

State of Progress for Maternal and Child Health-Related Sustainable Development Goals in Kenya



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Introduction

As the 2030 deadline for achieving the Sustainable Development Goals (SDGs) approaches, a comprehensive assessment of countries' progress is increasingly vital. However, the COVID-19 pandemic has reshaped the global context and impacted progress towards achieving the SDGs, especially those related to health. In Kenya, internal factors, such as economic disparities, healthcare infrastructure limitations, and other existing health challenges, contribute to the intricate landscape within which Kenya is working to advance its SDG agenda. Additionally, persistent conflicts in counties like Mandera, Garissa, Baringo, and Marsabit, as well as climate shocks such as recurrent droughts in Turkana, Wajir, and Marsabit, and floods in Tana River and West Pokot, further complicate the nation's efforts to achieve SDG 3.

The Putting Countries Back on the Path to Achieving the Sustainable Development Goals (Back-on-Track) project, led by the African Institute for Development Policy (AFIDEP) and funded by the Children's Investment Fund Foundation (CIFF), assessed the progress status of maternal, neonatal, and child health (MNCH)-related SDG targets in Ethiopia, Kenya and Nigeria. The project leveraged data and evidence to outline countries' action plans to achieve SDG goals. This policy brief highlights the main findings and provides targeted recommendations to inform policy decisions for Kenya.

Methodology

The Back-on-Track project used population-level Demographic and Health Survey (DHS) data to determine trends in progress and historical annual rates of change (AROC) on maternal, neonatal and child health (MNCH) outcomes. Data from the Institute for Health Metrics and Evaluation (IHME) [1] was used to determine 2030 projection scenarios and the required AROCs to meet SDGs. Maternal mortality rates (MMR) were based on WHO-modelled estimates [2]. The trends include projections for 2030 under three scenarios: The reference scenario assumes achievement

Key Messages

- Kenya is on track towards meeting some of the health-related Sustainable Development Goals (SDGs) by 2030, if appropriate and targeted interventions are made
- Under-five mortality decreased from 90 to 41 deaths per 1,000 live births between 1990 and 2022, while neonatal mortality decreased from 28 to 21 deaths per 1,000 live births during the same period. Projections for 2030 indicate that if progress is sustained, the country is on track to meet the Sustainable Development Goal (SDG) targets for these indicators by 2030.
- Child immunisation coverage has improved over the past decade (from 52% in 2009 to 79% in 2022) but remains below the required SDG target ($\geq 90\%$). More effort is required to meet the SDG target by 2030.
- While Kenya has achieved a notable reduction in maternal mortality rate (MMR) (from 470 to 382 deaths per 100,000 live births between 2000 and 2020), progress has plateaued, and 2030 projections indicate that the country will not meet the SDG target for MMR (70 deaths per 100,000 live births) by a wide margin.
- Kenya has made steady improvements in skilled birth attendance (SBA) coverage (at 89% in 2022), putting the country on track to achieve the SDG target for SBA. However, the progress in the coverage of at least four antenatal care visits (ANC4+) has been insufficient (66% in 2022).
- Key challenges in the Kenyan health sector include inadequate funding, poor coordination between the Ministry of Health and county-level governments in the implementation of policies, and poor data collection and management systems for tracking progress.

based on maintaining the business-as-usual status quo until 2030, labelled as the reference category in the graphs presented below. The better-case scenario projects achievement if Kenya advances at a rate equal to or greater than the top 15% of previous performers in sub-Saharan Africa (SSA). The worst-case scenario assumes achievement if the country advances at a rate equal to or less than the bottom 15% of previous underperformers in SSA.

Additionally, the project used routine facility Health Management Information Systems (HMIS) data to assess the potential impacts of COVID-19 on healthcare service coverage. The project conducted systematic reviews assessing impactful interventions on child nutrition, adolescent sexual health, maternal health and water, sanitation and hygiene in low- and middle-income countries (LMICs). Furthermore, it conducted a political economy analysis (PEA) to understand the socio-political factors influencing the MNCH agendas in Kenya. The PEA consisted of reviews of policy documents and reports, as well as key informant interviews. Information gathered from the data analytics, systematic reviews, and the PEA was used to develop recommendations for a roadmap to guide Kenya towards achieving MNCH SDG targets.

Key Findings

1. Progress, trends and projections of selected RMNCH indicators in Kenya towards 2030 targets

Neonatal and under-five child mortality

Data on neonatal and under-five child mortality rates from DHS surveys in Kenya between 1990 and 2022 are presented in Figure 1. Under-five mortality decreased from 90 deaths in 1990 to 41 deaths per 1,000 live births in 2022, following a peak of 115 deaths per 1,000 live births in 2003 (Figure 1). On the other hand, neonatal mortality slightly decreased from 28 in 1990 to 21 deaths per 1,000 live births in 2022. Projections for 2030 suggest that Kenya is on track to meet the SDG goals for neonatal and under-5 mortality if the reductions seen in the last decade are sustained.

Essential child vaccination

Between 1990 and 2022, Kenya saw fluctuations in the coverage of essential immunisation for children under five years old. The coverage sharply increased from 44% in 1990 to 78% in 1993 (Figure 2). However, a decline followed, reaching 52% by 2009. Despite this dip, there has been significant improvement, with child vaccination coverage reaching 79% in 2022. From 2009 to 2022, Kenya achieved an AROC of approximately 3.3%. Should this trajectory persist, Kenya will meet and exceed the SDG target for child immunisation of 90% by 2030. However, 2030 projections suggest a stagnation between 2022 and 2030 (Figure 2), with coverage only increasing to 81% by 2030, falling short of the required target. To meet the SDG goal by 2030, Kenya requires an AROC of 1.6%.

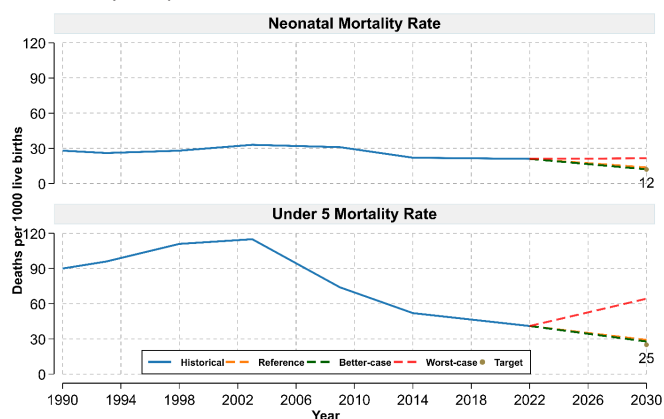


Figure 1: Neonatal (top) and under-five (bottom) mortality rates in Kenya between 1990 and 2022, and projections to 2030 showing business-as-usual, better- and worst-case scenarios. (Data sources: Kenya DHS surveys from 1990 to 2022 and projections from the International Health Metrics Evaluation [IHME] [1]).

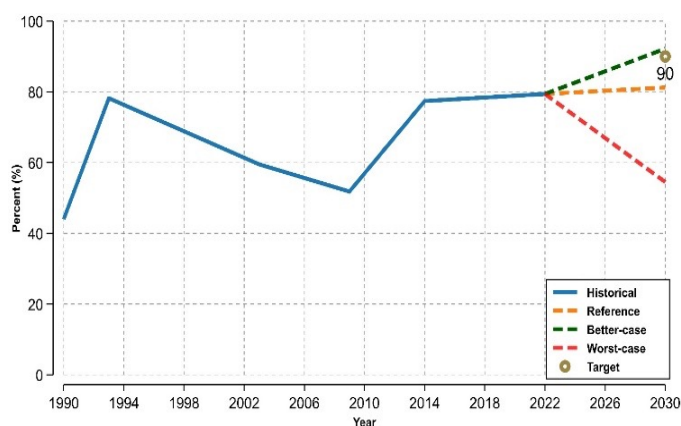


Figure 2: Trend in maternal mortality rate in Kenya between 2000 and 2022, and projections to 2030 showing business-as-usual, better- and worst-case scenarios. (Data sources: Kenya DHS surveys from 1990 to 2022 and projections from the International Health Metrics Evaluation [IHME] [1]).

Maternal mortality rate (MMR)

Figure 3 presents data on trends and 2030 projections for maternal mortality rates (MMR) in Kenya. Between 2000 and 2020, MMR reduced, declining from 470 to 382 maternal deaths per 100,000 live births. Despite this progress, the rate plateaued after 2012. Reference scenario projections for 2030 indicate a continued slow reduction, suggesting that Kenya is not currently on track to achieving the SDG target of reducing MMR to less than 70 deaths per 100,000 live births by 2030. Historically, Kenya has achieved an annual reduction rate (ARR) for MMR of 1%. However, to meet the SDG for MMR, Kenya must attain an ARR of 17%. This emphasises the urgent need for strategic and sustained efforts in maternal healthcare and mortality reduction initiatives.

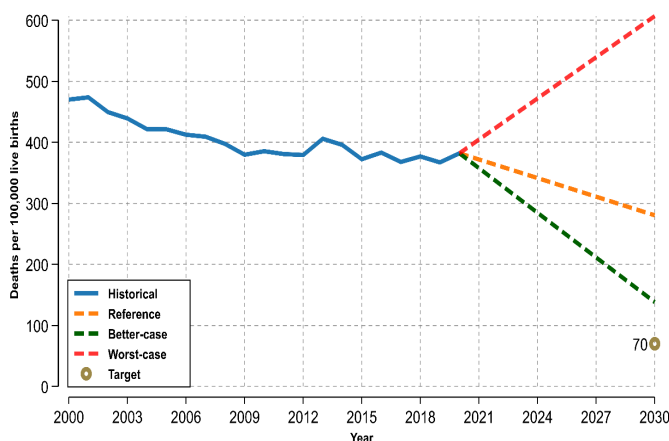


Figure 3: Trend in maternal mortality rate in Kenya between 2000 and 2017, and projections to 2030 showing business-as-usual, better- and worst-case scenarios. (Data sources: United Nations macro trends estimates from 2000 to 2019 [2] and projections from the International Health Metrics Evaluation [IHME] [1]).

Antenatal care and Skilled birth attendance coverage

Data on skilled birth attendance (SBA) coverage in Kenya indicate that between 2009 and 2022, the country made steady progress, with SBA coverage rising from 41% to 89%. Despite projections suggesting potential stagnation between 2022 and 2030, Kenya appears to be on track to exceed the required 90% coverage if the upward trajectory observed over the past decade is sustained. On the other hand, the improvement in ANC4+ (at least four antenatal care visits) coverage has been insufficient. Coverage increased from 44% to 56% between 1990 and 2022. Thus, representing an AROC of 1.8%. If the current trend persists, Kenya will not meet the target of at least 90% coverage. To meet the SDG goal by 2030, Kenya requires an AROC of 4.7%.

Demand for Family Planning Satisfied by Modern Methods (mDFPS)

Data on trends in demand for family planning satisfied by modern methods (mDFPS) from the DHS indicate that mDFPS steadily increased from 43% in 1993 to 79% in 2022, surpassing the required SDG target of at least 75%. This growth followed a sharp decrease between 1990 and 1993. Projections for 2030 suggest that Kenya will continue with this upward trend, with coverage estimated to reach 81%. Further examination of changes in mDFPS from 2014 to 2022, using DHS data, showed that significant disparities between counties persist. By 2022, only five counties – Nyandarua, Murang'a, Embu, Nyeri, and Kirinyaga – had achieved mDFPS rates exceeding 80%. In contrast, seven counties – Mandera, Marsabit, Wajir, Samburu, Isiolo, Garissa, and West Pokot – had coverage below 40%. Overall, 26 counties were yet to achieve the required target of 75%.

2. Potential COVID-19 impact on maternal and child health indicators in Kenya

Essential Child Immunisation

The impact of the COVID-19 pandemic on essential child immunisation coverage based on routinely collected facility-level data was relatively minimal. At the national level, coverage decreased slightly from 80% in the pre-COVID-19 period (2018–2019) to 79% during the pandemic period (2020–2021), which was not statistically significant. Across the 47 counties, only five (namely Bungoma, Garissa, Lamu, Machakos and Turkana) reported a substantial decrease in child vaccination. At the same time, three counties (namely Bomet, Kirinyaga, and Mandera) experienced a notable increase, and 31 did not observe a statistically significant change. This resilience in essential child immunisation may be attributed to proactive measures taken by the Ministry of Health. Before the onset of the COVID-19 outbreak, the ministry had initiated child vaccination campaigns specifically addressing vaccine stockouts in facilities countrywide. These campaigns continued during the pandemic, ensuring a sustained effort to increase child immunisation rates. Five reported a substantial decrease in child vaccination, while three experienced a notable increase, and 31 did not observe a statistically significant change. This resilience in essential child immunisation may be attributed to proactive measures taken by the Ministry of Health. Before the onset of the COVID-19 outbreak, the ministry had initiated child vaccination campaigns specifically addressing vaccine stockouts in facilities countrywide. These campaigns continued during the pandemic, ensuring a sustained effort to increase child immunisation rates.

Antenatal care and skilled birth attendance coverage

At the national level, ANC4+ coverage experienced a slight increase from 49.6% in the pre-COVID-19 period to 51.4% during the COVID-19 period. At the county level, disparities in ANC4+ coverage were observed, with some counties experiencing significant decreases, namely Kiambu, Kajiado, and Nairobi. In contrast, counties such as West Pokot, Busia, and Migori showed no statistically significant difference (Figure 4). Notably, eight counties consistently showed substantial declines in ANC4+ coverage during the pandemic period, highlighting disruptions in service access, particularly in the following counties: Kiambu, Kajiado, Embu, Turkana, Nairobi, Mombasa, Nyeri, and Meru (Figure 4).

Skilled birth attendance (SBA) increased from 64.8% during the pre-pandemic period to 76.0% during the pandemic period. Despite this notable increase, the rates remain below the WHO-recommended 90% coverage. Sub-nationally, there were disparities, with Turkana, Marsabit, and Embu experiencing declines in SBA rates. On the other hand, notable improvements during the COVID-19 period were observed in counties like Kericho, Trans-Nzoia, Siaya, Nandi,

Mandera, Makueni, Kirinyaga, Nakuru, Tharaka Nithi, Nyamira, Bomet, and Uasin Gishu.

3. Challenges within the healthcare system in Kenya

Poor coordination between stakeholders

A political economy analysis (PEA) for Kenya revealed a complex health sector with numerous stakeholders that often have conflicting rather than complementary interests. Despite the need for intersectoral partnerships among the stakeholders to enhance healthcare delivery, the Ministry of Health (MoH) exerts a disproportionately dominant influence, overshadowing other pertinent ministries and stakeholders. Additionally, the PEA identified significant gaps between the MoH and county governments in executing policies and programmes, particularly at the lower-level facilities. This disconnect further hinders the attainment of cohesive and well-coordinated healthcare initiatives, posing challenges to the overall health landscape in Kenya.

Inadequate Funding for the Health Sector

The PEA further revealed that the health sector budget is significantly underfunded. Despite the Abuja Declaration target of 15% of the national budget, the current allocation for the health sector stands at only 9%. As donor support continues diminishing due to changing global priorities, bridging the financial gap and effectively meeting the country's healthcare needs is increasingly vital.

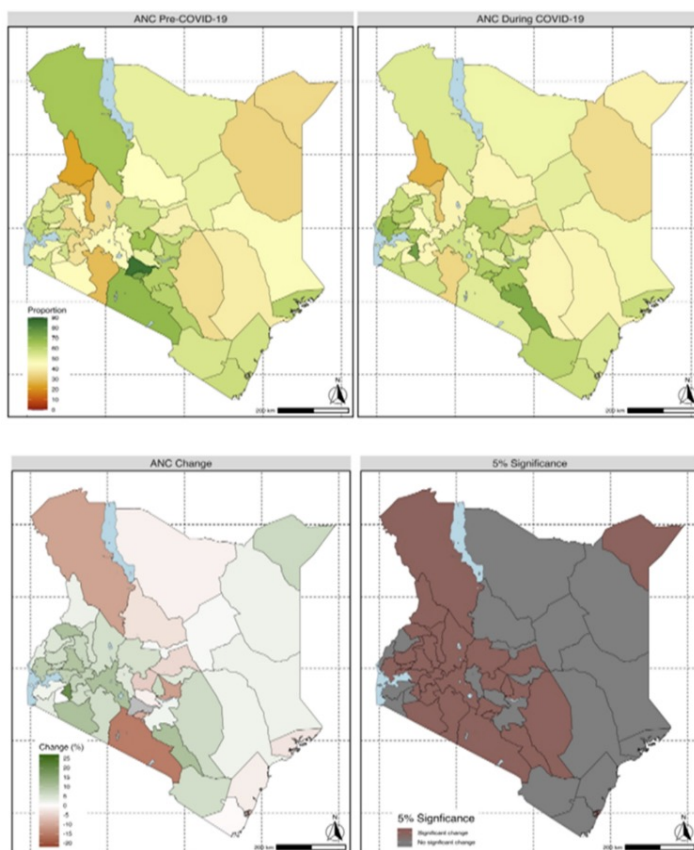


Figure 4: Top panel: ANC4+ coverage (%) for Kenya, pre-COVID-19 period (left) and during the COVID-19 period (right); (Green = high ANC coverage rates or increase in coverage; Red = low ANC coverage rates or decrease in coverage).

Bottom panel: Change in ANC coverage between pre- and during- COVID-19 period (left) (Green = increase in ANC in coverage rate, Red = reduction in ANC coverage rates, White = no change); and its statistical significance (right) (Red = observed change is significant. Grey = observed change is not significant). (Data sources: Kenya Health Management Information System data from January 2018 to December 2021)

Maternal Mortality

Despite the increased SBA coverage in Kenya, the country still faces challenges in reducing maternal mortality. ANC4+ has not sufficiently improved. While most women (about 79%) deliver in health facilities, this pattern suggests that many pregnant women present to healthcare services late during pregnancy and that they do not adequately engage with healthcare services throughout their maternal healthcare journey.

Low healthcare utilisation

The data analysis indicates that healthcare utilisation and coverage of various indicators remain below the targets the World Health Organization (WHO) and the United Nations set through the Sustainable Development Goals (SDGs). The low healthcare utilisation may be attributed to multiple and complex factors, such as insufficient funding for the health sector, as mentioned earlier, suboptimal health-seeking behaviour among the general population, high out-of-pocket costs for healthcare access and utilisation or a lack of health facilities near the population requiring services.

Poor routine data quality

Assessment of potential COVID-19 effects on child and maternal health indicators using the routinely collected facility-level data revealed notable issues in the data quality, highlighting deficiencies in the routine health data collection and consolidation systems. These shortcomings pose potential challenges to regularly monitoring progress and evaluation of interventions. Some critical challenges identified include:

- Persistent underreporting of indicators across counties over extended periods.
- Variations in measurement methods (e.g., counts vs. proportions) and collecting different indicators mark disparities in tracking SDG indicators across counties.
- In instances where proportions were reported, persistent reporting of coverage estimates exceeded 100%, suggesting the use of outdated population estimates as denominators.



RECOMMENDATIONS

Reduce maternal mortality

- To enhance progress in reducing maternal mortality, the Kenya healthcare system should emphasise the importance of early and consistent engagement with healthcare services throughout the maternal healthcare cascade. This holistic approach can contribute to identifying and addressing potential maternal health concerns at an earlier stage, which should ultimately result in reducing maternal mortality.

Improve health data quality

To enhance routine data collection systems and facilitate effective monitoring of progress, the Kenya government should implement the following measures:

- Adopt standardised data collection and reporting to improve quality in routine HMIS and other data systems.
- Improve data quality by integrating quality and consistency checks within data capturing tools.
- Foster transparency and collaboration by opening access to health data for research, monitoring, and evaluation purposes and establishing clear guidelines for accessing health data.

- Build the capacity of local staff to analyse data, use information for decision-making and effectively disseminate findings to relevant stakeholders.

Improve health funding and coordination

- To effectively meet the country's healthcare needs, the Kenyan government should prioritise increasing funding for the health sector in line with the Abuja Declaration. The government should further enact legislation to boost the county government's financial autonomy and improve health service delivery at lower levels.
- The MoH should actively promote collaboration by fostering partnerships with other relevant ministries, departments, and stakeholders, including the Ministry of Education, the State Department for Gender Affairs, and the National Council for Population and Development, to tackle MNCH issues.
- Given that the health sector has many actors, policy, legal, and institutional frameworks should acknowledge and embrace the diversity of stakeholders to enhance the effectiveness of joint initiatives for MNCH issues.

References

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