



Health and WaSH

The Demographics and Health scenario

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The Demographics and Health scenario

This section explains the structure of a Demographics and Health scenario which could set the continent on a different human development trajectory from the Current Path forecast.

The parameters that impact on demographics (Chart 11) consist of the following country-level interventions, benchmarked to reflect reasonable but ambitious targets for countries at similar levels of development:

- The first intervention is the large-scale roll-out of modern contraceptives in sub-Saharan Africa since total fertility rates in North Africa are already low. In 2019, only 31% of fertile women in sub-Saharan Africa were using modern contraceptives, ranging from 84% in Seychelles to below 6% in South Sudan. No interventions are made for Namibia, South Africa, Botswana, Libya, Seychelles and Mauritius as they all have relatively high levels of contraceptive use and low total fertility rates. The impact of the scenario is that contraceptive use among fertile women in Africa is, on average, 16 percentage points higher in 2043 than in the Current Path forecast (51% versus 67%).
- A second intervention consist of the reduction in under-five and maternal mortality^[1] from communicable diseases. A high under-five mortality rate translates into families having more children. We push aggressively for improvements to basic healthcare to reduce child and maternal mortality rates. The interventions are most aggressive in low-income African countries and least aggressive in middle-income countries.
 - Under-five mortality declines to 29 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 131 deaths in 2043 compared to 194 in the Current Path forecast.

Chart 11: 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 parameters that impact on health consists of the following interventions that are all done at a country level and are

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 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 (e.g. Ethiopia, the Republic of the Congo and Togo) expect substantial improvements in sanitation provision by 2043. The push by the combined 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 27% in Chad, 21% in Madagascar and 16% in Sudan by 2043. The average for Africa in 2043 is 4% above the Current Path forecast, translating into 70 million additional Africans with access to improved sanitation (1.730 billion instead of 1.667 billion).
 - The earlier and more rapid improvement in access to safe water is that, by 2043, 44 million more Africans will have access to safe water in the combined scenario—an improvement of 2.5% above the Current Path forecast, equivalent to 30 million more people with access.
- 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. The intervention accelerates the rapid decline in both diseases already reflected in the Current Path.
 - In 2019, roughly 638 500 Africans died from malaria. In the Current Path forecast, 429 300 will die in 2043 but the number declines to 171 600 in the Demographics and Health scenario. In October 2023 the WHO announced that it recommended a new vaccine, R21/Matrix-M, the second [malaria vaccine](#) to win such approval on top of the [RTS.S vaccine](#) recommended in 2021, with the potential to close the large demand-and-supply gap. These developments cannot come sooner as evidence emerges that the parasite that causes malaria is showing signs of [resistance](#) to artemisinin, the main drug used to fight the disease in East Africa.
 - Instead of 285 400 AIDS-related deaths in 2043, only 173 900 deaths occur in 2043—much lower than the 664 400 deaths in 2019. New discoveries of cheap, long-lasting drugs to avoid infection in addition to the available treatments on prevention and treatment provide a positive future. The most exciting is a twice-yearly injection with a potentially affordable drug [lenacapavir](#) that fully protects against HIV infection. For that reason the intervention on reductions in HIV/AIDS is aggressive.
- 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, also based on ongoing improvements in medical technology.

The result of these interventions is a 37% 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 achieving the respective SDGs by 2030. Rather, they reflect a determined and ambitious push against 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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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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