Berlin Institute for Population and Development

All's well that grows well?

Why economic growth alone cannot solve Africa's demographic challenges

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CONTENT

SUMMARY

Africa is on track for growth in two respects. Its population has increased more than fivefold since 1950, and unlike other regions of the world, there is no end in sight so far. By the middle of the century, more than half of the global population growth will be accounted for by the African continent. At the same time, Africa's economies have also been on a growth path for more than two decades – only surpassed by South and East Asian average growth in a global comparison.

This trend may lead to the assumption that the strong population growth is no challenge for Africa. A widespread assumption is that comparatively high economic growth compensates for population growth, or that a steadily growing and young population can spur economic growth and socio-economic progress as it provides more workers, consumers and innovators. As a result, fertility rates will eventually fall, and population growth will come to an end – so the conclusion is drawn.

However, at least since the outbreak of the coronavirus pandemic and the associated collapse of global supply chains, it seems more than questionable that economic growth in Africa will be sufficient to initiate a development path that leads to greater prosperity and security for all and thus to smaller families and a decline in population growth in the long term.

Why economic growth alone cannot solve Africa's demographic challenges

Not only must future prosperity gains be shared by more and more people as the population continues to grow. Economic growth in Africa is also not inclusive, as hardly any jobs are created for an increasing number of young workers. Rather, growth can mostly be attributed to the export of unprocessed products and mineral resources which both creates relatively few formal jobs.

As a result, almost nine out of ten Africans depend on informal employment to feed their families. In addition to the direct consequences for the people – lack of social security in old age, precarious working conditions and low incomes – this also has a negative impact on government revenues as those who do not work formally do not pay taxes. Consequently, in many places, the urgently needed funds for investment in infrastructure, education and health are lacking. This leaves the continent's most important resource largely untapped: its human capital.

As long as people's living conditions and future prospects do not improve, experience shows that the average number of children per woman is likely to remain at a high level. This reduces the chances for development progress. The economic consequences of the pandemic contribute to a further deterioration of the situation. The cycle of low health and educational outcomes, weak economic performance and continuing high population growth is likely to continue.

How demographic development becomes an opportunity

Africa's greatest chance for a leap in development that benefits broad segments of the population is for families to become smaller. Only a decline in fertility rates enables a change in the age structure of a population, which is what the Asian tiger states have taken advantage of in their economic race to catch up. This so-called demographic bonus – in which a disproportionately large number of young people of working age has to provide for a declining proportion of children and few older people – ideally enables such an economic upturn. A comprehensive demographic

policy with investments in the core areas of health, education, promotion of gender equality and family planning programs, as well as job creation, is therefore indispensable, especially during the current crisis.

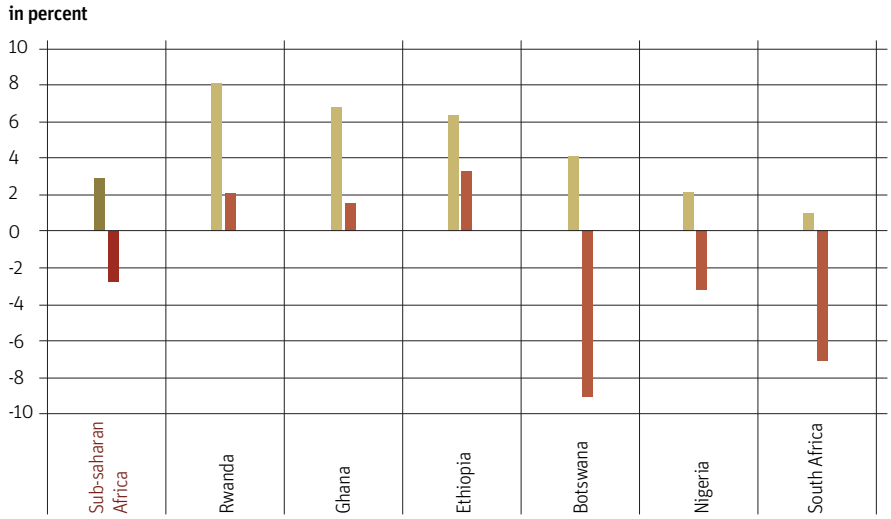
For African countries to take advantage of the positive effects of a favourable age structure on their path to a demographic dividend, there is need:

- **... to establish demographic policy as an essential part of an integrated economic policy in Africa and to focus on the well-being and needs of the people.** In addition, to increased promotion of economic sectors that are central to the creation of formal income opportunities, this also includes a stronger orientation of training programs to the needs of the labour market.

- **... by the German foreign policy to address the urgent need for action in demographically relevant areas in dialogue with African States.** It should be communicated that economic growth alone is not sufficient to meet the demographic challenges in Africa.

- **... to encourage international financial institutions, not least the IMF, to take a closer look at the macroeconomic effects of demographic development and to also address them in dialogue with African partner countries.**

- **... to increase German and international support for African approaches in demographically relevant areas** such as the Ouagadougou Partnership or the AU Roadmap on Harnessing the Demographic Dividend.



When a virus causes economies to collapse

Most governments in Africa responded with strict restrictions and measures in early 2020, when COVID-19 began to spread across the globe. As in other parts of the world, this did not remain without consequences for the continent's economic development. In June, the World Bank revised its growth forecasts for 2020 for all African countries significantly downwards. The assumption that high economic growth will absorb the continent's rapid population growth is now – at the latest – obsolete.

Projected GDP growth rate, in percent, January and June 2020
(Data basis: World Bank[1, 2])

January
June

1 DUAL GROWTH – A PROMISE OF SUCCESS?

Africa is growing. And it is doing so in two ways. On the one hand, the continent is currently gaining more than 60 new inhabitants every minute. This is equivalent to an increase of more than one billion people, almost doubling of the African population by the middle of the century. This means that half of the global population growth up to 2050 will occur on the African continent alone.[1]

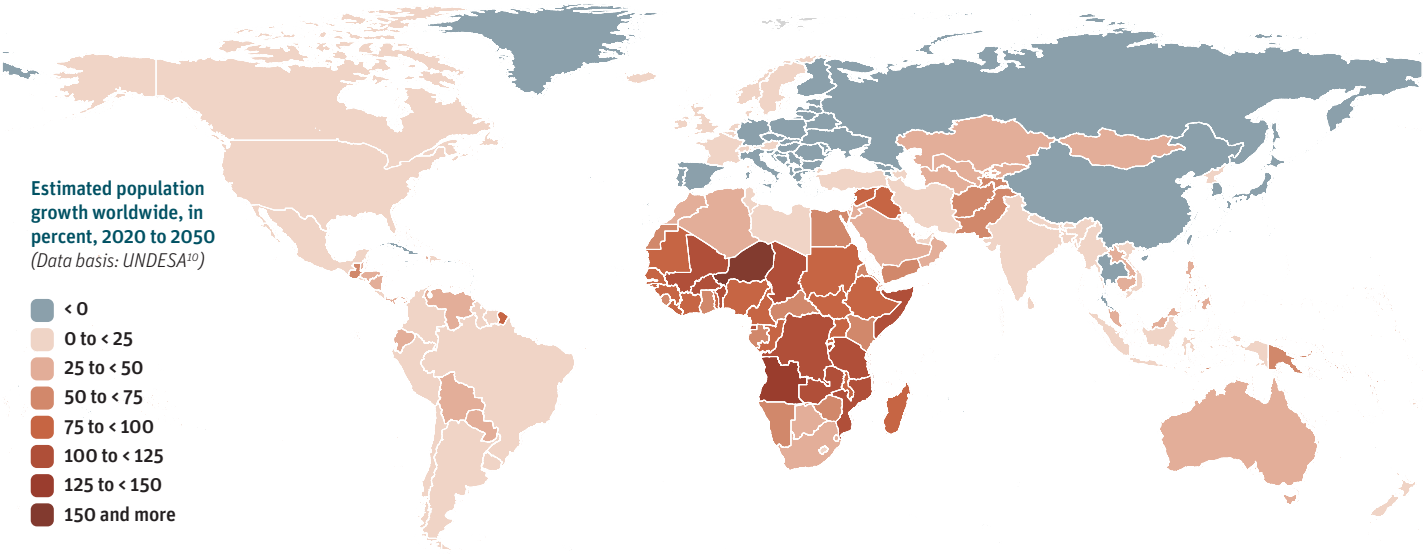
On the other hand, the African continent has been on a course of growth economically, too. Since the turn of the millennium, a solid economic upswing has been observed.[2] On average, the African states have grown by more than four percent annually since the year 2000. Worldwide, the average growth rates of gross domestic product in Africa during this period was exceeded only in South and East Asia.[3]

Despite regional differences in economic performance, the generally solid economic development on the continent has contributed in building the confidence of many African governments towards the future. At the World Economic Forum on Africa 2019 in Cape Town, South Africa's President Ramaphosa spoke of a coming "African century".[4] The positive economic development has repeatedly led many politicians and decision-makers – even beyond the continent – to believe that high economic growth absorbs population growth. After all, as long as economic growth rates exceed demographic trends, it should be possible to provide for the greater number of people, according to a widespread opinion.

The fact that the annual growth rate of the African population has been significantly lower than economic growth in the last two decades – and is forecasted to remain so in the coming decades – has supported this argument so far.[5] While the population of Africa is estimated to grow by about 2.5 percent annually until 2025 by the United Nations, experts at the African Development Bank (AfDB) have until recently predicted that the African economy would grow by 3.9 percent in 2020, and by as much as 4.1 percent in the following year.[6] The high population growth is therefore no cause for concern in the view of growth optimists.

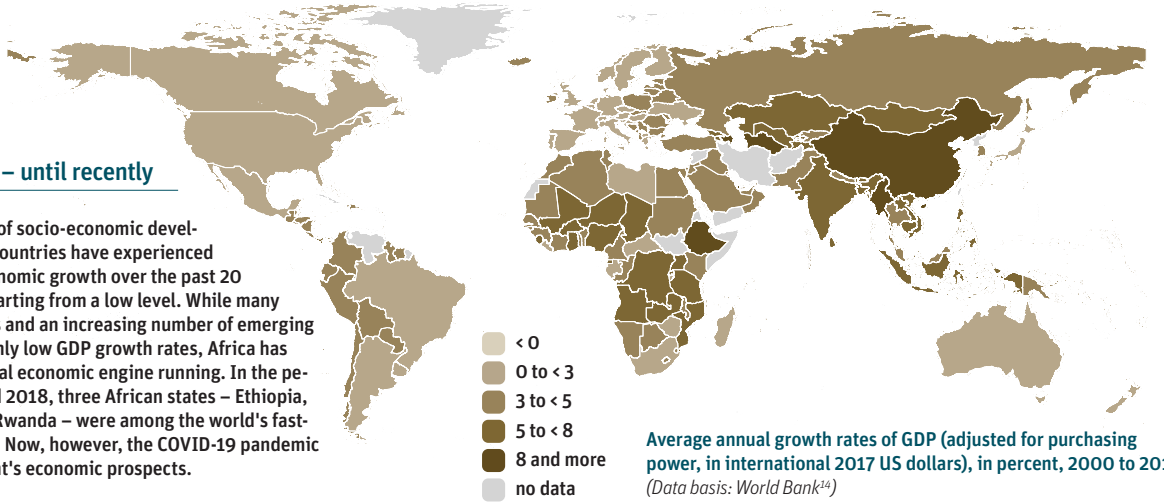
Africa as a centre of growth

Global population growth is increasingly concentrated in the less developed states of Western Asia and in sub-Saharan Africa especially. According to UN estimates, many countries in the region are likely to see their population double in the next three decades, some even almost triple.



Economic upswing – until recently

As latecomers in terms of socio-economic development, many African countries have experienced comparatively high economic growth over the past 20 years – albeit mostly starting from a low level. While many industrialized countries and an increasing number of emerging economies have seen only low GDP growth rates, Africa has helped to keep the global economic engine running. In the period between 2000 and 2018, three African states – Ethiopia, Equatorial Guinea and Rwanda – were among the world's fastest growing economies. Now, however, the COVID-19 pandemic is clouding the continent's economic prospects.



Average annual growth rates of GDP (adjusted for purchasing power, in international 2017 US dollars), in percent, 2000 to 2018
(Data basis: World Bank[14])

Growth slump due to COVID-19

With the outbreak of the COVID-19 pandemic, the continent's economic growth prospects have changed dramatically – at least temporarily. Since the first half of 2020, lockdowns and social distancing measures have brought economic activity to a halt in many places on the continent. The consequences of collapsing commodity prices, a lack of tourist inflows, interrupted global supply chains, and declining investments and money transfers from the diaspora are now becoming apparent.[7] Economic growth for this year, and for years to come, is therefore likely to be significantly lower than previously expected. According to the latest World Bank forecasts, sub-Saharan Africa could experience negative growth of around three percent in 2020 – a decline of almost six percentage points compared to previous forecasts from January 2020.[8] This suggests that the continent is likely to slide into recession in 2020 for the first time in 25 years.[9]

However, the multifaceted consequences of the pandemic not only affect the economy but also, and to a considerable extent, the living conditions of the people on the continent. This might reverse gains in development progress that have already been achieved in Africa. According to World Bank estimates, 13 million people in Africa could fall into extreme poverty this year as a result of the pandemic. Depending on how serious the economic consequences will actually be, the number could even increase significantly.[11] In addition, the virus exacerbates the difficulties in accessing health services and education, which is often already precarious for many people on the continent. Over 250 million children and youth were not attending school in July 2020.[12] It remains unclear when all educational institutions will reopen and whether all students will be able to return. And since the pandemic will place additional burdens on already strained health systems, health outcomes, particularly among women and children, are likely to deteriorate.[13] These setbacks could also affect Africa's demographic development in the medium to long term: Experience shows that as long as living conditions do not improve – or even worsen – the average number of children per woman remains high.

Need for action – not only on account of the pandemic

This makes the assumption that high economic growth will absorb the rapid population growth on the continent obsolete in two respects. In the short term, the gains in prosperity, which will have to be distributed among more and more people in the future, will now be even smaller due to the economic downturn. In the long term, due to the development setbacks anticipated because of the pandemic, the high population growth could continue for a longer period in the future.

However, a closer look at the socio-economic development of the African continent until to date quickly makes it clear that the estimates of growth optimists do not correspond to reality, even without the consequences of COVID-19. The available data indicates that even the high economic growth of the last two decades has not been sufficient to keep up with the population growth seen so far in Africa. This is because the economic upward trend has not, or has barely, translated into actual socio-economic progress, which is necessary to reduce the high population growth in the long term. Chapter 2 outlines some of the main reasons for this, and explains why fertility rates on the African continent remain at a high level. Chapter 3, on the other hand, shows what (economic) opportunities would arise for Africa if the number of children fell, and what measures are urgently needed to achieve this – especially in times of crisis. Only if the right adjustments are made today, African countries will have the prospect of a demographically induced development boost, a "demographic dividend".

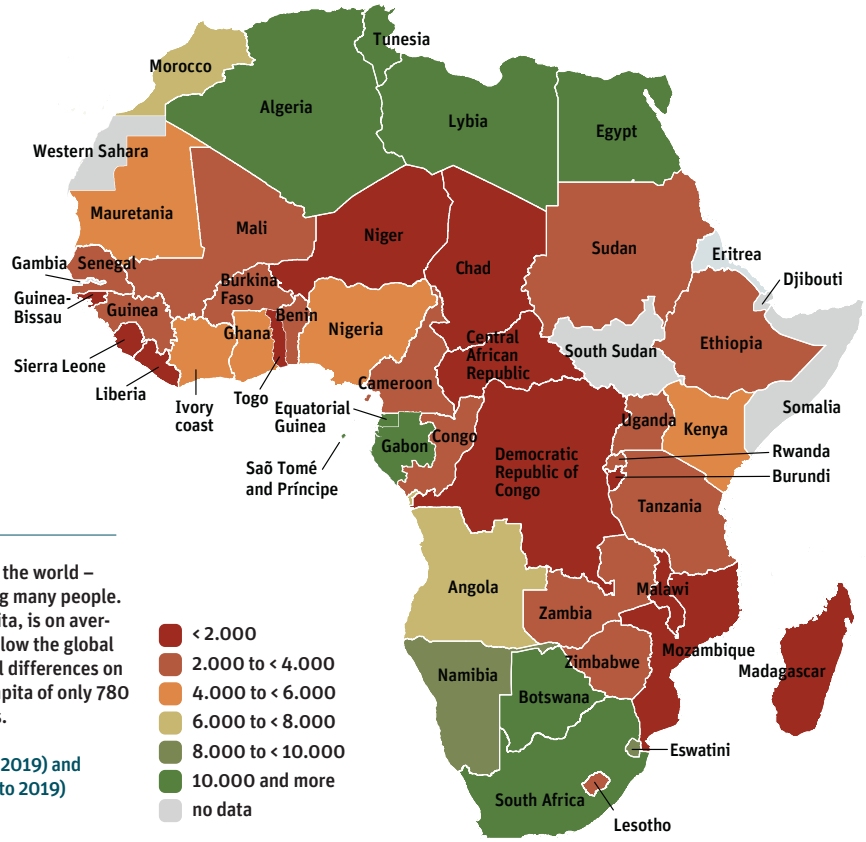
2 WHY ECONOMIC GROWTH ALONE DOES NOT ACCELERATE AFRICA'S DEVELOPMENT

According to common economic theory, economic growth brings more prosperity for all. In Africa, however, this does not seem to be the case, or only to a limited extent. A look at the gross domestic product per capita shows that little of the wealth generated on the continent remains for each individual: Between 2000 and 2019, per capita incomes in sub-Saharan Africa grew by only about 1.9 percent annually on average. During the same period, per capita GDP in East and South Asia rose by 4.6 and 4.7 percent annually, respectively. The high growth in population has thus ensured that the real GDP per capita in sub-Saharan Africa today is still at about the same level as in the 1970s.[15]

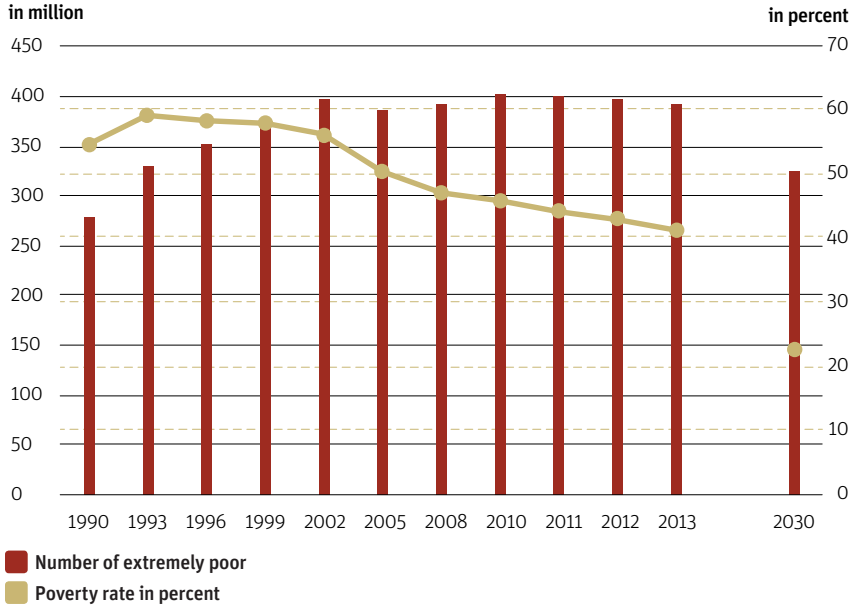
Moreover, the comparatively high economic growth has so far hardly translated into socio-economic progress that benefits broad segments of the population. The comparatively poor health and education levels on the continent, as well as the persistent poverty, speak for this. It is true that poverty rates have already declined since the turn of the millennium, particularly in sub-Saharan Africa: from almost 60 percent in sub-Saharan Africa in 2000 to 42 percent in 2015, which is undoubtedly a success. However, the reduction of poverty was slower than in other regions of the world, such as South Asia and Latin America.[16] Moreover, and most importantly, with the increase in population over the last three decades, the absolute number of people living in extreme poverty has risen. Whereas in 1990 just under 280 million people in sub-Saharan Africa had to get by on less than $1.90 a day, by 2015 the figure had risen to around 420 million.[17] If the current trend continues, Africa will not achieve the ultimate goal of the Sustainable Development Goals (SDGs) of eradicating poverty by 2030. According to World Bank estimates, one in four people on the continent will still be living in poverty ten years from now.[18]

Low income for many people

The level of prosperity on the African continent is the lowest in the world – partly because the wealth generated must be distributed among many people. The GDP per capita, i.e. the national income generated per capita, is on average only around 4,000 US dollars in sub-Saharan Africa, far below the global average of just under 18,000 US dollars. However, the regional differences on the continent are considerable. While Burundi has a GDP per capita of only 780 US dollars, it is 30,000 US dollars per person in the Seychelles.



Per capita income (adjusted for purchasing power, in US dollars, 2019) and average annual growth rate of GDP per capita (in percent, 2000 to 2019)
(Data basis: World Bank[19])



Growing number of poor despite declining poverty rates

On first sight, it is good news that the poverty rate in sub-Saharan Africa has fallen significantly in recent decades. However, a comparison with absolute figures shows that more people in sub-Saharan Africa today live in extreme poverty than did in 1990, which is the result of insufficient socioeconomic progress and high population growth. If per capita GDP continues to grow in the future, as it did between 1998 and 2013, the World Bank estimates that even in 2030 – when poverty should be eradicated according to the SDGs – more than 300 million people will still have less than 1.90 US dollars a day at their disposal.

Development of the poverty rate (in percent) and the absolute number of people in extreme poverty (<1.90 US dollars per day) in Africa, different years surveyed and forecast for 2030
(Source: Christiaensen und Beegle 2019[20])

2.1. No inclusive growth without jobs

Why has the African population hardly benefited from the high economic growth rates so far? One reason is the source of economic growth in Africa: Unlike in Asian countries, which have undergone a rapid industrialization process in recent decades, economic growth in many African countries is still based primarily on the export of raw materials and unprocessed agricultural products. On the one hand, this makes many African economies sensitive to price fluctuations on the world market. On the other, this economic structure has a direct impact on the chances of reducing poverty – not only because a wealth of mineral resources is usually accompanied by a high degree of corruption and a lack of investment in basic infrastructure, but above all because few formal jobs are usually created in this sector.[21]

Low level of industrialization

In other regions of the world, the processing industry has always provided a multitude of income opportunities. As recently in Asia, Asian emerging markets – above all China – have, as extended workbenches of the global economy, built simple production plants in the past in which the growing number of people of working age were employed – including those who were no longer needed in an increasingly productive agriculture. Starting with economic sectors such as textiles, leather and other light industries, the countries eventually moved up into higher value-added chains that increased productivity and generated income gains. The factories and industrial plants that have been the engine for economic growth and development progress, first in Europe and most recently in Asia, are still largely absent in African countries. With a few exceptions such as South Africa, Egypt and Nigeria (which are considered more or less industrialized), and some developing countries such as Ethiopia or Rwanda (which are making great efforts to accelerate industrialization), the potential of the continent's manufacturing and processing industry is largely untapped.[22] Overall, the share of manufacturing in value added in sub-Saharan Africa has actually declined in recent years. In other words, the continent has de-industrialized rather than industrialized.[23]

Jobless growth

The absence of this structural change is causing a lack of secure income opportunities for the growing number of people of working age in Africa. It is estimated that between 2010 and 2020, only 4 percent of new entrants to the labour market found a formal job in manufacturing, 21 percent in the service sector. The remainder were left empty-handed.[24] And with population growth, this situation is worsening. Up-to-date, the number of people of working age in Africa grows by over 20 million annually.[25] In sub-Saharan Africa alone, some 18 million jobs would have to be created each year to guarantee future prospects and income for those. Recently, however, only about 3 million formal jobs have been created each year.[26] With the economic consequences of the COVID-19 pandemic, the number of jobs created could be even lower in the nearer future.

The lack of jobs forces the majority of Africans to make ends meet as subsistence farmers or in the informal service sector. Without a social safety net provided by the state and with low household incomes overall, hardly anyone can afford to be unemployed. As long as the African economies do not diversify and create more productive jobs in manufacturing and in the formal service sector such as in technology, communications and finance, peoples prospects of earning secure and adequate incomes in the future will remain bleak. Experience shows that the number of children will then also remain at a high level.

2.2. Low investments in human capital

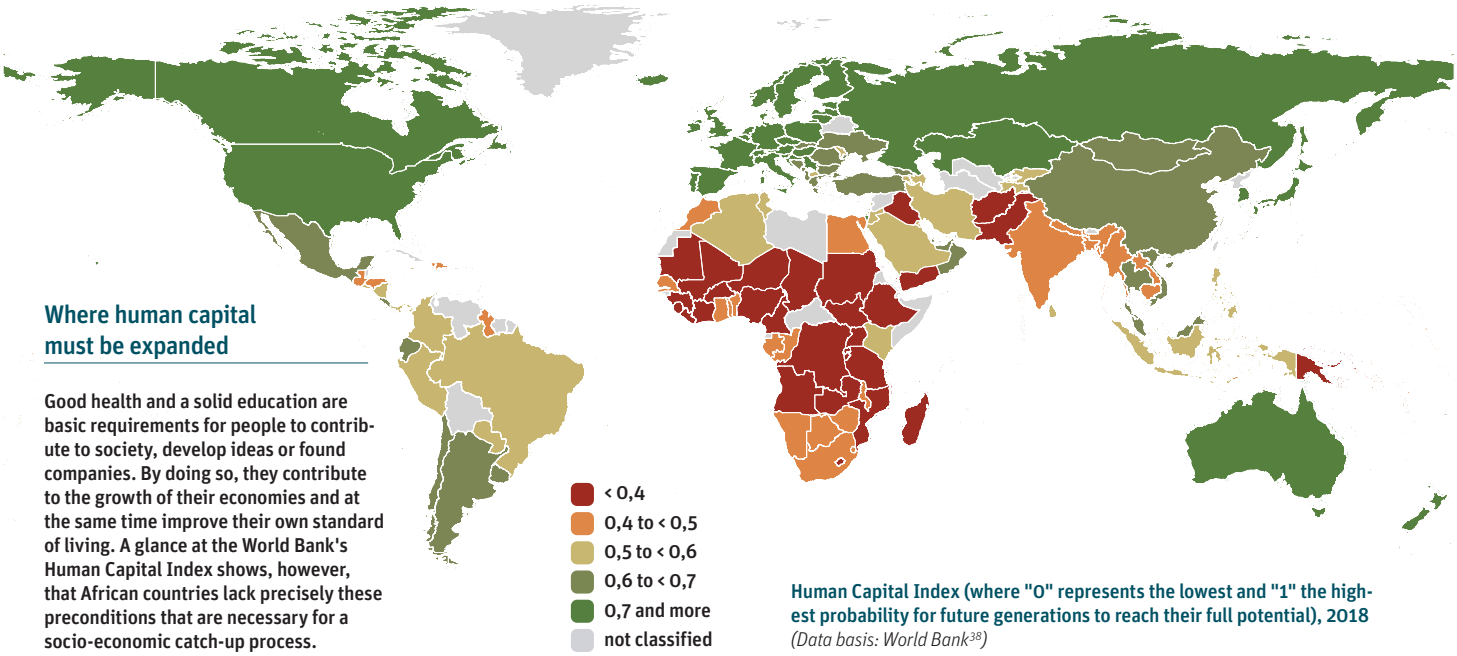
An estimated 86 percent of Africans must be satisfied with informal jobs.[27] This usually means precarious working conditions, low income as well as a lack of social security for them. Additionally, it has negative consequences for the state, as those who are not formally registered as employees do not pay taxes – at least not direct taxes. This is among the reasons for generally low state revenues on the continent.[28, 29] On average, tax revenues in African countries with low-middle incomes were just 19 percent of GDP in 2013, compared to the OECD average of 34 percent in 2015. The low-income countries even only achieve an average of 14 percent. In some countries, tax revenues are below 13 percent and thus below the level at which the maintenance of basic state functions can be guaranteed.[30]

Unused potentials

The African states consequently not only lack the means for investments in infrastructure – in roads, railways, power lines as well as solar plants and wind farms – that would be necessary for a structural change towards a manufacturing industry and an economic growth course based on broader foundations. They also lack funds to invest in the continent's greatest resource: in what economists call human capital, through the health, and above all, the education of its young population. This would be a key prerequisite for economic growth and socio-economic progress.

A glance at the World Bank's Human Capital Index shows that sub-Saharan Africa in particular has a lot of catching up to do. This index uses health and education indicators to assess how much human capital a child born today can expect to acquire by the age of 18. The chances of the young generation in sub-Saharan Africa are the bleakest in a global comparison. With an average value of 0.40, the countries in the region are far below the global average of 0.57.[31]

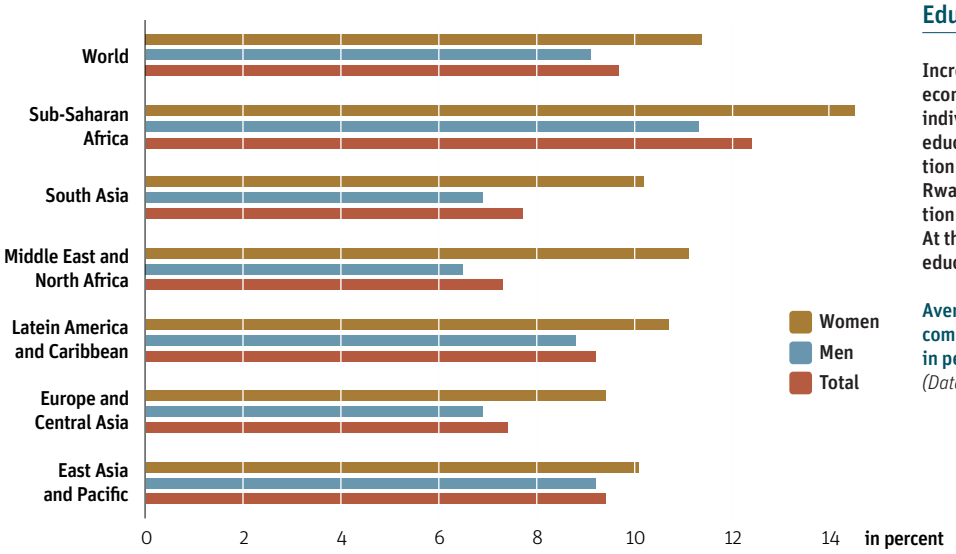
The poor performance of African countries in health and education is hardly surprising. Child and maternal mortality rates remain high, especially in sub-Saharan Africa. Avoidable infectious diseases are still widespread, and in many places, there is a lack of basic infrastructure for a healthy life, such as clean water or sanitary facilities. This contributes to the fact that the continent carries the highest burden of disease worldwide – while at the same time having the lowest density of medical staff and overall strained health systems.[32]



Where human capital must be expanded

Good health and a solid education are basic requirements for people to contribute to society, develop ideas or found companies. By doing so, they contribute to the growth of their economies and at the same time improve their own standard of living. A glance at the World Bank's Human Capital Index shows, however, that African countries lack precisely these preconditions that are necessary for a socio-economic catch-up process.

Human Capital Index (where "0" represents the lowest and "1" the highest probability for future generations to reach their full potential), 2018
(Data basis: World Bank[38])



Education pays off

Increased investment in education not only brings economic benefits, but also income effects for each individual. Despite all the challenges of African education systems, the monetary benefits of education are on average highest in sub-Saharan Africa. In Rwanda, for example, each additional year of education brings a life income gain of about 22 percent. At the same time, women benefit more from higher education than men do.

Average increase in life income per additional completed school year by world region and gender, in percent, 2014
(Data basis: Montenegro and Patrinos[39])

Deficits in the education sector

There are also major deficits in educational outcomes across the entire continent. Although access to education has formally improved significantly in the last two decades, the level of education is still low. Even before the COVID-19 pandemic, African countries were far from achieving the goal of providing all children and young people with secondary education by 2030, as envisaged by the Sustainable Development Goals (SDGs). On average, in sub-Saharan Africa, only 6 out of 10 children enrolled complete elementary school, and only 1 in 4 graduates from high school. Even those who benefit from education are thus usually poorly qualified to compete on the labour market in the 21st century. According to representative surveys in Senegal, Kenya, Tanzania, Nigeria, Togo, Uganda and Mozambique, on average, 38 percent of fourth-grade students could not read a single letter, 53 percent could not read a complete sentence, and 89 percent could not read a whole paragraph.[34]

Increased investments in health and education in Africa are therefore urgently needed – not only in times of the coronavirus crisis. In 2001, the member states of the African Union (AU) committed themselves in the Abuja Declaration to devote at least 15 percent of their annual budgets to the health sector. By 2014, however, only four countries had adhered to this.[35] Even UNESCO's recommendation that 15 to 20 percent of the national budget be spent on education each year is far from being met by all countries.[36] According to the World Bank, higher investments in these sectors are likely to have enormous effects on the region's economic development. If all girls and boys in Africa could reach their full potential, the GDP per worker could be 2.5 times higher than today. This would correspond to additional annual economic growth of 1.8 percent over the next 50 years.[37]

2.3. Population growth prevents economic catch-up

The lack of employment and human capital reduces the chances of African economies to achieve – possibly even greater –economic growth that could improve people's living conditions and reduce poverty. The low chances of Africans to benefit from the existing economic growth also has a demographic effect. As long as people have no opportunities to lift themselves out of poverty thanks to good health, adequate education and existing income opportunities, experience shows that the number of children will remain at a high level.

Lack of development slows down fertility decline, and high fertility rates prevent development progress

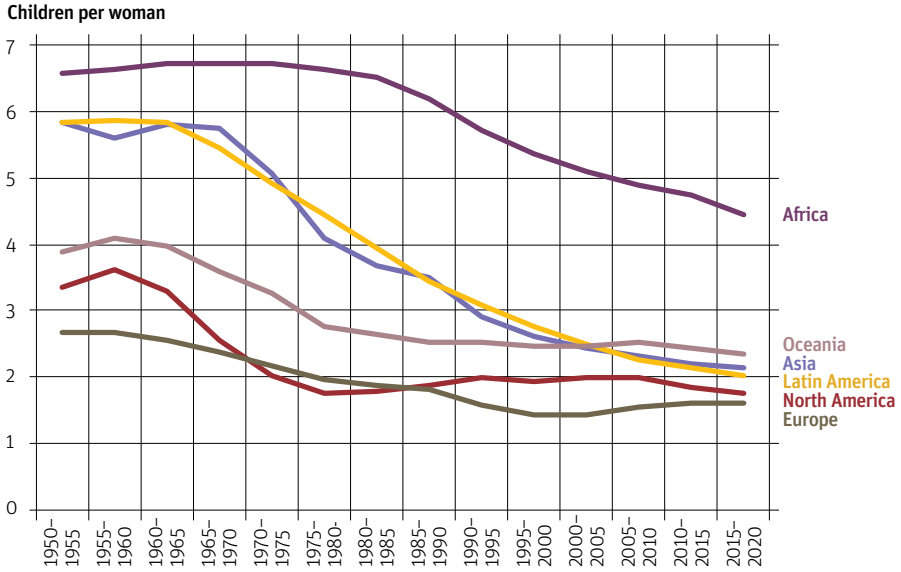
The slow socio-economic progress is thus contributing to the fact that the decline in fertility rates in Africa has so far been much slower than in other regions of the world. Whereas the fertility rate in Asia fell from 5.7 to 3.5 children per woman between 1965 and 1985 – a decline of 40 percent, the average number of children per women declined in Africa not only 20 or 30 years later but also amounted to just 17 percent.

Consequently, African woman today give birth to an average of 4.4 children during their lifetime, almost twice as many as women in other regions of the world.[40] The expected increase of more than one billion people over the next three decades further hampers the urgently needed creation of sufficient jobs and improvement of human capital. While in 2018, for example, around 35 million primary school children in Africa were still attending school, the age group of children to be educated will grow by an average of over four million each year over the next decade.[41, 42] The COVID-19 pandemic is now further widening the access gaps. The cycle of low health and educational standards, weak economic performance and sustained high population growth continues.

Late and slow

Africa has so far lagged behind other regions of the world in terms of fertility decline, which not only began 20 to 30 years later than in Asia or Latin America, but has also been much slower. The continuing high population growth makes it increasingly difficult to provide sufficient health facilities, schools or jobs for all. This is precisely what is needed to enable African countries to catch up socio-economically.

Average number of children per woman by world region, 1950-1955 to 2015-2020
(Data basis: UNDESA[43])

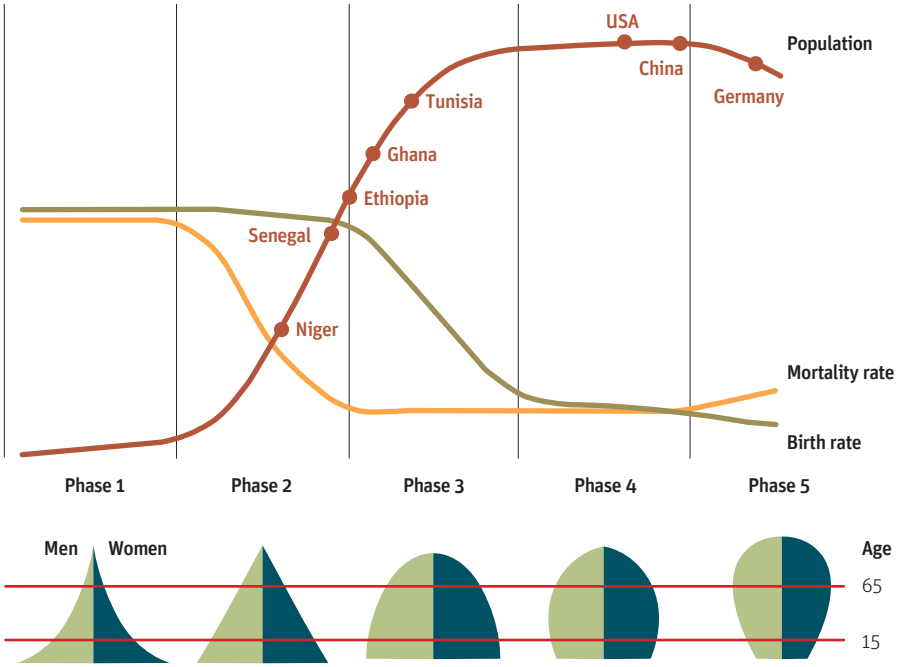


3 WHY DECLINING FERTILITY RATES OPEN UP DEVELOPMENT OPPORTUNITIES

Africa's economic growth is far from sufficient to adequately provide for the steadily growing number of inhabitants. Moreover, as the living conditions of the African people hardly improve, the number of children declines only very slowly, which in turn fuels further population growth. However, what would happen if fertility rates were to fall, and population growth were to slow down? Would a socio-economic process of catching-up be possible then? The model of the demographic transition, which describes the demographic development that has accompanied socio-economic progress in all countries worldwide to date, provides answers to these questions.

When the age structure starts to change

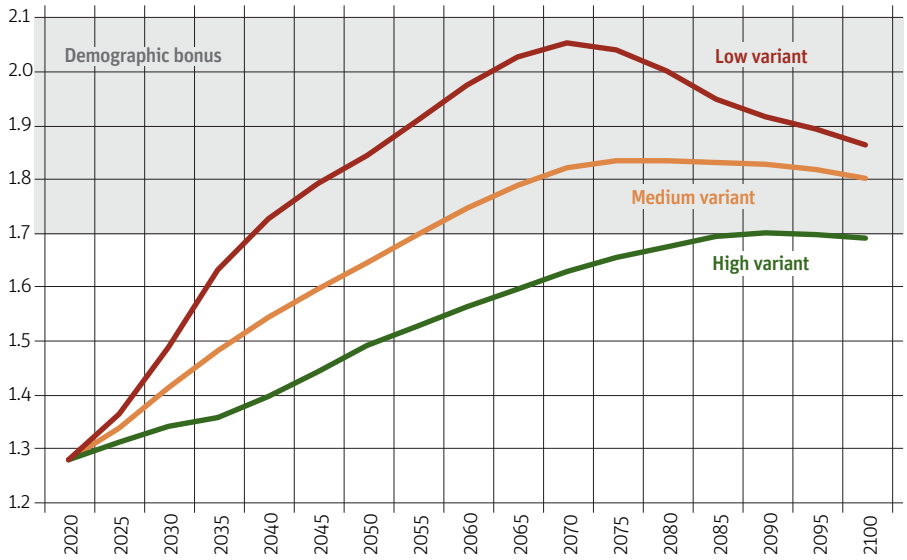
The demographic transition describes the change from societies with high death and birth rates to those in which both reach a low level. Due to better nutrition and hygiene, the mortality rate starts to fall, while the birth rate remains high for the time being. Temporarily, this leads to rapid population growth. Once people realize that the next generation will survive and socio-economic progress will improve the living conditions of the people – in other words, when health care continues to improve, schools and universities offer new educational opportunities, formal jobs are created and women acquire more rights – with a time lag, the number of children begins to decline. Population growth slows down or even reverses into decline.



One path for all states

In the course of their socio-economic development, all countries undergo a demographic transition – albeit with a time lag and at different speeds. Initially, an improvement in living conditions will reduce the mortality rate and, with a time lag of one to two generations, the birth rate eventually starts to fall. In this intermediate phase, the population grows rapidly. At the end of the transition, it stagnates or even begins to shrink, provided there is no immigration. During this transformation process, however, not only the size of a population changes, but also its age structure.

Schematic representation of the development of birth and death rates as well as the total population in the absence of migration
(own representation)



Sooner or later to the bonus

At what point African countries will reach the favourable age structure of the demographic bonus and what the dependency ratio will be depends on how rapidly the number of children per woman on the continent will decline in the future. If birth rates fall in the future at a rate previously observed in other regions of the world, the window of opportunity for the demographic bonus in Africa should open around 2055 on average. By contrast, a faster decline, as envisaged in the UN's low-fertility variant, could result in a bonus as early as 2040.

Estimated development of the dependency ratio (ratio of the working age population between 15 and 64 years to the dependent population under 15 and over 64 years) in Africa according to UN population scenarios, 2020 to 2100
(Data basis: UNDESA[48])

All industrialized countries and the first emerging markets have largely completed this transition. In Africa, by contrast, it is still in progress, or has only just begun in some countries. Mortality rates, particularly among children and mothers, have already declined thanks to hygienic and medical advances and better food supplies. However, the lack of progress in access to health services, high-quality education and secure income, as well as the lack of equality for women, means that birth rates remain high in many regions (see chart on page 12).

Continuous high fertility rates, however, delay a change in the age structure, which always accompanies a demographic transformation process, and has opened up new economic opportunities for states in other regions. This is because the decline in the number of children in Phase 3 means that the youngest cohorts are getting smaller and the classic population pyramid transforms into a kind of beehive. The gravity centre of the population then shifts towards the population of young working age (see graph on page 13). While the proportion of children and youth to be cared for declines and the number of older people is still small at this point, the economy has a disproportionately large number of young productive labour force at its disposal.

Towards a dividend

Under good framework conditions, with political stability, a sufficiently qualified labour force and a good supply of jobs this favourable age structure – the so-called demographic bonus – can be turned into an economic upswing, into a "demographic dividend". Economists attribute the economic rise of East Asian states in the 1980s largely to the optimal use of the demographic bonus. Between 1965 and 1990, the working population there grew almost four times faster than the dependent population because fertility rates had previously fallen rapidly. Thanks to good social, economic and political conditions, the East Asian states succeeded in turning this bonus into an "economic miracle". The change in the age structure is estimated to be responsible for about one-third of economic growth during this period.[44, 45]

However, most African states are still far from reaching the economically favourable age structure of the demographic bonus. This window of opportunity only opens up if there are at least 1.7 people of working age between 15 and 64 for every dependent person. Some North and South African countries, such as Tunisia, South Africa and Morocco, have already achieved this ratio of working age to dependent population and must now find ways to convert this bonus into a dividend. The majority of sub-Saharan countries, however, cannot hope to achieve this favourable age structure until 2055 at the earliest.[47]

Even this late offset in the change of age structure presupposes that fertility rates in sub-Saharan Africa will fall as sharply in the future as they have in other regions of the world. If the decline in the number of children is slower in the future than in other world regions in the past – for example, due to setbacks in development caused by the COVID-19 pandemic – it could even take about 20 years longer on average for sub-Saharan Africa to reach the demographic bonus.

A glance over the continents margin

Africa's greatest chance for a longer-lasting economic upswing that benefits broad segments of the population is for families to become smaller. However, how can the decline in fertility rates in Africa, especially in sub-Saharan Africa, be accelerated – with a rights-based approach and without coercive measures such as those known from China? Moreover, once the demographic bonus is reached, what is needed to transform it into economic growth and socio-economic progress? Where the key levers lie and what measures are effective in advancing the demographic transition and making the best possible use of it for economic development can be deduced from the experiences of Asian countries.

South Korea – From a poor agricultural state to a technology hub

South Korea is a prime example of how to use the demographic bonus, alongside Taiwan and the city-states of Singapore and Hong Kong – the so-called Asian tiger states. Only 60 years ago, South Korea was one of the poorest countries in the world, where the population lived predominantly from agriculture and received little education. At the beginning of the 1960s, per capita GDP was still below the level of some African countries such as Ghana or the Ivory Coast, and women gave birth to about six children on average in the course of their lives.[49] Today, however, South Korean women only have one child on average.[50] Furthermore, this child can lead a much better life than its grandparents did. The 50-million-state has made it to the 12th place amongst the world's biggest economies, and is home to some of the largest global companies – including technology powerhouses such as Samsung and LG and carmakers Hyundai and Kia.[51]

This success story is largely based on massive investments in the education of the South Korean population, especially women. This was accompanied by a population policy aiming primarily at disseminating modern contraceptives and improving maternal and child health. These efforts proved effective: Between 1960 and 2000, the fertility rate halved every 20 years.[52] The age structure began to change and the number of people of working age rose disproportionately. Additionally, since the export-oriented manufacturing industry in particular offered them enough jobs, the economy began to grow.[53] The rising tax revenues provided the country with additional capital, which was in turn reinvested in the education and health sectors, but also in infrastructure and the development of remote regions. In this way, life expectancy in the country continued to rise and more and more young people benefited from better education, giving them the opportunity to progress into industries with higher value added and better incomes. Moreover, because they put some of this money aside, the savings rate increased and the money flowed back as investments in the creation of new innovative companies.[54] In 1996, South Korea became a member of the OECD and had thus risen to the ranks of the industrialized nations.[55]

Bangladesh – With woman's empowerment towards the bonus

The development path of South Korea and other Asian tigers was followed somewhat later by other Asian countries such as China, Malaysia, Thailand, Indonesia and Vietnam, which have also made great progress in development in recent decades. Another state that was long considered a hopeless case in development policy has recently joined this series: Bangladesh. When the country gained independence in 1971 after a bloody civil war with Pakistan, it was already one of the most densely populated states in the world, and its population grew by an average of over two percent each year.[57]

While at the time the state was founded, each Bangladeshi woman gave birth to an average of almost seven children, today the average is only just over two. Hardly any other country has experienced such a rapid decline in fertility.s[58] The average number of children in Bangladesh has thus already fallen below the replacement level of 2.1 children that a society needs to maintain its population size. Population growth in the country is likely to come to a halt by the middle of the century.[59]

A demographic policy package

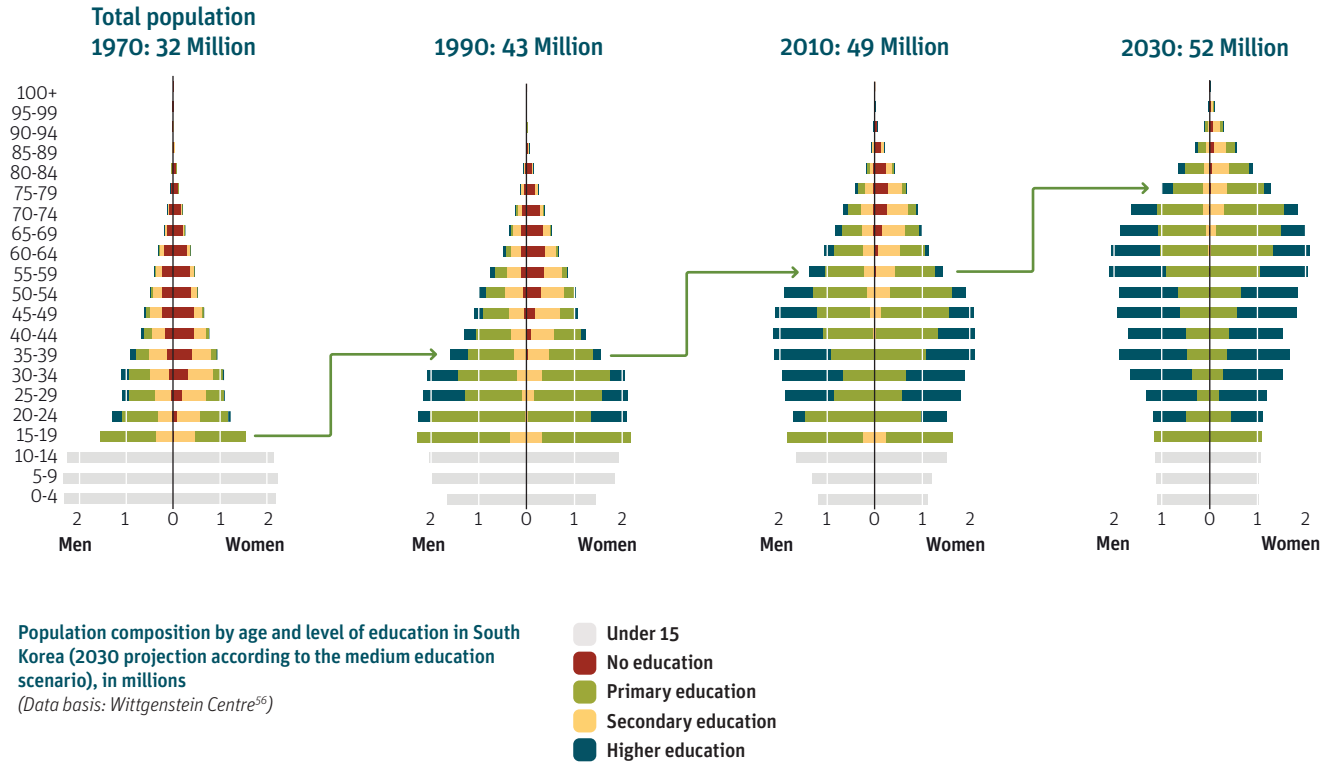
The fact that families in Bangladesh were shrinking so rapidly can be attributed to a whole range of measures that have improved people's lives in many ways and have been focused primarily on women. Together with non-governmental organizations, the government began to take care of schools, health services, as well as family planning and micro-credit programs for women in the 1970s. Among other measures, this helped to further improve the health of Bangladeshis – and especially children, to make modern contraceptives more widely available, and to make education equally accessible to boys and girls. In 1994, the government introduced a scholarship program for girls to improve their access to secondary school. This was not only intended to prepare them for careers as teachers or health workers, but also to ensure that they would marry and have children at a later point in life.[60]

The fact that the annual growth rates of GDP in Bangladesh have remained above 6 percent ever since indicates that the country has been able to reap the first benefits from this favourable age structure. This is in part probably also due to the comparatively high labour force participation of Bangladeshi women. 45 percent of women between the ages of 25 and 34 are economically active – significantly more than in other Muslim countries such as Pakistan (23 percent) or Afghanistan (25 percent).[61] So far, growth has been fuelled primarily by the textile industry.

However, while the industry created more jobs between 2003 and 2015, as there was a growth in workforce, the pace of job creation has recently slowed.[62] Bangladesh now faces the challenge of creating more and higher quality jobs to take advantage of its demographic bonus. Whether the country will succeed in following the path of the Asian tigers and harness a demographic dividend therefore remains to be seen.

Many educated people

The example of South Korea shows that education pays off socially and economically. In 1970, many people of working age were still illiterate. However, as the next generation of workers received increasingly better education, they slowly but surely made their way up the population pyramid and were able to ensure the rise of South Korean companies into the high-tech sector. Today, South Korea is among the nations with the highest level of education, with around 45 percent of those over the age of 25 holding a university degree.



Population composition by age and level of education in South Korea (2030 projection according to the medium education scenario), in millions
(Data basis: Wittgenstein Centre[56])

4 WHAT NEXT?

The only way for African countries to escape the development trap is to accelerate the decline in fertility. This requires sustained socio-economic investments for the benefit of the people. Then not only will the number of children who need to be cared for decline, the change in the age structure will open up new economic prospects for the continent.

Worthwhile investments

The potential that a package of measures in demographically relevant areas holds for the African continent is shown, for example, in the "Demographic Dividend Scenario" by the Institute for Security Studies. This scenario models how the population of the continent is likely to develop when measures in health, sanitation and education among others are implemented, and how this could affect prosperity gains. If it were possible to further reduce infant and maternal mortality, improve access to family planning methods as well as to clean drinking water and sanitation, and raise the continent's educational level – especially for girls – Africa could have about 250 million fewer inhabitants in 2050 than a "business as usual" scenario would suggest. Since fewer children would have to be cared for in the "Demographic Dividend Scenario", while at the same time more employable people could promote economic development, living conditions could improve significantly: In 2050, 112 million fewer people in Africa would be living in extreme poverty compared to the baseline scenario.[63]

A growing population can offer Africa an economic advantage in the future - but only on the condition that growth is concentrated on people of working age and not, as has been the case in the past, primarily on the youngest age groups. For African countries to reach the age structure of the demographic bonus, the decline in fertility, which has already begun in some countries, must continue or accelerate.

This requires investments in health infrastructure to further reduce child mortality. Access to education must also be further improved, especially for girls and young women. All of these factors contribute to a reduction in the desire for children, as new income and life prospects are opening up for people, and ensuring security in old age is no longer seen as the responsibility of the next generation. If the desire to have fewer children is met with sufficient availability of family planning methods, fertility rates will fall and the necessary change in the age structure will start.

What is more, if the number of offspring declines, families can also invest more in the education of their fewer children. This not only has a positive effect on the future prospects of the younger generations. With a well-educated population, the economy can develop, innovative companies and formal jobs can be created, and productivity can grow. In turn, tax revenues increase, and the state has more resources at its disposal, which it can reinvest in transportation infrastructure as well as in health and education systems, i.e. in the human capital of its population. This is crucial, because only if the disproportionately large working population is healthy, well educated and can find sufficient jobs, it can bring economic benefits and reap a demographic dividend.

For African countries to take advantage of the positive effects of a favourable age structure on their path to a demographic dividend, there is need:

- **... to establish demographic policy as an integral part of an integrated economic policy in Africa and focus on the well-being and needs of the people.** In addition to an increased promotion of economic sectors that are central to the creation of formal income opportunities, this also includes a stronger orientation of training programs to the needs of the labour market.

- **... by the German foreign policy to address the urgent need for action in demographically relevant areas in dialogue with African States.** It should be communicated that economic growth alone is not sufficient to meet the demographic challenges in Africa.

- **... to encourage International financial institutions, not least the IMF, to take a closer look at the macroeconomic effects of demographic development and also address them in dialogue with African partner countries.**

- **... to increase German and international support for African approaches in demographically relevant areas** such as the Ouagadougou Partnership or the AU Roadmap on Harnessing the Demographic Dividend.

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