and rapid population growth. Only after an interval of about 10 years does the birth rate also start to drop in Stage 2. Observations worldwide have revealed that it is when children's prospects of survival rise that parents decide to have fewer offspring.

The declining birth rate ushers in **Stage 3** of the demographic transition. The population has now grown considerably, and continues to grow in this stage as well – if less rapidly than before – since by now the majority are of reproductive age. Even if these numerous young people have fewer children than their parents did, due to the sheer size of their cohort they will also produce large succeeding generations. However, they tend to have smaller families, enabling them to invest more in the health and education of each individual child. At the same time, both parents, and especially women, have more availability to engage in gainful activities.

At the start of **Stage 4**, birth and death rates are reduced and population size tends to stabilise. At the same time, life expectancy continues gradually to rise. Children and young people now account for a smaller share of the total population. More and more people live to an advanced age. While a growing number of people initially stay healthy as they age and enjoy a high quality

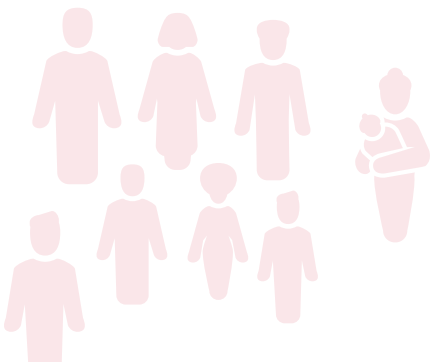
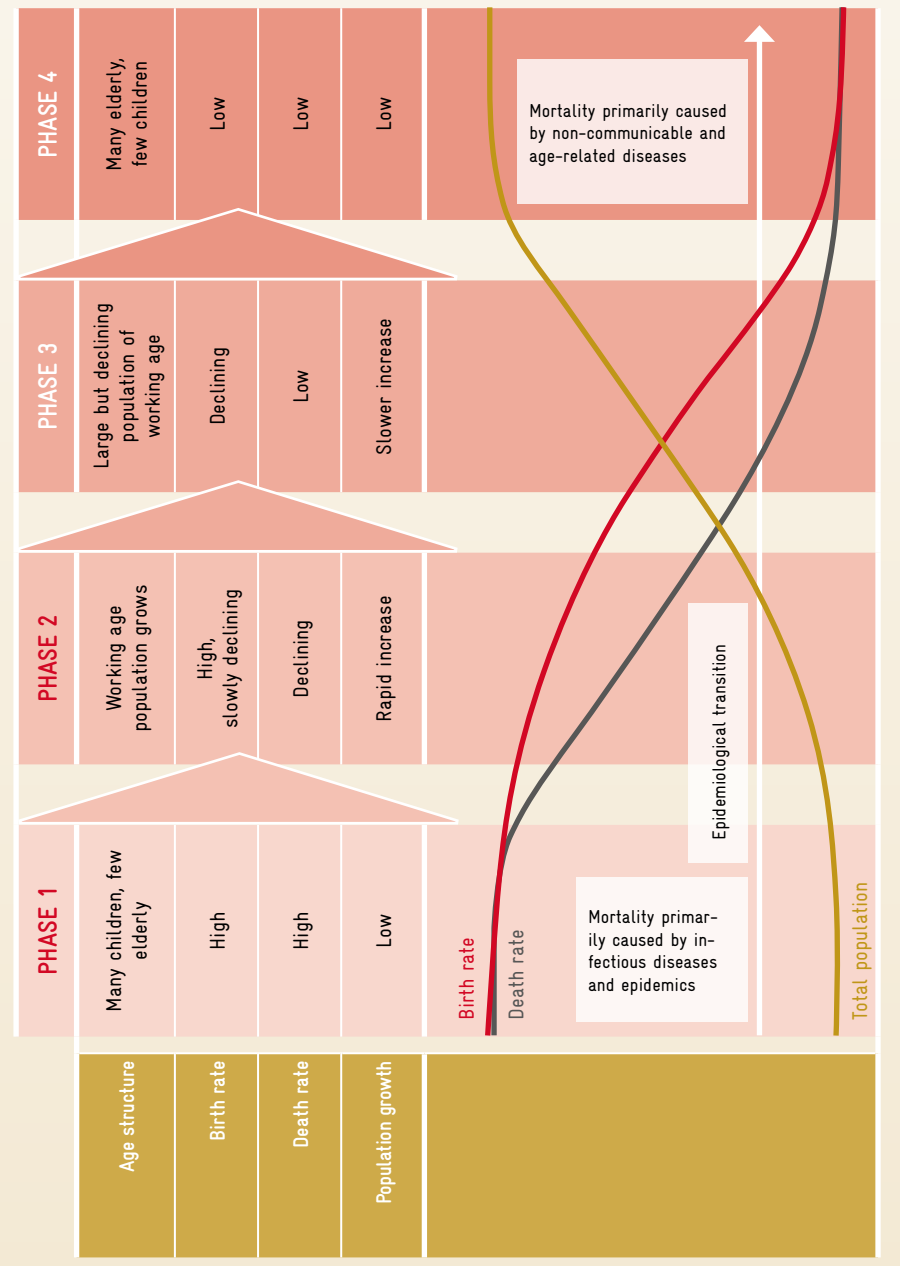


Figure 3: The four stages of the demographic transition



Source: Schematic representation based on UNICEF (2017): Generation 2030 Africa 2.0, page 5.

of life – i.e. healthy life expectancy rises – an increasing number of very old people come to suffer from multiple chronic conditions.

The four stages of the demographic transition are accompanied by an epidemiological transition. This is simultaneously a cause and a consequence of the demographic transition and describes how the frequency of diseases and causes of death changes within large population groups. While most people in Stage 1 die of infectious diseases and epidemics, most deaths in Stage 4 are caused by non-transmissible chronic degenerative diseases.

Assuming a continuation of the demographic transition, some models hypothesise a development in which the majority of the population reaches a very advanced age, birth rates continue to drop and without immigration the population starts to shrink. At the same time, mortality might again increase through new diseases and causes of death, such as antimicrobial resistance.

### Demographic bonus and demographic dividend

The dependency ratio compares the proportion of people within a population who are not of working age, such as children and the elderly, with that of people of working age. In countries where child mortality and fertility are declining and the proportion of elderly people is still small, a demographic bonus results when the majority of the population is of working age. This bonus sets in as soon as there are about three people of working age for every two people of non-working age.

#### The first demographic dividend

Whether the demographic bonus can be converted into an economic benefit – a demographic dividend – depends on whether the young adults grow up healthy (⇒ Chap-

ter 4.2: Health) and educated (⇒ Chapter 4.3: Education) and whether both women and men (⇒ Chapter 4.1: Human rights and gender) can actually find productive employment and decent work (⇒ Chapter 4.4: Sustainable economic development and technical and vocational education and training (TVET)).

A team of researchers at Harvard University found in a study published by Germany's IZA Institute of Labor Economics that up to a third of income growth in East Asia between 1965 and 1995 can be attributed to effective use of the demographic bonus. The 'Asian Tigers' Singapore, Hong Kong, Taiwan and South Korea thus reaped a demographic dividend.

All countries in sub-Saharan Africa and many other developing nations have not yet entered



the the window of opportunity of the demographic bonus that lasts from 30 to 50 years (see Figure 4). In many of these countries, people of working age still make up little more than half the population. Children up to age 15 account for the bulk of the population, on average 43% in sub-Saharan Africa. The crucial factor for entering the window of economic opportunity is, however, a large proportion of young people of working age between 15 and 24 years. Countries such as Kenya, Rwanda and Ethiopia, which according to the *World Population Prospects* will enter this window in about 10 to 15 years, must urgently invest now in the education and health of children and young people, in promotion of gender equality and of labour markets. In this way they can prepare the future generations of productive workers to harness the demographic dividend.

### The second demographic dividend

Under conducive political, economic and social conditions, people of working age can acquire savings during the window of opportunity for the demographic dividend. If this is successful, this can lead to a second demographic dividend.

With sufficient savings, older people can largely provide for their own financial needs. In this case the financial benefits from the first demographic dividend are not used up by transfer payments such as government-financed pension systems. The population's savings can also serve as investment capital. This can give rise to enduring economic growth – the second demographic dividend. Preconditions for this include creation of incentives for saving and the promotion of solid financial institutions.

East Asia is again a good example of a region that has benefited from the second demographic dividend. There, a sharp drop in fertility was accompanied by an increase in life expectancy. This allowed a large share of the population in these countries to give their children a better education and prepare them for skilled employment. These solid foundations enabled them to build reserves and make investments. A study in the *Journal of Asian Economics* indicated that the national savings rates rose by 14% during this period.

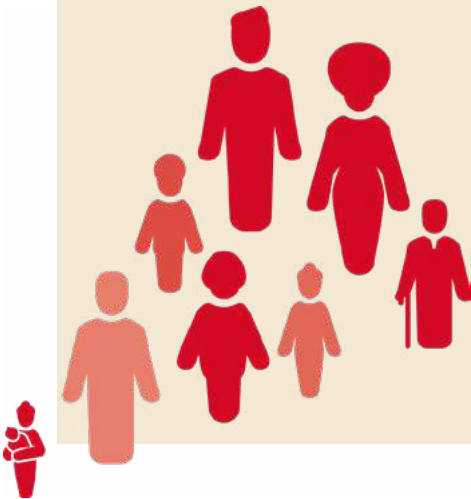
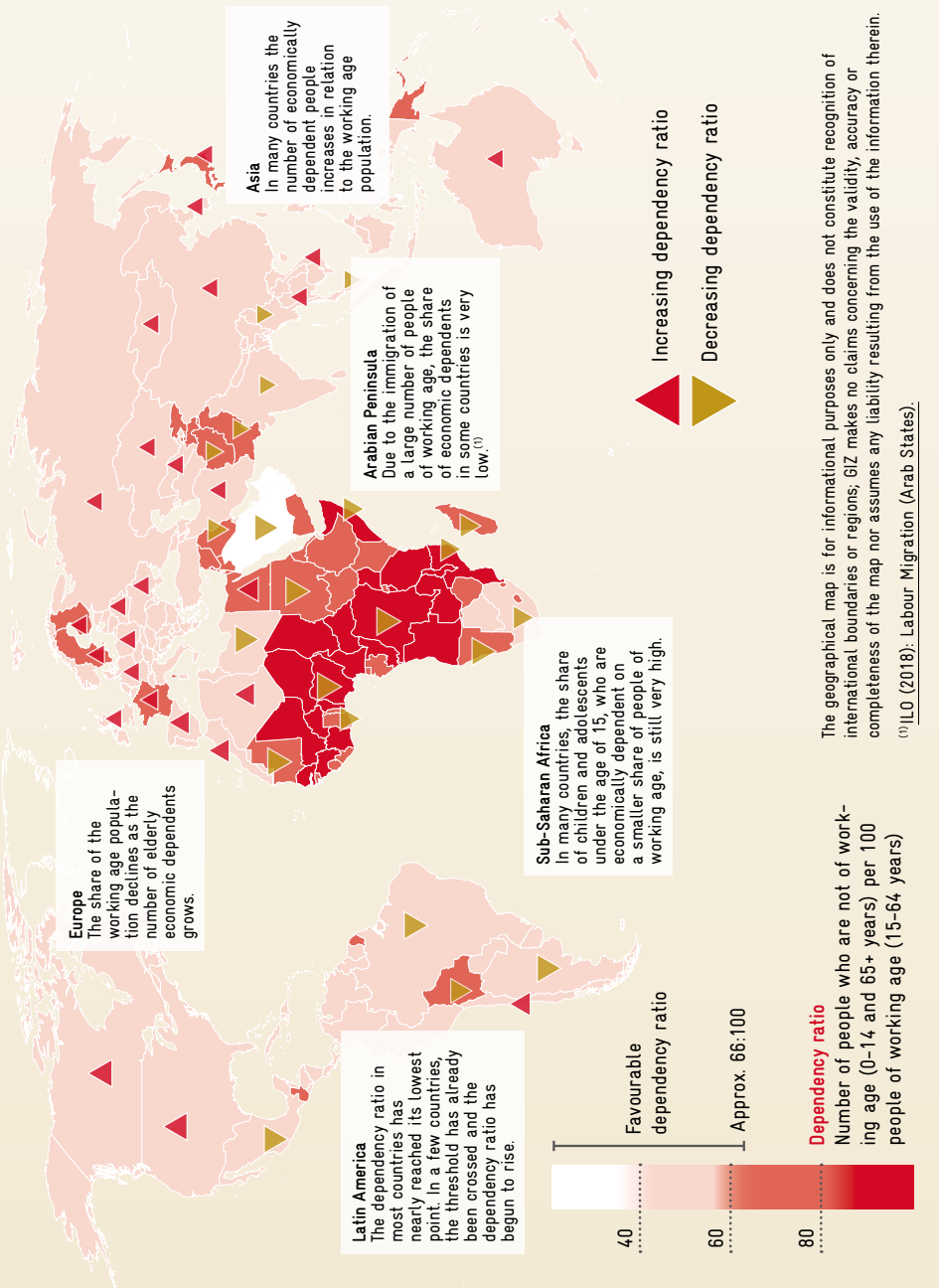


Figure 4: Global comparison of age structures



Source: Authors' own representation based on UN DESA Population Division: World Population Prospects: The 2017 Revision. Prognosis for the year 2020.



## 2.2 Regional population trends

There are very large demographic differences between some of the world's regions. The following overview of the key characteristics of regional demographic development presents the current demographic situation and possible future developments. Data on age structure, average life expectancy or

urbanisation highlight the different demographic opportunities and challenges facing the countries in the individual regions today. The chapter concludes with the demographic profile of Germany, as a comparative example of an industrialised country.

### 2.2.1 Asia<sup>1</sup>

#### Demographic profile

**Population size:** By 2050, Asia's population will rise from 4.2 billion to around 4.9 billion, according to the UN *World Population Prospects*. India is expected to replace China as the world's most populous country in 2024. Fertility rates vary widely from country to country. A woman in Bangladesh has on average 2.1 children, while in Timor-Leste the average is 5.3.

**Life expectancy:** A child born today in Asia will live on average to the age of 73. Child mortality in South and Central Asia stands at 47 deaths per 1,000 live births. In South-East Asia the figure is 26, and in East Asia, 11. There are also major differences within the regions. In Sri Lanka, eight children die per 1,000 live births, in

contrast to 79 in Pakistan (➡ [Chapter 4.2: Health](#)).

**Age structure:** There are a large number of young people of working age in many Asian countries. In 2017, on average for every 100 people of working age (between the ages of 15 and 64), there were about 47 children and elderly people. Since the number of older people is rising rapidly in many countries, policies should be aligned with population forecasts at an early stage to promote social protection for the elderly (➡ [Chapter 4.5: Social protection](#)).

**Urbanisation:** According to the UN's *World Urbanization Prospects*, the proportion of Asia's urban population currently stands at around 48% and is set to rise to about 62% by 2050. Apart from megac-

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<sup>1</sup> This section is based on the regional classification of the UN Population Division. It includes the categories East Asia, South and Central Asia as well as South-East Asia.



ities such as Mumbai and Dhaka, many people in Asia continue to live in rural regions. In Cambodia, for instance, the urban population accounted for only 21% in 2014, as opposed to the projected 36% in 2050. The influx will focus on small and medium-sized towns and cities (➡ Chapter 4.8: Decentralisation and urban development).

**Migration:** In 2017, the world's largest migration corridor was in Asia, according to the *International Migration Report 2017*. Of the 106 million migrants from Asia (including Western Asia), about 63 million people migrated from their home country to other Asian countries. A further 20 million emigrated from Asia to Europe, 17 million to North America and 3 million to Oceania (➡ Chapter 4.6: Migration and displacement).

**Civil registration and vital statistics (CRVS):** According to the database for birth registration maintained by the United Nations Children's Fund (UNICEF), between 2010 and 2016 a total of 60% of children were registered in South Asia, whereas the average in East Asia and the Pacific was 84% (➡ Chapter 5.3: Civil registration and vital statistics (CRVS)).

## Political significance of population development

Asian countries are addressing numerous aspects of population dynamics. The UN conducts a regular survey of national population policies (*World Population Policies Database*) and made the following observations for 2013 and 2015:

- The majority of Asian countries supported family planning measures, some of them also for adolescents.
- An ageing population was a significant development for almost half of the countries.
- Many Asian countries took measures to influence the exodus of their people from rural to urban areas.
- Of the total of 30 countries, 17 carried out measures to improve the registration of births.
- In 2013, the level of child and maternal mortality was still unacceptable for about two-thirds of the countries.



Major differences in age structure

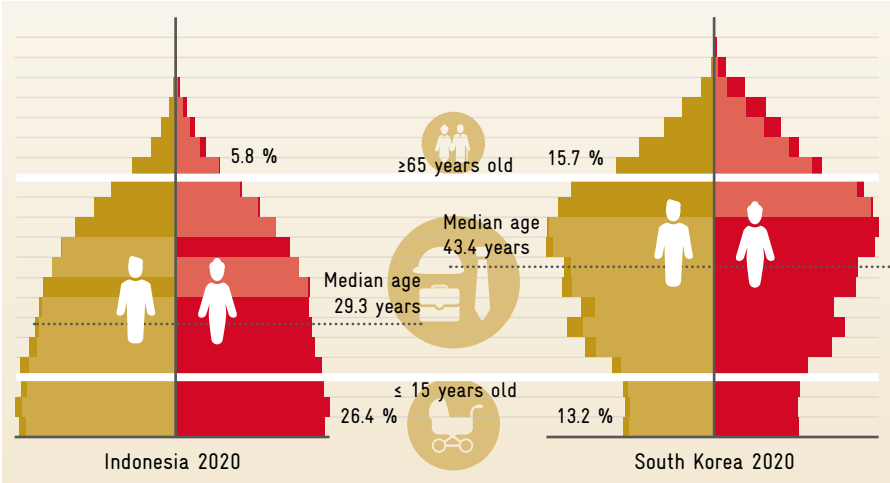
Although Asia is ageing rapidly on the whole, there are large differences in age structure between individual countries. In Indonesia and South Korea, the *World Population Prospects* predict that in 2020 there will be a comparable number of economically dependent people – children and the elderly – in relation to people of working age: 47.4 dependents per 100 working-age people in Indonesia, and 40.6 per 100 in South Korea. Both countries therefore have a favourable dependency ratio.

However, the average age of the population in Indonesia is only 29.3 years in contrast to 43.4 years in South Korea. This is because over 25% of the population in Indonesia is under 15 years of age, as compared to only 13.2% in South Korea. By contrast, over 15.7% of the

South Korean population is over 64 years old, while only 6% of the Indonesian population belongs to this age group. Therefore, despite similar dependency ratios, the two countries are going through different stages of the demographic transition (see Figure 5).

As soon as today's large cohorts of children reach working age in Indonesia, the country's dependency ratio will most likely improve even further. South Korea, on the other hand, has almost passed the window of opportunity of the demographic bonus. When it reaches the end of this stage of economically favourable age structures, the country will have to adjust its social protection systems to take into account the increasing proportion of older people (⇒ Chapter 2.1: Global population trends).

Figure 5: Differences in age structure in Indonesia and South Korea



Source: Authors' own representation based on UN DESA Population Division: World Population Prospects: The 2017 Revision. Prognosis for the year 2020.

## 2.2.2 Latin America and the Caribbean

### Demographic profile

**Population size:** In 2017, about 646 million people were living in Latin America and the Caribbean according to the UN *World Population Prospects*. By 2050, this region's population is set to rise to about 780 million people. The average birth rate is around two children per woman. In Bolivia, women have an average of 2.9 children, in Costa Rica it is 1.8.

**Life expectancy:** A child born today in this region will live on average to the age of 75. Mortality among children under five is around 21 deaths per 1,000 live births. In Bolivia, out of 1,000 live births, 59 children die before they reach the age of five, compared to only 8 in Chile (➡ Chapter 4.2: Health).

**Age structure:** In 2017 children under 15 years of age made up approximately 25% of the region's population. About 17% were young people aged 15 to 24, who are part of the 67% of the population of working age. The proportion of people aged 65 and over is expected to grow from 8% to 19.4% by 2050.

**Urbanisation:** By 2014 an estimated 80% of the population of Latin America and the Caribbean was already living in towns and cities, according to the *World Urbanization Prospects*. An increase of 6% is expected by 2050. Megacities such as São Paulo and Mexico City already have more than 21 million inhabitants each (➡ Chapter 4.8: Decentralisation and urban development).

**Migration:** Of the 38 million migrants from Latin America and the Caribbean in 2017, around 5 million were living in Europe and 26 million in North America, according to the *International Migration Report 2017*. Of these, 12.7 million were from Mexico and lived in the United States of America (➡ Chapter 4.6: Migration and displacement).

### Civil registration and vital statistics

**(CRVS):** The region has a high registration rate, as indicated by the *UNICEF data-base on birth registration*. Between 2010 and 2016, the births of 95% of children under five were registered. Haiti achieved a registration rate of 80% in 2012, and Uruguay even 100% in 2013. Nevertheless, an estimated 3.2 million children in the region were not listed in any CRVS system, as UNICEF points out in its report *Birth Registration in Latin America and the Caribbean: Closing the Gaps* (➡ Chapter 5.3: Civil registration and vital statistics (CRVS)).



## Political significance of population development

Various aspects of population dynamics play a key role for the countries of Latin America and the Caribbean. Drawing on the *World Population Policies Database*, the following observations can be made on population policies in 2013 and 2015:

- All countries stated that they wanted to support family planning measures among the population, directly or indirectly.
- 24 out of the total of 33 countries considered the growing proportion of older people as a significant development.
- 19 countries carried out measures over the past five years to improve birth registration.
- For a majority of countries the level of child and maternal mortality continued to be unacceptable. They took measures to lower these figures.
- Most countries took a proactive approach on the population's regional distribution and wanted to reduce the rural exodus to towns and cities. In addition, 11 countries wanted to promote decentralisation.

## Urbanisation in Latin America and the Caribbean

Hardly any other region in the world has as high a degree of urbanisation today as Latin America and the Caribbean – where it will continue to rise. According to the *World Urbanization Prospects*, in 2014 the region already had four megacities with over 10 million inhabitants each. Two more megacities are expected to emerge by 2030 (see Figure 6).

Nonetheless, here too major regional differences can be observed between both island countries and continental states. The island group of Trinidad and Tobago was the world's least urbanised country in 2014, with an urban population of only 8.6%. Guadeloupe, on the other hand, was one of the five countries with the highest degree of urbanisation worldwide (98.4%). The contrast between Uruguay (95.2%) and Guyana (28%) is similarly striking.

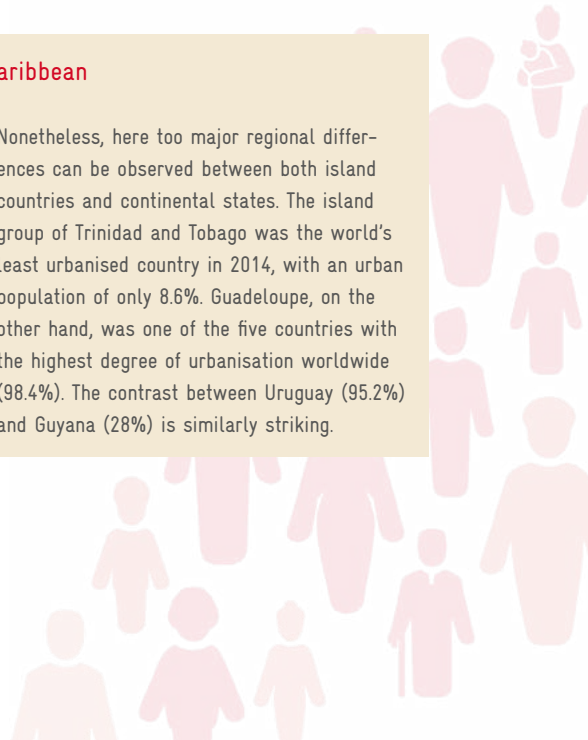


Figure 6: Urbanisation and megacities in Latin America and the Caribbean



Source: Authors' own representation based on UN DESA Population Division: World Urbanization Prospects: The 2014 Revision.



## 2.2.3 Middle East and North Africa (MENA)<sup>2</sup>

### Demographic profile

**Population size:** In 2017, about 403 million people were living in the MENA region according to the *World Population Prospects*. By 2050, its population is set to rise to about 642 million people. On average, a woman in this region has 3.1 children. There are however major differences within the MENA region. In Lebanon, the average is 1.7 children, as compared to 4.3 children per woman in Iraq.

**Life expectancy:** The average life expectancy in the MENA region is 71. Mortality of children under five is relatively low, with 28 deaths per 1,000 live births. However, owing to the war in Syria and other crises in the region, the viability of the health systems in many countries has been severely impaired or destroyed. This jeopardises the sustainability of results that have already been achieved in terms of development. Calculations based on the World Health Organization (WHO) report *Trends in maternal mortality: 1990 to 2015* show that in 2015 on average maternal mortality was relatively low in the region, with 104

deaths per 100,000 live births. Due to the conflicts in the MENA region, it is now again increasing in some countries. In 2015 already, variations within the region were very pronounced, ranging from 4 deaths per 100,000 live births in Kuwait to 311 in Sudan, the region's most populous country (➡ Chapter 4.2: Health).

**Age structure:** Roughly 70 million young people aged between 15 and 24 represented approximately 17% of the region's population in 2017. Despite some progress in recent years, youth unemployment continues to be the highest worldwide, especially among young women (➡ Chapter 4.4: Sustainable economic development and technical and vocational education and training (TVET)).

**Urbanisation:** Currently over half the population lives in cities, according to the *World Urbanization Prospects*. With the exception of Egypt (57%), Yemen (54%) and Sudan (50%), by 2050 in all of the region's countries over 70% of the population will be living in urban areas (➡ Chapter 4.8: Decentralisation and urban development).

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<sup>2</sup> The region is defined differently at the international level. This section is based on the regional classification of the UN Population Division. It includes all countries in the categories North Africa and Western Asia except for Armenia, Azerbaijan, Cyprus, Georgia and Turkey. Drawing on the national data sets in the World Population Prospects, the regional values were calculated with a weighting based on the proportional share of the population.

**Migration:** The migration corridor runs through the MENA region and as far as Europe and North America. Due to persistent crises, refugee movements within and outside the region are increasing. By early 2018, around 5.5 million Syrian refugees were registered on UNHCR's *Syria Regional Refugee Response* data portal: nearly 3.5 million in Turkey, close to one million in Lebanon and over 650,000 in Jordan. The host country governments assume that the real numbers of Syrian refugees are much higher in some places. Jordan's monarchy, for instance, according to the *German Institute of Global and Area Studies*, estimated their number in 2017 at 1.4 million. Furthermore, according to UNHCR reports, at the end of 2016 there were 5.3 million Palestinian refugees under the mandate of the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA), of whom 2.2 million were also living in Jordan (► [Chapter 4.6: Migration and displacement](#)).

### Civil registration and vital statistics

**(CRVS):** The countries of this region have comparatively well-established registration systems. However, in some parts these are no longer fully functional, due to the ongoing armed conflicts. On average, 92% of the births between 2010 and 2016 were registered, as is evidenced by the *UNICEF birth registration database* (► [Chapter 5.3: Civil registration and vital statistics \(CRVS\)](#)).

### Political significance of population development

The UN *World Population Policies Database* describes population policies in the region in 2013 and 2015 as follows:

- About half the countries intended to reduce population growth.
- Population ageing was considered a problem in only three countries.
- By contrast, the vast majority (16 out of 19 countries) indicated that they wanted to support family planning measures.
- Nearly all countries wanted to proactively shape migratory movements from rural to urban areas.
- About half the countries judged the high child mortality rate as unacceptable.



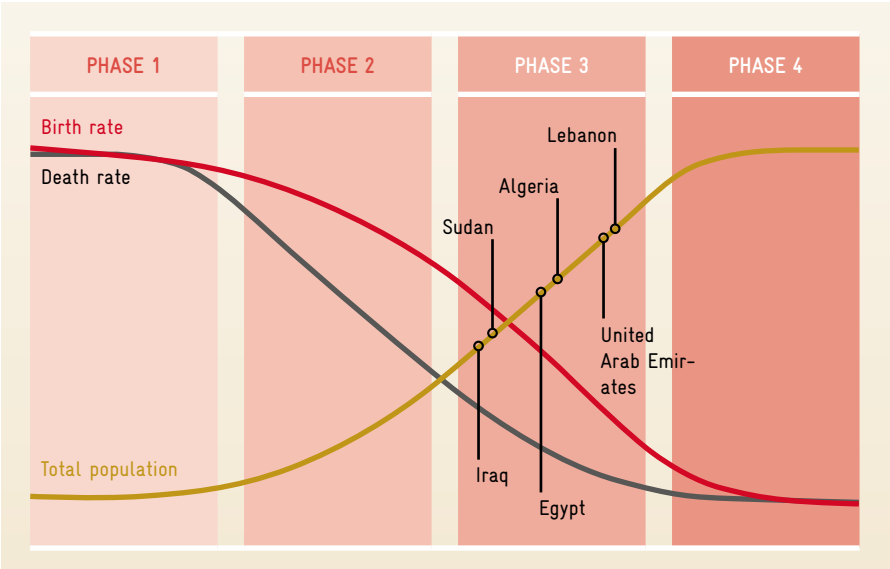
### Demographic transition in the MENA region

Most countries in the MENA region are in Stage 3 of the demographic transition (→ Chapter 2.1: Global population trends), at a point where the birth rate is already declining. Nonetheless, the population continues to grow because there are many young people of reproductive age. Even if they have fewer children than their parents did, the sheer size of their cohorts leads to comparatively large succeeding generations.

The countries of the MENA region have reached different points in Stage 3. Whereas Lebanon has already almost reached the peak

of its population growth, Sudan and Iraq, with high birth rates, are still at the beginning of Stage 3. Sudanese and Iraqi people of working age still have to provide for many children and young people (see Figure 7). Demographers also speak of a ‘youth bulge’ in the MENA region. This arises when there is a sharp drop in birth rates: As the large cohorts with many children gradually become adults, the following cohorts tend to be smaller. As a result, for a certain period, there is a disproportionately large number of young people of working age as compared to the population as a whole.

Figure 7: Countries in the MENA region undergoing the demographic transition



Source: Schematic representation based on UNICEF (2017): Generation 2030 Africa 2.0, page 5; data based on UN DESA Population Division: World Population Prospects, The 2017 Revision.





## 2.2.4 Eastern and South-Eastern Europe<sup>3</sup>

### Demographic profile

**Population size:** According to the *World Population Prospects*, the population in Eastern and South-Eastern Europe will drop from 421 million at present to 398 million in 2050. With an average of 1.8 children per woman, this largely homogeneous region is below the industrialised countries' replacement level fertility of 2.1 children per woman.

**Life expectancy:** A child born today in the region will live on average to the age of 76.4 years. With a presumed life expectancy of 82.4 years in 2050, the ageing trend in this region will continue. The mortality of children under five is very low, on average 10.5 deaths per 1,000 live births. While around 7 children per 1,000 live births die in Bosnia and Herzegovina, in Azerbaijan the figure is still 32.4 children. Calculations based on the WHO report *Trends in maternal mortality: 1990 to 2015* show that the regional average for maternal mortality in 2015 was about 20 deaths per 100,000 live births (➡ Chapter 4.2: Health).

**Age structure:** Children under 15 made up approximately 18.2% of the region's popu-

lation in 2017. Young people aged 15 to 24 represented about 11.6% of the population. The proportion of inhabitants over 64 was 14%, and is set to rise to almost 24% by 2050. In Bulgaria, by 2015, over 20% of the population already belonged to this group (➡ Chapter 4.5: Social protection).

**Urbanisation:** On average, the *World Urbanization Prospects* state that nearly 70% of Eastern and South-Eastern Europeans currently live in towns and cities. By 2050 they will represent about 76%. In 2014, an estimated 74% of Turkey's population lived in urban areas, whereas in the Republic of Moldova, the figure was only about 45% (➡ Chapter 4.8: Decentralisation and urban development).

**Migration:** Eastern and South-Eastern Europeans migrate to other countries in the region as well as to Western Europe and North America. Many countries are affected by emigration, due, among others, to a lack of attractive jobs, but also to persistent conflicts. In Ukraine alone, by the end of 2016 UNHCR counted a total of 1.8 million internally displaced persons in its *Global Trends* report. In Turkey, the *Syria Regional Refugee Response* data portal confirmed the presence

<sup>3</sup> This region is not used as a category by the UN Population Division. Here the following countries have been included under Eastern and South-Eastern Europe: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Estonia, Georgia, Hungary, Latvia, Lithuania, Macedonia, the Republic of Moldova, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Turkey and Ukraine. The regional values were calculated on the basis of the national data sets in the *World Population Prospects*, with a weighting based on proportional share of the population.



in early 2018 of almost 3.5 million refugees from Syria. In early 2015, UNHCR had estimated the number of Syrian refugees in Turkey at only 1.5 million, as attested in the 2015 *Global Trends* report (➡ Chapter 4.6: Migration and displacement).

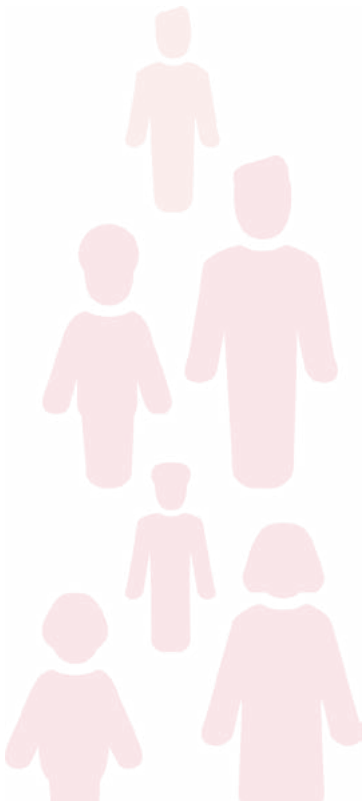
### Civil registration and vital statistics

**(CRVS):** Large parts of Eastern Europe have very well-developed CRVS systems. According to the UNICEF birth registration database, about 99% of children in the region were registered between 2010 and 2016 (➡ Chapter 5.3: Civil registration and vital statistics (CRVS)).

### Political significance of population development

Population dynamics plays a key role for policy-making in the region, especially because the proportion of older people is growing fast, and many people are emigrating. Drawing on the UN *World Population Policies Database*, the following observations can be made for 2013 and 2015:

- Many Eastern and South-Eastern European countries responded to their ageing societies by increasing social security contributions and raising the retirement age.
- Most of the countries promoted rural development, especially to minimise the rural exodus.
- With the exception of Poland and Slovakia, all countries indicated that they supported family planning measures, directly or indirectly.
- In response to emigration and an ageing society, almost all Eastern and South-Eastern European countries undertook efforts to compensate for the lack of skilled workers in certain sectors and encouraged their citizens to come back to their country of origin.

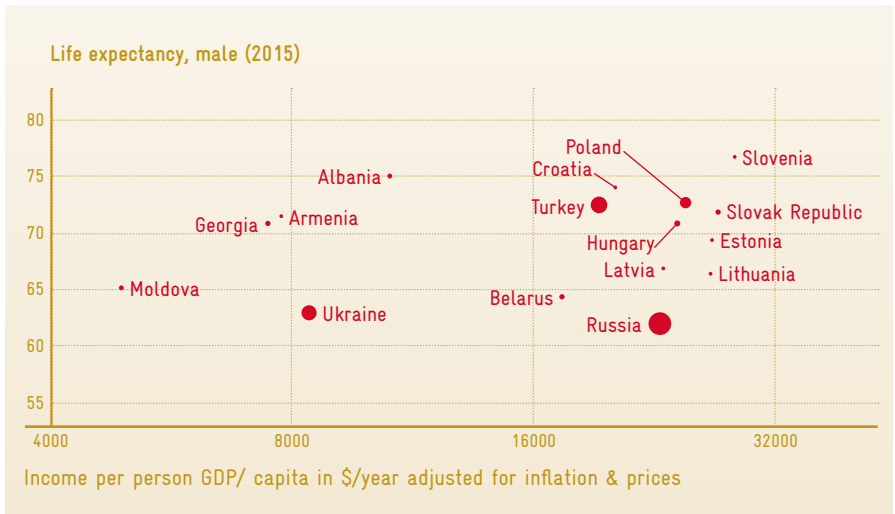


### Per capita income and life expectancy in Eastern and South-Eastern Europe

Life expectancy generally increases in tandem with rising per capita income. Some countries of Eastern and South-Eastern Europe are an exception to this rule (see Figure 8). The life expectancy of male newborns in Russia in 2015, for example, was only 62 years, whereas in the Republic of Moldova, with a much lower per capita income (USD 18,000 less according

to *Gapminder*) it was 65.2 years. Albania is another exception, with a life expectancy of 75.1 years despite a per capita income of only USD 10,600. Paradoxically, the country thus had a much higher life expectancy than many European Union (EU) member states in Eastern Europe with a per capita income more than double Albania's.

Figure 8: The relationship between per capita income and life expectancy in Eastern and South-Eastern Europe



Source: Gapminder, based on Institute for Health Metrics and Evaluation (2016): Global Burden of Disease Study 2015; Mattias Lindgren, Gapminder (2015): Income per person (fixed PPPS), version 17.



## 2.2.5 Sub-Saharan Africa

### Demographic profile

**Population size:** In 2017, about one billion people were living in sub-Saharan Africa according to the *World Population Prospects*. This figure will more than double to 2.2 billion by 2050. Fertility rates are generally high, with 4.8 children per woman. In Niger, a woman has an average of 7.2 children, while in South Africa the average is 2.4.

**Life expectancy:** People in sub-Saharan Africa have an average life expectancy of 60 years. This region has the world's highest child and maternal mortality rates. In this region on average 82 children out of 1,000 live births die before their fifth birthday – most of them in their first year of life or even in the first weeks after being born (see Figure 9). According to WHO (*Trends in maternal mortality: 1990 to 2015*), in 2015 an average of 546 mothers died for every 100,000 live births in this region (see Figure 10) (➡ Chapter 4.2: Health).

**Age structure:** In 2015 children under 15 constituted the largest segment of the region's population with 43% of the total. Although 15- to 24-year-olds accounted for almost 20% of the population, this has so far not led to a demographic bonus – i.e. a surplus of young people of working age – due to the large number of children to be cared for in many countries (➡ Chapter 2.1: Global population trends).

**Urbanisation:** In 2014 about 37% of the population of sub-Saharan Africa lived in towns and cities, according to the *World Urbanization Prospects*. The figure is expected to rise to 55% by 2050. Kinshasa and Lagos are already megacities with more than 10 million inhabitants each. However, there are also many countries that are primarily rural, such as Burundi, with a rural population of 88% and Uganda with 84% (➡ Kapitel 4.8: Dezentralisierung und Stadtentwicklung).

**Migration:** In its *International Migration Report 2017*, the UN estimates that of the 36 million people of African origin who no longer lived in their country of birth in 2017, 53% had migrated to other African countries. The conflicts in sub-Saharan Africa are also forcing many people to flee their homes, both within the region and to Europe. According to UNHCR's *Global Trends* report, some 5.1 million refugees were registered in sub-Saharan Africa by the end of 2016, 16% more than at the start of the year. Uganda, Kenya and the Democratic Republic of the Congo were among the 10 countries hosting the largest numbers of refugees worldwide (➡ Chapter 4.6: Migration and displacement).

### Civil registration and vital statistics

**(CRVS):** According to the *UNICEF birth registration database*, between 2010 and 2016 on average only 43% of births were registered in sub-Saharan Africa. In Ethiopia in 2016, 97% of children under five (about 14.7 million) were not registered. In Nigeria

in 2013, almost 21 million children were not registered – about 70% of all children in this age group (➡ Chapter 5.3: Civil registration and vital statistics (CRVS)).

### Political significance of population development

Drawing on the *World Population Policies Database*, the following observations on the region's population policies in 2013 and 2015 can be made:

- The proportion of African countries that carried out measures to reduce population growth rose from 60% in 1996 to nearly 80% in 2015.
- All African countries stated that they directly support family planning.
- Almost all countries had undertaken measures to improve birth registration.
- 39 out of 49 countries stated that they had adopted political strategies to limit the rural exodus to urban areas, while 35% said they had adopted strategies to curb international migration from their own countries.
- Less than 30% of the countries perceived ageing of their societies as a major challenge.

### Political commitment for a demographic dividend in sub-Saharan Africa

The African Union (AU) made the demographic dividend (➡ Chapter 2.1: Global population trends) its annual theme in 2017 and adopted the regional roadmap *Harnessing the Demographic Dividend through Investments in Youth*. The roadmap envisages stepping up support for young people in Africa in four areas:

- employment and entrepreneurship
- education and skills development
- health and well-being
- rights, governance and youth empowerment.

This regional initiative is to be continued in the AU member states beyond the theme year.

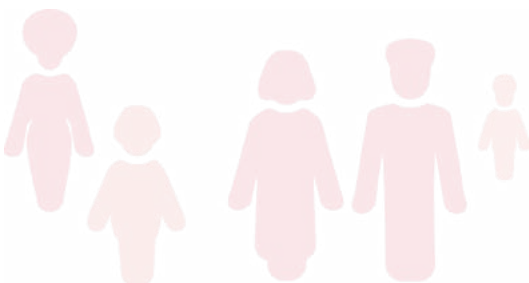
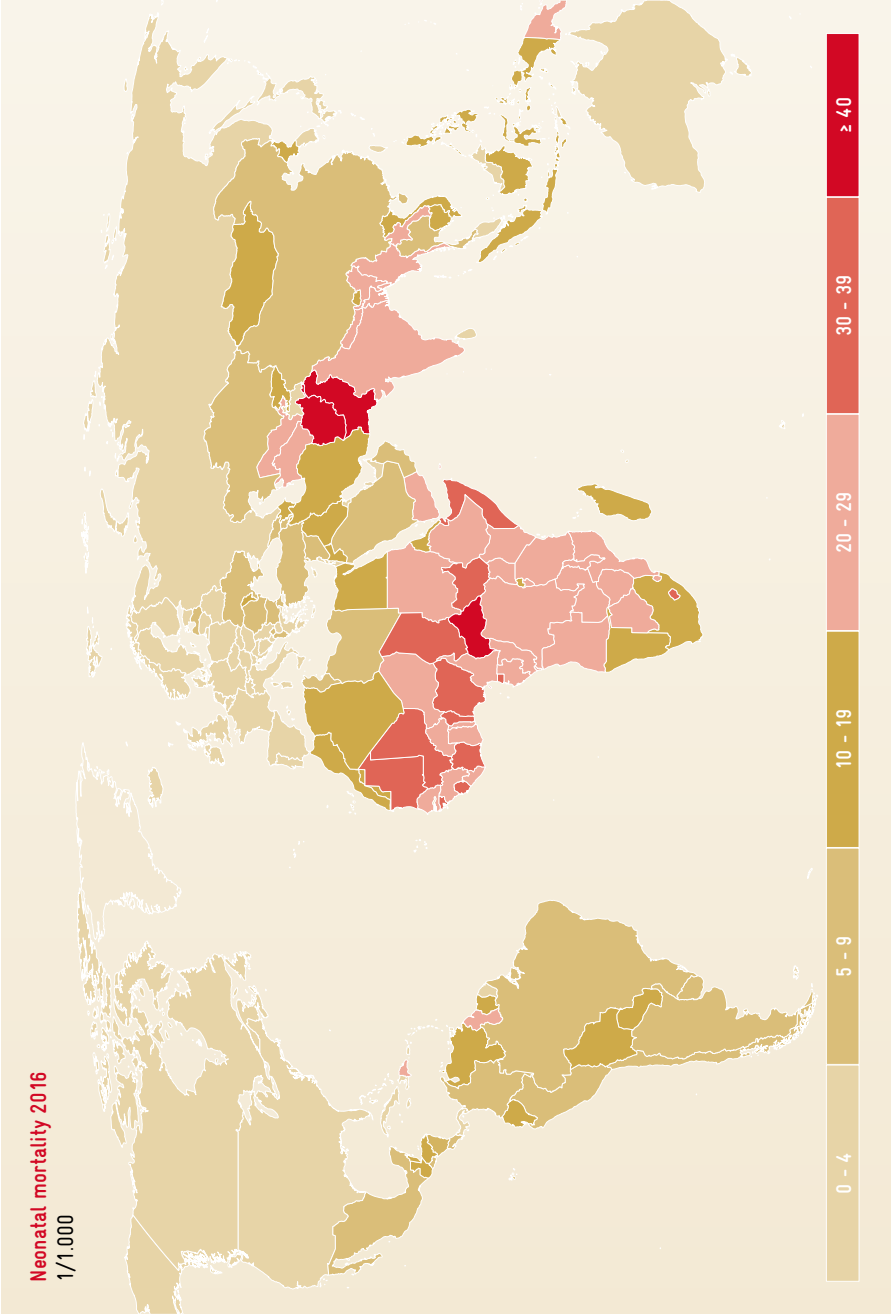
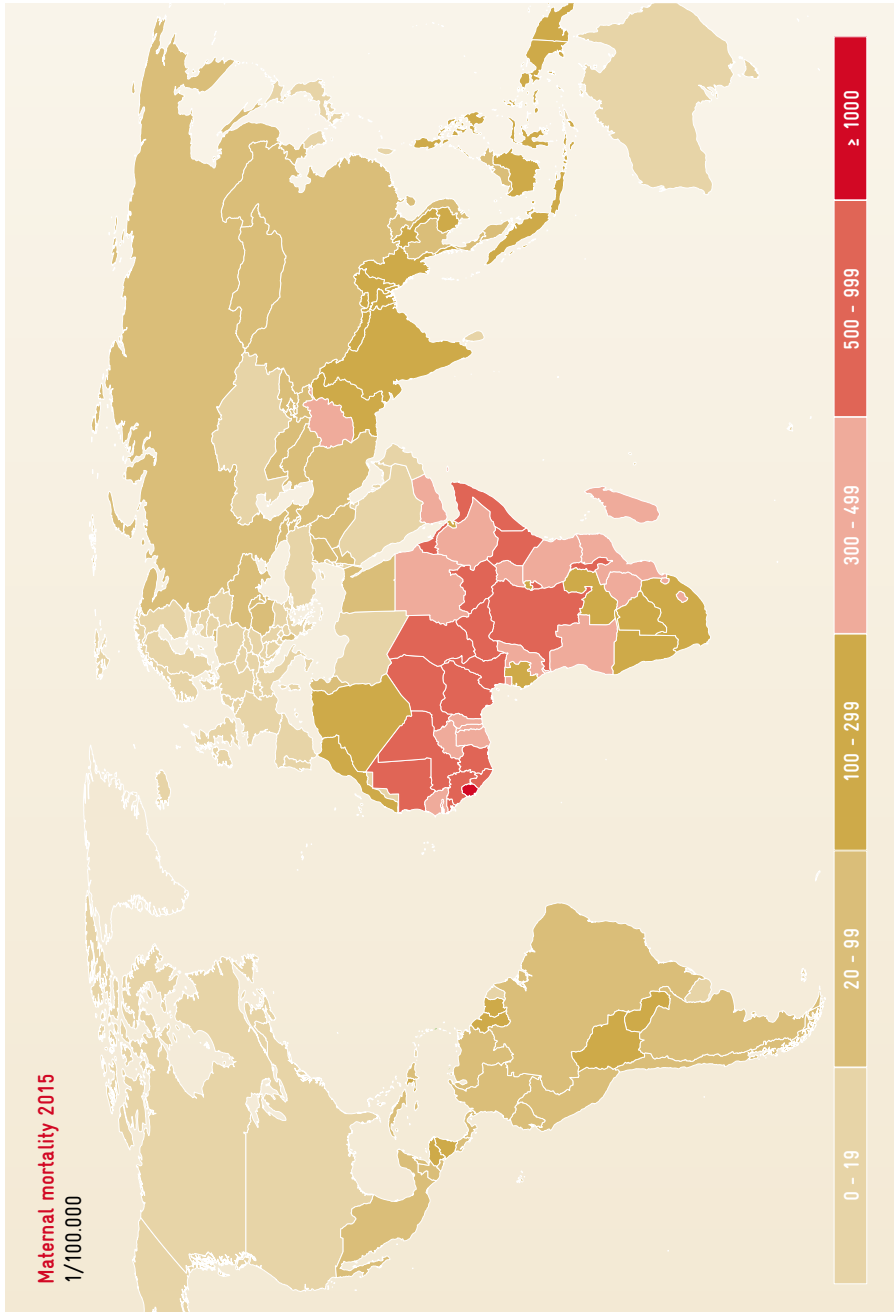


Figure 9: Neonatal mortality rates worldwide



Source: Authors' own representation based on United Nations Inter-agency Group for Child Mortality Estimation (2017): Levels & Trends in Child Mortality. Report 2017.

Figure 10: Maternal mortality rates worldwide



Source: Authors' own representation based on WHO (2015): Trends in Maternal Mortality: 1990 to 2015. Estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division.



## 2.2.6 Supplement: Germany

### Demographic profile

**Population size:** In 2017 about 82.1 million people were living in Germany, according to the *World Population Prospects*. By 2050, the population is expected to diminish to about 79.2 million. In Germany, a woman has on average 1.5 children. In comparison, the global average is 2.5 children per woman, and in Europe 1.6.

**Life expectancy:** A child born today in Germany will live on average to 81. In Germany, an average of 2.6 children under five die per 1,000 live births, while the European average is 5. According to WHO (*Trends in maternal mortality: 1990 to 2015*), in 2015 maternal mortality in Germany was 6 deaths per 100,000 live births. The European average is 16 deaths, and in sub-Saharan Africa, the figure for 2015 was 546 maternal deaths per 100,000 live births (➡ Chapter 4.2: Health).

**Age structure:** In 2017, people aged 65 and over represented some 21.5% of the German population, while children under 15 made up only 13.1%. The 15- to 24-year-old age group accounted for another 10.4%. Between 2017 and 2050, the proportion of the working-age population (15-64 years) will shrink from 65.5% to 56.4%, while the number of people aged 65 and over will rise to 30.7% (➡ Chapter 4.5: Social protection).

**Urbanisation:** In 2014, according to the *World Urbanization Prospects*, some 75% of Germany's population lived in towns and cities. The proportion of people living in urban areas is expected to rise to 83% by 2050. High migration rates from some rural and economically underdeveloped regions are accelerating the decrease in population in those areas (➡ Chapter 4.8: Decentralisation and urban development).

**Migration:** At the end of 2016, according to the German *Central Register of Foreigners* some 10 million people with exclusively foreign citizenship were registered in Germany. About 43% of them held citizenship of another EU member state. Sixteen per cent (around 1.6 million people) were registered as asylum seekers (➡ Chapter 4.6: Migration and displacement).

### Civil registration and vital statistics

**(CRVS):** CRVS data are collected on a regular and comprehensive basis. Since 2014 the data are collected exclusively by electronic means. On the other hand, confronted with high migration figures over the last decade, civil registration for asylum seekers and other migrants is currently deemed incomplete and unreliable (➡ Chapter 5.3: Civil registration and vital statistics (CRVS)).



### Political significance of population development

Numerous aspects of population dynamics are taken into account in the German government's *Demographic Strategy*, first published in 2012 and updated in 2015. This concerns in particular the dwindling proportion of people of working age as a percentage of the population as a whole, low birth rates and the growing number of older people.

Germany's demography strategy includes specific measures in various policy fields for addressing the challenges of demographic change:

- In order to secure sufficient skilled workers in the context of its changing age structure, Germany has introduced numerous measures, ranging from higher investments in vocational education and training, to the acquisition of foreign experts, and measures to better reconcile careers and family commitments. Suitable conditions have been created to integrate refugees into the training and employment market.
- A large number of measures are designed to help strengthen social cohesion. These include laws to reinforce nursing care and prevent illness at all ages, and the stepping up of support for civic engagement and new measures in the field of inclusion. Investments in the territorial development of rural areas are intended to reinforce smaller towns and municipalities in structurally weak regions. The German government also wishes to support the integration of migrants, particularly in urban centres.
- Demographic change also poses considerable challenges for public budgets and social protection systems. The German government has consolidated the basis for sustainably viable public finances by instituting the debt rule.<sup>4</sup>
- The expansion of investments in education, research and infrastructure also reflects the important impetus given by Germany's demographic policy to public expenditure.

<sup>4</sup> State finances must be consolidated at the end of each year with no additional debt.





### 3 Approaches and examples from practice in German development cooperation

How German development cooperation shapes its measures within technical and financial cooperation depends essentially on population trends in its partner countries. As illustrated in Chapter 2, these population trends present challenges and also opportunities for enhancing development in these countries. In order to harness the demographic potential, German development cooperation has developed a number of specific approaches with which it supports its partner countries in mainstreaming the issue of population dynamics.

To ensure that the cross-cutting issue of population dynamics can be considered and integrated as an overarching concept, German development cooperation has adopted a holistic perspective. This chapter therefore starts with a systematic overview that situates the role of demographic trends in steering bilateral cooperation, focussing particularly on (➡ Chapter 3.1) **population dynamics in German development cooperation's commissioning procedure**. It ranges from assessing the development potential of a partner country to designing programmes and modules.

The chapter next presents in detail the tried and tested approaches of German development cooperation, illustrated by concrete examples of practice from different countries and sectors. The approaches and

(➡ Chapter 3.2) examples of integrating population dynamics into German development cooperation include (➡ Chapter 3.2.1) studies of single demographic aspects and assessments (➡ Chapter 3.2.2: Multisectoral approach to population dynamics). Approaches designed to improve (➡ Chapter 3.2.3) data collection and analysis, to provide (➡ Chapter 3.2.4) support for national institutions and (➡ Chapter 3.2.5) **investments in infrastructure** are also presented, as well as specific approaches for (➡ Chapter 3.2.6) human capacity development (HCD) and for (➡ Chapter 3.2.7) international and national policy dialogue. The (➡ Chapter 3.3) **Overview: Approaches** presents a table summarising the key information.

The German Federal Ministry for Economic Cooperation and Development (BMZ) offers a wide range of support options in relation to the cross-cutting theme of population dynamics and application of the relevant approaches in development practice. As needed, it also provides information on (➡ Chapter 3.4) **financing options**. The (➡ Chapter 3.5) **support offered by the BMZ sector division** for Health, Population Policy and Social Protection is geared towards the regional divisions, the economic cooperation officers working in the partner countries of German development cooperation and the implementing organisations.

### 3.1 Population dynamics in German development cooperation's commissioning procedure

As a cross-sectoral issue, population dynamics is of high importance both for partner countries in shaping their policies and for German development cooperation in designing its programmes. Demographic trends should therefore also be taken into account in the procedure used to plan and implement technical and financial cooperation modules, as stipulated in BMZ's handbook on bilateral development cooperation.

#### Steering bilateral development cooperation

BMZ's assessment of the development potential of a partner country should always also include information on its population trends. At the same time, it should highlight the related opportunities and challenges and address their implications for establishing the priority areas of the respective **country strategy**.

**Programmes** must accordingly take these demographic implications into account in their risk assessment and choice of target group. Programme steering includes regular reflection processes where changes in context are examined and adjustments made if necessary. Here population dynamics should also be taken into account. The basis for this reflection process are the annual programme reports, which should also address demographic changes where appropriate.

Partners are generally involved in programme design via **government negotiations and consultations**. Here, too, it should be standard practice to examine the interactions between the developments in individual sectors and population trends, and take the latter into account as required. Partner perspectives on the country's demographic change and approaches to address such trends can then be integrated into the design of the development cooperation programme.

#### Commissioning and implementing technical and financial cooperation modules

In the process of commissioning development modules, there are certain steps where demographic trends are especially relevant and should be taken into account (see Figure 11). To assess whether new ideas for module proposals offer added value in the context of a given country strategy and/or a specific development cooperation programme, BMZ requires the implementing organisations to submit a **brief assessment**. This presents a preliminary analysis of how the module objective can be achieved and how this in turn can contribute to the programme. Ideally, the brief assessment should therefore address the country's population trends and the availability of relevant – including sector-specific – data. Especially in the case of large-scale measures, the next step are **feasibility studies** (or fact-finding missions), which as a rule refer explicitly to population data.

## Country strategies, programmes and modules

BMZ pilots its bilateral cooperation activities using a three-pronged approach associating country strategies, programmes and modules.

- **Country strategies** are the strategic framework for German development cooperation. The process for drawing up the strategy, its format, period of validity and points at which the strategy is reconsidered are set out in the country strategy guidelines (HR013). Country strategies are the key instrument for strategic planning and policy management by BMZ. They describe the cooperation with the partner country, the activities of other donors in the country and priority areas of Germany's involvement. They define targets and fields of activity in the priority area and explain them in the context of their contribution to the partner country's implementation of the 2030 Agenda and with reference to the relevant thematic management documents. They may set policy priorities for how development cooperation is framed in support programmes.
- **Programmes** are operational steering instruments for German development cooperation, which combine the technical and financial cooperation modules in a specific development sector so that they have a joint impact. Based on the goals of the country strategies, programmes define the regional and thematic nature of German involvement in a given sector, including identification of stakeholders and target groups, and establish milestones. They outline potential risks for attaining the objectives set out in the country strategies. As a rule, programmes formulate indicators on the impact level, on which they base their intervention logic.
- **Modules** are specific financial or technical cooperation measures that are commissioned as part of programmes and that contribute to achieving the relevant programme objective. In exceptional cases, modules can also be implemented outside of programmes. Modules have a specific module objective (outcome) and indicators that measure the outputs that they produce. Based on their commission from BMZ, the implementing organisations are responsible for providing the agreed outputs and verify whether, on the one hand, these outputs help achieve the module objective and on the other, if they contribute to achieving the programme objective.

The implementing organisations receive an appraisal order from BMZ and prepare **module proposals** that include an analysis of overarching societal – and therefore also demographic – trends. These influence the definition of the module objective and the fields of activity.

In the case of German financial cooperation, once BMZ has awarded the commission, the KfW Development Bank concludes a financing agreement, for example with the ministry of finance of the partner country, and in the course of implementation enters into special agreements with the country's sector ministries that act as project executing agencies. These in turn award **consulting contracts**, whose terms of reference should also take demographic factors into account, as these are incorporated into module planning as well. If the terms of reference are not sufficiently data- and evidence-based, financial cooperation is entitled to exercise its veto.

During the **implementation** of development cooperation measures, it is essential to keep an eye on population trends. Concrete information about target groups is required particularly for tailoring the modules to target group needs and for effective implementation. To gain insights into population trends, there is a need for data disaggregated by age and sex, as well as information on rural and urban migration, or the distribution of specific population segments defined by education or income levels. If such data are not available, the module can also focus on reinforcing the country's authorities that collect, evaluate and use population data. So

that municipalities in the partner countries for instance are able to independently collect and utilise such data, modules can also offer training to support decentralised structures.

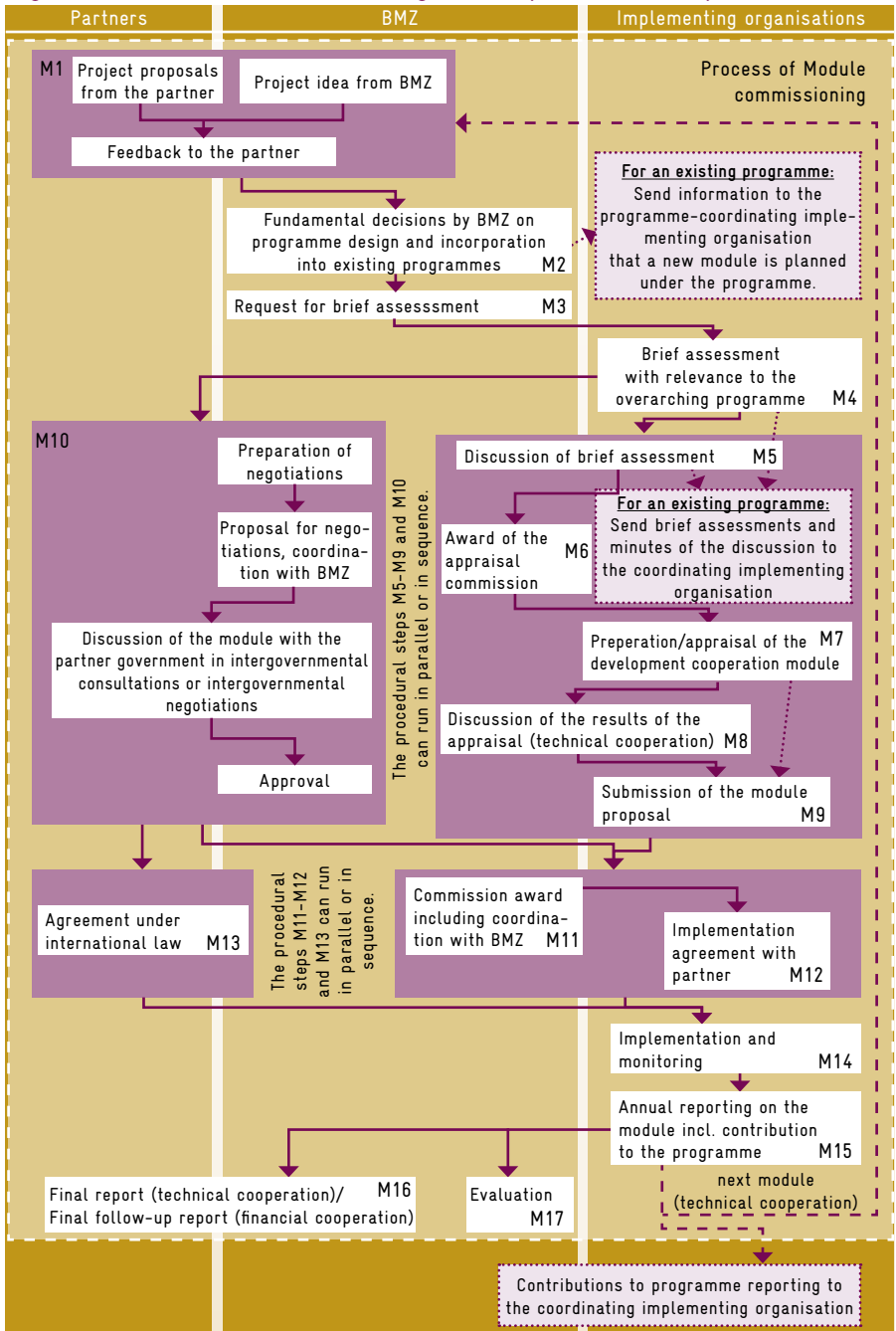
As part of their **results-based monitoring**, in nearly every module the implementing organisations also use population data to track progress on results. An indicator's denominator usually refers to demographic benchmarks. These are often linked to the module objective, which aims at improving the lives of a specific population group.

It is recommended that modules' **progress reports** take into consideration the overall societal – and thus also demographic – context of the partner country. Financial cooperation modules usually include a mid-term evaluation half-way through the project, which may lead to a module being adjusted – for example on the basis of population trends in the partner country. Annual progress reports on the one hand ensure accountability and information to BMZ on key aspects of module implementation, and on the other hand they provide BMZ an important basis for policy management and decision-making.

After completion of the module, technical cooperation submits a **final report** and financing cooperation a **final follow-up report**. These reports are used for knowledge management. They also provide information on whether the module was successfully integrated into the socio-demographic context and whether it had a sustainable effect in terms of development.



Figure 11: Module commissioning and implementation processes

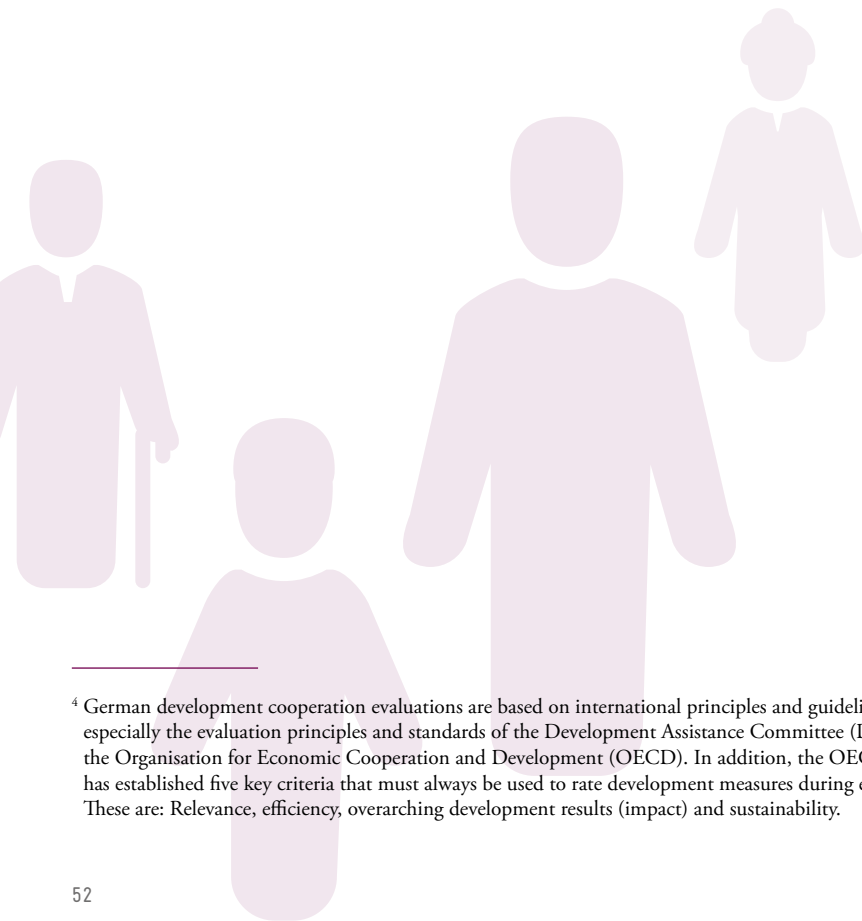


Source: BMZ (2017): Manual of bilateral development cooperation. Guidelines No. HR023, Procedural guidelines for planning and implementing FC and TC measures, page 13.



Population trends again play a key role during **evaluation**. Demographic data help to judge the long-term effectiveness of development modules. In order to apply the evaluation criteria for German bilateral development cooperation, in particular the three OECD-DAC criteria that are relevant to population dynamics<sup>4</sup> – relevance, overarching development results (impact) and sustainability – it is for example important to know:

- the extent to which the module has reached its target group(s), e.g. a gender, an ethnic minority, a specific income group or party to a conflict
- how stable the situation is in the context of the development module – e.g. concerning strong population growth, a changing age structure or major migration movements – in order to estimate whether positive changes and results are durable.



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<sup>4</sup> German development cooperation evaluations are based on international principles and guidelines, especially the evaluation principles and standards of the Development Assistance Committee (DAC) of the Organisation for Economic Cooperation and Development (OECD). In addition, the OECD-DAC has established five key criteria that must always be used to rate development measures during evaluations. These are: Relevance, efficiency, overarching development results (impact) and sustainability.



Key questions for taking population dynamics into account during the commissioning and implementation process:

- What is the demographic profile of the country, especially with regard to population size, age structure and spatial distribution?
- Where does the country stand in a regional and global comparison?
- How will the demographic situation change in the next 10, 15, 20 and 30 years?
- Which sectors are most strongly influenced by the major demographic developments in the given country?
- How does population growth or decline influence the specific objectives of the module and programme, as well as their sustainable impact?
- What data are available, disaggregated for example by age, sex, place of residence, education level, income, ethnic group and disability? Are they used to shape the country's policies?
- What is the target group, where is it and what proportion of the overall population does it represent?
- How do the measures affect the country's demographic development and the sectors concerned?
- What consequences do the demographic trends have for the priority areas agreed upon between the German government and the partner government?
- Should specific measures in the field of population dynamics be considered, rather than just mainstreaming the issue?



## 3.2 Examples of integrating population dynamics into German development cooperation

German development cooperation has a range of tried and tested approaches for mainstreaming population dynamics (➔ [Chapter 3.3: Overview: Approaches](#)). They are presented here in the context of

different countries, sectors and programmes and illustrated with concrete examples. The approaches described can be individually adapted depending on the context.

### 3.2.1 Studies of single demographic aspects

Specific aspects of population dynamics, such as population growth, large proportions of young people (youth bulges) or strong internal migration, influence the planning and implementation of measures in many sectors of development cooperation (➔ [Chapter 4: Population dynamics and](#)

[selected sectors of German development cooperation](#)). On the basis of population data, sector-specific studies make recommendations on how demographic factors can be better taken into account when designing programmes and policies in the given sectors.

#### Example from Nepal: How migration influences the labour market



A study of the influence of international migration on the development of Nepal's labour market provided the Inclusive Development of the Economy (INCLUDE) project with recommendations on how it could strengthen the labour market. Data had been collected for the study at national and district level. In addition to its focus on employment, the study also provided relevant information on how other sectors of development cooperation can address the impact

of migration flows. German development cooperation in Nepal has since been supporting income-promotion measures in those districts that are most affected by people leaving the area. The Nepalese government has also used the study findings to improve its bilateral agreements with the countries hosting Nepalese migrants (➔ [Chapter 4.6: Migration and displacement](#)).

### Step by step: How to carry out studies on single demographic aspects

1. Brainstorm on relevant demographic factors that affect the programme.
2. View and evaluate existing demographic data sources and analyses.
3. Identify needs for further analysis and data gaps.
4. Verify the budget available for the study and the financing options for implementing recommended actions.
5. Design the study and implement it.
6. Evaluate the findings with the partners and document intersections with other sectors.
7. Communicate the findings to a broad range of stakeholders.
8. If possible, transmit new data to national data systems.
9. Implement the recommendations made by the study.



### 3.2.2 Multisectoral approach to population dynamics

German development cooperation and the governments of its partner countries often lack comprehensive data and strategies that would enable them to take long-term demographic trends into consideration in their programmes or national development plans. Multisectoral assessments can be useful here. Such assessments inventorise existing (➔ Chapter 5.2) data sources and describe how they can be used in different sectors. They also outline the capacities of the national and possibly local institutions involved in data collection and/or use (➔ Chapter 3.2.4: Support for national institutions). Such assessments provide a basis for development planning which is both demographically sensitive and coherent across sectors.

#### Step by step: How to conduct a multisectoral assessment

1. Brainstorm on relevant demographic factors that affect all or most development cooperation programmes in the country.
2. View and evaluate existing demographic and sector-specific data sources and analyses.
3. Identify needs for further cross-sectoral analysis and data gaps and define the stakeholders.
4. Explore possibilities for cooperation with development partners and identify implementing partners.
5. Verify the available budget for the assessment as well as financing options for implementing recommended actions.
6. Design the assessment and conduct it.
7. Evaluate findings with the partners of all programmes involved and develop recommendations for action.
8. Draw up a plan of operation with the partners of all programmes involved in order to implement and follow up on the recommended adjustments.





### Example from Togo: Development of German cooperation priority sectors in the context of heavy internal migrant flows

In Togo, it is mainly young people who migrate from rural areas to urban agglomerations in search of work. This movement affects all three priority area programmes of German development cooperation: agriculture and rural development, vocational training and youth employment, and good governance and decentralisation. The country's registration systems and statistical institutions do not have sufficient capacities to collect demographic data in a standardised manner (⇒ Chapter 5.3: Civil registration and vital statistics (CRVS)).

German development cooperation financed a 14-month cross-cutting initiative giving greater consideration to population dynamics (see Figure 12) through its Study and Expert Fund (SEF).

The first step was conducting a comprehensive assessment of how demographic changes influence the country's development, focusing particularly on population growth, the high proportion of young people within the population, and the heavy influx of rural migrants into the cities. The assessment also studied national and local capacities for collecting and analysing data.

On this basis, in November 2015, with support from German development cooperation, the Togolese Ministry of Development Planning prepared a manual on the integration of population dynamics into national planning (*Guide d'intégration de la*

*dynamique démographique dans la planification politique nationale*). The manual has since been introduced to all Togolese ministries as guidance for their respective sectoral planning. Training courses on collecting and analysing demographic data were then organised for ministry officials and statisticians in collaboration with the United Nations Population Fund (UNFPA). The manual was used to develop the new Togolese agricultural and education strategies.

In early 2018, a study was published as part of the German Health Practice Collection (GHPC), a joint initiative of BMZ, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and KfW Development Bank, under the title *Getting a better grasp on Togo's future: Population dynamics at the heart of development planning*. The GHPC case study documents the lessons learned and challenges of the pilot measure in Togo.

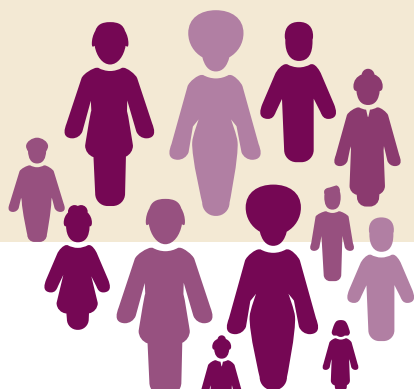
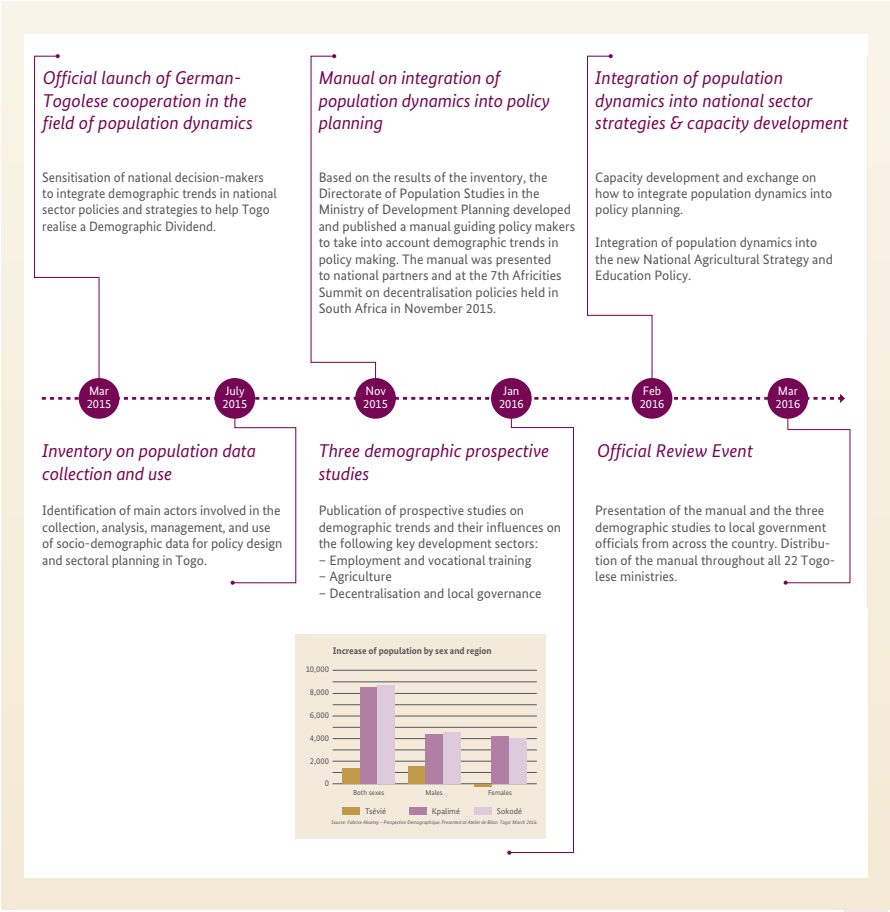


Figure 12: Timeline of the cross-cutting pilot initiative in Togo



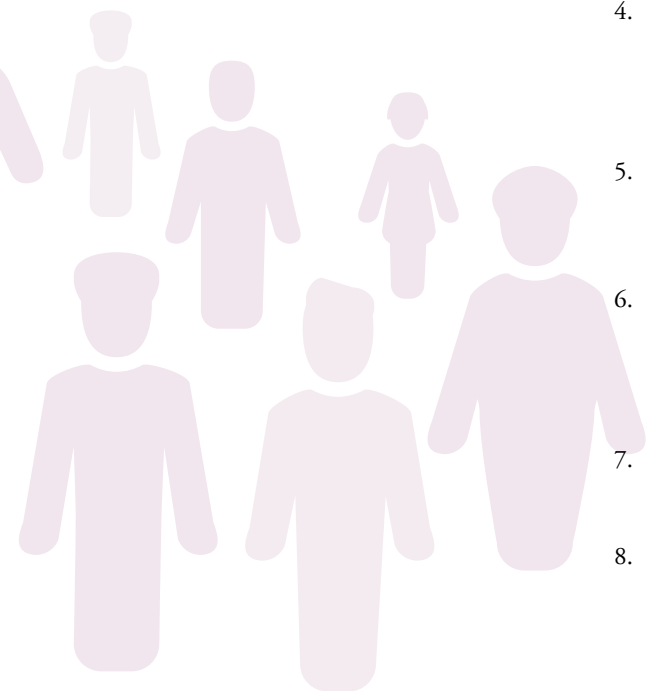
Source: Author's own representation.

### 3.2.3 Data collection and analysis

If development cooperation measures cannot be effectively implemented or monitored due to the lack of solid demographic data, module proposals can integrate their own components or activity packages for collecting, analysing and using data. They should make use of existing national systems wherever possible and complement them by sharing the newly acquired data (➔ [Chapter 5: Population data](#)).

#### Step by step: How to improve data collection and analysis

1. Brainstorm on relevant demographic factors that affect the programme and can in turn be actively shaped.
2. View and evaluate existing demographic data sources and analyses, particularly for the intervention regions.
3. Identify needs for further analysis and data gaps for implementing the programme.
4. Examine capacities for data collection and analysis among the programme's main partners and possibly other national institutions.
5. Explore possibilities for cooperation with development partners from different sectors.
6. If required, integrate activities related to data collection or use into the planning budget and monitoring of the module.
7. If possible, transmit new data to national data systems.
8. If required, strengthen the capacities of national partners for independently collecting, evaluating and using data for policy-making.





### Example from Kenya: Population data for a better water supply in growing towns and cities

The slums in Kenyan cities are expanding rapidly. This presents enormous challenges for the urban infrastructure, which has to keep up with a constantly growing number of people requiring, among other things, an adequate water supply and sanitation services (➡ Chapter 4.8: Decentralisation and urban development). Just one year after the human right to water and sanitation was enshrined in the Kenyan constitution in 2010, the online

database MajiData was launched with financial and technical assistance from the United Nations Settlements Programme (UN HABITAT), Google.org, the Water Sector Trust Fund (WSTF), KfW and GIZ. The database provides information on the evolution of population and settlements in urban slums and provides the basis for planning the expansion of local water and sanitation infrastructures.

## 3.2.4 Support for national institutions

In many partner countries, the national statistics authorities are not in a position to collect detailed population data on a regular basis. One reason is a frequently inadequate (➡ Chapter 5.3) civil registration and vital statistics (CRVS) system. However, data collection alone is not a sufficient basis for the responsible ministries and authorities to make policy decisions. What is important is that research and policy advisory institutions analyse and process these data for decision-makers. German development cooperation is therefore strengthening the capacities of national institutions to collect, analyse and use demographic data, and

supports the responsible units particularly in (➡ Chapter 5.6) monitoring the 2030 Agenda. To do this, it is increasingly using (➡ Chapter 3.2.6) human capacity development (HCD) measures.





### Step by step: How to strengthen national institutions

1. Together with partners, identify the need for support with regard to:
  - a. collecting demographic data
  - b. handling gaps in data
  - c. analysing and interpreting population data, and
  - d. using the findings for policy planning.
2. Explore possibilities for cooperation and financing with development partners from different sectors.
3. Explore possibilities for supporting national institutions as part of ongoing programmes and modules of German development cooperation.
4. Strengthen the capacities of national partners for independently collecting, evaluating and using data for policy-making, among other things by:
  - a. providing support for organisational development
  - b. strengthening coordination between ministries, statistics authorities, research and policy advisory institutions and civil society
  - c. promoting data collection, and
  - d. promoting (➡ Chapter 3.2.6) **human capacity development (HCD)** of different target groups on various socio-demographic issues, particularly the analysis, interpretation and use of data.

### Example from Myanmar: Implementation of the first census in 30 years



Through a grant to UNFPA, BMZ supported Myanmar's Central Statistical Organisation in 2013 in carrying out the country's first national census in 30 years. As in many other countries in South-East Asia and sub-Saharan Africa, Myanmar does not have a functioning CRVS system and the registries of births, deaths, marriages and divorces are therefore incomplete.

The census data provided the Government of Myanmar with comprehensive information about population trends, and served as a valuable data basis for planning national policies and monitoring development progress. Myanmar's 2013 census also clearly showed, however, that a very sensitive approach needs to be taken when collecting and preparing disaggregated population data because these have the potential to exacerbate existing conflicts between ethnic groups.





## Example from Egypt: Strengthening the National Population Council

Egypt's National Population Council (NPC) was set up in 1985. The International Conference on Population and Development (ICPD) (⇒ [Chapter 1.2: Guiding principles](#)) held in Cairo in 1994 temporarily gave population policy a higher political priority in Egypt. However, little was done to link population dynamics with themes such as poverty, employment, education or reproductive health, as envisaged in the ICPD's proposed paradigm shift. The focus continued to be placed on family planning.

Since 2013, German development cooperation has been supporting Egypt's NPC in embedding family planning programmes in more comprehensive economic and social development initiatives, based on innovative approaches and evidence-based analyses. The organisational development of NPC was intended to enhance its visibility and give it greater political influ-

ence. This was meant to assist the Council in promoting a more active development-oriented population policy by formulating corresponding policy recommendations. At the same time, the intention was to strengthen NPC's role as a cross-sectoral coordinator in supporting exchanges between the state and civil society.

Owing to the political instability in Egypt, the German-supported measure's scope for action was limited for a prolonged period until it was reoriented in early 2018. Since then, it has concentrated on better coordination and cooperation between stakeholders concerned with population policy, with the aim of strengthening implementation of Egypt's National Population Strategy. In addition to NPC, these stakeholders include UNFPA, the United Nations Development Programme (UNDP) and civil society organisations.



### 3.2.5 Investment in infrastructure

Changes in a population's needs due to births, deaths, immigration and emigration are most strongly felt by municipalities. Local administrations and decentralised decision-makers require up-to-date and reliable data on population trends in order to keep up with sometimes fast-paced demographic changes and provide the population with adequate public infrastructures such as schools and hospitals. Routine data systems are the most important source for such information, and most easily accessible for local authorities via a digital infrastructure (➡ Chapter 5.3: Civil registration and vital statistics (CRVS), ➡ Chapter 5.4: Digitisation).

#### Step by step: How to adapt infrastructure in line with needs

1. Together with partners, identify changing needs for infrastructure within a specific intervention area, on the basis of emerging population and sector developments.
2. If deemed relevant, start by developing or expanding the required (digital) population data infrastructure in order to ensure a sound data-based planning framework for infrastructure adjustments (➡ Chapter 5.7: Tips for promoting data systems).
3. If appropriate, initially carry out (➡ Chapter 3.2.1) studies of single demographic aspects or assessments (➡ Chapter 3.2.2 Multisectoral approach to population dynamics).
4. Together with partners, examine possible ways of using and expanding existing infrastructure.
5. Explore possibilities for cooperation and financing with local and international development partners from different sectors.
6. With a view to the future, adapt infrastructure in cooperation with local partners, based on long-term population forecasts.
7. Consider the need for training courses on the use and maintenance of the modified infrastructure.





### Example from Jordan: Water supply for rapidly growing communities

Jordan, which suffers from a generalised water scarcity, was hosting an estimated 1.4 million Syrian refugees in 2017, especially in the north of the country near the border with Syria, according to information from statements made by the Jordanian monarchy. Since this has significantly increased the already high demand for water in northern Jordan, German develop-

ment cooperation through several emergency water projects is supporting the rehabilitation and expansion of 28 deep wells and new water distribution systems. These provide water to more than 600,000 additional people and allow supply to be maintained in the face of population growth and refugee influx.



### Example from Rwanda: Digitisation of registration systems and introduction of electronic identity cards

The Rwandan government wants to improve its registration system in order to reduce errors in data management and waiting times for citizens in local government offices. German development cooperation is planning to provide financial support for procuring and installing the required digital infrastructure

and organising training courses for civil servants at national level who are to establish and then utilise a new central database. In the medium term, all citizens are to receive an electronic ID card that can also store information on health insurance and driver's licence.

### Snapshot: Adapting infrastructure in situations of displacement

Persistent crises and conflicts such as the war in Syria cause people to leave their homes at short notice in search of a safer place where they can settle. In recent years, host communities in Syria's neighbouring countries have had to provide additional public infrastructure within a very short time and under difficult conditions. Detailed information on the refugees, including their number, age and sex, are important in

order to align the required infrastructure with their needs (⇒ [Chapter 4.6: Migration and displacement](#)). This likewise applies to setting up and expanding refugee camps that take people's needs into account. Even in a refugee context, under generally challenging conditions, it is essential to maintain the security and confidentiality of all personal data at all times (⇒ [Chapter 5.4: Digitisation](#)).



### 3.2.6 Human capacity development (HCD)

The HCD promoted by German development cooperation is directed at three levels: individual, organisation and society. HCD measures develop the personal and professional capacities of individuals, bring people together in networks and foster learning processes in organisations and within society. The following are four HCD approaches that are designed to promote population dynamics.

#### Study trips

On study trips, for example to Germany, experts and leaders from partner countries exchange information with international colleagues, and thus further develop the individual capacities they need in the domain of population dynamics. Special forms of study trips such as short-term hosting of experts by government agencies, administrations and research institutions are geared to the specific needs of individuals for continuing professional development in their work context.

Institutions such as the German Federal Statistical Office (Destatis) and the German Federal Institute for Population Research (BiB) thus give organisations from partner countries with a similar mandate insights into their everyday work and share with them the challenges, new developments and possible solutions concerning, for instance, stakeholder coordination, demography-sensitive policy advice and addressing data gaps. Study visit participants and their German counterparts exchange information about how tasks are shared and coordinated by

the respective public institutions that work on demography and population policy, and learn about common features and differences.

People who take part in study trips receive a wealth of ideas on how to develop their own approaches to population dynamics and how to integrate them into their country's policy process. Networking with regional and international actors can in some cases lead to a closer cooperation, for example on specific demographic challenges. The focus is on the (➔ Chapter 6.1) **key actors in the field of population data in selected countries.**

#### South-South cooperation

Within the framework of HCD, German development cooperation also promotes exchanges between partner countries in the form of South-South cooperation. Neighbouring countries can share their experience of designing policies to address population trends during bilateral exchanges between government representatives and specialists, for instance at regional and international conferences. South-South cooperation is particularly effective when the countries have similar socio-cultural and institutional settings and face comparable demographic challenges and opportunities.





### Example from the Maghreb region: Study trip on population data in municipal development planning

On a study trip to Germany, a delegation from Moroccan and Algerian municipalities exchanged information with experts from the German Federal Institute for Population Research (BiB), the University of Koblenz-Landau and German municipalities on using population data for municipal development planning. On visits to the municipalities of Mannheim and Ludwigsburg, the Moroccan and Algerian representatives learned, among

other things, about technical solutions for processing and publishing data, and participatory municipal planning mechanisms. In a closing workshop, participants discussed further training needs and cooperation options, and noted that some approaches used by the German municipalities can be applied directly in the Maghreb context, such as the introduction of a department for statistical data on municipal level.



### Example Togo-Mali: Advice from one neighbour to another

A directorate in Togo's Ministry of Development Planning that studies the country's demographic trends and advises the other ministries on population issues became the driving force for shaping the country's policy on population dynamics. This directorate supports all line ministries in drawing up their sector strategies to include aspects of population dynamics, using a manual that it had itself developed on integrating popu-

lation dynamics into national policy design (➡ [Chapter 3.2.2: Multisectoral approach to population dynamics](#)). The directorate is now passing on its experience from Togo to its French-speaking neighbours. In Mali, for instance, the Togolese directorate presented the manual and discussed with its counterparts there the scope that exists for action and new advisory approaches.



#### Networks and knowledge partnerships

Networks and knowledge partnerships bring together a significant number of stakeholders who focus on a specific theme. A platform can thus be used to address common challenges, to share knowledge, to identify interfaces or to collaborate on research topics. Such networks are especially useful for a cross-cutting issue such

as population dynamics because they bring together stakeholders from different sectors (➡ [Chapter 4: Population dynamics and selected sectors of German development cooperation](#)) and link them with experts from the fields of demography and statistics. Cooperation agreements provide the participants with a guiding framework and define their joint interests and goals.

#### Example from practice: Demography for Development Planning (D4DP)

As part of the Demography for Development Planning (D4DP) initiative, BMZ, GIZ, the German Federal Institute for Population Research (BiB) and the University of Koblenz-Landau have since October 2016 been reinforcing the capacities of African partner countries in analysis, interpretation and use of data for demography-sensitive programme and policy planning. Besides their experience in providing technical advice and sectoral and methodological expertise, the German partners also have a broad network

of institutions with which they cooperate. Thus, actors in the partner countries benefit from the initiative's wealth of experience through workshops or technical advisory sessions. This knowledge partnership aims at making global and bilateral partners aware of demographic trends, making research findings and statistics available to be used in planning policies for various sectors, and more firmly embedding population dynamics in the programmes of German development cooperation and of other partners.



## Decentralised dialogue platforms

Dialogue platforms are an effective way to create public awareness that a good information base on demographic development can help identify needs at local level and adapt and shape plans accordingly. A large variety of methods used in working with communities, such as communication campaigns, creative theatre workshops

and sports, can be put to good use in this context. In addition to raising awareness, dialogue platforms can also strengthen local capacities for the improved collection, analysis and use of data (➡ [Chapter 3.2.3: Data collection and analysis](#)). This gives local stakeholders a tool for demanding accountability from central agencies (➡ [Chapter 4.1: Human rights and gender](#)).

### Example from Burundi: Identifying needs at local level



Ever since, owing to political unrest, Germany was obliged to suspend its development cooperation with Burundi at national level in late 2015, German development cooperation has concentrated on working with the local level and civil society. The German-Burundian health programme had already been cooperating for some time with local networks in which not only health centres, but also schools, community leaders, churches and non-governmental organisations (NGOs) were active. These networks sensitise the local population on rights-based family planning and maternal and child health, and inform about the services offered by the health centres.

For the local networks it is very important to be autonomous in planning and organis-

ing their activities, especially in view of the continuing political uncertainty on national level. German development cooperation therefore started a two-year pilot project with five local networks in June 2016. A Burundian demographer supported these networks in independently putting together and evaluating information on population trends in their community, such as data on births and deaths, teenage pregnancies and school drop-out rates. This has enabled the local networks to respond autonomously to demographic developments and launch their own initiatives. Since capacity development through these dialogue platforms met with great demand among the network partners, it is planned to scale these activities up to more than 35 local networks in the course of 2018.



### 3.2.7 International and national policy dialogue

Global megatrends such as population growth, ageing, urbanisation and migration need to be appropriately anchored both in national policy agendas and at international level. German development cooperation and its partners therefore make a point of highlighting the cross-sectoral influence of

population dynamics in the international and national policy dialogue. This also includes giving sufficient priority to the topic at the national level and more effectively integrating it into the strategies, as well as the sector and budget plans, of partner countries.



#### Example from practice:

#### International policy dialogue and promotion of multi-stakeholder partnerships

In the aftermath of the ICPD in Cairo, German development cooperation benefits from the annual meetings of the United Nations Commission on Population and Development (CPD) as an international forum where it can underline the importance of population dynamics and other key themes of the Cairo Programme of Action (⇒ [Chapter 1.2: Guiding principles](#)). Respect for human rights, particularly the human rights principle of self-determination and gender equality, are among the key principles guiding German development cooperation's commitment on population policy (⇒ [Chapter 4.1: Human rights and gender](#)).

On another level, Germany strengthens multi-stakeholder partnerships that make a strategic contribution to implementing the Programme of Action, including the former High Level Task Force for ICPD and its successor mechanism The Nexus Initiative. Likewise, the International Dialogue on Population and Sustainable Development that has been held in Berlin every year since 2002 promotes supra-regional exchanges and cooperation between relevant actors from politics, civil society, research and the private sector on topics such as youth, sexual and reproductive health and rights (SRHR) and gender equality.



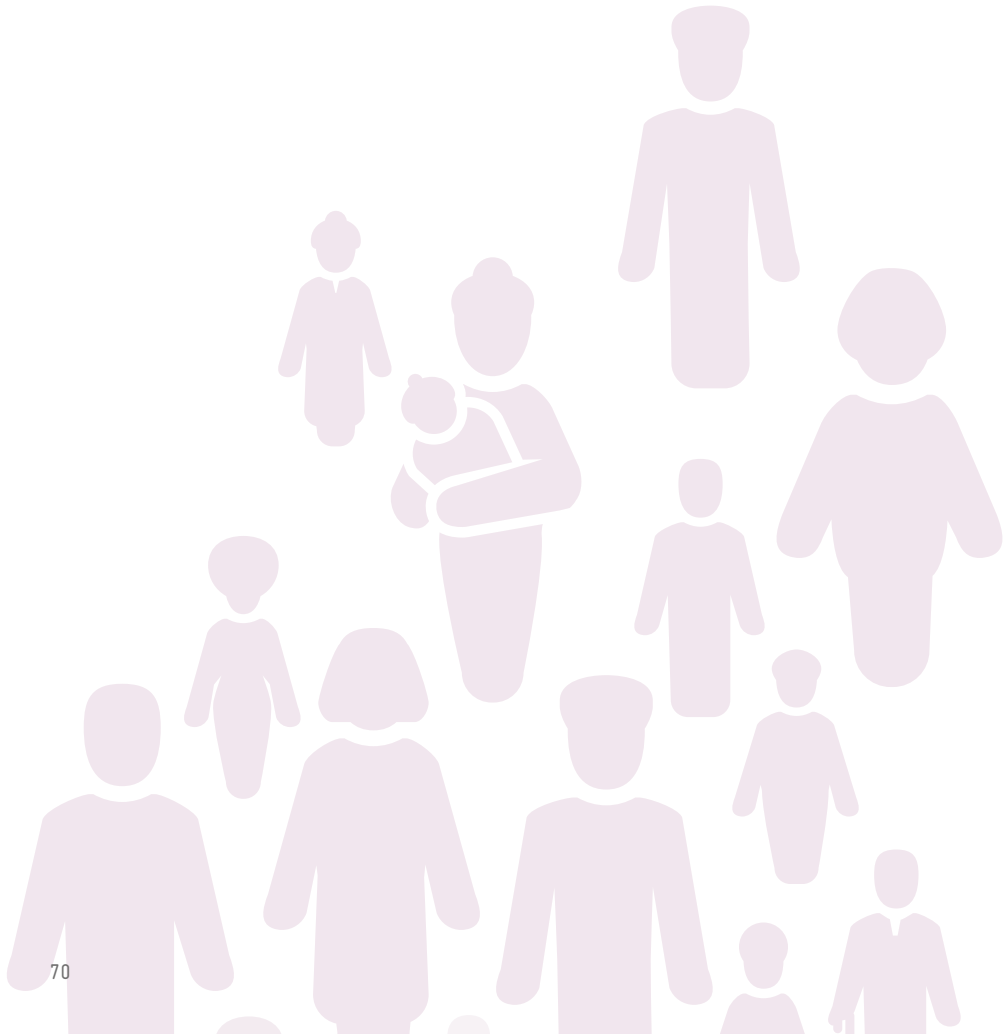


### Example from practice:

#### Guiding recommendations for the national, regional and international agenda

Supported by Germany, the Gutmacher-Lancet Commission on SRHR is a collaboration between the Gutmacher Institute and the medical journal *The Lancet*. This research commission has made key contributions to the 2030 Agenda for Sustainable Development in the field of SRHR. The Commission's final

report, published in May 2018, presents the first comprehensive definition of SRHR to be embedded in the 2030 Agenda and aligned with human rights, as well as evidence-based recommendations for its effective implementation in policies and programmes



### 3.3 Overview: Approaches

Approach	Objectives	Suitable methods	Key actors
<p>(➡ Chapter 3.2.1) Studies of single demographic aspects</p>	<ul style="list-style-type: none"> <li>Better knowledge of demographic influences on individual sectors in the partner country</li> <li>Identification of necessary adjustment measures in national policy and German development cooperation</li> </ul>	<ul style="list-style-type: none"> <li>Discussion of a single aspect</li> <li>Evaluation of data sources and analyses (e.g. projections concerning the impacts of urbanisation)</li> <li>Discussion of recommendations with partners; possible involvement of new partners</li> </ul>	<ul style="list-style-type: none"> <li>National sector ministries</li> <li>National statistics authorities and research institutions</li> <li>Institutions providing policy advice on demographic development or single demographic aspects</li> </ul>
<p>(➡ Chapter 3.2.2) Multisectoral approach to population dynamics</p>	<ul style="list-style-type: none"> <li>Cross-sectoral overall analysis of demographic development in the partner country</li> <li>Overall analysis of the institutional capacities of relevant actors</li> <li>Better collection, analysis and use of demographic data</li> <li>Identification of necessary adjustment measures in national policy and development cooperation</li> </ul>	<ul style="list-style-type: none"> <li>Assessment of actors and sources for demographic data and of data gaps</li> <li>Support in adjusting development strategies to population trends, e.g. by               <ul style="list-style-type: none"> <li>compiling guidelines on taking demographic factors better into account in decisioning policies</li> <li>Intersectoral training for public and civil society stakeholders on different levels</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>National population council or similar institutions</li> <li>Unit responsible for demography, usually in the planning ministry</li> <li>National statistics authority, potentially regional statistics offices and municipal representatives</li> <li>Representatives of relevant national ministries, e.g. from all priority sectors of German development cooperation</li> <li>Development partners</li> </ul>

Approach	Objectives	Suitable methods	Key actors
<p>(➡ Chapter 3.2.3) Data collection and analysis</p>	<ul style="list-style-type: none"> <li>Setting up and expanding the demographic database for effective planning and implementation of measures</li> <li>Strengthened capacity of partners for collecting, analysing and using local data on population development (e.g. data on population trends in urban slums)</li> </ul>	<ul style="list-style-type: none"> <li>Support for partners in collecting and processing demographic data (e.g. by digital means)</li> <li>Raising awareness of population dynamics in municipal planning and promoting social cohesion and resilience (e.g. in fragile contexts)</li> </ul>	<ul style="list-style-type: none"> <li>Local statistics offices and municipal representatives</li> <li>If appropriate, national statistics authorities and relevant institutions in the sector</li> <li>IT service providers for databases, software and training</li> <li>Local multi-stakeholder partnerships</li> <li>Development partners</li> </ul>
<p>(➡ Chapter 3.2.4) Support for national institutions</p>	<ul style="list-style-type: none"> <li>Strengthening the mandate of actors involved in population policy (e.g. population council)</li> <li>Strengthening capacities of national or decentralised authorities and institutions to collect and analyse data and provide effective policy advice</li> </ul>	<ul style="list-style-type: none"> <li>Capacity development and organisational development of institutions involved in collecting and analysing demographic data, population research and policy advice</li> <li>Financial contribution for data collection by the government (e.g. census)</li> <li>Networking between population policy actors and sector ministries on the establishment of coordination mechanisms</li> </ul>	<ul style="list-style-type: none"> <li>National statistics authorities and decentralised statistics offices</li> <li>Population councils and policy units, usually in the planning ministry and relevant sector ministries</li> <li>Institutions and networks engaged in research community and in policy advice</li> <li>Development partners</li> </ul>



Approach	Objectives	Suitable methods	Key actors
<p>➡ Chapter 3.2.5)</p> <p>Investment in infrastructure</p>	<ul style="list-style-type: none"> <li>Adapting public infrastructure to meet the changing needs resulting from demographic development in order to ensure the supply of services</li> <li>Setting up or expanding public population data infrastructure to create a data-based planning foundation for infrastructure planning (e.g. CRVS system)</li> </ul>	<ul style="list-style-type: none"> <li>Financial contribution for investments in the (digital) recording of population data and the adaptation of public infrastructure to demographic changes (e.g. procurement of necessary IT software and hardware)</li> <li>Human capacity development (HCD) of partners involved in financing, expanding and maintaining the infrastructure</li> <li>Financial and technical support for the rapid expansion of public infrastructure in view of major changes in population (e.g. in regions taking in many refugees)</li> </ul>	<ul style="list-style-type: none"> <li>Planning ministries and relevant sector ministries</li> <li>Public and civil society institutions at municipal level</li> <li>Public and private service providers</li> <li>Construction and transport companies</li> <li>Stakeholders in the field of humanitarian aid and transitional development assistance</li> <li>CRVS authorities and agencies</li> <li>IT service providers for databases, software and training</li> <li>Development partners</li> </ul>

Approach	Objectives	Suitable methods	Key actors
<p>(➡ Chapter 3.2.6) Human capacity development (HCD)</p>	<ul style="list-style-type: none"> <li>Promoting awareness-raising, networking, knowledge transfer and experience-sharing among relevant actors for population policy</li> <li>Developing the expertise of individuals and strengthening organisational learning processes</li> </ul>	<ul style="list-style-type: none"> <li>Study trips</li> <li>South-South learning formats</li> <li>Establishment and expansion of knowledge and research partnerships</li> <li>Establishment and expansion of decentralised networks</li> <li>E-learning and blended learning courses</li> </ul>	<ul style="list-style-type: none"> <li>Ministries as well as national and decentralised institutions engaged in policy advice, research and data collection</li> <li>Civil society and media</li> <li>Development partners</li> </ul>
<p>(➡ Chapter 3.2.7) International and national policy dialogue</p>	<ul style="list-style-type: none"> <li>Strengthening the integration and visibility of the population dynamics issue in international policy processes</li> <li>Mainstreaming and prioritising the issue of population dynamics at national level</li> </ul>	<ul style="list-style-type: none"> <li>Active participation in international fora and processes</li> <li>Joint coordination and positioning with like-minded actors</li> <li>Supporting multi-stakeholder partnerships on population policy issues</li> <li>Financial and technical support for civil society</li> <li>Workshops on capacity development, awareness-raising and networking (e.g. with NGOs, the media and members of parliament)</li> </ul>	<ul style="list-style-type: none"> <li>Public and civil society stakeholders involved in designing population policy in partner countries</li> <li>Regional NGOs and parliamentary and intergovernmental networks</li> <li>International development partners and experts</li> </ul>

### 3.4 Financing options

In order to promote the mainstreaming of population dynamics, a number of financing options exist. These include:

- The **technical cooperation's Study and Expert Fund (SEF)**, to promote, for example, a study on a single demographic aspect or a multisectoral assessment, to finance experts to support data collection and analysis, or to develop human capacities through HCD measures.
- The **financial cooperation's Project Preparation Fund (PPF)**, to promote, for example, a study on a single demographic aspect or a multisectoral assessment to finance experts to support data collection and analysis, or to develop human capacities through HCD measures.
- **(Partial) financing from an ongoing module of technical or financial cooperation**, for example to promote a study, multisectoral assessment or short-term data collection and analysis. Such partial financing is equally conceivable for supporting national population policy institutions and their policy dialogue, expanding their infrastructure or reinforcing their institutional and individual capacities.
- **Independent module of technical or financial cooperation**, for example to strengthen population policy institutions at national level in their organisational and capacity development, or to set up and expand public (digital) infrastructure, particularly in the field of population data. An independent module is also conceivable for supporting or forming a specific regional network, or for promoting national and international policy dialogue.
- **Partial and start-up financing through technical cooperation sector and global projects**, for example to promote a study, a multisectoral assessment or short-term data collection and analysis. Technical cooperation sector and global projects can make a financial contribution especially in relation to HCD for partners. It is also conceivable for these projects to provide temporary support for a strategic policy dialogue.
- **Special support programmes** exist within German development cooperation, for example to improve data collection and analysis, for investments in digital infrastructure or for supporting national institutions and their capacity development. These include:

- the Digital Africa Initiative (➡ Chapter 5.4: Digitisation)
- the Initiative Programme 2030 Agenda (➡ Chapter 5.6: Monitoring the 2030 Agenda)
- the Demography for Development Planning (D4DP) initiative for (➡ Chapter 3.2.6) human capacity development (HCD).
- **Financing by German institutions or network partners**, for example of study trips and hosting of experts by official German public bodies, authorities and research institutions. The strengthening of capacities and activities by regional and international network partners and dialogue platforms might also be possible (➡ Chapter 5.1: Key actors in the field of data collection and analysis).
- **Co-financing by international development partners**, for example for collecting and analysing large volumes of data, supporting a national population policy institution, setting up and expanding infrastructure (especially related to CRVS) or a regional network.
- **Financing by partner countries of German development cooperation**, for example via budgets that are available to institutions in partner countries for HCD, in addition to the countries' own financial contributions in connection with setting up and expanding national institutions and infrastructure.





### 3.5 Support offered by the BMZ sector division

As stipulated in the BMZ position paper *Population dynamics in German development cooperation*, BMZ's sector division for Health, Population Policy and Social Protection is responsible for mainstreaming the cross-cutting theme of population dynamics in German development cooperation (➔ [Chapter 1.2: Guiding principles](#)). In this undertaking, it works together with a variety of other BMZ divisions and relevant German actors in the field of population policy. In applying the position paper, the division is supported by its implementing organisations, especially by the GIZ Sector Initiative Population Dynamics, Sexual and Reproductive Health and Rights and by the Competence Centre Sustainable Economic Development, Education and Health in the KfW Development Bank.

The BMZ division supports interested development cooperation actors among other things in:

- advising on sector and country strategies in the context of demographic change
- preparing demographic background information in advance of government consultations and negotiations, and, if appropriate, submitting proposals for the minutes of the negotiation
- taking part in country discussions
- commenting on brief assessments and programme proposals
- brokering contacts with national and international partners
- implementing approaches to promote better integration of population dynamics in German development cooperation programmes and modules, and
- advising on specific themes such as the demographic dividend, population growth, ageing and CRVS.

Do you have questions regarding the examples described in this chapter, or on taking account of population dynamics in the German development cooperation commissioning procedure? Do you need information on population dynamics for a specific partner country or sector? Please get in touch directly with the BMZ Division for Health, Population Policy and Social Protection, or send an email to [demografie@giz.de](mailto:demografie@giz.de).



## 4 Population dynamics and selected sectors of German development cooperation

A country's population dynamics is closely interlinked with many sectors of German development cooperation. Demographic changes, which are reflected in birth and death rates, as well as in ageing, migration and urbanisation processes, have an impact on the population's needs and require adjustments to policy and programme planning. Conversely, developments in specific sectors can also influence a country's population dynamics. Recognising these interrelationships early on plays a key role in leveraging potential opportunities and in better meeting the accompanying challenges.

This chapter looks at how population size, structure and distribution have developed in the context of single sectors and thematic areas. For each sector, particularly relevant aspects of population trends are presented in textboxes and with illustrative facts and figures. In addition, practical recommendations for action indicate what aspects need particular attention in policy and programme planning and how these can be designed.

Thus, (➡ Chapter 4.1) human rights and gender, (➡ Chapter 4.2) health, (➡ Chapter 4.3) education and (➡ Chapter 4.4) sustainable economic development and technical and vocational education and training (TVET) are among the key prerequisites enabling age structures in partner countries to change so that the important potential offered by young people can be developed. In this context, (➡ Chapter 4.5) social protection plays a key role in responding to the needs of the population throughout all phases of the demographic transition. (➡ Chapter 4.6) Migration and displacement also influence (➡ Chapter 4.7) rural development and food and nutrition security, as all migration movements affect how a population is structured and distributed. Against this background, there are increased demands on (➡ Chapter 4.8) decentralisation and urban development, which must orient themselves towards the changing needs of a society in transformation.

Up-to-date, disaggregated and reliable population data provide an indispensable framework for planning and shaping policies and programmes in all sectors. They also illustrate the intersections between population dynamics, (➡ Chapter 4.9) climate and resource utilisation, which are key for a balanced social, economic and ecological development. Finally, a (➡ Chapter 4.10) Supplement: Religion and population dynamics examines the role of religious actors and points to the associated opportunities for shaping social development processes.

## 4.1 Human rights and gender

The human rights situation in a country influences its demographic development. Human rights violations such as state-imposed contraception, abortion and sterilisation, as well as political persecution or war crimes, can for instance affect a population's size, spatial distribution, sex and age structure. Conversely, population dynamics can also have an impact on the human rights situation. For instance, population density can be a major factor determining whether or not the right to food and health can be ensured. Furthermore, the status of women and girls within a society has a significant impact on birth rates.

### How does the human rights situation affect population dynamics?

The human rights situation within a country influences its population dynamics in many different ways. In the case of family planning, for instance, women and men should be able to decide themselves whether, when and with whom they would like to start a family and how many children they would like to have (➡ [Chapter 4.2: Health](#)). This principle of self-determination and people's empowerment to exercise this human right can have an impact on a country's average birth rate. In China, for example, this principle was infringed upon by the one-child policy, which was in force for decades. As a result, according to the United Nations' (UN) current forecasts (*World Population Prospects: The 2017 Revi-*

*sion*), since 1990 China's average number of children has remained below the standard replacement level of fertility for industrialised countries of 2.1 children per woman.

The principle of self-determination is likewise limited if people do not have unrestricted access to modern forms of contraception. According to the Guttmacher Institute's study, *Adding it up: Investing in Contraception and Maternal and Newborn Health, 2017*, there are still 214 million women in developing countries who have an unmet need for modern contraception. Women in these countries wish on average to have fewer children than men, but are often unable to prevail against their partners and families. A [Guttmacher Institute study](#) on contraception and unintended pregnancy in Uganda shows that women there give birth to nearly two children more than they desire due to a lack of contraceptive options and restrictions on their capacity to impose their own family planning choices. This difference between desired and actual number of children is one of the highest in sub-Saharan Africa.



### Having children: A desire or a blessing?

In most developing countries, there is a discrepancy between the number of children that a couple has and the number of children they would actually like to have. This difference shows to what extent the right to self-determination cannot be fully exercised. According to a comparative study of Demographic and Health Surveys (DHS) in 60 developing countries (*Comparative Report No. 25: Desired Number of Children: 2000–2008*), between 1998 and 2008 the desired number of children declined almost everywhere as child mortality rates fell. In southern and eastern Africa, the desired family size was an average of 4.5 children, in North Africa and in Asia, it was 2.9, and in Latin America and the Caribbean it was 3 children per couple.

Here differences also existed between men and women. In all regions men wished for a somewhat larger number of children than women. The report also indicates that women with a higher education level desired fewer children than less well-educated women.

In most of the countries examined, the birth rate was declining. The DHS results indicate that the drop in the birth rate was largely due to a decline in the desired number of children. Only a small fraction was due to a decrease in unintended pregnancies. The highest share of unintended births, 39%, was in Bolivia. If the right to self-determination for all is to be fulfilled, the number of unintended births must approach zero and the unmet need for contraception needs to be eliminated.

Violations of human rights such as child marriage, child trafficking and gender-based violence (including female genital mutilation and unsafe abortions) also have an impact on a country's birth rate and on maternal and child mortality. Girls in particular are often married while still children and are thus exposed to sexual contacts from the very beginning of their reproductive life. As

long as girls and women are not perceived as rights holders and are not themselves able to claim their rights, birth and death rates in developing countries will not decline. This is, however, a key prerequisite for the demographic transition, a process that is still just starting in many developing countries (➔ Chapter 2.1: Global population trends).



## Teenage pregnancies and child marriage

According to the World Health Organization (WHO), every year an estimated 21 million girls aged 15 to 19 years, plus 2 million girls aged under 15, become pregnant in developing countries. Particularly in these countries, the proportion of young women in these age groups will continue to increase significantly in the coming decades. WHO therefore assumes that the absolute number of babies born to teenagers will increase, at least for some time. This is a likely scenario even though the birth rate has already fallen from 65 to 47 births per 1,000 young women aged 15 to 19 between 1990 and 2015.

According to the 2014 *State of World Population* report of the United Nations Population Fund (UNFPA), each year around 70,000 young women in this age group die from complications related to pregnancy or childbirth. WHO therefore estimates that this represents one of the most common causes of death among girls aged 15 to 19.

In its *2013 State of World Population* report, UNFPA reports that 90% of all teenagers who give birth for the first time are underage girls who entered into arranged marriages. Preventing child marriages consequently means reducing teenage pregnancies. Marrying later not only raises women's average age at their first delivery, it also lowers the nationwide birth rate.

This effect was seen in Pakistan, for instance, between the 1970s and the 1990s. According to a study conducted by the German Institute for International and Security Affairs (SWP), family planning measures undertaken by the government had little effect. The decrease in the birth rate during this time is primarily attributed to a rising age at time of marriage.



Gender inequities also manifest themselves in the fact that girls and women often have to overcome greater obstacles in accessing health, education and sex education services or in finding productive work. Early motherhood is often associated with low levels of education, legal and economic

dependence on men, and poverty, which is passed on from generation to generation. The demographic dividend (➡ [Chapter 2.1: Global population trends](#)), which is based on a preponderance of people of working age, can only be realised if girls and women too can reach their full potential.



### How does population dynamics influence the human rights situation?

A country's demographic development can affect its human rights situation. Rapid population growth harbours the risk that vital sectors such as food supply, water and healthcare will lag behind the population increase. This could spark or exacerbate distribution conflicts and have a negative impact on political stability within a country. This could in turn affect a wide variety of other human rights such as the right to life and physical integrity, the right to an adequate standard of living and also the fundamental freedoms.

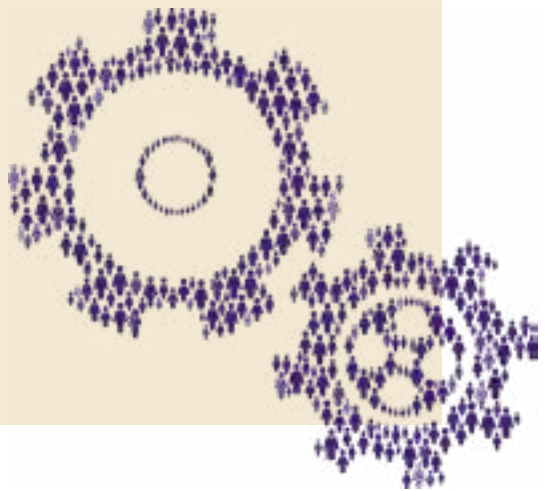
Similar impacts may be observed if there is a drastic change in the population's spatial distribution over a short period of time. Crises, conflicts or natural disasters can trigger refugee movements, which are frequently associated with violations of human rights, particularly those of children and women, as well as of disadvantaged population groups such as people living with disabilities or in poverty or members of ethnic minorities (➡ [Chapter 4.6: Migration and displacement](#)).

For this reason, disaggregated socio-demographic data are essential, both for the state and for the individual. The most important prerequisite for an individual to participate as a citizen in society is his or her birth certificate. In accordance with the United Nations' Convention on the Rights of the Child, every human being has a right to identity and registration (➡ [Chapter 5.3: Civil registration and vital statistics \(CRVS\)](#)). Someone who is not registered, and therefore has no recognised legal identity, is seriously restricted from participating in society, accessing public services and asserting his or her rights. Disaggregated socio-demographic data can also reveal inequities between population groups. Open access to data contributes to good governance and offers citizens the opportunity to insist more effectively on their rights and to denounce human rights violations.



## Recommended action

- Reinforce girls and women as rights holders in order to safeguard their right to self-determination and ensure their social and economic participation, e.g. by:
  - promoting awareness of these rights and opportunities among girls and women and across the population
  - ensuring their legal establishment and safeguarding by the state as the duty-bearer.
- Promote equal rights and address gender inequities in order to strengthen the potential of girls and women and thus make a demographic dividend possible.
- Support the right to identity and registration in order to dismantle barriers to accessing basic services such as health and education and to facilitate participation in society, e.g. by:
  - developing civil registry systems, and particularly
  - establishing universal birth registration and safeguarding the right to a birth certificate.
- Provide special support to children, women and disadvantaged population groups such as ethnic minorities in displacement situations in order to strengthen their role as rights holders towards the state and to prevent violations of human rights.
- Promote a policy planning process based on population data and its transparent public display so that inequities can be identified and reduced.



## Additional information



*Data 2x* is an initiative of the UN regional commissions in Africa and Asia. It brings partners together to collect gender and population data and process them in a suitable format for policy making.

<http://data2x.org/>



## 4.2 Health

A country's health status is closely intertwined with its demographic development. Improved access to healthcare reduces child mortality and the birth rate, while life expectancy increases. This can pose new challenges for the health sector, as it will need to adjust to the changing needs of different population groups and an ageing society.

### How does a population's health affect population dynamics?

Health, together with education, employment and gender equality, is one of the key sectors on the road to a demographic dividend (➔ [Chapter 2.1: Global population trends](#)). Experience from different countries shows that the prerequisites for a demographic dividend – when the largest share of the population becomes of working age – can only be achieved if there is simultaneous advancement in the health sector. This applies in particular to reducing child mortality and improving access to family planning.

The population's health status has a direct impact on the mortality rate (and thus on average life expectancy) and on the number of children per woman. As a result, it has a significant influence on population size and

age structure. Improved healthcare has thus contributed in recent decades to a steady increase in average life expectancy and a decrease in birth rates in developing countries. Nonetheless, particularly in these countries, couples often continue to have more children than they would like. According to the Guttmacher Institute's 2017 study, *Adding it up: Investing in Contraception and Maternal and Newborn Health*, 43% of all pregnancies in developing countries are unintended<sup>5</sup> (➔ [Chapter 4.1: Human rights and gender](#)).

A key reason for this is the lack of access to early comprehensive sexuality education (➔ [Chapter 4.3: Education](#)) and to sexual and reproductive health and rights (SRHR) services. These include advice on family planning and access to modern contraception. As indicated in the 2015 UN report *Trends in Contraceptive Use Worldwide*, at least one in ten women all over the world has an unmet need for family planning. In sub-Saharan Africa this even concerns one in every five women. Since many women desire fewer children than their partners, the empowerment of girls and women in this respect is of great importance.

<sup>5</sup> Approximately 127 million babies are born each year in developing countries. These countries count 89 million unintended pregnancies, of which 30 million are carried to term. This means that 23.6% of the 127 million births in developing countries are unintended.

*If all women had access to contraceptives, three quarters of unintended pregnancies could be avoided. Unintended births would thus fall from 30 million to seven million per year.*

*Guttmacher Institute: Adding it up: Investing in Contraception and Maternal and Newborn Health, 2017*

The birth rate is also indirectly influenced by infant and child mortality rates. In regions where child mortality is high, women also have on average more children. It is scientifically proven that couples are prepared to have fewer children if each individual child has a better chance of surviving. Although child mortality in developing countries has been successfully reduced in recent years, the UN's 2017 *World Population Prospects* show that in the world's least developed countries the average rate is still almost 15 times higher than in Europe, North America, Australia, New Zealand and Japan.

### How does population dynamics influence the population's health?

Conversely, a country's demographic development will also affect demands on the health sector. Population dynamics should therefore always be taken into account as an influencing factor when planning health policy and designing health programmes in partner countries.

As the population grows, so too does the need for medical infrastructure and health-care workers, among other things. The spatial distribution of the population is another key demographic factor that influences the demand for health services, and should consequently also be reflected in an adjustment of the offer. In rural areas medical care is often insufficient and parents there – who tend to be less well educated – often have a higher number of children. At the same time, in towns and cities the need for health services often rises very rapidly as a result of increased urbanisation (➡ [Chapter 4.8: Decentralisation and urban development](#)).

The age structure of a population also influences demand for health services. In many developing countries with a comparatively young population, child health and youth-oriented health services in areas such as sex education, HIV prevention and family planning are particularly important. As a society ages, clinical profiles change and non-communicable and chronic diseases often become more prevalent. Health systems must be able to respond appropriately to these changes.

*A lack of healthcare professionals, particularly in developing countries, endangers human life. Although about one sixth of the world's population currently lives on the African continent, in 2015 it carried close to 24% of the global burden of disease, while in 2013 it counted just 4% of global healthcare workers.*

*UN DESA, Population Division: World Population Prospects: The 2017 Revision; WHO: Global Health Estimates 2015; WHO: Global Strategy on Human Resources for Health: Workforce 2030*

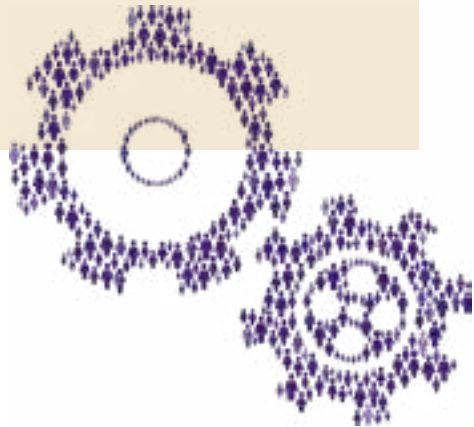
In order to document the status of the public health system in a country, plan health policy and measure results, data on population trends and on the distribution of health risks and diseases are required. These data are provided on the one hand by healthcare institutions and on the other hand by large-scale surveys such as the DHS (➔ [Chapter 5.2: Data sources](#)). A comprehensive picture of population trends is provided only by a census or a functional system for registering births and deaths (➔ [Chapter 5.3: Civil registration and vital statistics \(CRVS\)](#)). From figures on the frequency of specific causes of death, for instance, the spread of diseases and epidemics can be recognised in time. These data also provide information on the population's spatial distribution and thus on regional disparities in relation to needs in the health sector.

Provision of medical care to refugees poses a special challenge. One of the dangers of displacement is that it exposes in particular children, women and the elderly to greater health risks, with poor access to medical services. Even once they reach their destination, refugees often live under precarious conditions, may have health problems caused by the displacement, and frequently lack access to routine medical services (➔ [Chapter 4.6: Migration and displacement](#)).



## Recommended action

- Incorporate findings on population trends into programme and policy planning in the health sector in order to plan in function of current and longer-term needs.
- Support the ability of the health sector to adapt to the special needs of specific age groups, e.g. by:
  - strengthening youth-oriented health services to promote awareness and acceptance of sex education and family planning
  - preparing health services in advance for changes in the clinical profiles of an ageing society.
- Improve access to high-quality health services, particularly for girls and women, among others to reduce pregnancy-related deaths.
- Establish and expand adequate health services for refugees, particularly for children, women and the elderly, in order to respond to their special needs.
- Improve the collection and analysis of data in healthcare institutions in order to improve documentation of the population's health status and promptly identify health risks.
- Expand CRVS systems and, above all, the (digital) registration of births and deaths in order to provide a reliable data basis for health policy planning.



## Additional information

The Health Data Collaborative is a global multi-actor partnership committed to the improvement, availability and local use of health and population data.

<http://www.healthdatacollaborative.org/>

## 4.3 Education

Education – particularly for girls and women – not only reduces poverty and promotes economic growth, it also influences demographic factors such as birth and death rates. Conversely, population dynamics affects needs within the education system such as the required infrastructure and number of teachers.

### How does education affect population dynamics?

Access to education can largely shape population trends, since education influences social and political interaction within a society and promotes economic and social participation. A country's education status, for instance, is closely linked to the average birth rate. In particular, access by girls and women to further education leads as a rule to their starting child-bearing at a later age, with longer spacing between births, and to their having fewer children overall. One of the reasons for this is that education offers people the chance to engage in gainful employment. Better-educated women (i.e. having at least completed secondary school) often desire fewer children, are better able to assert this wish towards their partners and make more use of contraception for family planning.

School attendance can also protect girls against child marriage, at least temporarily. The 2013/14 *Education for All Global Monitoring Report* of the United Nations Educational, Scientific and Cultural Organization (UNESCO) shows that secondary school attendance helped avert about 1.8 million marriages of girls under the age of 15 (➔ Chapter 4.1: Human rights and gender).

### More girls than boys are excluded from a school education

According to the databank of the UNESCO Institute for Statistics, in 2015 around 264 million children and adolescents worldwide did not attend school. Girls are more frequently excluded from school education than boys. In sub-Saharan Africa in 2015, around 22.8% of girls did not go to primary school, compared with 18.4% of boys. At the higher secondary school level this rose to 61.3% of young women and 53.6% of young men.

As the educational status of women improves, so too do their children's chances of survival. Here the mother's education level plays a more crucial role than the father's or the family income. Better-educated women are more likely to use medical services and to pay more heed to a healthy diet and lifestyle for their families and themselves, for instance in relation to breastfeeding. They thus fundamentally improve their own health and that of their children. It has also been shown that couples have fewer offspring if their children have higher chances of survival. Thus, from a statistical point of view, a reduction in child mortality increases the population's life expectancy and leads to a long-term reduction in the birth rate (➔ Chapter 4.2: Health).

*If all women in developing countries were able to attend primary school, child mortality in those countries would decrease by 15%; if they were all able to attend secondary school, it would sink by as much as 49%.*

UNESCO: Education for All Global Monitoring Report 2013/14

In order for education to have a sustainable impact on population development, both men and women need to have equal access to educational opportunities. In practice, boys tend to be privileged when it comes to school attendance, since girls' duties are seen above all as being in the household, or because a family may not have enough money to send all of their sons and daughters to school. Such barriers need to be dismantled, for example through awareness-raising campaigns on the relevance of girls' education or through scholarship programmes. In many countries, inadequately equipped sanitary facilities and a lack of access to sanitary products keep girls from regularly attending school during menstruation.

It is important, however, for both boys and girls to remain in school in the long term, to receive an education of quality and obtain their completion certificate. The positive effects just described are obtained above all when girls and women have completed not just primary but also secondary school.

*Women in sub-Saharan Africa with a secondary school diploma have on average two children fewer than women who only completed primary school*

UNESCO: Education for All Global Monitoring Report 2013/14



### How does population dynamics influence access to education?

The 2030 Agenda for Sustainable Development aims for all girls and boys worldwide to be able to obtain a primary and secondary school education by 2030. In order to attain this objective, particularly in countries with a high birth rate and a rising number of children, large-scale investments in school infrastructure and teacher training are required. A report of the UNESCO Institute for Statistics calculates that by 2030 almost 69 million certified primary and secondary teachers will need to be hired worldwide if all children are to receive an education of quality. The need is most acute in (➔ [Chapter 2.2.5](#)) [sub-Saharan Africa](#), where by 2030 the number of children of primary school age will increase by 38%, and those of secondary school age by fully 48%. To cover this need, in sub-Saharan Africa alone, it will be necessary to replace around 7.6 million retiring primary and secondary school teachers and hire an additional 9.5 million.

Birth rates in most developing countries are dropping slowly but steadily. This is changing the long-term age structure of the population. With the onset of the demographic transition (➔ [Chapter 2.1: Global population trends](#)), the proportion of young people is increasing and the need for education is shifting from the primary level to secondary and tertiary education.

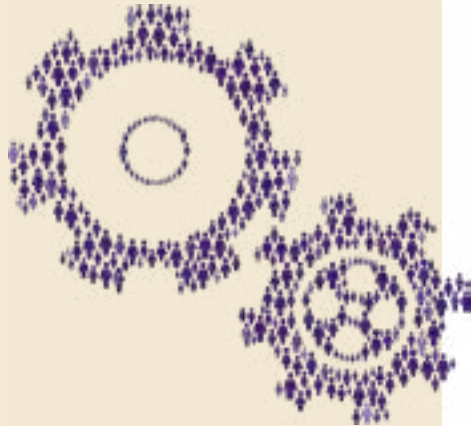
*Although the number of primary school teachers in sub-Saharan Africa almost doubled between 2000 and 2015, there are still 38.8 pupils to every teacher (compared with 42.6 in 2000). This is due, among other things, to population growth and a higher enrolment rate among children of primary school age.*

UNESCO Institute for Statistics: UIS.Stat

Migration, like the flow of people from rural to urban areas, can bring about a shift in educational needs, requiring an adjustment in supply and capacities. Here special attention should be paid to children and young people who have had to flee from their home country. Education is vital for their future prospects and those of their entire generation. In order to be able to adapt to these trends, educational policy must regularly take demographic data into account, including population projections. It must also observe and assess differentiated regional trends and respond to them in an appropriate manner.

## Recommended action

- Support equal access for girls and boys to a good primary and secondary school education, especially in view of the pronounced disparities between urban and rural areas.
- Dismantle the obstacles that prevent particularly girls and young women from accessing education in order to contribute to sustainable demographic development, among other things through:
  - campaigns and awareness-raising on the relevance of educating girls
  - reduction of financial obstacles to accessing education, for example with scholarship programmes and conditional cash transfers
  - gender-segregated sanitary facilities and dismantling taboos concerning, for instance, pregnancy and menstruation
  - a larger proportion of female teachers, who can provide a role model for girls and encourage their participation in class.
- Support education sector planning based on population data, to ensure forward-looking education plans and avoid a shortage of schools and teachers.
- Offer educational opportunities to displaced children and young people in order to provide them and future generations the possibility of socio-economic participation.



## Additional information

UNESCO has developed the interactive tool No Girl Left Behind to depict gender-specific disparities in primary and secondary school education.

<http://uis.unesco.org/apps/visualisations/no-girl-left-behind/>

The Global Out-of-School Children Initiative, another UNESCO measure, targets the children and young people who are excluded from education worldwide.

<http://uis.unesco.org/apps/visualisations/oosci-data-tool/index-en.html#en/cover>





## 4.4 Sustainable economic development and technical and vocational education and training (TVET)

Sustainable economic development brings an economic boost and prosperity for broad swathes of society. Some of the consequences are a higher life expectancy, declining birth rates and in some places increasing migration. At the interface between population dynamics, sustainable economic development and TVET, the focus is on young people and their future. Without this young generation, there can be no demographic dividend. Disaggregated population data can help align the needs of a changing society with those of the economy.



### The demographic-economic paradox

The higher the per capita income and educational status of a particular population segment, the lower its birth rate. Wealthy and well-educated social classes tend to have the lowest number of children, even though they have the most resources, with which they could easily care for a large family. This paradox can be observed in each country where the demographic transition has led to the emergence of a large middle class.

### How do sustainable economic development and TVET influence population dynamics?

Technical and vocational education and training (TVET), as well as productive and decent employment, are key prerequisites for enabling people of working age to earn an income and secure a livelihood. Particularly in societies with a young population, TVET is a fundamental building block of economic and social development. With increasing economic prosperity and rising per capita income, as a rule the birth rate falls, while life expectancy rises. Sustainable economic development thus contributes in the long term to the demographic transition and therefore to the ageing of society (► [Chapter 2.1: Global population trends](#)).



Good offerings in TVET as well as a healthy supply of jobs on the labour market can also attract young, highly-motivated individuals from other countries, thereby serving as a pull factor for immigration (➡ [Chapter 4.6: Migration and displacement](#)). These tendencies may be observed in countries such as (➡ [Chapter 2.2.6](#)) [Germany](#), where the economy has been flourishing for years, unemployment and population numbers are declining and demand for skilled workers is rising. To ensure that they do not experience a shortage of skilled workers in the medium and long term, such countries can turn to immigrants or young people who have not yet been trained and offer them attractive educational or employment opportunities.

### Unfilled apprenticeships in Germany

Shortly before the start of the 2017 training year, there were still around 179,000 unfilled apprenticeships in Germany, according to the German Federal Employment Agency. In 2016 as well, every third company offering apprenticeships was unable to find suitable candidates to fill all of its training vacancies. Reasons for the shortfall include a low birth rate in the year in which potential trainees were born, the growing popularity of commercial and trade professions, increasing pursuit of academic studies and many companies' preference for more highly qualified trainees.

### How does population dynamics influence sustainable economic development and TVET?

With a high proportion of children and young people, it is particularly the world's poorest countries that have a rapidly growing number of potential workers. In the course of the demographic transition, this favourable age structure can prove useful for a growing economy. However, the extent to which it can actually be converted into a demographic dividend and benefit the national economy depends on whether the young people of working age can unlock their productive potential (➡ [Chapter 2.1: Global population trends](#)). For this to come about, a sufficient number of future-oriented training structures, educational programmes and employment opportunities are necessary.

In many countries, the number of new jobs generated is frequently not proportionate to growing demand. This gap between job supply and demand often results in many young people being un- or underemployed, taking up precarious work, or working under inhumane conditions. It is particularly difficult for these population groups to access financial products such as start-up loans to pursue potential business ideas and generate their own income.

The impact of population dynamics on the economy can be seen in national and regional data, disaggregated by age, sex and place of residence, concerning for instance labour market development, or internal and international migration (➡ [Chapter 3.2.1: Studies of single demographic aspects](#)). Gender-differentiated information on education and employment histories helps in equitably promoting academic and vocational education for both men and women. Particularly in developing countries, this can help to counter the trend of early marriage and pregnancy which reduces girls' and women's opportunities for education and paid employment (➡ [Chapter 4.1: Human rights and gender](#)).

### Young people in Egypt seek work

Egypt is the country with the largest population in the Arab world. Even though its current population growth of almost 2% will slowly decrease in the coming decades, the UN's *2017 World Population Prospects* anticipate that Egypt's population will grow by 1.5 to 2 million people per year between now and 2050. The Egyptian Ministry of Local Development reckons that currently up to two million jobs need to be created each year if young people are to be offered adequate prospects in their country.

### Additional information

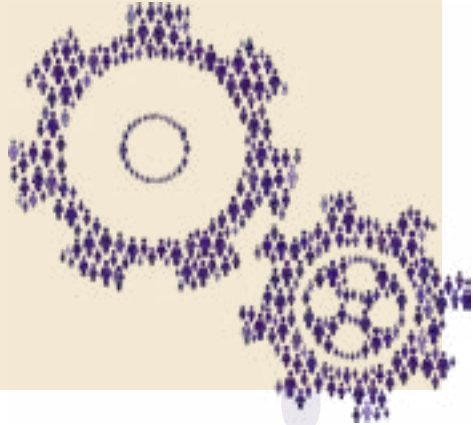
The International Labour Organization (ILO) provides data on the labour market situation in 230 countries.  
<http://www.ilo.org/ilostat/>

The ILO's *Inception Report for the Global Commission on the Future of Work* identifies megatrends for employment and the labour market.  
[http://www.ilo.org/global/topics/future-of-work/publications/WCMS\\_591502/lang--en/index.htm](http://www.ilo.org/global/topics/future-of-work/publications/WCMS_591502/lang--en/index.htm)



## Recommended action

- Adapt training infrastructure, educational measures and employment opportunities to growing demand in an age- and gender-appropriate manner so that young people, men and women have access to training opportunities and can participate actively in the labour market.
- Provide special support for young women's access to vocational training opportunities in order to promote their economic participation and self-reliance.
- Create jobs that pay a sufficient wage to enable workers to become consumers and contribute to the demographic dividend.
- Create an enabling environment for economic and employment policies, including through:
  - private sector development mechanisms
  - access to financial services
  - an active labour market policy, for instance with measures to integrate the unemployed.
- Identify employment potentials, based for example on labour market analyses of migrant worker trends and sectoral and socio-demographic employment patterns, in order to boost economic growth, productivity and tax revenue.
- Adjust training measures to demand in order to shape the future of employment, create prospects within the country and prevent economic emigration.



## 4.5 Social protection

Social protection systems can influence the birth rate and the life expectancy of a country's population. Conversely, each phase of the demographic transition poses new challenges for the mechanisms and systems that provide social protection. Adjustments are needed above all due to changes in age structure and emigration or immigration.

### How does social protection affect population dynamics?

Numerous children and an extensive family network are still the only social protection in many countries, for instance in the face of illness or old age. However, the population's increasing mobility between rural and urban areas, or even to other countries, is contributing to the gradual disintegration of these traditional family structures. Those left with no alternative safety net, particularly older people, have an increased risk of falling into poverty. The establishment of social protection systems prevents this and can guarantee basic security. Social protection systems thus provide an alternative to a large or extended family as the only form of social security.

Social protection systems also influence the population's life expectancy, particularly the span of healthy life expectancy. In the case of illness, having a social protection such as health insurance reduces for instance the financial barriers to healthcare access, thus promoting healthy ageing. By improving medical prevention and care, health

insurance can help reduce and shorten illness-related absences from work, and contribute to a longer working life. This can have a positive impact on the duration and magnitude of the demographic dividend. This ultimately benefits the entire economy, since with longer life expectancy, good health and employment people can save more and in retirement generate a so-called second demographic dividend with their private financial reserves (► [Chapter 2.1: Global population trends](#)).

Social protection systems can also reduce inequities in society. They help ensure that access to social services such as health, education and nutrition can be guaranteed for all, especially for disadvantaged population groups. Conversely, an inadequate or non-existent social protection system can encourage (► [Chapter 4.6](#)) migration and displacement.



## How does population dynamics influence social protection?

For many developing countries, the demographic transition – which paves the way for a demographic dividend – is still in the future. The demographic dividend is a window of accelerated economic growth in which the age structure of the population has changed, with the proportion of the working-age population significantly outweighing that of dependent children and the elderly. It is important that developing countries take advantage of this transition period to establish and expand social protection systems, particularly pension systems, to prepare in advance for the approaching ageing of their societies.

Social protection systems need to be continuously adapted to the population's age structure, with its associated challenges and changing needs. If the ratio of the working population to the non-working recipients of social benefits is reduced, tax revenue declines while expenditure on social benefits increases. Social insurance can also be affected by demographic changes. With an increasingly ageing population, in order to safeguard the sustainability of pay-as-you-go financed pension schemes, it may for instance be necessary to reduce benefits or to increase the retirement age or the amount of the pension premiums. However, in many partner countries of German development cooperation, a large number of people work in informal settings where no social contributions are paid. In these countries the social protection systems need to be aligned

## Expansion of social protection systems in South Korea

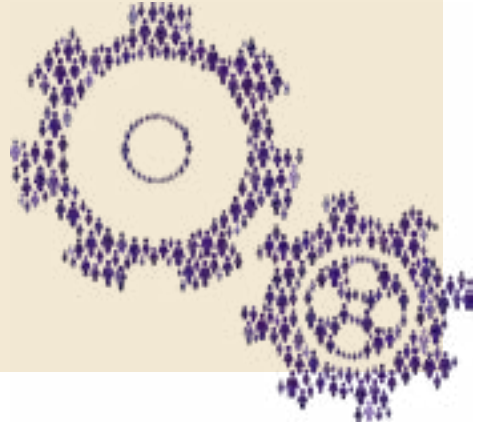
In 1997, South Korea was hit by the Asian financial crisis, while the country was in the middle of its demographic dividend. The demographic dividend is a one-time window of opportunity lasting between 30 and 50 years. If during this time a country does not invest in protecting against unemployment, old age or illness, there will be severe consequences, such as old-age impoverishment. In South Korea, ageing of society had already started before the year 2000, but an adequate social protection network did not yet exist. In the following years, faced with growing social unrest, the government expanded state social systems, establishing in particular mechanisms for old-age provision and social welfare.

with employment relations as well as with population trends.

As the elderly population increases, so does the recourse to health insurance and nursing care schemes, reflecting the growing need for medical services, treatment and long-term care. With the help of reliable, up-to-date and comprehensive population data, disaggregated by age, gender, and place of residence, local and national authorities can identify the needs of different population groups. This is vital in order to take these needs into account in policy planning and to ensure that social security systems meet minimum standards.

### Recommended action

- Expand access to (state) social protection systems so that family-based structures are not the only option.
- Use the favourable age structure during the demographic transition in order to establish and expand social protection systems.
- Provide social protection for the working-age population in order to promote healthy ageing and ensure that people are engaged in productive work for longer and can save more, so that at a later stage they can make a second demographic dividend possible.
- Use population data to plan social protection systems and prepare in advance for changing challenges and needs.



### Additional information

Cambodia launched its Identification of Poor Households Programme (IDPoor) to promote the country's socio-economic development. With support from German development cooperation, the programme routinely collects and publishes up-to-date data on households living in poverty. The government and NGOs use these data to implement their development activities. <http://www.idpoor.gov.kh/en/home>



## 4.6 Migration and displacement

Migration and displacement are global population trends that are interlinked with other demographic factors such as population size and age structure, both in the country of origin and in the host country of the migrants and refugees.

Whereas international migrants move abroad for a specified or indefinite period of time in order to work, study or join their family, internal migrants move within a country or region, for example from a rural area to a city. Individuals who are uprooted due to persecution, conflicts, generalised violence or serious human rights violations are displaced persons.

### How do migration and displacement affect population dynamics?

Migration and displacement lead to a geographic redistribution of the population. On the same order of magnitude, as population numbers decrease in the countries of origin, they increase in the host countries. This can have far-reaching – positive and negative – socio-economic consequences for both the sending and the receiving states. In countries where population segments emigrate or immigrate, the population may change in terms of its ethnic composition, but also its age, gender and social characteristics.

### More displaced persons than ever

The number of displaced persons has almost doubled since 1997. In its report *Global Trends: Forced Displacement in 2016*, UNHCR establishes that at the end of 2016, worldwide 65.6 million people were forcibly displaced (2015: 65.3 million), including 22.5 million international refugees (2015: 21.3 million), 2.8 million asylum seekers (2015: 3.2 million) and 40.3 million internally displaced persons (2015: 40.8 million).

The departure of a large number of professionals (brain drain) can have a negative impact on the social structure of the countries of origin, since those left behind are mainly elderly people and children, as for example in Eastern Europe and Central Asia. As a society ages, gaps in care can appear and economic productivity can decline (➡ [Chapter 4.7: Rural development and food and nutrition security](#)).

If international migrants maintain strong ties with their countries of origin, this can have positive impacts in these countries. For example, the diaspora can often contribute to an exchange of know-how and ideas (brain circulation) by transferring knowledge and experience or mobilising networks and contacts. Cash transfers (remittances) from migrants to their countries of origin



can also help boost the economy. In some countries, remittances represent a large portion of the gross domestic product (GDP).

*In 2016, according to the World Bank, Nepal, Kyrgyzstan and Haiti were the countries with the highest proportion of remittances worldwide, with cash transfers representing up to a third of GDP.*

*The World Bank: World Development Indicators*

food. A sharp increase in the population over a short period of time, for example, through large-scale displacements from neighbouring countries, can put a tremendous strain on a country's supply situation, its labour market and its political stability.

*Developing countries currently take in about 84% of all refugees worldwide.*

*UNHCR: Global Trends: Forced Displacement in 2016*

Particularly for economically weak host countries, transboundary migration and refugee movements present major additional challenges. These countries are often already struggling to provide their own citizens with healthcare, education, clean drinking water and sufficient

Supply bottlenecks and insufficient absorption capacities increase health and mortality risks, particularly for pregnant women, children and the elderly. According to UNFPA's *Humanitarian Action 2017 Overview*, 75% of the 125 million people who currently need

### Brain drain in the Republic of Moldova

The Moldovan population is not just ageing, it is also shrinking. Each year, mainly due to a lack of prospects on the domestic job market, many working-age Moldovans leave their home country. On the basis of census data from 2011, UNFPA's *Population Situation Analysis*

*in the Republic of Moldova* estimates that about one sixth of the population permanently lives abroad. As a result, around half a million working-age Moldovans are not available for the national labour market.

humanitarian aid worldwide are women and children. Particularly in refugee, conflict and disaster situations, many of them have very restricted, if any, access to basic sexual and reproductive health and rights services. These include modern family planning methods to prevent unintended and high-risk pregnancies as well as sex education and care for pregnant women, mothers, newborns and children (➡ Chapter 4.2: Health). Displacements have a serious impact on the mortality of mothers, infants and children, which in turn significantly reduces life expectancy of the overall population. Furthermore, in refugee situations gender-based violence occurs frequently and an increase in child marriages is also observed (➡ Chapter 4.1: Human rights and gender).

Internal migrants and internally displaced persons (IDPs) face a situation similar to that of international migrants and refugees. Here, too, host regions and local authorities frequently find it difficult to adapt to increasing demands while the regions of origin, which are frequently in rural areas,

are confronted with a decreasing population. Just as a disproportionate number of international migrants gravitate towards large cities, internal migrants and IDPs are also mainly attracted to urban areas as a place to settle or to stay for a limited time (➡ Chapter 4.8: Decentralisation and urban development).

In order to adjust policy-making to changes in the population's needs caused by migration or refugee movements, socio-demographic data – disaggregated for instance by age, sex, marital and education status – are very important. However, statistics on refugees are often unreliable because displaced persons may be denied official registration, may be documented several times at different locations, or host countries may not have the required capacities to register them. Migration statistics are also often incomplete due to circular migration flows or unregistered border crossings. A lack of clarity concerning the legal status of migrants and refugees also makes it more difficult to generate reliable data on them.

### Demographic impacts of the Syria crisis

As UNHCR's data portal *Syria Regional Refugee Response* shows, at the beginning of 2018 around 5.5 million Syrians were registered as refugees, most of them in Egypt, Jordan, Turkey, Lebanon and Iraq. Barely 8% (around 460,000 people) were housed in refugee camps in their host countries; by contrast over 90%

of refugees were distributed between cities, peri-urban and rural areas. At the beginning of 2018, 51.6% of all Syrian refugees were male, and 48.4% female. Some 49.2% were aged between 18 and 59 years, and about 47.7% were still minors.

### How does population dynamics influence migration and refugee movements?

The population dynamics of an individual country or even of an entire region can change the migration behaviour of nationals and non-nationals. Demographic factors such as strong population growth or a large youthful population can foster (distribution) conflicts and political instability, and thus constitute a 'push' factor for emigration movements. Instability is, however, not triggered by the demographic situation itself, but by the interaction of a number of additional factors such as a lack of jobs and future prospects for young people (► [Chapter 4.4: Sustainable economic development and technical and vocational education and training \(TVET\)](#)).

The countries of the Middle East and North Africa (MENA) region in particular face major challenges in this regard. It has the world's highest rate of youth unemployment, and the number of people of working

age increases each year by about 5 million, according to the [Berlin Institute for Population and Development](#).

While political instability and a lack of economic prospects provoke the emigration of young professionals in particular, nations with ageing societies must propose special incentives to attract immigrant workers, such as good career prospects and apprenticeships for young people. Immigration of professionals (brain gain) helps to compensate the decline in the population and in the workforce, thereby countering the ageing of society, which affects almost all European countries as well as Canada, the USA, Japan and South Korea.

### Protection: need versus entitlement

From a legal perspective, there is a significant difference between migrants and refugees – particularly IDPs – concerning their right to protection. The 1951 *Geneva Convention Relating to the Status of Refugees* does not apply to IDPs as they have not crossed an internationally recognised state border. The Convention also does not recognise as

refugees individuals who have been uprooted due to natural and environmental disasters. This means that people who flee from such disasters do not have the right to refugee protection under international law, either in their own country or in another host country (► [Chapter 4.9: Climate and resource utilisation](#)).

There are also demographic factors, such as urbanisation, which in fact foster a country's political stability and help promote immigration. However, cities must be able to provide adequate services for their inhabitants, including in rapidly growing informal settlements (➡ [Chapter 4.8: Decentralisation and urban development](#)). Furthermore, they must structure urban life so that it functions in an orderly manner and residents can both involve themselves and share in sustainable urban development.

*According to the Berlin Institute for Population and Development, many parts of the world will benefit from a stabilising effect once an urbanisation rate of around 70% has been reached.*

*Berlin Institute for Population and Development: Krisenregion MENA (conflict zones in the MENA region)*

### Additional information



The International Organization for Migration (IOM) supports the collection of migration data at the global and national levels and pools data on migration and international migration policy in the Migration Data Portal.

<http://gmdac.iom.int/migration-data-portal>

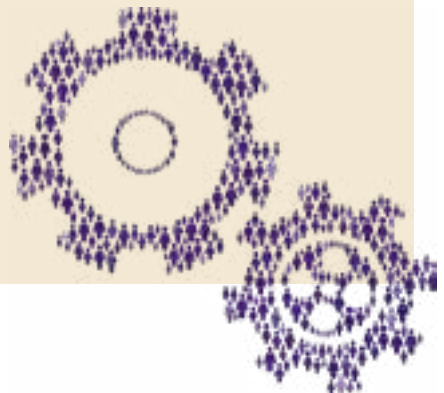
UNHCR routinely provides up-to-date information and statistics on major regional migration flows.

<https://data2.unhcr.org/en/situations>



## Recommended action

- Adjust social protection mechanisms and public infrastructure in countries of origin and host countries so that they can respond to changes in the population size and in the age, sex and social structure resulting from migration and refugee flows.
- Support the exchange of knowledge and ideas between countries of origin and host countries (brain circulation), for example to:
  - prevent brain drain
  - counteract a lack of skilled workers in specific sectors in the countries of origin
  - reinforce sustainable economic development processes
  - provide targeted support for beneficial worker mobility through training and labour market services.
- Provide targeted assistance for developing countries with high immigration rates and insufficient absorption capacities in order to prevent supply bottlenecks and health risks for the local population, as well as for the migrants and refugees.
- Expand infrastructure and services, particularly in cities, where population increase in the context of migration and displacement tends to be highest.
- Support access to basic health services, particularly for pregnant women, newborns and children, in order to curb rising mortality rates in refugee, conflict and disaster situations.
- Introduce measures to combat gender-based violence in the refugee context, such as sex education for young people and separate sanitary facilities for women and men, as well as night-time lighting in refugee camps.
- Create future prospects for young people in order to prevent political instability, social imbalance and economic emigration.
- Reinforce capacities to collect, analyse and use data on population flows, so that programme and policy design can take adequate account of how migration affects population distribution within the country, and to ensure transparency.



## 4.7 Rural development and food and nutrition security

Rural development is closely interlinked with population dynamics in developing countries, particularly in relation to urbanisation and population growth. These pose major challenges for rural development by changing the age structure in rural areas, making food shortages more pronounced and exacerbating already inadequate productivity. The result is poverty-driven migration to cities, which can, in turn, make rural development all the more difficult.

### How does rural development affect population dynamics?

The main demographic trend that can be observed concerning rural development is migration from rural to urban areas. In many countries it is primarily young people who move from the countryside into the cities (➡ Chapter 4.8: Decentralisation and urban development), hoping for better access to education and employment opportunities or better services, e.g. for healthcare. Further reasons for rural-urban migration include frequently inadequate agricultural productivity and a lack of alternative economic sectors, which make living conditions in rural areas difficult. Seed, irrigation systems and agricultural tools are often lacking, infrastructure is inadequate and climate change may be having a negative impact (➡ Chapter 4.9: Climate and resource utilisation).

Rural-urban migration fundamentally changes the age structure in rural areas – and in many countries also the sex structure. When potential workers migrate to cities, those left behind are frequently elderly people and children. In certain regions of the world, it is mostly young men who leave for the cities. If, as a result, it is mainly young women who are left behind and have to work in agriculture, these young women have less opportunity to attend school (➡ Chapter 4.3: Education). At the same time, there may be less incentive for the remaining population to become productive in agriculture if their family members who left for the city send them money or supplies.

Food insecurity among the population often reinforces pre-existing migration and urbanisation trends, but it can also be the root cause of (➡ Chapter 4.6) migration and displacement. Insufficient quantity and quality of food also have a direct impact on life expectancy and mortality.

According to the report *The State of Food Security and Nutrition in the World 2017* of the UN's Food and Agriculture Organization (FAO), in 2016 worldwide 815 million people were chronically malnourished. Of these, some 155 million were young children affected by stunting (too short for their age), while 52 million were endangered by wasting (acute undernourishment). Food and nutrition security is crucial for pregnant women and their babies from the

start of pregnancy to the age of two (known as the '1,000-day window') to ensure their (► Chapter 4.2) health and development. During this period, it is not only the quantity, but above all the quality and balanced nature of the diet that are vital. An insufficient supply of essential micronutrients is one of the key causes of high mortality, especially among children under five.

*Malnutrition contributes to nearly half of all deaths in children under five. A high rate of child mortality contributes to high birth rates, since couples often have many children in order to secure their livelihood.*

UNICEF Data: Malnutrition. Current Status + Progress

### How does population dynamics influence rural development?

To keep up with world population growth, by 2050 global food production must rise by 70%, concludes the World Resources Institute in its 2014 report *Creating a Sustainable Food Future*. Due to rapid urbanisation this higher demand becomes a major challenge, since the increase and expansion of urban agglomerations result in a loss of agricultural land in the surrounding countryside and can give rise to conflicts over land use. At the same time, in

many places population growth also leads to a reduction of per capita agricultural area, since dividing up inherited land results in its uneconomic fragmentation into ever-smaller parcels.

Efficient and sustainable agriculture requires young, well-trained workers. However, in many countries young people are migrating in large numbers to cities and very few return after training. Rural areas, and particularly the agricultural sector, must therefore once again become more attractive for the young generation.

Rural-urban migration, particularly of people of reproductive age, leads to a reduction in the number of births in rural areas, even if the rural birth rate remains constant. In the medium term, this rural exodus can also affect the national birth rate, since experience shows that people in urban areas have significantly fewer children than in rural areas (► Chapter 4.8: Decentralisation and urban development). In the very long term, it is possible that a fall in the nationwide birth rate as well as in the number of births in rural areas may help relieve pressure on the supply situation in rural areas.

In order to analyse population profiles and migration flows in rural areas, and specifically to be able to compare crop yields and food requirements in relation to a population that is growing rapidly in many places, demographic and agricultural data are required. In the long term, strengthening municipal structures and (► Chapter 5.3) civil registration and vital statistics (CRVS) in rural areas will provide better population data for planning.

These data will also help in developing rural infrastructure in function of need and in clarifying land tenure issues.

Reliable data and strengthened local administrative structures also provide a basis for preparing joint regional development strategies for rural areas and the small and medium-sized cities in their environment. Integrated development planning for a city and its surrounding countryside can have a positive effect on the economic and social development of the rural areas, allowing them for instance to play complementary roles and counter a potential urban-rural divide.

### Additional information



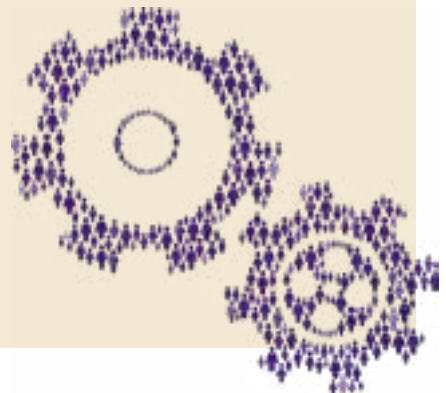
FAO and UNFPA provide support for population and agricultural censuses. The organisations recommend coordinating both censuses and effectively integrating agricultural data into population censuses. <http://www.fao.org/docrep/015/i2680e/i2680e00.htm>





## Recommended action

- Increase agricultural productivity in a sustainable and environmentally sound manner in order to safeguard the population's food and nutrition in the long term, e.g. by:
  - maintaining productive workers in rural areas
  - finding technical solutions to increase productivity
  - establishing a sustainable resource management system
  - implementing measures to address the impacts of climate change.
- Improve agricultural production so as to fulfil the population's nutritional needs, e.g. by:
  - diversifying agricultural production
  - designing nutrition-sensitive value chains and nutrition systems.
- Transfer knowledge and raise awareness of the importance of a balanced diet in order to improve the health of the rural population, particularly that of pregnant women and children.
- Increase the attractiveness of rural areas in order to prevent migration – particularly of young people – and bring innovation to rural areas, for instance by:
  - Expanding service and supply infrastructure (e.g. schools, health centres, electricity, water, mobile phone network and internet)
  - providing social security mechanisms, for example in the case of crop failure or illness
  - providing targeted support for small and medium-sized cities and their trade and traffic networks as well as their contacts with surrounding areas
  - expanding employment options in rural areas, both within and outside of agriculture.
- Increase the involvement of older members of the population in rural development programmes and provide them support, e.g. through:
  - social protection mechanisms
  - improved access to productive resources, particularly for women.
- Improve data collection in rural areas to enable planning based on population data, and strengthen municipal structures as decision-makers.



## 4.8 Decentralisation and urban development

Growing urbanisation is associated with increasing life expectancy and falling birth rates, particularly when compared with population trends in rural regions. However, there are great discrepancies within urban agglomerations, as all city-dwellers are far from having equal access, for instance, to local service and supply infrastructure. In order to ensure equity, and make local planning evidence-based, municipal authorities must refer to disaggregated population data and adapt to demographic changes.

### How do decentralisation and urban development affect population dynamics?

Increasing urbanisation is a global population trend that is closely associated with a society's social and economic development and that additionally influences a range of further demographic factors. For example, worldwide, in all urban areas the birth rate is lower than in rural areas. Life expectancy as a rule is also higher in urban areas. Both of these developments are conditioned by the broader options available to city-dwellers, compared with their rural counterparts.

### Comparative birth rates

The findings of a study conducted by the Overseas Development Institute in 2016, which evaluates DHS results from 66 developing countries, show that women in rural areas tend to have on average 1.5 children more than women in urban areas. The lower fertility trend in cities maintains itself despite increasing influx from rural areas of people of reproductive age.

These options include more education and employment opportunities, particularly for women (➡ [Chapter 4.3: Education](#)), greater gender equity (➡ [Chapter 4.1: Human rights and gender](#)) and more comprehensive healthcare (➡ [Chapter 4.2: Health](#)). Cities also offer more opportunities for political and economic participation and as economic centres act as hubs for trade and transport including across national boundaries. From this perspective, urbanisation can have a positive impact on a potential demographic dividend (➡ [Chapter 2.1: Global population trends](#)).

### Literacy rates are higher in Indian cities than in rural areas

According to a 2014 national education survey in India, the literacy rate in urban areas (86%) was 15% higher than in the countryside (71%). The 2011 Indian census indicates that the education gap between urban and rural women was almost twice as high as for men.

There are, however, still important discrepancies within urban agglomerations. In a situation of fast-paced and uncontrolled urbanisation and inadequate policy planning, infrastructure is often unable to keep up with the growing needs of the population. The result can be large undersupplied urban areas where part of the population is living under precarious conditions. Data confirm that both mortality and birth rates remain high in these areas.

### Many people still live in urban slums

In developing countries in 2014, about 30% of their urban population lived in slums, and in sub-Saharan Africa, the average was even 56%, as indicated by the 2016 World Cities Report of the United Nations Human Settlements Programme (UN HABITAT). In certain countries, this applies to practically the entire urban population: for instance, in South Sudan, the figure is 95.6%, in the Central African Republic 93.3%, in Sudan 91.6% and in Chad 88.2%.

Between 1990 and 2014, the ratio of slum dwellers to the urban population in developing countries fell by more than 15%. However, since the population of towns and cities has grown significantly overall, the absolute number of slum dwellers has simultaneously also increased by some 200 million.

*In Bangladesh in 2009, the under-five mortality rate in slums was 79% higher than in the rest of the city and 44% higher than in rural areas.*

*UNICEF: The State of the World's Children 2012*

### **How does population dynamics influence decentralisation and urban development?**

Despite the improved options that urban living can offer, inequities are far more pronounced among city dwellers than in rural regions. While in rural areas inequity is due to excessive distance from services, in urban areas it is caused primarily by financial barriers to access. As in rural areas, the issue of food and nutrition security plays an important role for the urban poor (➡ [Chapter 4.7: Rural development and food and nutrition security](#)). However, unlike for their rural counterparts, the determining factor for urban dwellers' food security is whether or not they have cash. Households living in extreme poverty in the urban areas of developing countries use more than 50% of their available resources for food, according to the World Bank's 2012 *Global Monitoring Report*. The need to buy food rather than being able to grow it makes the urban population, especially women, particularly vulnerable to income and food price shocks. The consequences are food and nutrition

insecurity as well as undernourishment and malnutrition. Therefore strategies for the integrated development of cities and their rural surroundings are advantageous for reducing supply bottlenecks and barriers to access for both the urban and the rural population.

For policy makers and administrators to be able to prepare themselves for the growth and expansion of urban agglomerations and the consequent changes in needs, locally collected data are required. Demographic information, e.g. on birth rates, emigration and immigration, as well as on changes in the age structure, is of vital importance for policy planning. Such a solid database can, for example, enable structurally weak regions to benefit from special economic promotion measures, or disadvantaged population segments to receive targeted support (➡ [Chapter 3.2.3: Data collection and analysis](#)).

In countries where internal mobility is high, locally collected data are particularly relevant for decentralised administrations. Municipalities and provinces can respond more directly to local and regional developments than can the national level. On the other hand, often data collected at the local level – due to inadequate capacities or coordination – are not fully or consistently compiled at the national level. For the registration of births and deaths in particular, health institutions must work closely with municipal administrations (➡ [Chapter 5.3: Civil registration and vital statistics \(CRVS\)](#)). This is also the case when compiling voter lists, conducting population surveys and for the national census (➡ [Chapter 5.2: Data sources](#)).

### Recommended action

- Focus on rapidly growing urban areas that are difficult of access so that their inhabitants living in poverty are not left behind, for example by:
  - expanding the range of services such as education and health facilities
  - expanding urban infrastructure such as public transport, water and electricity supply, and sewerage and waste management.
- Encourage the preparation and implementation of national urban development policies, to promote a sustainable and balanced urbanisation and regional development.
- Provide particular support to small and medium-sized towns to achieve sustainable growth in harmony with their surrounding countryside and to prevention development of slums in the growing cities.
- Promote integrated development of cities and their surrounding areas in order to improve prospects for the population beyond political and administrative boundaries and to make use of interfaces, e.g. by:
  - implementing joint infrastructure plans for mobility and social services
  - coordinating production and purchase of agricultural produce.
- Establish and expand the registration of births, deaths and marriages and promote the use of population data in the context of decentralisation and urban development.

### Additional information

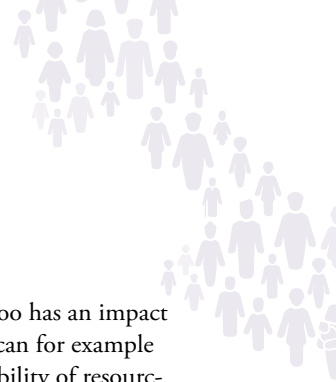
The UN Population Division routinely publishes data on global and national urbanisation trends in its World Urbanization Prospects.

<https://esa.un.org/unpd/wup/>

UN HABITAT publishes data on the development of countries and cities.

<http://urbandata.unhabitat.org/>





## 4.9 Climate and resource utilisation

The increasing frequency and intensity of extreme weather events and the impact of gradual climate change and the associated consequences pose a threat to humanity. The livelihoods of population groups living in poverty are at particular risk because of their limited resilience. At the same time, population growth has an impact on CO<sub>2</sub> emissions and on the use of resources. The determining factor here is above all a society's production and consumer behaviour – especially its increasing transport mobility.

### How do climate and the use of resources affect population dynamics?

The effects of climate change are increasingly modifying people's living conditions, and thus also influence population dynamics. The consequences of climate change are particularly severe in economically poorer regions of the world where people already have only limited access to natural resources, and the population is growing. Extreme weather events such as storms, droughts, flooding or landslides threaten the life and health of many people, lead to crop failure, and thus exacerbate or even cause food and nutrition insecurity and water shortages (➔ [Chapter 4.7: Rural development and food and nutrition security](#)).

Gradual climate change too has an impact on people's habitat. This can for example restrict the use and availability of resources, for instance when rising sea levels make soil and groundwater too salty to use. Gradual climate change can also lead to increased expansion of disease vectors such as mosquitoes, allowing infectious diseases such as malaria or dengue fever to spread or shift to new geographical areas. The consequence is an increased burden of disease and rising mortality, particularly among less resilient groups such as children, pregnant women, the elderly and people living in poverty (➔ [Chapter 4.2: Health](#)).

In certain regions the consequences of climate change intensify (➔ [Chapter 4.6](#)) [migration and displacement](#). Some impacts, such as rising sea levels, can so severely restrict living conditions that there is no other option but a planned relocation. Long-term climate changes, such as a shift or suspension of rainy seasons, can have a negative impact on agriculture and, as a result, on the food and nutrition security and income of smallholder farmers, thus becoming a push factor for emigration movements. As the risk of extreme weather events will continue to escalate, migration movements in certain regions of the world are expected to increase significantly. The Internal Displacement Monitoring Centre estimates that an average of 25.3 million people – most of whom live in Asia – have been internally

### *El Niño*

The impacts of *El Niño* – a climate phenomenon that occurs every two to seven years due to fluctuating ocean currents in the Pacific – are complex and affect populations' size and spatial distribution. Climate change is exacerbating these impacts. The World Meteorological Organization (WMO) estimates that in 1997 and 1998 *El Niño* was responsible for the deaths of around 24,000 people worldwide. According to the European Space Agency (ESA), a series of forest fires

in Malaysia, Indonesia, Borneo and Papua New Guinea that occurred during this time following large-scale drought caused by *El Niño*, unleashed CO<sub>2</sub> emissions representing up to 40% of the global emissions from fossil fuels. The FAO anticipated that in 2017, as a result of *El Niño*, around 40 million out of the 300 million inhabitants of the 15 southernmost countries of Africa would face food insecurity.

displaced each year since 2008 due to natural disasters.<sup>6</sup>

When inhabitants of rural areas are affected by the consequences of climate change, they frequently migrate to cities. However, cities are often also exposed to climate risks, and consequently are not fully protected habitats either.

In addition to people who are temporarily away from home, there are 'trapped populations' who are unable to migrate, for example, because they live on an island or in remote regions on the mainland, are

not mobile or have no contact person in the city. These population groups are often particularly vulnerable to the consequences of climate change.

For certain regions climate change also brings advantages. These can include increased fishing yields, fewer hurricanes and temporarily higher rainfall in otherwise very arid areas, such as Eritrea, Uganda and South Sudan, which thus benefited from *El Niño* in 2015 and 2016. Ultimately however, the few advantages of climate change are far outweighed by the many negative impacts.

<sup>6</sup> These natural disasters include both events caused by climate change and geophysical events such as earthquakes and volcano eruptions, which are not caused by climate change. The number of IDPs probably also includes multiple documentation of individuals who have been displaced more than once within a year.



## How does population dynamics influence climate and resource utilisation?

What quantity of additional natural resources will be used by an expanding population, depends on their consumer behaviour, their technological level and the resource-intensiveness of their economic production. Conversely, reducing population growth does not necessarily mean that fewer resources will be used. On the contrary: often slower population growth is associated with economic growth and a higher standard of living that result in an increased use of resources. This is reflected in the fact that a smaller percentage of the world's population still consumes a disproportionately large share of global resources.

Increasing urbanisation also causes higher resource consumption. This is evident not just in greater water and energy use but

also in increased waste generation and air pollution. Furthermore, in many places the drastic expansion of human infrastructure and sealing over of soil leads to the fragmentation of existing ecosystems, with catastrophic consequences for local flora and fauna. All of this has a negative impact on the climate (➡ [Chapter 4.8: Decentralisation and urban development](#)).

Resource use also often changes in urban areas. For example, to ensure water supply, cities with high population density need pipe connections or water kiosks, while the rural population draws water from wells and natural watercourses. In rapidly growing urban slums the burgeoning demand for resources is a major problem. Data on local and regional population trends provide a good basis for identifying current requirements (➡ [Chapter 3.2.3: Data collection and analysis](#)).

## Our ecological footprint

The global population is already consuming far more natural resources than the Earth can regenerate, as revealed by the work of the Global Footprint Network. The ecological footprint – which represents the amount of land required to provide the natural resources needed to sustain a certain lifestyle – is unevenly distributed. In 2017, Germany's Earth Overshoot Day was already the 24th of April. If all people on the planet consumed resources at the same rate as the people of Germany, humanity

would exhaust all resources that Earth can regenerate naturally within a year by this date. Statistically speaking, a global demand for natural resources at the German rate would require 3.4 Earths to make this level of consumption possible. By contrast, if all people on the planet consumed at the rate of Bangladesh, with a population of over 160 million – more than twice that of Germany – they would need just 0.3 Earths to sustain their consumption.



Changes in consumer behaviour are also interlinked with the demographic transition (► [Chapter 2.1: Global population trends](#)) and with the associated change in societies' age structure. Whereas societies that are ageing or have already greatly aged are reducing their CO<sub>2</sub> emissions – for instance because they are less mobile – these emissions are just starting to accelerate in many developing countries and emerging economies, with their large proportion of young people and a rapidly expanding middle class. As productive workers and at the same time consumers, these young people are galvanising the economy. The downside

of the demographic dividend is a higher demand for resources.



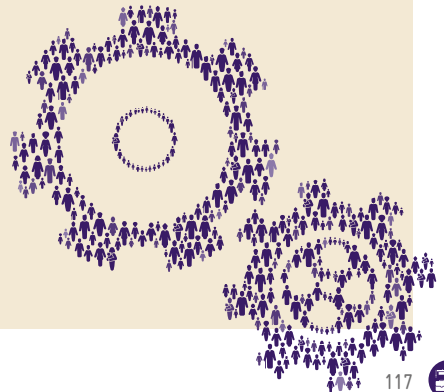
### Additional information

The Climate Fairshares Initiative compares the CO<sub>2</sub> emissions of individual countries in relation to the United Nations Framework Convention on Climate Change (UNFCCC).

<http://www.climatefairshares.org/tables>

### Recommended action

- Implement a comprehensive climate risk management system, for example, using risk transfer mechanisms such as crop insurance to protect poor and vulnerable population groups who are most affected by the impacts of climate change, and to relieve the pressure to migrate.
- Support the sustainable use of resources through the targeted promotion of innovative and holistic concepts for resource-friendly and CO<sub>2</sub>-neutral production and mobility.
- Shape the demographic dividend so that the concept of sustainability is an integral component of the economic upswing, for example through support for ecologically responsible (green) growth.
- Improve the data basis on the consequences of climate change and on local and regional population trends as an efficient early warning system so that countries, regions and municipalities are better able to identify particularly endangered and vulnerable population groups and to prepare in advance for possible negative impacts.



## 4.10 Supplement: Religion and population dynamics

Projected global population growth will also mean a probable rise in the number of people who have an affiliation to a religious community or to a religious-spiritual tradition. However, due to diverse regional and demographic developments, this will not concern all religions to the same extent. In its study *The Changing Global Religious Landscape*, the Pew Research Center determined that in 2010, 84% of the world's population – some 5.8 billion people – felt that they belonged to a religious community. The largest proportion (2.2 billion) said they were Christians, followed by 1.6 billion Muslims and 1 billion Hindus. The religious groups vary greatly in terms of their geographic distribution: While the majority of Hindus, Muslims and Buddhists are to be found in Asia, Christians are fairly evenly distributed across Europe, Latin America, the Caribbean, sub-Saharan Africa and – to a somewhat lesser extent – Asia and North America.

The religions also vary in terms of the average age and birth rates of their members, whereby followers of Islam have the highest birth rate and the lowest median age. These factors together lead to the prognosis that by 2050, the absolute numbers of Christians and Muslims will be approximately equal. With higher population growth in regions of strong religious affiliation, the number of atheists and agnostics will decline from a global perspective. In the industrialised countries of Europe and North America, where population numbers are falling and the number of

people with a religious affiliation is likewise declining, the number of Christians will also drop. In 2050, because of its rapidly growing population, about 40% of all Christians will live in sub-Saharan Africa. In absolute terms, the largest population increase will continue to be in Asia. This will also contribute to a rise in the proportion of Muslims and, as a result, by 2050 India is expected to have the world's largest number of Muslims. Over the same time period, the proportion of Buddhists in the world population will drop slightly, while the percentage of Jews and Hindus will remain constant.

*In 2050, there are expected to be as many Muslims as Christians worldwide, with each group accounting for about 30% of the global population.*

*Pew Research Center: The Changing Global Religious Landscape*

One question that frequently arises in both academic and public debate concerns the possible influence of religion on birth rates, and therefore on population dynamics. A fundamental observation is that – contrary to appearances – the relationship is not causal,

but influenced above all by the respective context. For example, fertility in Europe first started to decline primarily in the strongly Catholic regions of France. On the other hand, in Québec (Canada) and in Ireland, Catholicism is regarded as a factor in birth rates' not dropping until later.

Therefore, rather than asking whether religious affiliation affects birth rates, a far more important question concerns the conditions under which this happens. According to a study in the journal *Population and Development Review*, three key aspects are relevant: the religious teachings, the status of religious institutions within the society and the characteristics of the religion in question.

It is important first of all to look at the position of the respective religious teachings on issues that are directly related to birth rates. For example, both the Roman Catholic Church and Orthodox Judaism regard the use of modern contraceptives as unacceptable. Islamic teachings and traditions are less explicit on this topic, but generally condone the use of family planning methods. However, when surveyed, many Muslims state that they do not use contraceptives for religious reasons. Hindu and Buddhist teachings do not provide concrete guidelines on this subject.

The scientific community agrees that religious teachings and associated traditions alone are not enough to prove or explain any influence of religion on fertility. The birth rates in societies that adhere to the same religion are too diverse. For this reason, scholars conclude that it is more important to take into account the

status of religious institutions in a community's social and economic landscape. The characteristics of the religion in question are another key factor: Is the religious affiliation primarily just on paper, or does it play a significant role in daily life and for personal decision-making?

The status of the (extended) family, the minimum age for marriage, polygamy, the possibility of remarrying after divorce or following the death of a spouse and the roles of men and women are issues that tend to have an indirect influence on the birth rate, and on which the respective religions hold different positions. Scholars have differing views on whether or not religion influences gender equality. A number of studies argue that socio-cultural factors other than religious affiliation play a more important role for the status of women in society.

It can be concluded that religion in itself does not have a decisive influence on birth rates. Religious influence will not necessarily lead to higher fertility, even if this is the general tendency. The conservative Islamic Republic of Iran provides an interesting example. In addition to economic factors and education initiatives, Islamic leaders, by promoting family planning and use of contraceptives, played a key role in the reduction of the birth rate from 5.6 children per woman in 1986 to 1.7 in 2015.

## Family planning in Egypt and the role of Islam

Due to its high birth rate, particularly in rural areas, Egypt's population could reach 128 million by 2030. The Minister of Health therefore launched Operation Lifeline, which deploys 12,000 family planning advocates in 18 rural provinces. The health ministry also runs nearly 6,000 clinics where women get free examinations and counselling and obtain subsidised contraceptives.

Some population groups object to family planning, referring especially to the assumption that Islam prohibits people from themselves determining how many children they will have. The Al-Azhar University, one of Sunni Islam's most influential authorities, refuted this assumption and issued a fatwa – a ruling on a point of Islamic law – that states that family planning does not contradict Islamic teachings.

## International Partnership on Religion and Sustainable Development (PaRD)

The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH assumes the secretariat function of the multi-stakeholder partnership PaRD, which is based on an initiative by the German Federal Ministry for Economic Cooperation and Development (BMZ). PaRD promotes strategic cooperation between bilateral and multilateral institutions and religious actors focusing on SDG 17. Key themes include good gover-

nance (SDG 3), gender equality (SDG 5) and peace, justice and strong institutions (SDG 16). PaRD aims to provide a framework for exchange between multilateral organisations, governmental institutions of German development cooperation and civil society actors, including among others faith-based organisations, which are particularly relevant for PaRD.

[www.pard.international](http://www.pard.international)



### Example from Burundi:

#### Raising awareness among religious actors for population dynamics and family planning

In the strongly religious country of Burundi, where more than 80% of the population is Christian, religious institutions and actors exert a strong influence over the way people think and behave. To date, most religious leaders refuse to take part in awareness-raising measures related to sexual health and family planning.

The international, interdenominational working group Dialogue with Religious Leaders

seeks to dismantle mutual prejudices on SRHR among religious and lay actors in Burundi. It became apparent in this context that local religious actors are strongly interested in a values-oriented dialogue and in cooperation with development projects. Training to improve technical know-how and scientific studies on the effectiveness of 'natural' contraceptive methods offer opportunities for future cooperation in this field.



### Additional information

The US-based think tank Pew Research Center, which conducts social science research, uses demographic data and projections to analyse global religious trends.

<http://www.pewforum.org/2015/04/02/religious-projections-2010-2050/>





## 5 Population data

Demographic data provide information on birth and death rates and consequently on population trends in a country. They also reflect the population structure, including age, sex and other characteristics, and supply information on population distribution and density in various regions, urbanisation trends or international migration. Demographic data are therefore an important basis for any country's policy planning.

Population data are also required by the international community to measure development progress. Despite considerable efforts to improve the data situation, there continue to be major data gaps that make it difficult to get a clear picture of what has been achieved. For example, in monitoring the Millennium Development Goals (MDGs), for each five-year measurement period no more than 70% of the required data were available, as revealed in the 2014 report *A World that Counts. Mobilising the Data Revolution for Sustainable Development* prepared by the Independent Expert Advisory Group on a Data Revolution for Sustainable Development. A large part of these data were based on estimates and projections.

(➡ Chapter 5.6) **Monitoring the 2030 Agenda** is many times more vast and complex. This will require even more and, above all, better (➡ Chapter 5.2) **data sources**. In its partner countries, German development cooperation, together with other (➡ Chapter 5.1) **key actors in the field of data collection and analysis**, is therefore increasingly supporting the development of national data systems, particularly the reinforcement of (➡ Chapter 5.3) **civil registration and vital statistics (CRVS)** systems. Meanwhile, international donors continue to support one-time data collections as well as the promotion of (➡ Chapter 5.5) **data literacy**.

Development organisations and governments around the world are calling for a data revolution. Advances in (➡ Chapter 5.4) **digitisation** contribute to this in many ways. Digitisation can ensure rapid availability, greater reliability, and immediate accessibility of data – both for national and decentralised authorities, as well as for civil society and the general public. Key issues in this regard are accountability and data security. This chapter provides a wide range of background information on the topic of population data and concludes with practical (➡ Chapter 5.7) **tips for supporting data systems**.

## 5.1 Key actors in the field of data collection and analysis

### Multilateral actors

Key multilateral actors engaged in improving (➔ Chapter 3.2.3) data collection and analysis include the United Nations Population Fund (UNFPA), the United Nations Population Division within the United Nations Department of Economic and Social Affairs (UN DESA), and the United Nations Statistics Division (UNSD). Further actors include the World Bank and the United Nations Children's Fund (UNICEF).

- **UNFPA** provides financial and technical support to more than 150 developing and emerging countries for the collection and analysis of demographic data. It also advises national partners on how they can better integrate data and analyses into their sectoral and cross-sectoral development plans. To this end, the Fund prepares extensive situation analyses on population development in many countries, that also include policy recommendations for sustainable planning of the demographic transition, thus supporting evidence-based policy design.
- The **United Nations Population Division** regularly prepares demographic projections for monitoring global development and as a frame of reference for public debate. It also hosts the secretariat of the Commission on Population and Development (CPD) and supports many countries in analysing demographic data and trends.
- **UNSD** is the UN's global statistics division. Its tasks include collecting data, producing statistics and disseminating knowledge on demographic and social issues. It sets standards for population statistics, indicators and collection methods. It also supports national statistics authorities in collecting data. For example, UNSD launched the 2020 World Population and Housing Census Programme and supports the establishment of CRVS systems in developing countries, in addition to supporting specific surveys such as the Demographic and Health Survey (DHS) (➔ Chapter 5.2: Data sources). On the basis of census data, it publishes the annual Demographic Yearbook. Its Population and Vital Statistics Report compares worldwide developments in global life expectancy as well as birth and death rates. UNSD also helps developing countries to produce their own reports on population statistics.
- The **World Bank** supports efforts worldwide to collect and process demographic data, for instance to improve the measurability of indicators for population development such as child and maternal mortality and life expectancy at birth, to calculate values



such as per capita income and poverty development and to monitor the implementation of the global development goals.

- **UNICEF** is engaged in efforts to increase registration of children and improve (➡ [Chapter 5.3](#)) [civil registration and vital statistics \(CRVS\)](#). It places particular emphasis on the issuing of birth certificates, which help children exercise their individual rights and which protect them from rights violations such as child marriage. For this purpose, UNICEF raises awareness,

facilitates coordination among global partners and provides technical and financial support for partner countries. Its technical advice targets the national level, particularly concerning (digital) birth registration, but also the regional and municipal levels. UNICEF pays particular attention to children of marginalised population groups and in humanitarian crisis situations. It also promotes specific household surveys such as the [Multiple Indicator Cluster Survey \(MICS\)](#) (➡ [Chapter 5.2: Data sources](#)).

### Official development assistance (ODA) for data promotion

According to the [Creditor Reporting System \(CRS\)](#) of the [Organisation for Economic Co-operation and Development \(OECD\)](#), USD 254.5 million in official development assistance (ODA) was pledged in the area of population policy in 2016 under 'Population policy and administrative management' (CRS code: 13010). USD 75.4 million of these funds came from member states of the OECD Development Assistance Committee (OECD-DAC) and USD 179.1 million from multilateral actors. The highest amount (USD 37.9 million) was pledged by the USA, followed by Italy (USD 12.3 million) and the Netherlands (USD 9.9 million). Germany pledged USD 0.8 million.

Measures in this area are intended not only to promote the collection of population data and statistics, but also to include demographic research and analysis.

The promotion of statistics systems is also provided for under other OECD categories such as 'Government and civil society' and 'Other social infrastructure and services'. The total amount pledged under 'Statistical capacity building' (CRS code: 16062) in 2016 was USD 119.7 million, USD 44.5 million of which was pledged by OECD-DAC member states and USD 75.2 million by multilateral actors. Germany pledged USD 72,000.

## Bilateral actors

Bilateral donors are engaged in various priority areas:

- The **Netherlands** supports measures to promote sexual and reproductive health and rights in many partner countries. Some of these projects also support activities on use of demographic data.
- The **USA** supports many countries with financial assistance for the collection of data through censuses and DHS, while technical advisory services are primarily provided by private sector development cooperation institutions such as Macro (part of ICF International since 2011) and John Snow International.
- The **United Kingdom** finances demographic research projects in cooperation with civil society, academia and the private sector. Through its Global Open Knowledge Hub, the United Kingdom provides its cooperation partners access to data and research studies.
- **Canada** supports the establishment of CRVS systems in partner countries as part of the Muskoka Initiative and the Global Financing Facility in support of Every Woman Every Child (GFF). The interdisciplinary Centre of Excellence for Civil Registration and Vital Statistics Systems (CoE), which is supported by GFF, is based at the International Development Research Centre (IDRC) in Ottawa.
- **France** supports the establishment and expansion of statistical systems, including the collection and processing of demographic data, primarily in French-speaking Africa.
- **Norway** supports research on the links between poverty, economic growth, cultural influences, reproductive health and population dynamics, with a focus on sub-Saharan Africa, through the programme Norway-Global Partner (NORGLOBAL). Statistics Norway, the national statistical institute, is also involved in development policy, with a focus on the collection and analysis of population statistics.



## International and civil society networks

Various **international networks** promote compliance with quality standards in data collection and analyse population data. The key actors in this context are the International Union for the Scientific Study of Population (IUSSP), which advises the UN, numerous donors and developing countries, and the Partnership in Statistics for Development in the 21<sup>st</sup> Century (PARIS21), which supports the development of statistical capacities in low- and middle-income countries. This network of statistics experts, policy makers and development cooperation practitioners helps developing countries to better plan and expand their national statistics systems.

**International NGOs** such as the Population Reference Bureau (PRB), the Population Council and the global INDEPTH Network prepare demographic data for policy makers and the general public. A global database of household surveys is maintained by the International Household Survey Network (IHSN).

## Regional actors

The **UN Regional Commissions and regional development banks** also support the collection and analysis of demographic data, particularly the development and optimisation of CRVS systems. In addition, **regional statistical institutes, university networks and NGOs** such as the African Institute for Development Policy compile trend analyses and promote their use in policy design. EUROSTAT strengthens statistical systems in the European Union (EU) and in certain partner countries.

## National institutions

In the partner countries of German development cooperation, national **statistics offices**, which are responsible for collecting demographic data, often operate under the supervision of the ministries of planning. The equivalent structure in Germany is the Federal Statistical Office (Destatis), a subordinate authority of the Federal Ministry of the Interior, Building and Community (BMI). Line ministries and other institu-

tions also collect data with support from donors. The analysis of population data and formulation on this basis of policy recommendations is usually the responsibility of **population commissions or councils** or similar institutions that likewise are often under the ministry of planning. In Germany, this is the responsibility of the Federal Institute for Population Research (BiB), which is another subordinate authority of the BMI.

In many partner countries of German development cooperation, the responsible institutions need reinforcement of their capacities to coordinate and standardise demographic data collection. In many cases, they can provide policy makers only limited amounts of processed data, they often have only estimated values to refer to, and are rarely able to produce more in-depth analyses (➡ [Chapter 3.2.4: Support for national institutions](#)).



## 5.2 Data sources

Various data sources such as censuses, routine data systems and household surveys provide statistical information on the population of a country. This is collected using a variety of methods such as oral interviews, written questionnaires and the transfer of data from population registers. Demographic data always originate in the respective country itself, which then usually makes them available to international organisations such as the UN Population Division. By processing the data in accordance with international standards and publishing them, governments and international organisations create transparency and comparability. This also makes possible the analysis of (➔ Chapter 2) **global and regional population trends**.

### Censuses

The UN recommends conducting a national census every 10 years. Many of German development cooperation's partner countries follow this recommendation; in some cases, it is even enshrined in their constitutions. There are very few countries that have not carried out a census in the last 30 years.

Most developing countries and their national statistics offices receive financial and technical support, particularly from UNFPA, to help them carry out a census. Multilateral institutions such as the United Nations Development Programme (UNDP), UNICEF, the African Union (AU) and the European Union (EU), as well as many bilateral donors

– including Germany and the USA – also support censuses in their partner countries (➔ Chapter 3.2.4: **Support for national institutions**).

A census is a unique source of information, providing as it does valuable data on population size, structure and distribution, broken down to the smallest geographical and statistical unit. Census data can be used to prepare projections and to expand on and verify data from smaller-scale surveys. German development cooperation too designs its projects on the basis of census data. However, censuses provide only a snapshot at a given point in time and are very expensive. They usually take around two to three years to prepare and implement. Costs vary depending on the country's size and infrastructure. The 2017 census in Mozambique, which has a population of around 30 million, cost an estimated USD 75 million according to press reports. In Ethiopia, with some 105 million inhabitants, the cost of the census (that likewise started in 2017) is estimated at USD 123 million.

In the long intervals between censuses, attempts are made to meet the demand for reliable and readily accessible real-time data through population projections. However, projections have only limited reliability, and even small deviations can have a major impact on a country's policy and budget planning. This is illustrated by the results of the 2011 census in Germany, which

showed only 80.2 million people living in Germany instead of the projected 82.8 million. The impact of such deviations is felt particularly strongly at the local level, since in many places allocation of public funds to municipalities is based on the number of their inhabitants. This is also the case in Germany, where the census resulted in funding cuts. Following the downward revision of population numbers in nearly all parts of the country, many German towns, cities and municipalities lodged complaints against the data collected by the decentralised statistics offices.



### Routine data systems

Despite growing demand for data, for instance for (► Chapter 5.6) [monitoring the 2030 Agenda](#), collection of statistics should not place too great a strain on government budgets or on the population. One solution to this dilemma is the use of routine data systems such as for (► Chapter 5.3) [civil registration and vital statistics \(CRVS\)](#).

Routine data are taken primarily from official population registers and from the administrative systems of sector-specific institutions such as hospitals and schools. Collected locally, in many countries they are then as a rule consolidated at the next higher administrative level (e.g. at the district or provincial level) and ultimately passed on to the national level. Unlike data collected at specific intervals or for specific purposes through censuses or studies, routine data are produced on an ongoing basis as part of the

### In brief: Projections

Projections of demographic trends are forecasts based on census data, data from birth and death registers and large-scale surveys such as DHS and MICS. They also draw on assumptions regarding the future evolution of population dynamics, taking into account factors such as fertility, mortality and migration. Because even slight deviations in the underlying assumptions can have a major impact on forecasts, projections are used only for orientation.

An example are the projections published by the UN every two years on the development of the world population (latest publication: [\*World Population Prospects: The 2017 Revision\*](#)). Due to slight differences in the underlying assumptions on future fertility rates, three projections – one low, one medium and one high variant – are calculated. According to these, by 2100 world population could shrink to 7.3 billion, or grow to 11.2 billion or 16.5 billion. The middle variant is most often used.

According to an expert report issued by the National Regulatory Control Council, an independent advisory and supervisory body of the German Federal Government that estimates the costs resulting from political decisions, a fully register-based census – in other words, a national census based on routine data – is up to 98% more cost-effective than a traditional census, as no extensive field interviews are required and many steps in the process are digitised.

administrative process. When stored digitally, the data are available in real time and require no additional funding.

CRVS systems record all demographically relevant life events such as births, deaths (including cause of death), adoptions, marriages and divorces. Each of these events can be clearly assigned to an individual or consolidated according to various criteria. Taken all together, these data can provide insights into population size, age structure and sex ratio.

The routine data systems of most partner countries of German development cooperation are still in construction and are closely linked to the advancing (➡ Chapter 5.4) **digitisation** of administrations, a process that offers new opportunities for collecting, storing and analysing data. Examples include CRVS systems and thematic databases such as District Health Information System 2

(DHIS2) (➡ Chapter 4.2: Health). Until the registration systems in these countries are able to produce comprehensive and high-quality data, studies and household surveys serve as complementary sources of information (➡ Chapter 5.7: Tips for supporting data systems).

### Household surveys and studies

Household surveys collect information from a representative sample of the population. On the basis of these surveys, conclusions can be drawn for the population as a whole or for individual population groups. Individual studies usually focus on a particular population group and examine specific demographic trends.

The best-known surveys, which have been conducted in developing countries for over 30 years, are DHS and MICS, the latter having been developed by UNICEF. As a rule, partner countries conduct these surveys themselves, with financial and technical support from USAID (DHS) and UNICEF (MICS). Since 1984, more than 300 DHS surveys have been conducted in 89 countries, and since 1995 there have been more than 280 MICS surveys in over 100 countries. Both surveys also supply data for (➡ Chapter 5.6) **monitoring the 2030 Agenda**, particularly for goals 1 to 8 and 16 and 17.

The problem with these and other studies is that as a rule they are financed by donors and, despite the provision of technical support and (➡ Chapter 3.2.6) **human**

capacity development (HCD) measures, are not always sustainable, as most partner countries are unable to carry on these studies on a similar scale without support. Smaller-scale studies typically address very specific issues or collect highly selective data. They are often used to evaluate donor measures or as accompanying research, but are only rarely fed into national systems (➔ Chapter 5.7: Tips for supporting data systems).



### In brief: Disaggregated data

To make differentiated and forward-looking decisions, policy-makers and administrations require not only information on national trends, but also demographic data broken down by age, sex, place of residence and marital status, in addition to income, ethnicity, level of education, disability and other relevant variables. National censuses, registry systems and representative samples can provide such data.

Disaggregated demographic data also play a central role in the context of the 2030 Agenda. More than 43% of the indicators tracking progress across practically all 17 goals are based on disaggregated population data (➔ Chapter 5.6: Monitoring the 2030 Agenda).



## 5.3 Civil registration and vital statistics (CRVS)

Each country should record, document and certify the vital events in the lives of its citizens. The [World Bank](#) recommends that this apply to the following ten types of vital events: live birth, death (including cause of death), fetal death, marriage, divorce, annulment of marriage, judicial separation of marriage, adoption, legitimation (of a person born out of wedlock) and recognition (of paternity). The birth certificate in particular (often referred to as a ‘breeder document’) enables all citizens to establish their legal identity and to prove their age, nationality and family relationships.

In its 2014 *Principles and Recommendations for a Vital Statistics System*, UN DESA defines CRVS as:

*‘the continuous, permanent, compulsory and universal recording of the occurrence and characteristics of vital events pertaining to the population, as provided through decree or regulation in accordance with the legal requirements in each country.’*

### Benefits for individuals and governments

The data recorded in CRVS systems fulfil an important function for both individuals and the state (see Figure 13). **For individuals**, documentation – and, above all, certification – of life events is indispensable proof of legal identity and nationality. Certification creates the basic prerequisite for citizens to assert their rights (including inheritance, property and voting rights) and make use of services guaranteed by the state, including healthcare, education and social services. Furthermore, certification is also the necessary prerequisite for citizen participation.

It all begins with birth registration. This enables a child, among other things, to be vaccinated or to go to school. While

growing up, minors are protected against violations of their rights such as child marriage or child labour. Official records of deaths and family relationships are also of great importance. Particularly when men die, women and children, as the surviving dependants, often have difficulty in asserting their right to inheritance.

The CRVS system provides the **government** important information about the country’s population and its trends, from the national down to the local level. CRVS data therefore play a crucial role in the state’s planning and management. Vital statistics give the government insights into, for example, the population’s health situation and the size of upcoming generations. Policy-makers



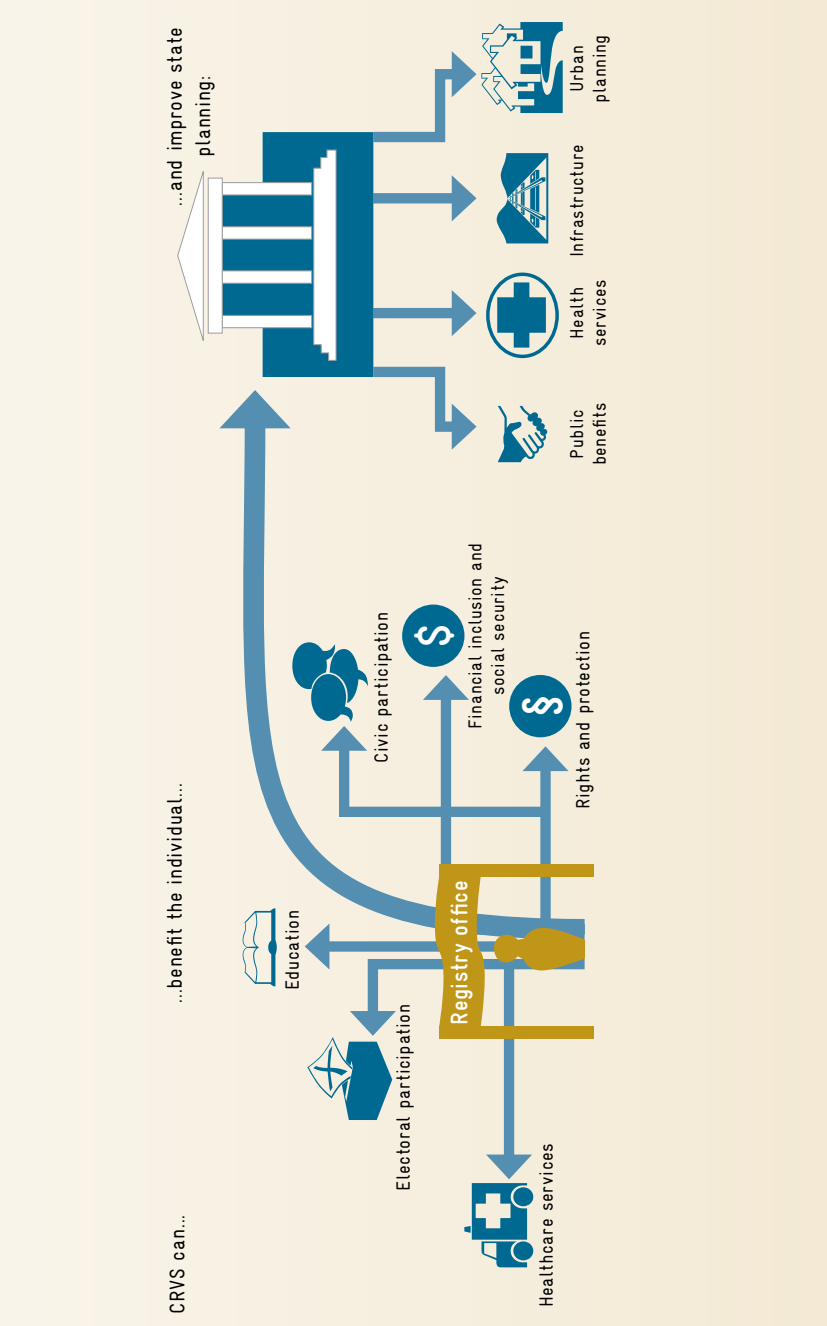
can use this information for needs-oriented planning and budgeting, for instance of health and education services and public infrastructure, including urban development and administrative structures. In this context, the focus is often on social security systems, whose financial sustainability can be better managed using CRVS data.

These are also a reliable source for feeding basic information into other government data systems, including national identification systems, population registers and functional registers such as voter lists or pension

registers. In addition to the **administrative advantages**, CRVS systems offer governments various options to produce **statistics** cost-effectively at any time – since reliable, up-to-date population data are always available and can be instantly retrieved, disaggregated, for instance, by place of residence, age, sex, ethnicity or other relevant characteristics, and converted into statistics. In this way, CRVS data can be used by governments to increase transparency and accountability vis-à-vis their citizens and, at the same time, provide a basis for measuring a country's development progress.



Figure 13: The benefits of CRVS



Source: Authors' own representation based on IFOED (2007) in Hatarti et al (2007): Verwaltungsreform und Zivilrechte – Wirkung durch Gender Mainstreaming



## How it works

Vital events in the lives of citizens are usually documented by authorities at the place where they occur. However, they can also be registered at the citizen's place of residence. 'Informants' such as relatives, birth attendants, police officers or religious leaders serve as witnesses to the event (see Figure 14). In addition to their verbal or written declarations, for example in the case of a birth, a birth notification (e.g. issued by a health facility) is also required. Parents can present these supporting documents to the responsible government authority that will enter the birth in the (paper or digital) civil register and issue a birth certificate.

As a rule, certain time limits are prescribed for official registration of life events, which are applicable nationwide. While it is often possible under national legislation to register births, for instance, one to two months after the event, deaths must be registered within a few days. In many cases, a grace period is also granted for late registration. Providing this leeway is important in order to encourage citizens to register events, thus promoting the completeness of CRVS data. Particularly in developing countries, citizens still face considerable obstacles when trying to register life events. Excessive bureaucracy, considerable distances to travel, and in some cases ethnic discrimination can all act as barriers. People are often unaware of how the system works and of the opportunities and benefits of registering and documenting life events, all of which contribute to low registration rates.

Depending on the country in question, CRVS management and administration involves **different ministries** and authorities. Most countries have civil registry offices, which can depend on one of a variety of ministries, e.g. justice, interior, migration, planning and administration, or labour and social affairs. In certain countries, external agencies are tasked with administering the CRVS system. However, processed CRVS data should also be made available to all government authorities to enable them to plan their strategic needs down to the municipal level based on population size, structure and distribution. By comparison, larger-scale household studies such as DHS and MICS only provide average regional figures every five years, but not up-to-date information down to the local level (► [Chapter 5.2: Data sources](#)).

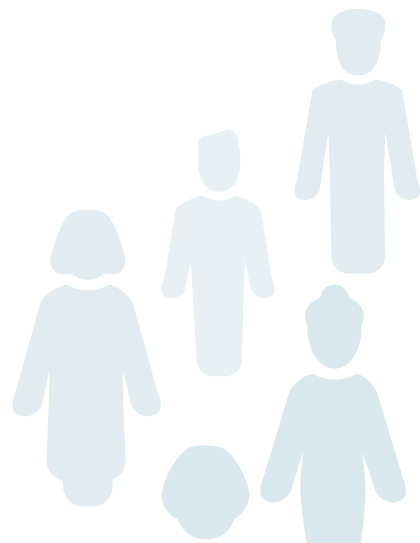
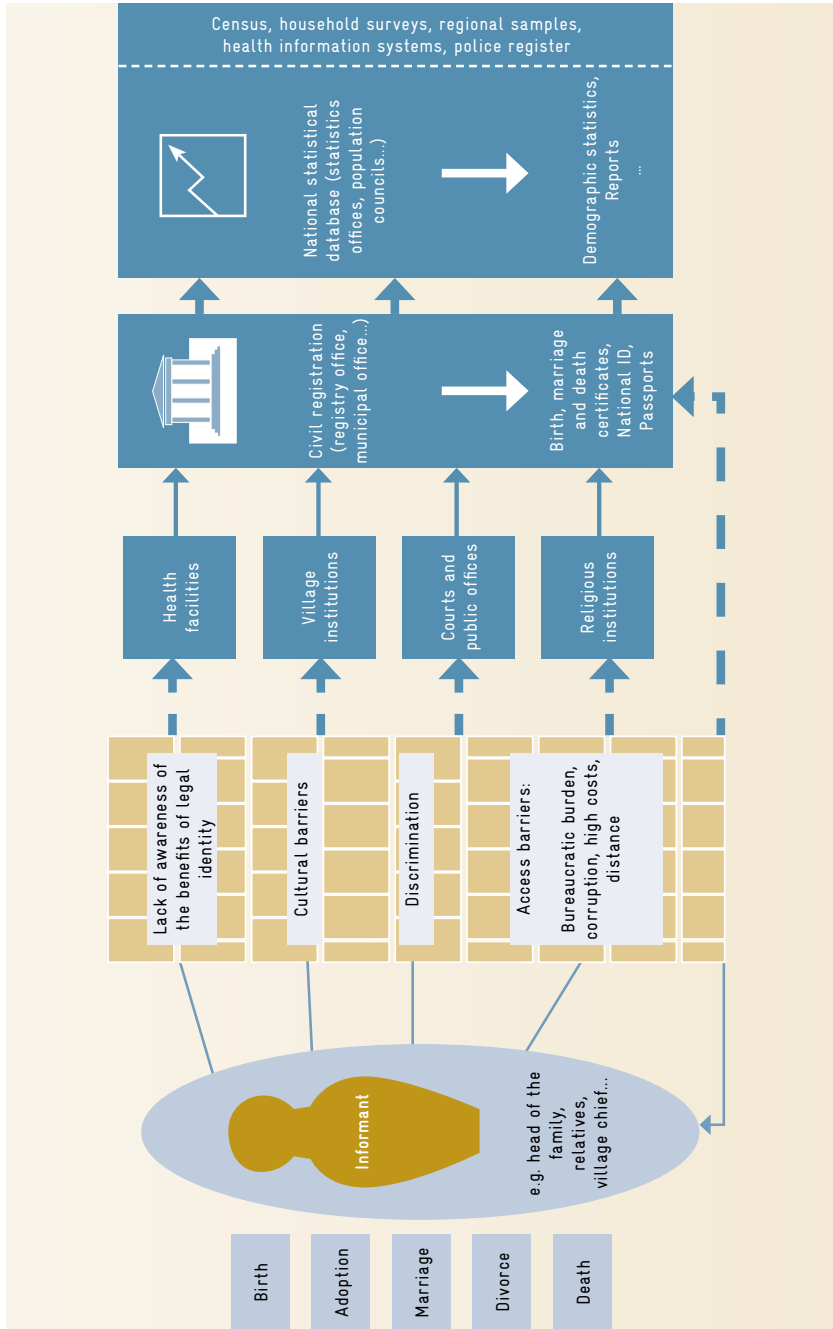


Figure 14: The functioning of CRVS systems



Source: Authors' own representation



## In brief: Birth registration and certification

Birth registration is part of CRVS. The right to birth registration is enshrined in many international and regional agreements. Article 6 of the 1948 *Universal Declaration of Human Rights* states that: 'Everyone has the right to recognition everywhere as a person before the law.' More specifically, the right to registration is anchored in Article 24 Par.2 of the UN's 1966 *International Covenant on Civil and Political Rights*: 'Every child shall be registered immediately after birth and shall have a name.' The UN's 1989 *Convention on the Rights of the Child* also stipulates in article 7 (1) that: 'The child shall be registered immediately after birth and shall have the right from birth to a name.' In addition, the UNHCR report *Global Trends: Forced Displacement in 2014* presents the right to birth registration as a universal human right that plays an important role in international refugee law and in international humanitarian law.

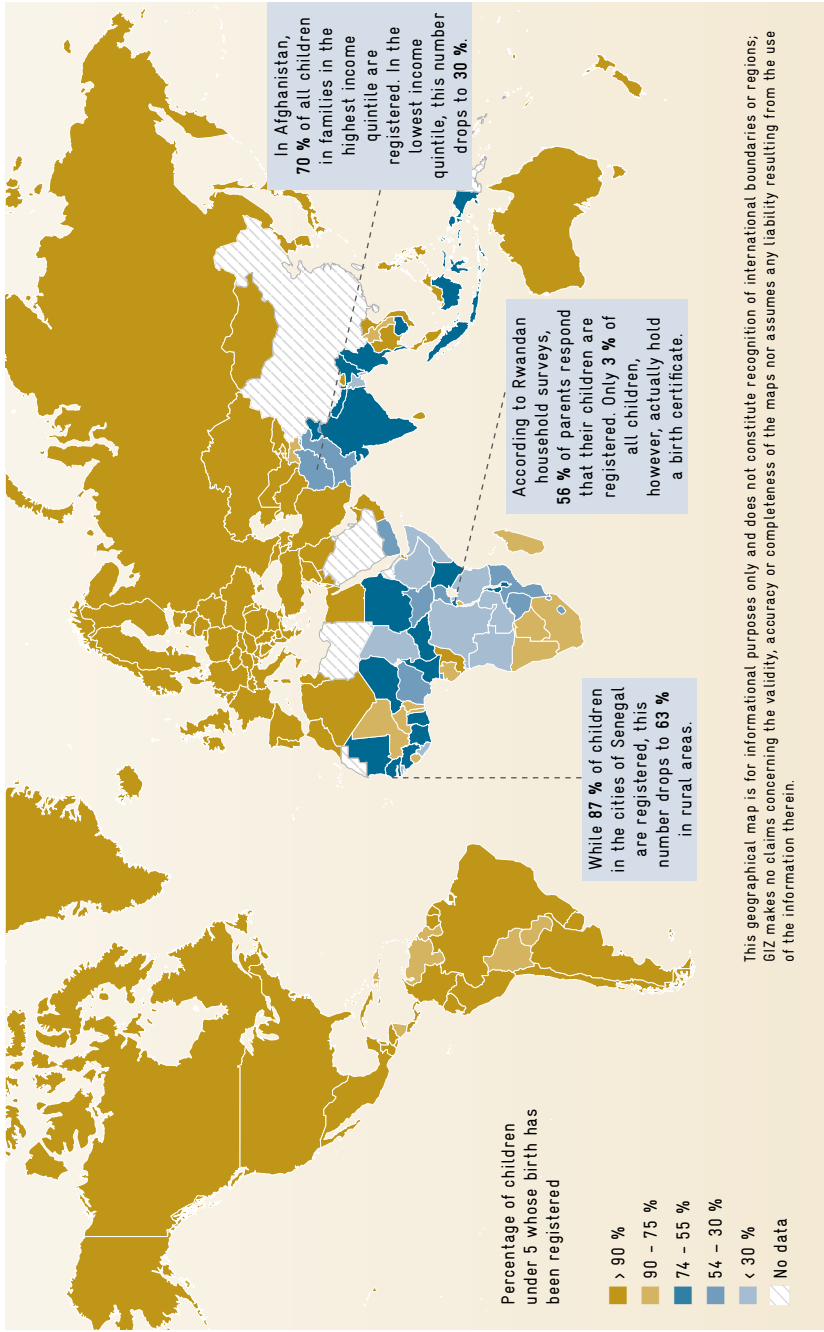
However, birth registration figures worldwide show that there are still countries in which not everyone is registered (see Figure 15). Moreover, in many cases registration figures differ from the number of birth certificates actually issued. UNICEF estimates that in 2017 the births of barely 43% of all children under the age of five were registered in sub-Saharan Africa, and that even fewer children – around 27% – received

a birth certificate. In some countries, the discrepancy between children registered and children with birth certificates is as high as 50%. In Malawi, for instance, according to the 2015 DHS, while 67% of children were registered in the country, only 17% of them had a birth certificate.

### Obstacles to registering births and issuing birth certificates

While health facilities, hospitals and local councils normally attest to and register births, families usually need to go to a higher-ranking authority to obtain a birth certificate. To do so, they need not only to be familiar with the necessary procedure, but also to undertake what may be a long journey to the certification office with its associated costs. Because of such barriers, the majority of children born on Indonesia's smaller islands have no birth certificate. Language barriers and a lack of support for those who cannot read also act as obstacles to the registration of children. The registration of nomadic population groups and of the children of migrants and refugees also poses problems. Requirements such as the need to prove lineage can be made more difficult by national legislation. In Nepal, for example, nationality can only be passed on to a child by the father.

Figure 15: Titel anpassen: Global comparison of birth registration rates



Source: Authors' own representation, based on UNICEF, with data from DHS, MICS and other household surveys, censuses and civil registries. Most recent data from 2010–16 is displayed; in a few cases, older data had to be included.

## CRVS decades in the Asia-Pacific and Africa regions

Significant CRVS deficits are evident in more than 100 low- and middle-income countries. The systems are incomplete and the data collected by various authorities are not sufficiently coordinated, digitally recorded or processed. Therefore, in the 2010s, the regional UN Economic Commissions together with the countries' responsible ministries made concrete their plans to strengthen CRVS systems. At high-ranking ministerial conferences, they committed to stepping up efforts to register and document the life events of their citizens.

At the Ministerial Conference on Civil Registration and Vital Statistics of the Asia-Pacific Region in November 2014, the Asian and Pacific Civil Registration and Vital Statistics Decade 2015-2024 was proclaimed under the motto 'Get Every One in the Picture', and a regional action plan was adopted. In August 2010, the first of four ministerial conferences in Africa had already approved a regional plan on reforming and improving CRVS systems. In December 2017, at the fourth of these conferences, the African ministers responsible for CRVS renewed their political commitment and announced the Decade for Repositioning of Civil Registration and Vital Statistics in Africa 2017-2026.

## Promoting CRVS in Africa

In 2010, the African Union (AU), the United Nations Economic Commission for Africa (UNECA) and the African Development Bank (AfDB) launched the Africa Programme for Accelerated Improvement of CRVS (APAI-CRVS). Within this framework, CRVS systems in countries in the region were analysed and measures for improvement were proposed. At the same time, various international partners including the EU and UNICEF supported the further development of national CRVS systems. The aim of the programme is to harmonise systems on a regional basis in order to better apply regional and international standards in their implementation and to facilitate mutual support among AU member states. For this purpose, units responsible for coordination among the relevant ministries were set up at the national level. To date, 26 AU member states have already developed comprehensive national plans for improving their CRVS systems. These are being implemented with support from development partners from various sectors.





## EU and AU commitment to digital CRVS in Africa

At the fifth AU-EU Summit held in Abidjan, Côte d'Ivoire, in November 2017, both sides reaffirmed their political commitment to strengthening CRVS systems in Africa. Paragraph 50 of the final declaration *Investing in Youth for Accelerated Inclusive Growth and Sustainable Development* states:

*'We are committed to a people centred partnership where citizens, especially youth and women and other stakeholders of the partnership actively participate in social, economic and political development and where institutions are accountable, inclusive and transparent, also with respect to delivering effective and efficient public services, including a continued strengthening of Digital Civil Registration and Vital Statistics (CRVS) and a right to issuance of birth certificates according to applicable national laws, as an indispensable requirement for creating sustainable and resilient societies. In that regard wider employment of eGovernance solutions shall be pursued.'*

## International coordination

At the international level, development partners' efforts to strengthen CRVS systems have been coordinated by the Global CRVS Group since 2014. Key actors in this context are the UN Regional Commissions, the UN Statistics and Population Divisions, UNICEF, UNDP, Plan International, the World Health Organization (WHO) and the World Bank. To finance the lengthy process of improving CRVS systems, the World Bank has developed a global CRVS Scaling Up Investment Plan for the period from 2015 to 2024 as well as case studies for individual countries. With the launch of the Global Financing Facility (GFF), which explicitly finances the expansion of CRVS systems in its partner countries, a Centre of

In cooperation with the Global CRVS Group and a wide range of international experts, the World Bank developed a comprehensive e-learning course on CRVS in 2016/2017. Since then, this course is offered free of charge as individual or facilitated training at the beginner or advanced level via the World Bank's Open Learning Campus.

Excellence on CRVS (CoE) was also created, which observes and evaluates countries' experiences in expanding CRVS systems (► Chapter 5.1: Key actors in the field of data collection and analysis).

## CRVS in German development cooperation

German development cooperation also supports certain partner countries such as Cameroon, Rwanda and Togo in improving their CRVS systems. Among others, it supports their efforts to:

- register births and deaths at the national and local level
- establish a digital CRVS system
- train civil registration officers
- link the health system with the CRVS systems.

### Example from Indonesia: Modernising the CRVS system

On behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), from 2005 to 2013, GIZ advised the Indonesian Ministry of Home Affairs on modernising the country's CRVS system. The Indonesian Government replaced legislation dating from the colonial era that, for example, prevented women from themselves registering their children. It also initiated administrative reforms in over 60 districts, trained public sector employees, strengthened the oversight of provincial authorities and set up modern citizen registration offices. Citizen-oriented measures in the Gresik district in Java province increased birth registration by 8% in one year. The 'family cards' (*Kartu Keluarga*) that often carried wrong or duplicated names were also renewed. These official documents, which are issued by Indonesian provincial governments to the head of the family, provide proof of the place of residence, the identities and the relationships between all family members. Thus the 'family cards' provide a record of births, deaths, migration and immigration.

## 5.4 Digitisation

With the advancing digitisation of all areas of life, the volume of digitally available data is constantly increasing. Information and communication technologies (ICTs) such as smartphones, apps, software and online services offer numerous options for recording, analysing and disseminating data efficiently and cost-effectively. They enable citizens to share in political decision-making and to close data and participation gaps – for example, by getting directly involved in data collection ('citizen-generated data').

### Digital collection of population data

Digitisation also creates new opportunities for collecting and analysing demographic data. This applies to all national (➔ Chapter 5.2) **data sources** used to obtain population data, but particularly to (➔ Chapter 5.3) **civil registration and vital statistics (CRVS)**, which in digital form can even more decisively develop its advantages compared to household surveys and censuses. Development organisations such as UNICEF and Plan International as well as private enterprises are involved in efforts to digitise CRVS systems (➔ Chapter 5.1: **Key actors in the field of data collection and analysis**).

### BMZ's Digital Agenda and Digital Africa Initiative

Since 2017, *BMZ's Digital Agenda* has provided the sectoral framework for all ICT projects of German development cooperation worldwide. To implement this agenda, BMZ funds specific support measures by technical and financial cooperation in its partner countries. Funds earmarked for strengthening digital development in Africa are provided through the *Digital Africa Initiative*. Once a year, BMZ's regional divisions are asked to

submit proposals via the Africa Division. Between 2015 and 2017 alone, around EUR 100 million were provided through the initiative for new digital measures in Africa. Around EUR 50 million are earmarked in the plans for 2018. The responsible contacts in BMZ are the Africa Division for issues relating to the Digital Africa Initiative, and Digital Technologies Division for issues relating to the *Digital Agenda*.

In the case of the census, digital data collection significantly reduces the time and cost involved. Collecting and recording data directly in digital form decrease data losses and transmission errors. Verification mechanisms can also be built into systems to prevent incorrect data entry.

These advantages also apply to national household surveys. However, the main drawback of household surveys is that they often work with small samples that can only be used to obtain average values for a region and, at most (in some cases) for the district level. It is impossible to obtain specific in-

formation for a more local level. With data collected digitally, such as mobile data, it is possible to widen the scope of the sample, so it becomes possible to present results also for smaller geographical areas.

The high level of mobile phone use among younger people means that these population groups can now also be reached through digital data collection. These groups have been under-represented in official surveys to date, or have not been included in survey samples due to their being under age. The same applies to information on socially sensitive issues such as child marriage,

### In brief: Mobile telephones in sub-Saharan Africa

According to the report *The Mobile Economy: Sub-Saharan Africa 2017* compiled by GSMA, an association which represents the interests of mobile operators worldwide, at the end of 2016 around 43% of the sub-Saharan population had a mobile phone contract. It is estimated that by 2020 half a billion people in the region will have a mobile phone contract. The number of active SIM cards was 731 million at the end of 2016 and is expected to rise to 1 billion by 2020. This increase will be primarily attributable to two groups: youth under 16 and women. Mobile phone ownership among women is currently 17% lower than among men. Population growth in certain sub-Saharan countries – especially the Democratic Republic of the Congo, Ethiopia, Nigeria and

Tanzania – will also play an important role in this increase. These countries are expected to account for half of all new mobile phone contracts by 2020.

At the same time, access to mobile broadband connections is expected to double between the end of 2016 and 2020 to half a billion. In parallel, the number of people using an internet-enabled mobile phone is growing at great speed. From 2014 to 2016 alone, the number of users doubled, amounting to approximately 200 million at the end of 2016. In addition to greater affordability and a growing market for used mobile phones, this increase is mainly due to the high and ever-growing number of young people at ease with technology.



domestic and gender-specific violence, family planning and abortion. Through anonymised mobile data (that still provide verifiable information on age and sex), it would also be possible to obtain information from young age groups through mobile network operators.

All political and administrative levels stand to benefit from digitally collected population data. Particularly at the local level, including in remote areas, this will enable a larger volume of data to be collected. These data will then be available to local administrations, which can in addition draw on data relating to marriages, divorces, births and deaths from various institutions such as health facilities, registry offices and religious institutions (► [Chapter 5.3: Civil registration and vital statistics \(CRVS\)](#)). Once analysed to identify the needs of the

population, this data can be factored into local development plans.

### Digital divide and big data

In digitised societies, those with no access to digital services such as internet-enabled mobile phones and those lacking knowledge of how to use such technologies are often at a disadvantage. This is the case for many people in the partner countries of German development cooperation, particularly in rural areas. There are disparities not only between urban and rural areas, but also between men and women. For example, 250 million fewer women than men have internet access, according to the *ICT Facts and Figures 2016* report of the International Telecommunication Union (ITU). As this 'digital divide' widens, these people have less and less chance to

### Example from Burkina Faso: A digital bracelet after birth

iCivil Africa, a Burkina-French enterprise, has developed a digital birth registration system that is being offered in Burkina Faso. A QR code, similar to a personal reference number, is generated for every newborn child. This is mounted on a bracelet and provides information on the child's name, parents and date of birth. All this information is also transmitted to the nearest registry office via encrypted text message. Using the bracelet, the child can then be registered there, and receive an official birth certificate. Thus

newborns are already equipped at birth with an individual proof of identity, with which they can later identify themselves to various institutions and exercise their rights. The bracelet remains in the family, providing family members with permanent proof of the birth and identity of the child. Following the introduction of iCivil Africa in parts of Burkina Faso (with support from the EU), the bracelet is being tested since 2018 in Togo's eighth largest town, Aného, which has over 28,000 inhabitants.

acquire knowledge and participate in socio-economic activities.

The availability of large volumes of data ('big data') does not always mean that the data contain a large amount of useful information. For example, the substantial data collected by telephone companies provide no information on multiple registrations, shared use of smartphones or the education level of users. Particularly in the age of big data, this shows that data must be handled carefully, not least from the perspective of data protection.

### Data security

Data are fundamentally vulnerable to political, commercial or criminal manipulation. In the case of big data from private providers, a further problem is that the quality of the data is difficult to verify. The standards applied when collecting data are often unclear, as are the groups covered by the data. The anonymisation of personal data (which is essential for the responsible use of sensitive information), respect for personal rights and the right to privacy must always be ensured. German development cooperation therefore includes data protection as part of its approach to human rights. According to BMZ *Special 165 Health and Human Rights*, in case of doubt, alternative forms of data collection must be used, as compliance with privacy rights has precedence.



## 5.5 Data literacy

In these times of (➡ Chapter 5.4) **digitalisation**, it is more important than ever that each individual understand data. This competence ('data literacy') is also receiving increasing attention in development policy. The exact definition of data literacy is currently the subject of much debate in academic, political and civil society circles. In its 2015 report *Beyond Data Literacy*, the global network *Data-Pop Alliance* defines the term as follows: 'The desire and ability to engage constructively in society through and with data.'

In 2011, PARIS21, a multilateral partnership for the promotion of statistics, was the first institution to propose an indicator for measuring statistical literacy. This measures the extent to which statistical data are used and critically discussed in a country's five main newspapers.

For political decision-makers, however, it is difficult to extract the information and insights they need for policy-making from large volumes of data, particularly in the case of complex issues such as population trends and their interactions with various sectors. This is why the data need first to be processed by researchers and policy advisors.

For individuals, too, free access to data is of little use if the data have not been processed or if there is no basis for comparison. To use data more effectively, citizens need to know what data, from what social and economic spheres, are relevant for them and where they can find the data. Children often learn this in school. However, data literacy is being increasingly conveyed through analogue and digital media, which explain data in a comprehensible manner and, ideally, also analyse and question them.

In a further step, people must also be able to interpret these data and know how to use them. Many people do not trust government authorities and feel they are being monitored by the government when asked to register or take part in surveys. This situation can be addressed by creating more transparency in data collection, by ensuring that data are used in accordance with standards and by complying with regulations on personal anonymity and privacy. Ultimately, citizens must be able to use their data literacy to take part in social processes and political debates.

German development cooperation supports efforts in its partner countries to reform administrative structures and processes in such a way that the rule of law, credibility, efficiency, transparency, integrity and citizen orientation are guaranteed. Key public representatives such as parliamentarians, civil society organisations and research institutes often lack the opportunities and capacities to access and analyse data on population trends, and on this basis demand accountability from their government. This is why statistical institutes and research and consulting institutions have the important task of analysing and compiling demographic data in a comprehensible manner.





## 5.6 Monitoring the 2030 Agenda

Without reliable data, it is impossible to determine the current situation or gauge the progress made towards achieving the Sustainable Development Goals (SDGs). To address this issue, the UN Secretary General launched the Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs) already in 2014. Its aim was to formulate concrete proposals on how to achieve a data revolution and what indicators for monitoring the goals and targets of the 2030 Agenda would be necessary and actually measurable. In its final report, the IAEG-SDGs called for national data systems to be strengthened, since the data they generate form the basis for measuring progress towards the goals of the 2030 Agenda.

Paragraph 48 of Resolution [A/RES/70/1](#) of the United Nations General Assembly of 25 September 2015 (*Transforming our world: the 2030 Agenda for Sustainable Development*) states that:

*'Quality, accessible, timely and reliable disaggregated data will be needed to help with the measurement of progress and to ensure that no one is left behind.'*

### BMZ's Initiative Programme 2030 Agenda

To strengthen innovative, transferable and sustainable approaches to implementing and monitoring the 2030 Agenda, BMZ through its 2030 Agenda Initiative promotes, among other things, measures to increase partner country capacities to monitor and review the 2030 Agenda. For example, a new project in Myanmar aims to strengthen national capacities in the area of data collection and analysis as well as in evidence-based

policy planning, and thus improve the pre-requisites for implementation of the 2030 Agenda. Since 2016 some EUR 43 million have been made available for the 2030 Agenda Initiative. This is being used to support 21 measures worldwide, including eight in the field of monitoring and review. The contact at BMZ is Division 2030 Agenda for Sustainable Development, Reducing Poverty and Inequality.

## Population dynamics in the SDGs

A large number of the 169 targets of the 2030 Agenda – across almost all thematic areas – explicitly or implicitly are related to population dynamics. Some 43% of the 244 SDG indicators, nine of which are repeated two or three times, are based on population data.

Certain SDG indicators **directly measure demographic variables**, including:

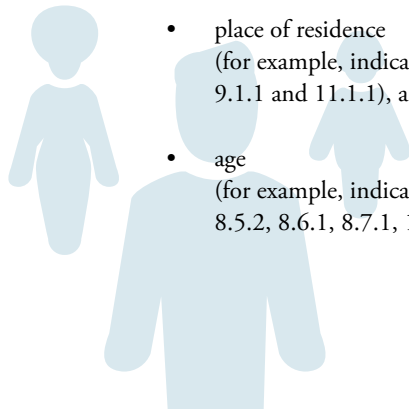
- birth rates of specific population groups (for example, indicator 3.7.2)
- death rates by cause of death (for example, indicators 3.1.1, 3.2.1, 3.2.2 and 3.4.1)
- urbanisation and the sustainable, integrated development of urban and surrounding rural areas (for example, indicator 11.a.1), and thus population distribution.

Other SDG indicators **indirectly target demographic variables**, examining issues of relevance to population dynamics by measuring population segments in relation to factors such as:

- their health (for example, indicators 2.2.1, 2.2.2 and 4.2.1)
- (lack of) access to services (for example, indicators 1.4.1, 3.7.1, 3.8.1 and 3.b.1)
- (lack of) access to resources (for example, indicators 6.1.1, 6.2.1 and 7.1.1)
- protection of other rights (for example, indicators 1.4.2, 5.2.1, 5.3.1 and 5.6.1).

Many SDG indicators **require a specific disaggregation by demographic parameters**, including:

- sex (for example, indicators 1.3.1, 1.4.1, 4.5.1, 5.b.1, 8.3.1, 8.6.1 and 8.7.1)
- place of residence (for example, indicators 4.5.1, 5.a.1, 9.1.1 and 11.1.1), and
- age (for example, indicators 1.3.1, 8.5.1, 8.5.2, 8.6.1, 8.7.1, 10.1.1 and 10.2.1).



Other SDG indicators **require a specific disaggregation by demographically relevant parameters or population-dependent data**, including:

- people living with disability (for example, indicators 4.5.1, 8.5.2, 10.1.1, 10.2.1, 11.2.1, 11.7.1 and 16.7.2)
- ethnic group (for example, indicators 2.3.2 and 4.5.1)
- income segment (for example, indicators 4.5.1 and 10.1.1)
- per capita information (for example, indicators 3.5.2, 8.1.1, 8.4.1, 10.1.1, 12.2.1, 12.2.2 and 17.8.1).

Certain SDG indicators **aim explicitly to improve data and statistics systems** and measure factors such as:

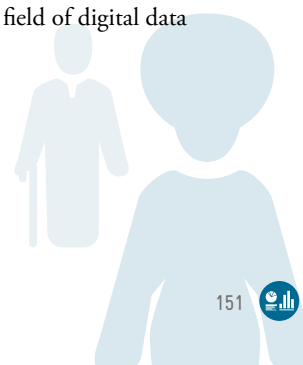
- the development of birth and death registers (indicators 16.9.1 and 17.19.2)
- regular conducting of a census (indicator 17.19.2)
- the increase in statistical capacities (indicators 17.18.1, 17.18.2, 17.18.3 and 17.19.1).

Without high-quality population data, the monitoring of many SDG indicators would be based on no more than projections and estimates. Disaggregated data make it possible to measure in particular the impact on hard-to-reach or particularly vulnerable population groups – in keeping with the 2030 Agenda's guiding principle: 'Leave no one behind'.

### Digital data revolution

(⇒ Chapter 5.4) **Digitisation** offers a variety of new opportunities for measuring development progress. Therefore the High-Level Political Forum (HLPF) called for a data revolution in the post-2015 development agenda, including the use of new technologies and instruments for more precise monitoring of progress towards the SDGs, in order to, e.g.:

- close data gaps, modernise data systems and improve data quality (⇒ Chapter 5.7: Tips for supporting data systems)
- increase (⇒ Chapter 5.5) **Data literacy** in the population
- establish and expand (⇒ Chapter 3.2.6) **human capacity development (HCD)** in the field of digital data systems.





## 5.7 Tips for supporting data systems

German development cooperation is committed to supporting its partner countries in producing, interpreting and using reliable, high-quality data. The following tips should be taken into consideration when designing projects of this kind or when deliberating on whether existing projects in different sectors should collect data of their own.

- **Needs orientation:** Investments in data information systems should always be guided by the concrete needs of the partner country. Their systems are often at very different stages of development. Guidelines should therefore avoid overly general information and focus instead on supporting the design of the individual system. South-South cooperation can be very useful in this context (➡ [Chapter 3.2.6: Human capacity development \(HCD\)](#)), between countries potentially facing similar systems development issues.
- **Promoting routine data systems:** The development of routine data systems (➡ [Chapter 5.3: Civil registration and vital statistics \(CRVS\)](#)) should be given priority, as only they can provide population development data on a timely and sustainable basis. Establishing functional routine systems is very time-intensive. Meanwhile, alternative (➡ [Chapter 5.2](#)) [data sources](#) such as household surveys should continue to be used.
- **Costs and benefits:** In determining whether data collection is necessary, a cost-benefit analysis is useful. It is worth checking whether other sources of the required information already exist or whether other actors are also planning to collect similar data that could be used (➡ [Chapter 5.1: Key actors in the field of data collection and analysis](#)).
- **Data protection:** Personalised information must always be handled confidentially and protected – in accordance with national and international data protection guidelines.
- **Standards for indicators:** To ensure that data are collected in line with uniform principles, indicators must be defined and categorised in a standardised way. This also enables data collected at the national level to be more easily fed into international monitoring databases and to be compared (➡ [Chapter 5.6: Monitoring the 2030 Agenda](#)).
- **Understanding population statistics:** Policy-makers should be aware of how evidence-based planning can help them make the best use of scarce resources. For evidence-based policy planning, demographic data and their analyses should therefore be easily accessible and understandable. Here research institutes and policy think tanks can help

by highlighting the information content of data through studies, analyses and interpretations (➡ [Chapter 3.2.4: Support for national institutions](#)).

- **HCD:** At the national and regional level, but especially at the local level, staff of statistics institutes and public agencies – as well as of health facilities, schools and other institutions – must have sufficient training in data collection and communication, since most data are collected at this level (➡ [Chapter 5.2: Data sources](#)). However, in many local institutions documentation and data collection do not have high priority, especially in cases where staff are already working to capacity. Nonetheless, they are the first point of contact for enquiries from members of the public. Demographic data can be used at the municipal level to foster a better understanding of challenges and opportunities in the context of population development, in view of initiating specific measures to improve living conditions at the local level (➡ [Chapter 3.2.6: Human capacity development \(HCD\)](#)).
- **From analogue to digital:** ICT alone cannot solve all the challenges in the field of data collection and analysis. The most useful approach is a step-by-step conversion of analogue data systems to digital systems. In this process uniform data collection standards are very helpful, since they allow the same data to be fed into and used in several different systems (➡ [Chapter 5.4: Digitisation](#)).
- **Avoiding duplication:** Duplication and fragmentation of data information systems should be avoided. This requires good communication and cooperation among the statistics institutes, development partners and individual national ministries in the partner countries.
- **Data transparency:** Open access to data contributes to good governance and offers civil society and the population the opportunity to review the findings presented by the government. At the same time, demographic data and their interpretation are vulnerable to manipulation and can be coloured by political interests (➡ [Chapter 5.4: Digitisation](#)). Government institutions have a special responsibility in this regard.



# 6 Annex

This final section provides further information and guidance. An overview of (➡ Chapter 6.1) **key actors in the field of population data in selected countries** presents a list of national contact points for statistics and population data by world regions, but is by no means exhaustive.

The (➡ Chapter 6.2) **index** presents technical terms and concepts used in the field of population dynamics and indicates on which pages of the handbook these terms are used in different thematic, regional and sectoral contexts. It also indicates the places in the text where definitions and explanations are introduced.

The (➡ Chapter 6.3) **list of sources** provides a list of all the documents used as a source of information for this handbook. It does not include links to actors and development cooperation programmes that are referred to in the text and that can be accessed in the electronic and web-based versions of the handbook.



## 6.1 Key actors in the field of population data in selected countries

### Asia

Country	Institution
Afghanistan	Central Statistics Organisation <a href="http://www.cso.gov.af/">http://www.cso.gov.af/</a>
Bangladesh	Bangladesh Bureau of Statistics <a href="http://www.bbs.gov.bd/">http://www.bbs.gov.bd/</a>
Cambodia	National Institute of Statistics <a href="http://www.nis.gov.kh/">http://www.nis.gov.kh/</a>
China	National Bureau of Statistics of China <a href="http://www.stats.gov.cn/english/">http://www.stats.gov.cn/english/</a>
India	Office of the Registrar General & Census Commissioner, India <a href="http://www.censusindia.gov.in/">http://www.censusindia.gov.in/</a>  Ministry of Statistics and Programme Implementation <a href="http://mospi.nic.in/">http://mospi.nic.in/</a>
Indonesia	Statistics Indonesia <a href="https://www.bps.go.id/">https://www.bps.go.id/</a>
Kazakhstan	Ministry of National Economy of the Republic of Kazakhstan, Committee on Statistics <a href="http://www.stat.gov.kz">http://www.stat.gov.kz</a>
Kyrgyzstan	National Statistical Committee of the Kyrgyz Republic <a href="http://www.stat.kg/">http://www.stat.kg/</a>
Lao People's Democratic Republic	Lao Statistics Bureau <a href="https://www.lsb.gov.la/">https://www.lsb.gov.la/</a>
Malaysia	Department of Statistics Malaysia <a href="https://www.dosm.gov.my/">https://www.dosm.gov.my/</a>
Maldives	National Bureau of Statistics <a href="http://www.planning.gov.mv/">http://www.planning.gov.mv/</a>



Country	Institution
Mongolia	National Statistics Office of Mongolia <a href="http://www.en.nso.mn/">http://www.en.nso.mn/</a>
Myanmar	Ministry of Labour, Immigration and Population <a href="http://www.dop.gov.mm/">http://www.dop.gov.mm/</a>
Nepal	Central Bureau of Statistics <a href="http://www.cbs.gov.np/">http://www.cbs.gov.np/</a>  Ministry of Health and Population <a href="http://www.mohp.gov.np/">http://www.mohp.gov.np/</a>
Pacific Community	Statistics for Development Division <a href="https://sdd.spc.int/">https://sdd.spc.int/</a>
Pakistan	Pakistan Bureau of Statistics <a href="http://www.pbs.gov.pk/">http://www.pbs.gov.pk/</a>  Population Welfare Department – Punjab <a href="http://www.pwd.punjab.gov.pk/">http://www.pwd.punjab.gov.pk/</a>
Philippines	Philippine Statistics Authority <a href="https://psa.gov.ph/">https://psa.gov.ph/</a>
Republic of Korea	Statistics Korea <a href="http://www.kostat.go.kr/">http://www.kostat.go.kr/</a>
Sri Lanka	Department of Census and Statistics <a href="http://www.statistics.gov.lk/">http://www.statistics.gov.lk/</a>
Tajikistan	Agency on Statistics under President of the Republic of Tajikistan <a href="http://www.stat.tj/">http://www.stat.tj/</a>
Thailand	National Statistical Office <a href="http://web.nso.go.th/">http://web.nso.go.th/</a>
Timor-Leste	General Directorate of Statistics <a href="http://www.statistics.gov.tl/">http://www.statistics.gov.tl/</a>
Turkmenistan	National Statistical Office <a href="http://www.stat.gov.tm/">http://www.stat.gov.tm/</a>



Country	Institution
Uzbekistan	The State Committee of the Republic of Uzbekistan on Statistics <a href="http://www.stat.uz/">http://www.stat.uz/</a>
Vietnam	General Statistics Office of Vietnam <a href="http://www.gso.gov.vn/">http://www.gso.gov.vn/</a>

## Latin America and the Caribbean

Country	Institution
Belize	The Statistical Institute of Belize <a href="http://www.sib.org.bz/">http://www.sib.org.bz/</a>
Bolivia	Instituto Nacional de Estadística <a href="https://www.ine.gob.bo/">https://www.ine.gob.bo/</a>
Brazil	Instituto Brasileiro de Geografia e Estatística <a href="http://www.ibge.gov.br/">http://www.ibge.gov.br/</a>
Caribbean	Regional Statistics Caribbean Community <a href="http://www.caricomstats.org/">http://www.caricomstats.org/</a>
Chile	Instituto Nacional de Estadísticas <a href="http://www.ine.cl/">http://www.ine.cl/</a>
Colombia	DANE Información Estratégica <a href="http://www.dane.gov.co/">http://www.dane.gov.co/</a>
Costa Rica	Instituto Nacional de Estadística y Censos <a href="http://www.inec.go.cr/">http://www.inec.go.cr/</a>
Dominican Republic	Oficina Nacional de Estadística <a href="https://www.one.gob.do/">https://www.one.gob.do/</a>
Ecuador	Instituto Nacional de Estadística y Censos <a href="http://www.ecuadorencifras.gob.ec/">http://www.ecuadorencifras.gob.ec/</a>
El Salvador	Dirección General de Estadística y Censos <a href="http://www.digestyc.gob.sv/">http://www.digestyc.gob.sv/</a>
Guatemala	Instituto Nacional de Estadística <a href="http://www.ine.gob.gt/">http://www.ine.gob.gt/</a>

Country	Institution
Guyana	Bureau of Statistics <a href="http://www.statisticsguyana.gov.gy/">http://www.statisticsguyana.gov.gy/</a>
Haiti	Institut Haïtien de Statistique et d'Informatique <a href="http://www.ihsi.ht/">http://www.ihsi.ht/</a>
Honduras	Instituto Nacional de Estadística <a href="http://www.ine.gob.hn/">http://www.ine.gob.hn/</a>
Jamaica	Statistical Institute of Jamaica <a href="http://www.statinja.gov.jm/">http://www.statinja.gov.jm/</a>
Mexico	Instituto Nacional de Estadística y Geografía <a href="http://www.inegi.org.mx/">http://www.inegi.org.mx/</a>
Nicaragua	Instituto Nacional de Información de Desarrollo <a href="http://www.inide.gob.ni/">http://www.inide.gob.ni/</a>
Paraguay	Dirección General de Estadística, Encuestas y Censos <a href="http://www.dgeec.gov.py/">http://www.dgeec.gov.py/</a>
Peru	Instituto Nacional de Estadística e Informática <a href="http://www.inei.gob.pe/">http://www.inei.gob.pe/</a>

### Middle East and North Africa (MENA)

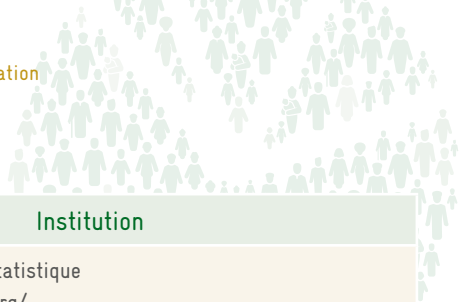
Country	Institution
Algeria	Office National des Statistiques <a href="http://www.ons.dz/">http://www.ons.dz/</a>
Bahrain	Central Informatics Organization <a href="http://www.cio.gov.bh/">http://www.cio.gov.bh/</a>
Egypt	Central Agency for Public Mobilization and Statistics <a href="http://www.capmas.gov.eg/">http://www.capmas.gov.eg/</a>
Iraq	Central Statistical Organization <a href="http://www.cosit.gov.iq/">http://www.cosit.gov.iq/</a>
Jordan	Department of Statistics <a href="http://dosweb.dos.gov.jo/">http://dosweb.dos.gov.jo/</a>

Country	Institution
Kuwait	Central Statistical Bureau <a href="https://www.csb.gov.kw/">https://www.csb.gov.kw/</a>
Lebanon	Central Administration of Statistics <a href="http://www.cas.gov.lb/">http://www.cas.gov.lb/</a>
Libya	Bureau of Statistics and Census Libya <a href="http://www.bsc.ly/">http://www.bsc.ly/</a>
Morocco	Haut Commissariat au Plan <a href="http://www.hcp.ma/">http://www.hcp.ma/</a>
Oman	National Centre for Statistics & Information <a href="https://www.ncsi.gov.om/Pages/">https://www.ncsi.gov.om/Pages/</a>
Palestinian territories	Palestinian Central Bureau of Statistics <a href="http://www.pcbs.gov.ps/">http://www.pcbs.gov.ps/</a>
Qatar	Ministry of Development Planning and Statistics <a href="https://www.mdps.gov.qa/">https://www.mdps.gov.qa/</a>
Saudi Arabia	General Authority for Statistics <a href="https://www.stats.gov.sa/">https://www.stats.gov.sa/</a>
Sudan	Central Bureau of Statistics <a href="http://www.cbs.gov.sd/">http://www.cbs.gov.sd/</a>
Syria	Central Bureau of Statistics <a href="http://www.cbssyr.sy/">http://www.cbssyr.sy/</a>
Tunisia	Statistique Tunisie <a href="http://www.ins.tn/">http://www.ins.tn/</a>
United Arab Emirates	Federal Competitiveness and Statistics Authority <a href="http://www.fcsa.gov.ae/">http://www.fcsa.gov.ae/</a>
Yemen	Central Statistical Organisation <a href="http://www.cso-yemen.org/">http://www.cso-yemen.org/</a>  Data portal currently unavailable. Some statistics are available at: <a href="https://knoema.de/atlas/sources/Central-Statistical-Organisation-Yemen">https://knoema.de/atlas/sources/Central-Statistical-Organisation-Yemen</a>

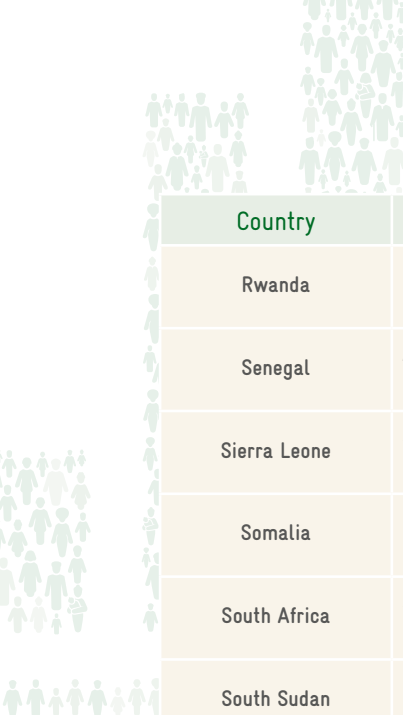
## Sub-Saharan Africa

Country	Institution
AFRISTAT	Observatoire Économique et Statistique d'Afrique Subsaharienne <a href="http://www.afristat.org/">http://www.afristat.org/</a>
Angola	Instituto Nacional de Estatística <a href="http://www.ine.gov.ao/">http://www.ine.gov.ao/</a>
Benin	Institut National de la Statistique et de l'Analyse Économique <a href="http://www.insae-bj.org/">http://www.insae-bj.org/</a>
Botswana	Statistics Botswana <a href="http://www.statsbots.org.bw/">http://www.statsbots.org.bw/</a>
Burkina Faso	Institut National de la Statistique et de la Démographie <a href="http://www.insd.bf/">http://www.insd.bf/</a>
Burundi	Institut de Statistiques et d'Études Économiques du Burundi <a href="http://www.isteebu.bi/">http://www.isteebu.bi/</a>
Cameroon	Institut National de la Statistique du Cameroun <a href="http://www.statistics-cameroon.org/">http://www.statistics-cameroon.org/</a>
	Central Bureau of the Census and Population Studies <a href="http://www.bucrep.cm/index.php/">http://www.bucrep.cm/index.php/</a>
Chad	Institut National de la Statistique, des Études Économiques et Démographiques <a href="http://www.inseedtchad.com/">http://www.inseedtchad.com/</a>
Côte d'Ivoire	Institut National de la Statistique <a href="http://www.ins.ci/">http://www.ins.ci/</a>
Democratic Republic of the Congo	Institut National de la Statistique <a href="http://www.ins-rdc.org/">http://www.ins-rdc.org/</a>
Ethiopia	Central Statistical Agency of Ethiopia <a href="http://www.csa.gov.et/">http://www.csa.gov.et/</a>
Ghana	National Population Council Secretariat <a href="http://www.npc.gov.gh/">http://www.npc.gov.gh/</a>
	Ghana Statistical Service <a href="http://www.statsghana.gov.gh/">http://www.statsghana.gov.gh/</a>





Country	Institution
Guinea	Institut National de la Statistique <a href="http://www.stat-guinee.org/">http://www.stat-guinee.org/</a>
Kenya	Kenya National Bureau of Statistics <a href="http://www.knbs.or.ke/">http://www.knbs.or.ke/</a>
Lesotho	Lesotho Bureau of Statistics <a href="http://www.bos.gov.ls/">http://www.bos.gov.ls/</a>
Liberia	Liberia Institute of Statistics & Geo-Information Services <a href="https://www.lisgis.net/">https://www.lisgis.net/</a>
Madagascar	Institut National de la Statistique <a href="http://www.instat.mg/">http://www.instat.mg/</a>
Malawi	National Statistical Office <a href="http://www.nsomalawi.mw/">http://www.nsomalawi.mw/</a>
Mali	Institut National de la Statistique <a href="http://www.instat-mali.org/">http://www.instat-mali.org/</a>
Mauritania	Office National de la Statistique <a href="http://www.ons.mr/">http://www.ons.mr/</a>
Mozambique	Instituto Nacional de Estatística <a href="http://www.ine.gov.mz/">http://www.ine.gov.mz/</a>
Namibia	Namibia Statistics Agency <a href="http://www.nsa.org.na/">http://www.nsa.org.na/</a>
	National Planning Commission <a href="http://www.npc.gov.na/">http://www.npc.gov.na/</a>
Niger	Institut National de la Statistique <a href="http://www.stat-niger.org/">http://www.stat-niger.org/</a>
Nigeria	National Population Commission <a href="http://www.population.gov.ng/">http://www.population.gov.ng/</a>
	National Bureau of Statistics <a href="http://www.nigerianstat.gov.ng/">http://www.nigerianstat.gov.ng/</a>



Country	Institution
Rwanda	National Institute of Statistics of Rwanda <a href="http://www.statistics.gov.rw/">http://www.statistics.gov.rw/</a>
Senegal	Agence Nationale de la Statistique et de la Démographie <a href="http://www.ansd.sn/">http://www.ansd.sn/</a>
Sierra Leone	Statistics Sierra Leone <a href="https://www.statistics.sl/">https://www.statistics.sl/</a>
Somalia	National Statistics Directorate <a href="http://www.mopic.gov.so/national-statistics-directorate/">http://www.mopic.gov.so/national-statistics-directorate/</a>
South Africa	Statistics South Africa <a href="http://www.statssa.gov.za/">http://www.statssa.gov.za/</a>
South Sudan	National Bureau of Statistics <a href="http://www.ssnbs.org/">http://www.ssnbs.org/</a>
Tanzania	Tanzania National Bureau of Statistics <a href="http://www.nbs.go.tz/">http://www.nbs.go.tz/</a>
Togo	Direction des Études de la Population sous la Direction Générale de la Planification du Développement <a href="http://www.planification.gouv.tg/">http://www.planification.gouv.tg/</a>  Institut National de la Statistique, des Études Économiques et Démographiques <a href="http://www.stat-togo.org/nada/">http://www.stat-togo.org/nada/</a>
Uganda	Uganda Bureau of Statistics <a href="http://www.ubos.org/">http://www.ubos.org/</a>
Zambia	Central Statistical Office <a href="http://www.zamstats.gov.zm/">http://www.zamstats.gov.zm/</a>
Zimbabwe	Zimbabwe National Statistics Agency <a href="http://www.zimstat.co.zw/">http://www.zimstat.co.zw/</a>

## Europe

Country	Institution
Albania	Institute of Statistics <a href="http://www.instat.gov.al/">http://www.instat.gov.al/</a>
Armenia	National Statistical Service of the Republic of Armenia <a href="http://www.armstat.am/">http://www.armstat.am/</a>
Azerbaijan	The State Statistical Committee of the Republic of Azerbaijan <a href="https://www.stat.gov.az/">https://www.stat.gov.az/</a>
Belarus	National Statistical Committee of the Republic of Belarus <a href="http://www.belstat.gov.by/">http://www.belstat.gov.by/</a>
Bosnia and Herzegovina	Agency for Statistics of Bosnia and Herzegovina <a href="http://www.bhas.ba/">http://www.bhas.ba/</a>
Bulgaria	National Statistical Institute <a href="http://www.nsi.bg/">http://www.nsi.bg/</a>
Croatia	Croatian Bureau of Statistics <a href="https://www.dzs.hr/">https://www.dzs.hr/</a>
Georgia	National Statistics Office of Georgia <a href="http://www.geostat.ge/">http://www.geostat.ge/</a>
Germany	Federal Statistical Office (Destatis) <a href="https://www.destatis.de/">https://www.destatis.de/</a>
Kosovo	Kosovo Agency of Statistics <a href="http://ask.rks-gov.net/">http://ask.rks-gov.net/</a>
Macedonia	State Statistical Office <a href="http://www.stat.gov.mk/">http://www.stat.gov.mk/</a>
Moldova	National Bureau of Statistics <a href="http://www.statistica.md/">http://www.statistica.md/</a>
Montenegro	Statistical Office of Montenegro <a href="http://www.monstat.org/">http://www.monstat.org/</a>
Romania	National Institute of Statistics <a href="http://www.insse.ro/cms/">http://www.insse.ro/cms/</a>



Country	Institution
Russian Federation	Federal State Statistics Service <a href="http://www.gks.ru/">http://www.gks.ru/</a>
Serbia	Statistical Office of the Republic of Serbia <a href="http://www.stat.gov.rs/">http://www.stat.gov.rs/</a>
Turkey	Turkish Statistical Institute <a href="http://www.turkstat.gov.tr/">http://www.turkstat.gov.tr/</a>
Ukraine	State Statistics Service of Ukraine <a href="http://www.ukrstat.gov.ua/">http://www.ukrstat.gov.ua/</a>

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On behalf of



Federal Ministry  
for Economic Cooperation  
and Development

Deutsche Gesellschaft für  
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices  
Bonn and Eschborn

Friedrich-Ebert-Allee 36 + 40  
53113 Bonn, Germany  
T +49 228 44 60-0  
F +49 228 44 60-17 66

Dag-Hammarskjöld-Weg 1 - 5  
65760 Eschborn, Germany  
T +49 61 96 79-0  
F +49 61 96 79-11 15

E [info@giz.de](mailto:info@giz.de)  
I [www.giz.de](http://www.giz.de)