



Demographics

The Demographics and Health scenario

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Last updated 27 June 2025 using IFs v7.84

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This section explains the structure of a Demographics and Health scenario, which could set the continent on a more positive human development trajectory than the Current Path forecast (see Chart 8).

The interventions that impact on demographics consist of the following country-level interventions, benchmarked to reflect reasonable but ambitious targets for countries at similar levels of development:

- A large-scale roll-out of modern contraceptives in sub-Saharan Africa (total fertility rates in North Africa are already very low). In 2019, only 31% of married women in reproductive age (15-49 years) in sub-Saharan Africa were estimated to have been using modern contraceptives, ranging from 84% in Seychelles to below 6% in South Sudan. No interventions are applied for Namibia, South Africa, Botswana, Libya, Seychelles and Mauritius, as these countries already show high levels of contraceptive use and relatively low total fertility rates. The impact of the combined scenario is that contraceptive use among fertile women in sub-Saharan Africa is, on average, 15 percentage points higher in 2043 than in the Current Path forecast (48% versus 63%).
- A reduction in under-five and maternal mortality^[1] from communicable diseases. A high under-five mortality rate is an important driver of high desired fertility levels, as high child mortality rates translate to families having more children. The interventions are most aggressive in low-income countries and least aggressive in middle- and high-income countries. The effect of the scenario is that:
 - Under-five mortality declines to 27 deaths per 1 000 live births in Africa by 2043 instead of 40 deaths in the Current Path forecast, with large country-to-country variations.
 - Average maternal mortality in Africa (at 450 deaths per 100 000 live births in 2019) declines to 127 deaths in 2043 compared to 194 in the 2043 Current Path forecast.

Chart 8: Demographics and Health scenario

Logic >>>	Intervention >>>	Outcome >>>	Impact >>>
Large and healthy working-age population enhances contribution from labour to growth	Increase contraceptive use	Reduction in total fertility rate	Increase in contribution that labour makes to economic growth
	Decrease under five child mortality		
	Decrease under five child stunting rate		
	Decrease maternal mortality		
	Increase access to safely managed water and sanitation	Reduction in comm. disease mortality	
	Decrease most important communicable disease mortality rates (from HIV/AIDS, malaria, respiratory, diarrhea, respiratory infections, Other communicable)		
	Decrease most important non-communicable disease mortality rates (from diabetes, malignant neoplasm, cardiovascular, digestive, other non-comm. diseases)	Reduction in non-comm. disease mortality	
	Increase government expenditure on health	More funding to health sector	

The interventions that impact on health consist of the following that are all done at a country level and benchmarked to reflect reasonable but ambitious targets for countries at similar levels of development:

- The first intervention is the more rapid provision of basic infrastructure (clean water and improved sanitation), which particularly pushes on the drivers of Africa's high communicable disease burden as well as indirectly on improving productivity given a generally healthier workforce.^[2]
 - In the Current Path forecast, several countries achieve substantial improvements in sanitation provision by 2043. The push from the Demographics and Health scenario is largest in the poorest countries, which are the least connected to improved sanitation in the Current Path, translating to improvements of up to 30% in Madagascar and 29% in Nigeria by 2043. Other countries that do well are Chad and the DR Congo. The average for improved sanitation access in Africa in 2043 is 13% above the Current Path forecast, translating into 132 million additional Africans with access to improved sanitation.
 - The earlier and more rapid improvement in access to safe water is that, by 2043, 28 million more Africans will have access to safe water in the Demographic and Health scenario—an improvement of more than one per cent above the Current Path forecast.
- The second [intervention](#) is large reductions in the incidence of HIV/AIDS and malaria in the countries most affected by these [diseases](#) on the back of expectations of rapid progress in prevention and treatment.
 - In 2019, roughly 638 500 Africans died as a result of malaria. In the Current Path forecast, 429 300 will die in 2043 but only 171 600 in the Demographics and Health scenario, despite Africa's much larger population. Advances in medical science will, among other reasons, help to overcome the threat of malaria drug resistance in Africa and produce an effective [vaccine](#).
 - Instead of 285 400 AIDS-related deaths in 2043, only 173 900 deaths occur in that year, much lower than the 664 400 deaths in 2019.
- Mortality is also reduced in countries with high levels of respiratory infections, respiratory diseases and the category of 'other communicable diseases'.
- Modest reductions in the incidence of non-communicable diseases, namely diabetes, malignant neoplasm and cardiovascular diseases, in most highly affected countries, and the category of other non-communicable diseases, are also based on ongoing improvements in medical technology.

The result of these interventions is a 27% reduction in deaths in the broad category of 'communicable diseases' in Africa by 2043, and a 1.5% reduction in non-communicable disease deaths, much of the latter in North Africa.

Given how far behind Africa is on these indicators compared to other regions, the Demographics and Health scenario does not get Africa to achieve the respective sustainable development goals (SDGs) by 2030. Rather, they reflect a determined and ambitious push such as what was historically achieved in South America and South Asia—the two regions most comparable to Africa. Although Africa has registered substantial improvements in a handful of targets (notably reducing AIDS-related deaths), the continent is likely to miss all the health-related SDG targets, often by substantial margins.^[3]

Endnotes

1. Maternal mortality rate is a measure of the number of women who die while pregnant or within 42 days of the termination of pregnancy.
2. The intervention reduces the proportion of people who have unimproved water access. The IFs algorithm then allocates the improvements to the category of 'other improved' water access and access to piped water.
3. There are exceptions, of course. Private healthcare in South Africa is among the best globally, although expensive and thus only available to a small portion of the population. Only four African countries—Mauritius, Tunisia, Seychelles and Libya—are set to meet the 2030 target to reduce infant mortality to fewer than 12 deaths per 1 000 newborns.

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Cite this research

Jakkie Cilliers (2025) Demographics. Published online at futures.issafrica.org. Retrieved from <https://futures.issafrica.org/thematic/03-demographic-dividend/> [Online Resource] Updated 27 June 2025.

About the authors

Dr Jakkie Cilliers is the ISS's founder and former executive director. He currently serves as chair of the ISS Board of Trustees, head of the African Futures and Innovation (AFI) programme at the Pretoria office of the Institute, and is an extraordinary professor at the University of Pretoria. His 2017 best-seller *Fate of the Nation* addresses South Africa's futures from political, economic and social perspectives. His three most recent books, *Africa First! Igniting a Growth Revolution* (March 2020), *The Future of Africa: Challenges and Opportunities* (April 2021), and *Africa Tomorrow: Pathways to Prosperity* (June 2022) take a rigorous look at the continent as a whole.

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