



The United Nations
sexual and reproductive
health agency

Expanding Family Planning in Sierra Leone:

**A Transformative,
Smart Investment**

Evidence to inform Family
Planning Investment, 2023–2030





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ABBREVIATIONS

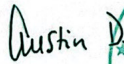
BAU	Business-as-usual
BCR	Benefit-cost ratio
CIP	Costed Implementation Plan
CPR	Contraceptive Prevalence Rate
DD	Demographic dividend
DHS	Demographic and Health Survey
FP	Family planning
GDP	Gross Domestic Product
GNI	Gross National Income
GoSL	Government of Sierra Leone
ICPD	International Conference on Population and Development
mCPR	Modern contraceptive prevalence rate
MoF	Ministry of Finance
MoHS	Ministry of Health and Sanitation
MTRS	Medium Term Revenue Strategy
ODA	Official Development Assistance
PFM	Public Financial Management
SDP	Service Delivery Point
TFR	Total Fertility Rate
UNFPA	United Nations Population Fund
WHO	World Health Organization


Family planning remains a cornerstone of Sierra Leone’s national health and development agenda. The Government of Sierra Leone recognizes, through both domestic commitments and international frameworks such as FP2030, that investing in family planning is fundamental to improving national health outcomes, accelerating socio-economic progress and advancing gender equality.

Over the past two decades, Sierra Leone has made notable gains. The maternal mortality ratio has declined by more than 70 percent – from 1,682 deaths per 100,000 live births in 2000 to 443 deaths per 100,000 in 2020, and most recently to 354 per 100,000 in 2023. These achievements are a testament to our collective efforts and renewed focus on maternal and reproductive health. Yet, significant challenges remain. The unmet need for modern family planning has shown little change since 2013, with nearly one in five married women still lacking access to services. Modern contraceptive prevalence has grown only modestly, and about 35 per cent of women discontinue use within the first year, underscoring persistent barriers of access, method choice and quality of care. This family planning investment case presents compelling evidence of the transformative impact of scaling up voluntary family planning services. Under the ambitious scenario, scaling up access could avert more than 3 million unintended pregnancies, prevent over 10,000 maternal deaths and more than 1 million unsafe abortions by 2030. For every dollar invested, Sierra Leone stands to gain up to nine dollars in social and economic returns. Beyond health, family planning empowers women and girls to complete their education, participate fully in the workforce, and contribute to a more productive and prosperous society.

The analysis also identifies the financial resources required to meet these goals – an amount that increases from US\$49 million to US\$65 million by 2030 – and the funding gaps that must be bridged. It highlights practical strategies for mobilizing domestic resources, improving efficiency and leveraging external financing. This is fully aligned with the Government’s broader health sector priorities under the Mid-Term National Development Plan (2024–2030) and the National Health Sector Strategic Plan (2021–2025), which emphasize primary health care, strengthened referral networks, health security and person-centred care across the life course.

The Government of Sierra Leone remains firmly committed to advancing family planning as a part of our journey toward Universal Health Coverage and the Sustainable Development Goals. I therefore call upon policymakers, development partners, civil society and communities to use this investment case as a guiding framework to accelerate progress. Together, we can ensure that every woman and girl in Sierra Leone has access to the family planning services she needs – when and where she needs them – thus contributing to a healthier, more resilient and more prosperous nation.


Dr. Austin Demby
Minister of Health





ACKNOWLEDGEMENTS

The development of the family planning investment case for Sierra Leone, presented in this report *Expanding Family Planning Services in Sierra Leone: A Transformative, Smart Investment*, has been a truly collaborative effort, reflecting the commitment, expertise and dedication of many institutions and individuals.

On behalf of the Ministry of Health, I wish to express our deep appreciation to the Directorate of Reproductive and Child Health for its leadership, and to the Ministry of Finance, the Ministry of Planning and Economic Development, other line Ministries, and our development partners for their invaluable support in making this work possible.

Special recognition is extended to the UNFPA Sierra Leone team for their financial and technical support. In particular, we acknowledge Sibeso Mululuma, Deputy Representative; Gamachis Shogo and Haja Bah, Technical and Programme Specialists; and Michael Fogbawa, Programme Assistant. Their dedication, technical guidance and tireless efforts in mobilizing resources were instrumental in bringing this report to fruition.

We are especially grateful to Nadia Rasheed, then UNFPA Representative, for her outstanding leadership and unwavering support, and to Mathew Cummings, Social Policy and Health Economics Adviser at the UNFPA Regional Office, whose technical expertise and guidance were invaluable throughout the process.

The Ministry also extends sincere thanks to Jacob Novignon, our consultant, for his expertise, commitment and significant contributions. Finally, we recognize with gratitude the members of the Task Team, development partners and all other stakeholders whose collaboration and insights enriched the development of this investment case. It is our hope that this joint effort will provide a strong foundation for evidence-based advocacy and help mobilize increased domestic and international financing for family planning in Sierra Leone.


Dr. Sartie M. Kenneh
Chief Medical Officer
Ministry of Health





EXECUTIVE SUMMARY

Sierra Leone is recovering from a turbulent recent history that includes the civil war, Ebola outbreak and the COVID pandemic, which largely explains the current challenging socio-economic landscape. Addressing these challenges starts with ensuring a healthy population with a sustainable growth rate, which would translate to demographic dividends and a lower dependency ratio. While recent data suggests some progress has been made, additional efforts are still needed. The unmet need for modern family planning (FP) services has remained almost the same between 2013 and 2019.



About 35 per cent of women who were using a modern contraceptive method discontinued the method within 12 months.

Between 2008 and 2019, the modern contraceptive prevalence rate changed by 1.5 percentage points for currently married women and 2.9 percentage points for unmarried but sexually active women. **About 35 per cent of women who were using a modern contraceptive method discontinued the method within 12 months.** Of all women who discontinued using implants, injectables and pills, 12.8 per cent, 27.9 per cent and 21.3 per cent respectively did so while in need of contraception.

Cumulatively, about 8.5 per cent of the reasons for discontinuation are related to access (including costs, distance, unavailability of preferred method) while 5.6 per cent is related to method failure and difficulty in using the method. Side effects and health concerns were the most prevalent reason stated (about 49 per cent). For all women, the commonly used modern contraceptive methods are injectables (10 per cent), implants (8 per cent) and pills (4 per cent).

Efforts to date have resulted in a decline in fertility levels over the past decade, but the rates remain relatively high with geographical variations. **Women in rural areas will have an average of five children by the end of their childbearing age while their counterparts in urban areas will have three.** Strikingly, more than 21 per cent of girls between the ages of 15–19 have already started having children. The situation is more worrisome in rural areas (29 per cent) compared to urban (14 per cent). About 16.8 per cent of adolescent women and 6.5 per cent of adolescent men between the ages of 15–19 had already initiated sexual intercourse. In 2023, the dependency ratio was estimated at 72 per cent (67 per cent among children 0–14 years and 5 per cent among those above 65 years).

Improving this situation requires concerted efforts to increase the investment in family planning (FP) commodities and service delivery across the country. It is instructive to note that investing in FP translates to socio-economic benefits beyond improved health outcomes. For instance, the unintended pregnancies averted through investment in voluntary FP services reduces the demand for maternal health services and related costs to the health sector. Moreover, averting unintended pregnancies provides girls with the opportunity to continue and complete their education and prepare them for the labour market, thus increasing female participation in the economy, and in society in general.

This investment case report presents estimates of the costs and associated health and socio-economic impacts of scaling up FP services in Sierra Leone with the goal of increasing the modern contraceptive prevalence rate. The estimates present compelling evidence to show that every dollar spent in FP services is not a waste of resource but an investment that translates to multiple folds of health and socio-economic returns. The estimates are also necessary to inform advocacy efforts to raise the needed resources towards FP service delivery in the country, and for other purposes.

Depending on whether one is considering the business-as-usual, achievable or ambitious scale-up scenario, Sierra Leone will require between US\$49million and US\$65million by 2030 in new investments. This will translate to averting up to 3 million unintended pregnancies, 10,000 maternal deaths and 1 million unsafe abortions by 2030. For every dollar invested the country would gain between \$3 and \$9 in socio-economic returns. The cost of inaction, on the other hand, would include over 300,000 unintended pregnancies, 1,000 maternal deaths and 100,000 unsafe abortions not averted under the achievable scenario. The consequences are more dire if the ambitious scenario is considered. The table that follows presents a high-level summary of the main findings under the three scale-up scenarios considered in the investment case.

	Business-as-usual scenario	Achievable scenario	Ambitious scenario
Goal	Increase mCPR from 29.1% to 33.0% by 2030	Increase mCPR from 29.1% to 43.1% by 2030	Increase mCPR from 29.1% to 49.5% by 2030
Health impacts			
Number of modern FP users to be reached by 2030	904,977	1,132,791	1,302,781
Unintended pregnancies averted	2,421,846	2,811,315	3,068,107
Maternal deaths averted	7,938	9,200	10,017
Unsafe abortions averted	864,599	1,007,706	1,095,291
Total financial investment	\$48,573,127	\$58,712,695	\$65,141,415
Benefit-cost ratio	\$3.3	\$6.9	\$9.8
Funding gap (financial investment required)	\$14,673,871	\$24,813,439	\$31,242,159

Note: Costs are in USD.



CHAPTER 1: INTRODUCTION

1.1 Purpose of the investment case

The potential benefits of scaling up sexual and reproductive health for women and girls is well known. Family planning (FP) interventions have the potential to improve the health and economic well-being of women and girls.¹ Health benefits include maternal deaths, unintended pregnancies and unsafe abortions that could be averted through FP service utilization. These also improve economic well-being as more girls are able to continue and complete their education and more women realize their labour market potential. Further, their professional skills can be better developed, and they can contribute more meaningfully to society.² The situation analysis in this report demonstrates the urgent need to rapidly scale up FP services across Sierra Leone.



A well-managed population is considered a prerequisite to harnessing the benefits of the demographic dividend (DD).³ Several developing countries, including Sierra Leone, can do so if their youth population remains healthy, acquires labour skills and does not have a high dependency burden once it becomes economically active. The Sustainable Development Goals Target 5.6 and the UNFPA transformative results all aim at preparing countries towards leveraging the DD.⁴ While investing more and better in all social sectors to build the human capital base of the country is critical, so too is ensuring that all women and girls have access to FP services when they need them.⁵

Addressing this gap requires sufficient investment in appropriate FP services through innovative and sustainable financing. This is in line with UNFPA's supplies partnership programme that encourages creating avenues to finance quality reproductive health and FP services.

In this report, evidence on the costs and impacts of relevant FP interventions is presented to inform advocacy efforts targeted at raising the needed resources. **The evidence will support the UNFPA Sierra Leone Country Office and the Ministry of Health (MoH) in their efforts to integrate FP in the national development plan and advocate for sustainable and diversified financing and deepening the integration of FP into primary health care and universal health coverage.** The analysis is based on reaching a goal for the modern contraceptive prevalence rate (mCPR) by increasing the uptake of modern contraceptive methods between 2023 (baseline) and 2030 (endline). The costs and health benefits reported are therefore based on multiple scenarios that project the mCPR to increase between the baseline and endline. The scenarios are described in detail later in the report.

1. Murdoch et al., 2018; Goodkind et al., 2018.

2. UNFPA, 2022.

3. UNFPA, 2014.

4. Starbird et al., 2016.

5. Karra et al., 2016.

1.2 Objectives

The investment case was designed to address specific objectives including the following:

- present a FP situation analysis that highlights the country context and key challenges;
- undertake a budget analysis that indicate the level and nature of FP spending in the country;
- estimate the costs and benefits of indicates in FP commodities and services under various scenarios;
- assess the funding gap and identify potential sources of fiscal space for FP investment in Sierra Leone.

1.3 Organization of the report

The report is organized as follows. Chapter 2 presents a situation analysis that includes a budget analysis. Chapter 3 presents the costs and benefits analysis including specific methods and estimates. In the final chapter, an assessment of fiscal space available for FP investment is presented.





CHAPTER 2: SITUATION ANALYSIS

2.1 Introduction

This section presents a situation analysis of FP, covering several indicators and enhancers, which helps contextualize the investment case. It sets out to show what progress the country has made in the past, what the situation is currently and what the future holds in terms of FP.

2.1.1 Social context: Key health and poverty indicators

The 2019 Demographic and Health Survey (DHS) reports an adult mortality rate of 4.69 per 1,000 population. The five-year average maternal mortality rate per 100,000 live births was reported to be 717 suggesting that 1 in 31 women will die of maternity-related causes.⁶ Maternal deaths from pregnancy-related causes were slightly higher at 796 per 100,000 live births over the five years preceding the survey. While the infant mortality rate was estimated to be 75 per 1,000 live births, the under-five mortality rate was 122 per 1,000 live births, suggesting that around one in every eight children die before their fifth birthday. Modelled estimates available at the World Health Organization (WHO) from 2023 report a maternal mortality ratio of 443 per 100,000 live births, and infant and under-five mortality rates of 80.5 and 108.5 per 1,000 live births respectively.⁷ Life expectancy at birth is reported at about 60.8 years.



Available estimates suggest a high incidence of poverty. The most recent household survey (2018) reports a poverty incidence of 56.8 per cent using an annual national poverty line of Le3,921,000 per adult equivalent. The disparity in welfare between the poor and rich is significant. For instance, the bottom 40 per cent of the population accounted for 20 per cent of consumption while the top 10 per cent accounted for 29 per cent. The Gini coefficient, a measure of income inequality, is estimated at 0.357.⁸ The multidimensional poverty indicator that accounts for social indicators like health, education and standard of living, is estimated at 0.29 – better only than 13 out of the 110 countries included in the report.⁹

2.1.2 Economic outlook

Like many developing countries, Sierra Leone has been affected by recent global events including the COVID-19 pandemic and the Ukraine conflict. Consequently, economic growth in the country declined to 1.8 per cent in 2020 but rebounded to 3.6 per cent in 2021.¹⁰ Barring any risks, the GDP growth rate is expected to average 5 per cent in 2024 and 2025. Although growth is projected to improve, there are major downside risks, including a high risk of debt distress, with total general government debt estimated at 92.9 per cent of GDP in 2023.¹¹

6. SLDHS, 2019.

7. World Bank, 2022.

8. Statistics Sierra Leone, 2019.

9. UNDP, 2023.

10. Budget statement, 2023.

11. African Development Bank, 2023.

2.1.3 Demographic situation

The population of Sierra Leone in 2023 is estimated at about 8.7 million people with nearly half (45 per cent) of the population below the age of 17. The rural population (57 per cent) living outside the major cities is higher than the urban population (43 per cent). The population growth rate is estimated at about 2.1 per cent and is expected to remain around 2 per cent until 2030. However, the 2023 population is projected to double by the year 2056.

2.1.4 Key events related to health outcomes

Some major events in the past two decades of Sierra Leone's history deserve to be mentioned because they are closely linked to the health outcomes in this report (see *Figure 1*). They start with the civil war that ended in the early 2000s, and the first national elections in 2002. In 2014, a state of emergency was declared due to the Ebola outbreak, that lasted until 2016. There was another national election in 2018 before the first case of COVID-19 was confirmed in 2020.

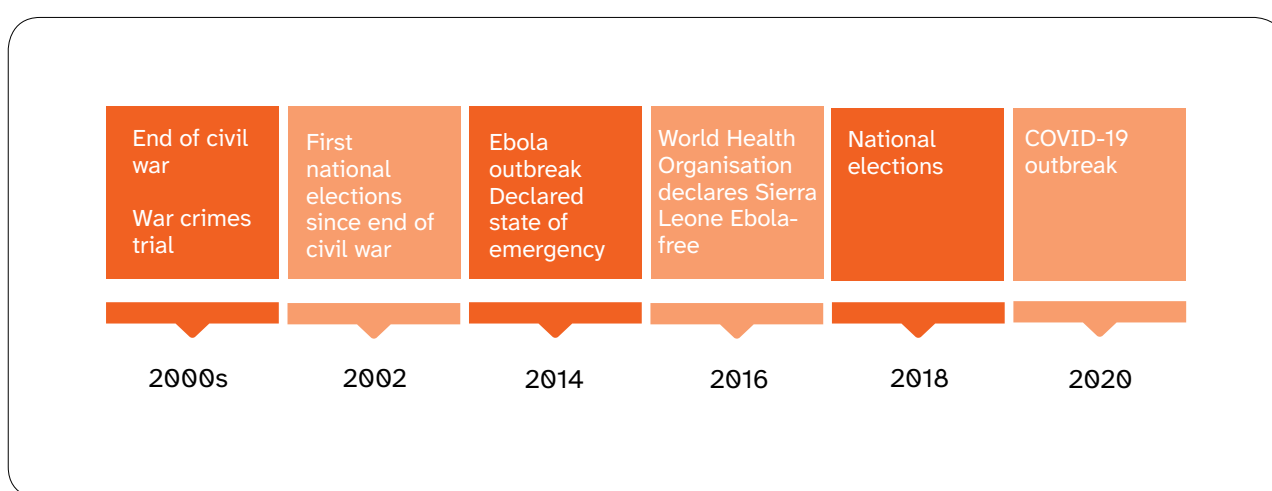


Figure 1: Timeline of key events in Sierra Leone's recent history

2.2 Demand and unmet need for family planning services

While demand for FP and the proportion satisfied by modern methods has increased steadily since 2008, unmet need declined only marginally (unchanged between 2013 and 2019). In Figure 2, the total demand and unmet need for FP in Sierra Leone from the DHS is reported for the various rounds of the survey. Total demand for FP increased from 35.8 per cent in 2008 to 46.1 per cent in 2019. In 2019, about 45.4 per cent of this demand was satisfied by modern methods, an increase from 35.7 per cent in 2013 and 22.9 per cent in 2008. About 24.8 per cent of currently married women in need of a modern contraception method had their need unmet in 2019. This indicates a decline from 27.6 per cent in 2008 but only marginally from the 25 per cent value recorded in 2013.

This suggests that the unmet need for modern FP methods among married women remained approximately the same over seven years (2013 to 2019), indicating that both total demand and proportion of demand satisfied increased over the period. The unmet need is also relatively higher when compared to other countries in the subregion including Ghana (23.4 per cent in 2022), Kenya (13.9 per cent in 2022) and Madagascar (14.6 per cent in 2021). This justifies the need to scale up investment in FP services.

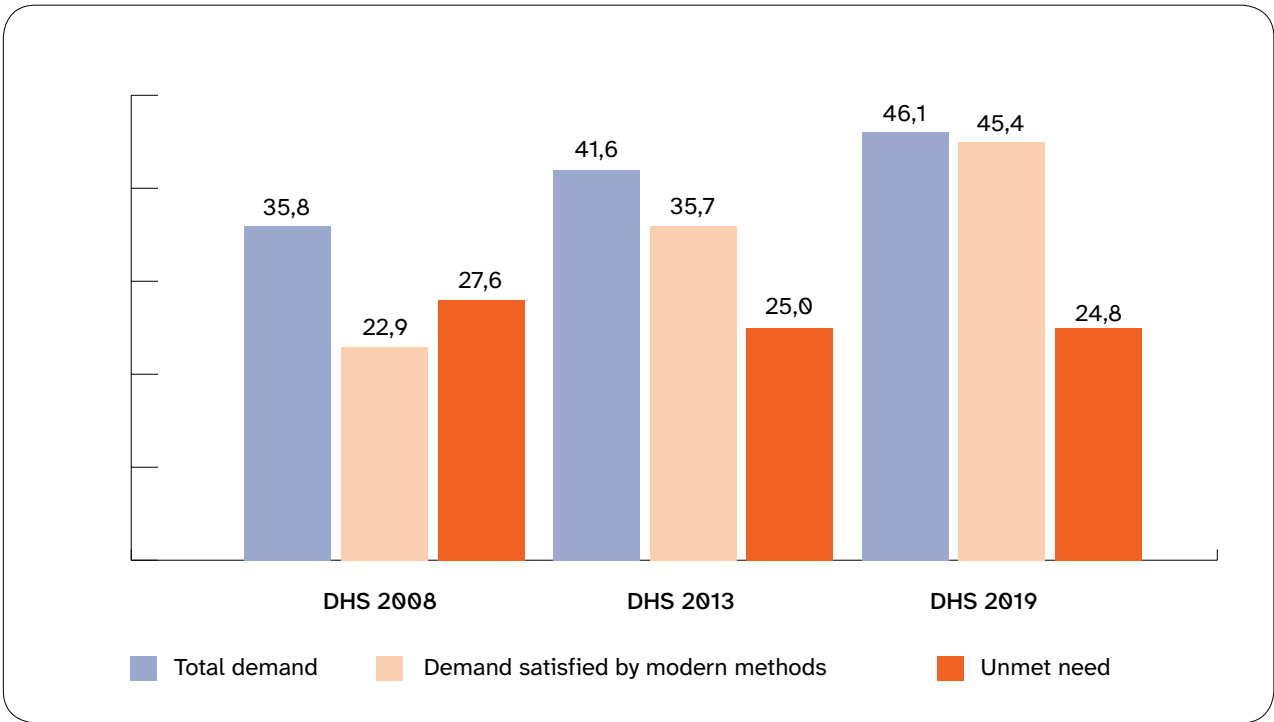


Figure 2: Percentage of women currently married with total demand, demand satisfied and unmet need for FP
 Source: Statistics Sierra Leone (Stats SL) and ICF, 2009, 2014 & 2020.



The unmet need in Sierra Leone also remains high compared to regional and global standards. Figure 3 shows the average unmet need for FP for married women from 2010 to 2020. It is higher (24.8 per cent) than the average in sub-Saharan Africa (15.2 per cent) and in other developing countries (22.4 per cent).

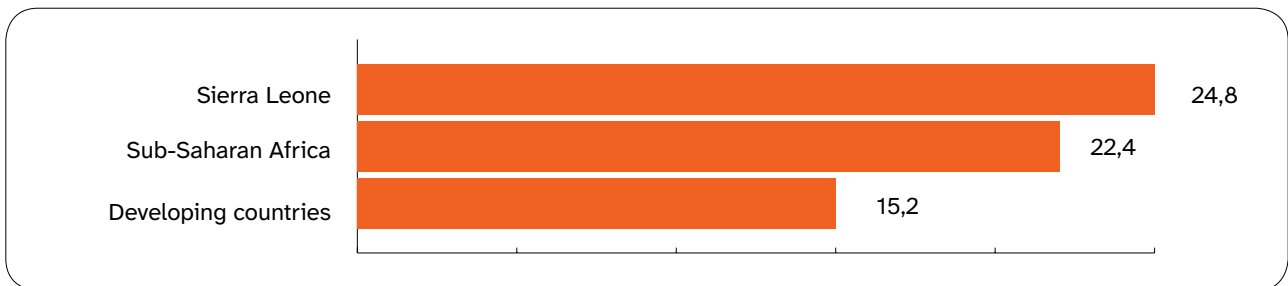


Figure 3: Average percentage of married/in-union women with unmet need for family planning. Source: United Nations Development Programme, 2022.

It is worth mentioning that modelled estimates of unmet need from Track20 shows a consistent decline for all women, currently married women and sexually active unmarried women (see Figure 4).

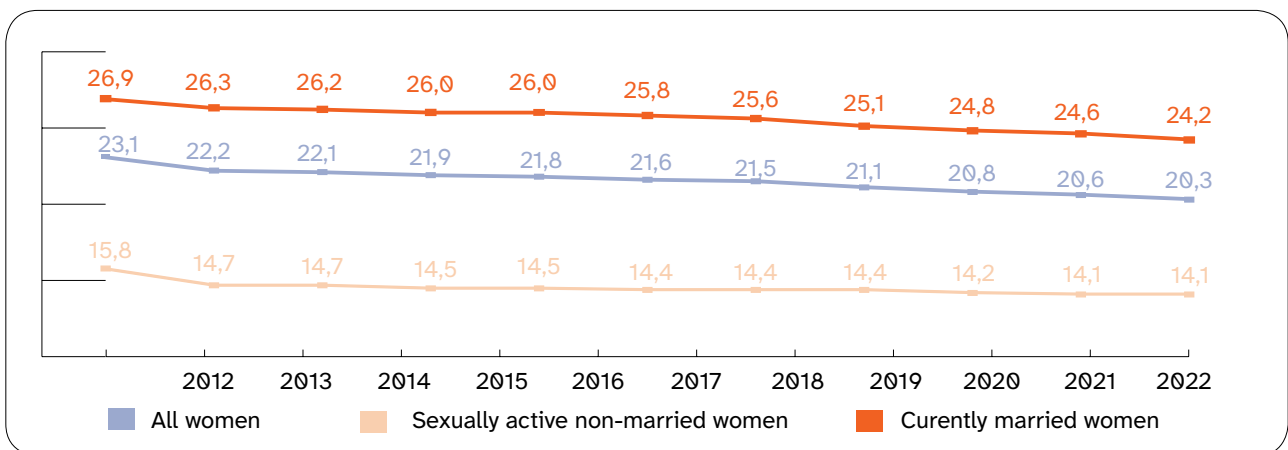


Figure 4: Unmet need for FP for all women, currently married women and sexually active unmarried women Source: Track20, 2023.

For currently married women and sexually active unmarried women, unmet need for modern FP contraceptives was higher in urban areas compared to rural areas. However, if all women in their reproductive age are considered, there is a higher unmet need in rural areas (see Figure 5).

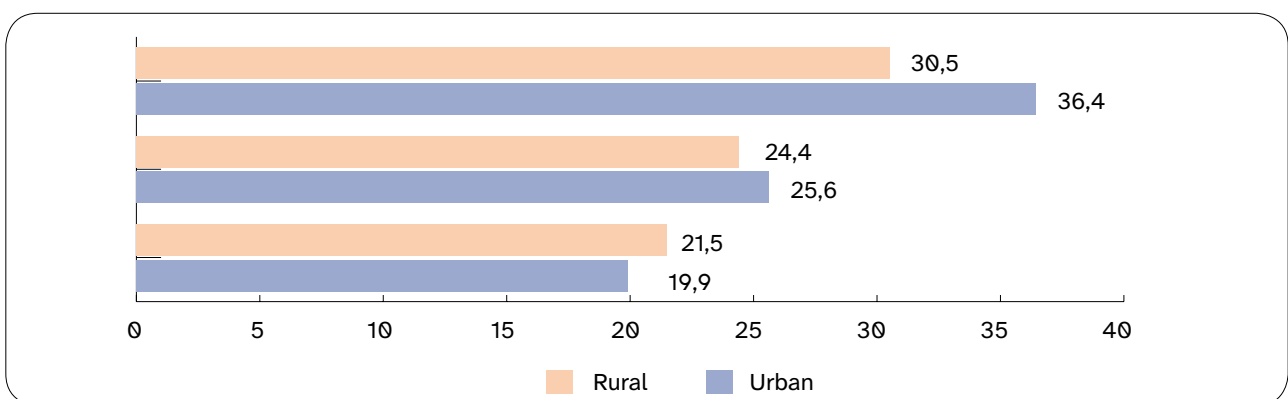


Figure 5: Percentage of all currently married and sexually active unmarried women with unmet need for family planning, by residence. Source: Statistics Sierra Leone (Stats SL) and ICF, 2020.

Similarly, the data by province shows that the proportion of sexually active unmarried with unmet need for FP is higher in the Western province (43 per cent) compared to 30 per cent in the Eastern province. Among all women, unmet need for FP is higher in the North West (23.8 per cent), followed by Western (21.7 per cent), Southern (20.8 per cent), Northern (19.4 per cent) and Eastern province (18.6 per cent). For currently married women, unmet need was higher in the Western province (27.4 per cent) and lowest in the Eastern province (22 per cent) (see Figure 6).

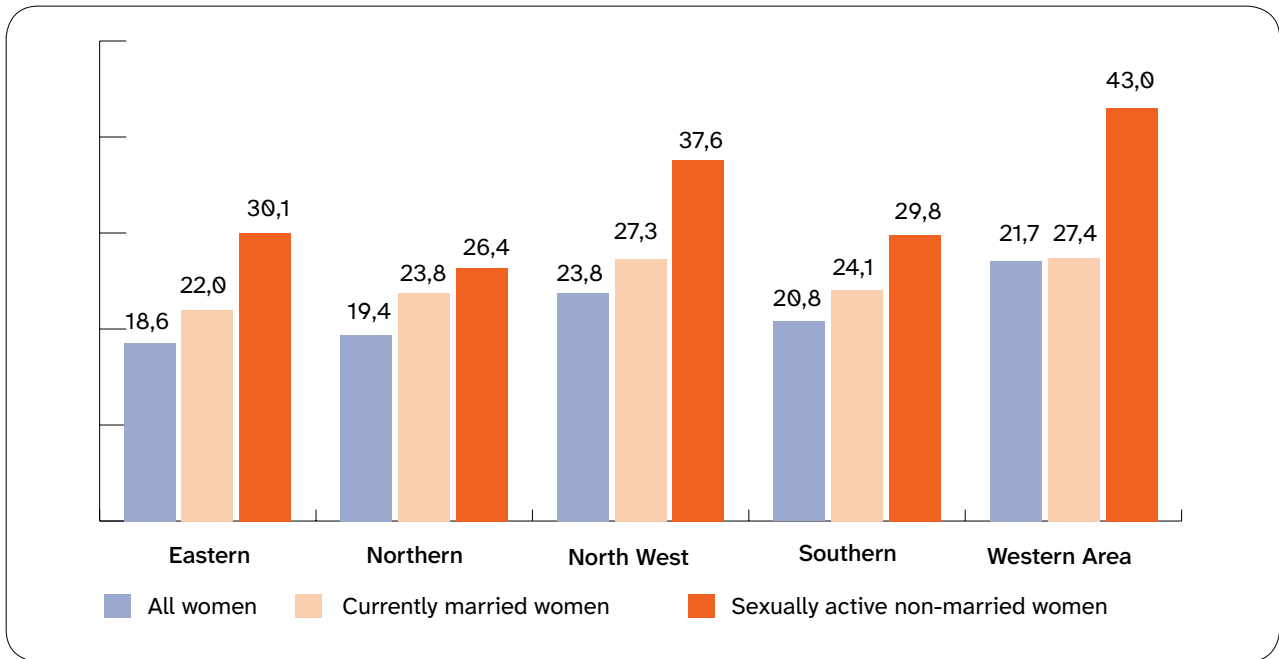


Figure 6: Percentage of all currently married and sexually active unmarried women with unmet need for FP, by province
Source: Statistics Sierra Leone (Stats SL) and ICF, 2020.

There is greater unmet need for spacing birth than for limiting birth. Figure 7 shows unmet need for spacing and limiting across all women, currently married women and sexually active unmarried women from the most recent 2019 DHS. Unmet need for spacing births is higher among sexually active unmarried women (32 per cent) compared to currently married women (17.4 per cent). On the other hand, unmet need for limiting births is higher for currently married women (7.4 per cent) compared to their counterparts who are sexually active but unmarried (2.1 per cent).

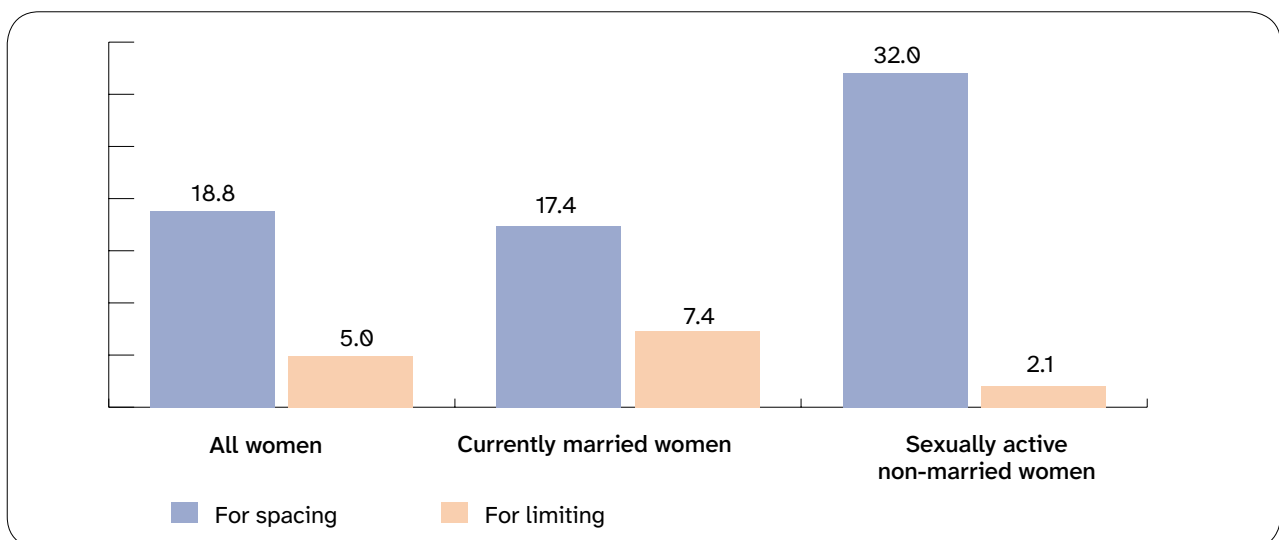


Figure 7: Percentage of women with unmet need for spacing and limiting births.
Source: Statistics Sierra Leone (Stats SL) and ICF, 2020.

2.3 Contraceptive prevalence

Globally, the trend in the mCPR in Sierra Leone lags behind regional average performance. On average, the mCPR for Sierra Leone between 2010 and 2020 is 21.2 per cent, significantly below the average for developing countries (57.7 per cent), sub-Saharan Africa (32 per cent), and the world (58.8 per cent).

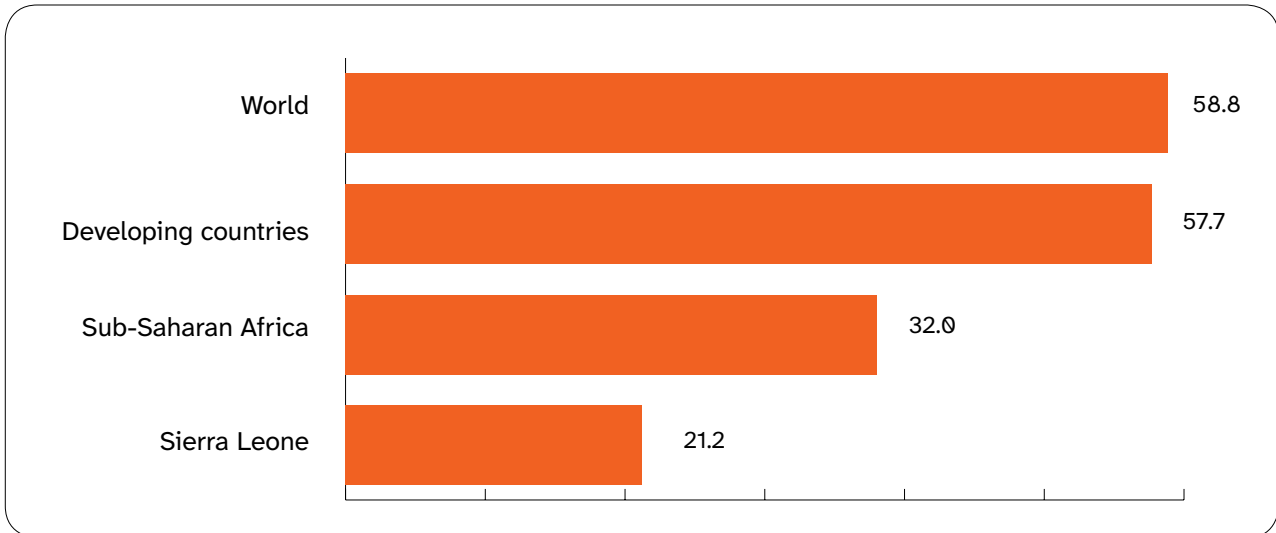


Figure 8: Average contraceptive prevalence rate, 2010–2020.
Source: United Nations Development Programme, 2022.

Modern contraceptives are the most prevalent among women who are unmarried but sexually active. In the most recent survey, about 53 per cent of unmarried but sexually active women were using a modern method compared to 21 per cent of currently married women. The overall prevalence for all women showed a marginal increase over time. This trend was also similar for married women and unmarried but sexually active women. Between 2008 and 2019, the mCPR changed by 1.5 percentage points for all women, 1.3 percentage points for currently married women and 2.9 percentage points for unmarried but sexually active women.

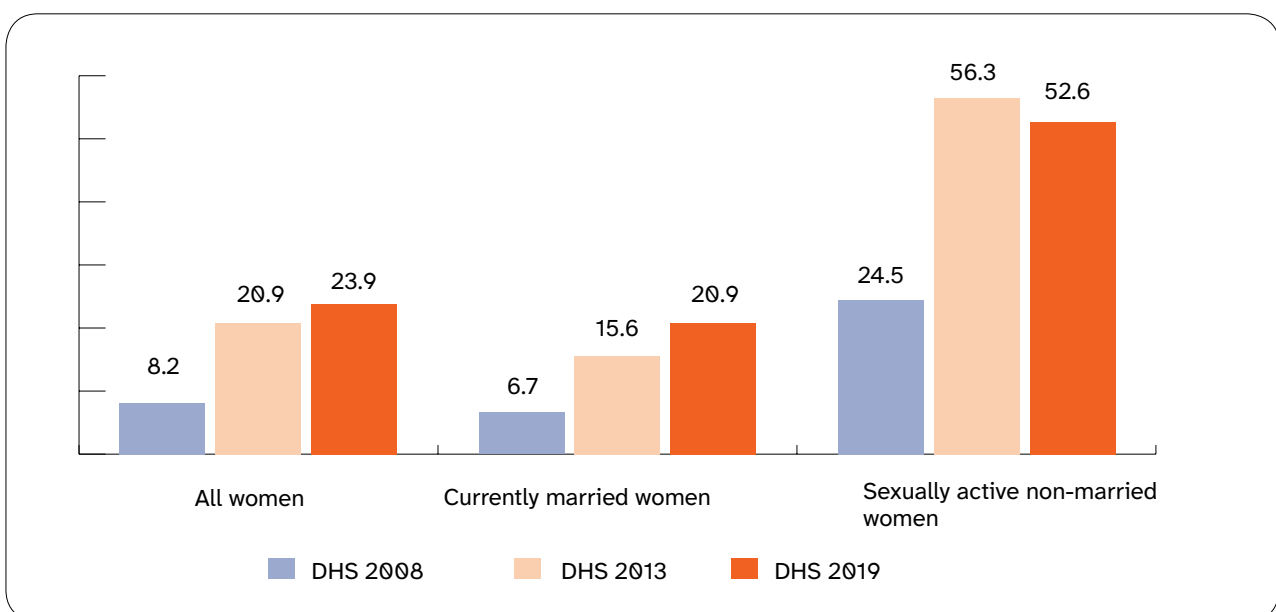


Figure 9: Percentage of women age 15–49 using modern contraceptives.
Source: Statistics Sierra Leone (Stats SL) and ICF, 2009, 2014 & 2020.

Modelled estimates from Track20 show a continued increase in the mCPR from 2012 to 2023. This is consistent for all women, currently married women and sexually active but unmarried women.

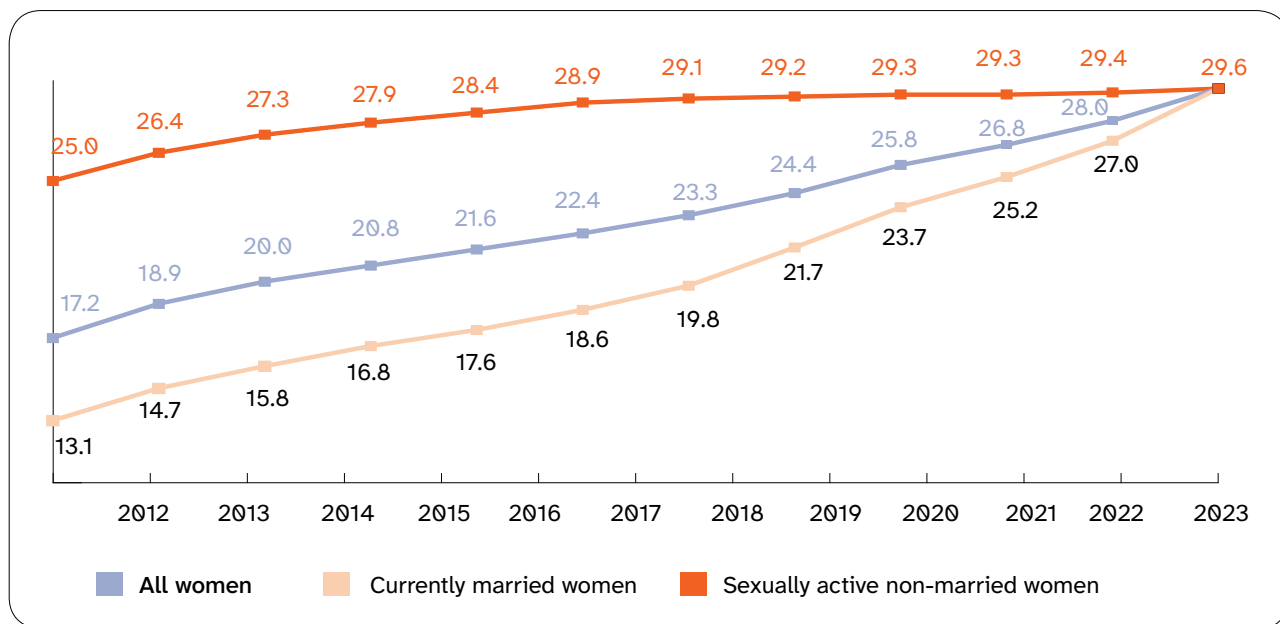


Figure 10: Modern contraceptive prevalence rate for all women, currently married women and sexually active unmarried women.
Source: Track20, 2023.

More currently married women use modern contraceptives in urban areas (25.8 per cent) compared to rural areas (18.1 per cent). This is expected, as access to services is more limited in rural areas. Focusing on the provinces, married women in the Western area have the highest mCPR while those Northwest has the lowest (see Figure 11). In the districts, Kailahun district has the highest mCPR (31.6 per cent) and Falaba district has the lowest mCPR of 7.1 per cent (see Figure 12).

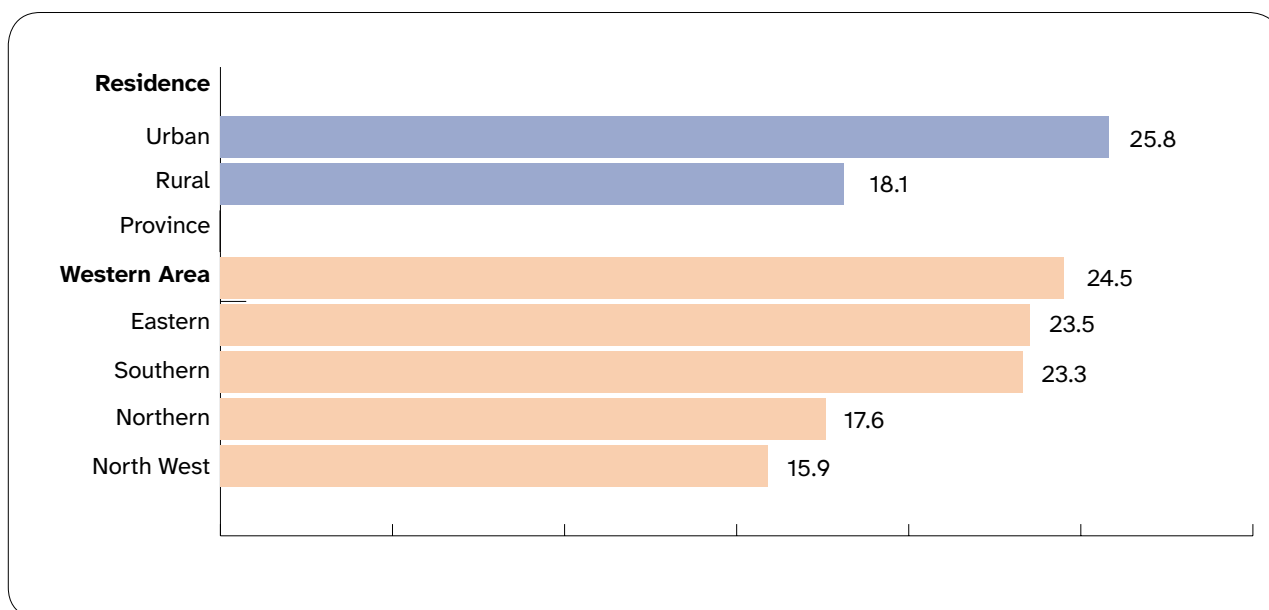


Figure 11: Percentage of women (currently married) using modern contraceptives, by province.
Source: Statistics Sierra Leone (Stats SL) and ICF, 2020.

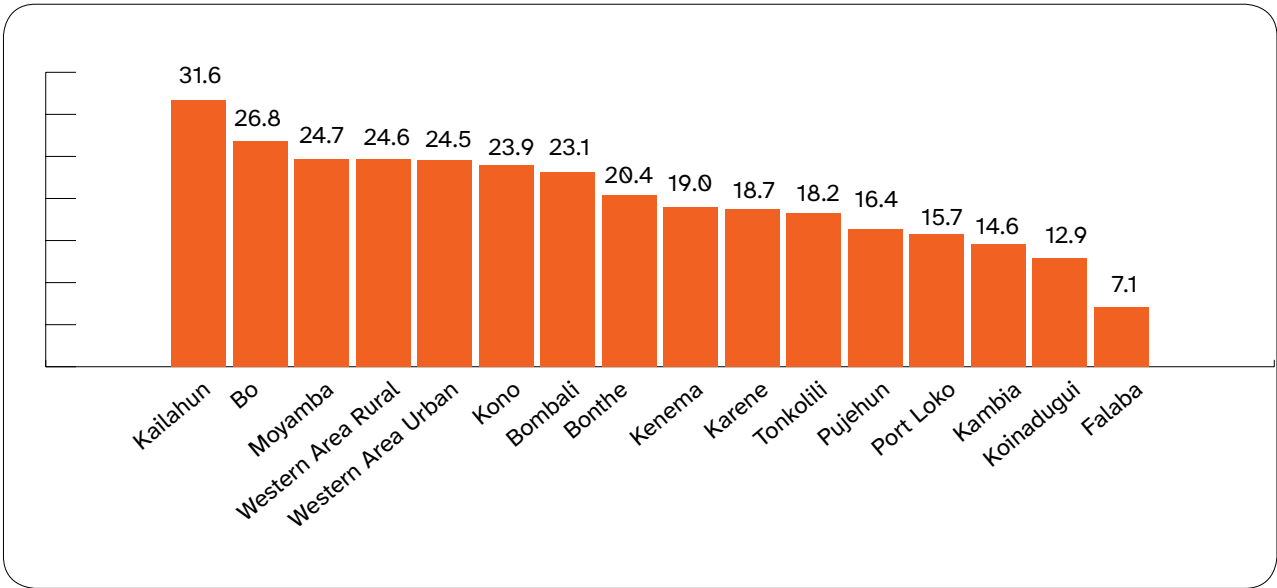


Figure 12: Percentage of women (currently married) using modern contraceptive (mCPR).
Source: Statistics Sierra Leone (Stats SL) and ICF, 2020.

2.4 Contraceptive discontinuation

About 35 per cent of women who were using a modern contraceptive method discontinued using the method within 12 months (see Figure 13). While the discontinuation rate varies across methods, the reported rates suggests that about 42 per cent of women who were previously using injectables and pills discontinued using these methods within 12 months. Similarly, 17 per cent of women also discontinued the use of implants, while 31 per cent discontinued using other methods such as withdrawal, rhythm, standard days method (SDM), male sterilization, IUDs and emergency contraceptives. Among all women who discontinued using implants, injectables and pills, 12.8 per cent, 27.9 per cent and 21.3 per cent respectively did so while in need of contraception.¹²

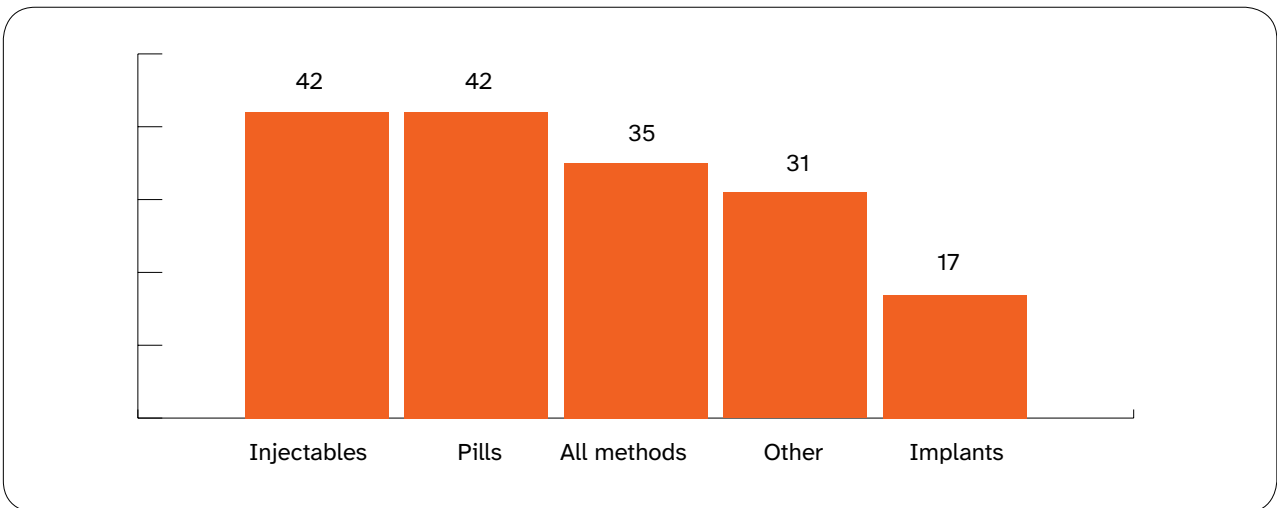


Figure 13: Percentage of contraceptive episodes discontinued among women age 15-49 within 12 months, by contraceptive method.

Note: Other includes withdrawal, rhythm, standard days method (SDM), male sterilization, IUDs and emergency contraceptives.

Source: Statistics Sierra Leone (Stats SL) and ICF, 2020.

12. Statistics Sierra Leone and ICF, 2020.

Some of the common reasons cited for discontinuation include the fact that the woman wanted to get pregnant (about 30 per cent of women cited this reason across all methods), concerns about side effects of the methods and health of the woman (about 42.6 per cent of women cited this reason across all methods). Cumulatively, about 8.5 per cent of the reasons are related to access (including costs, distance, unavailability of preferred method) while 5.6 per cent is related to method failure and difficulty in using the method (see Table 1).

Table 1: Percentage distribution of reasons for discontinuation of contraceptive use in the five years preceding the survey by method

Reason	Method					
	Injectables	Implants	Pill	Male condom	Other	All methods
Become pregnant while using	1.1	0.2	4.1	2.3	4.1	1.8
Wanted to become pregnant	29.6	26.3	35.4	23.2	30.4	30.3
Husband/partner disapproved	3.9	4.8	5.4	5.7	2.9	4.4
Wanted a more effective method	3.2	2.3	7	6.9	27.3	5.1
Side effect/health concerns	48.7	56.2	30.2	1.2	13.5	42.6
Lack of access/too far	1.8	1.2	2.2	5.3	0.9	1.9
Cost too much	2	1.2	0.9	1.3	0	1.5
Inconvenient to use	2.9	4.5	2.8	21.9	6	3.8
Up to God/fatalistic	0.6	0	0.2	0	0	0.4
Difficult to get pregnant/ menopausal	0.3	0	0	0	1.3	0.2
Infrequent sex/husband away	2.7	0.9	6.3	23.6	4.5	3.9
Marital dissolution/separation	0.4	0	0	1.6	0	0.2
Other	1.8	1.5	2.3	2.1	4.2	2
Don't know	0.3	0.3	0.6	4.2	1	0.5
Missing	0.7	0.7	2.7	0.6	3.8	1.3
Total	100	100	100	100	100	100
Number of discontinuations	1171	398	576	63	95	2303

Source: Statistics Sierra Leone (Stats SL) and ICF, 2020.

2.5 Contraceptive method mix

Injectables, implants and pills remain the most used modern contraceptive methods. Table 2 shows the method mix for modern and traditional contraceptives across all women, currently married women and sexually active unmarried women from the recent 2019 DHS. For all women, the commonly used modern contraceptive methods are injectables (10 per cent), implant (8 per cent) and pills (4 per cent). It is worth noting that the other modern methods of contraceptives (sterilization, IUD, condom, emergency contraceptives and SDM) are less than 1 per cent. Among currently married women, injectables (9 per cent), implants (7) and pills (4 per cent) are the common modern contraceptive methods used. Similarly, injectables (22 per cent), implants (20 per cent) and pills (9 per cent) are the commonly used modern contraceptives by sexually active unmarried women in Sierra Leone.

Table 2: Modern contraceptive method mix

Method	All women	Currently married women	Sexually active unmarried women
Sterilization	0.2	0.2	0.2
Pill	4.4	4.1	8.5
IUD	0.4	0.04	0.9
Injectables	10.1	8.9	21.5
Implant	8.2	6.8	19.9
Condom	0.3	0.1	1.0
Emergency contraceptive	0.1	0.1	0.4
SDM	0.1	0.1	0.1
Other modern	0.1	0.2	0.0
Withdrawal	0.1	0.0	0.4
Other traditional	0.3	0.3	0.2

Note: Sterilization and condom use includes both male and female.

Source: Statistics Sierra Leone (Stats SL) and ICF, 2020.

2.6 Total Fertility Rate

The fertility rate in Sierra Leone declined by about 25 per cent over 11 years (2010-2021). While the rate remained below the average for sub-Saharan Africa and low-income countries for most of the years, it is substantially above the global average. The rate in 2021 for Sierra Leone was 4.0 compared to a global average of 2.3 (see Figure 14). UNDESA projects that the fertility rate in Sierra Leone will decline to 2.4 in 2050 and 1.8 in 2100.

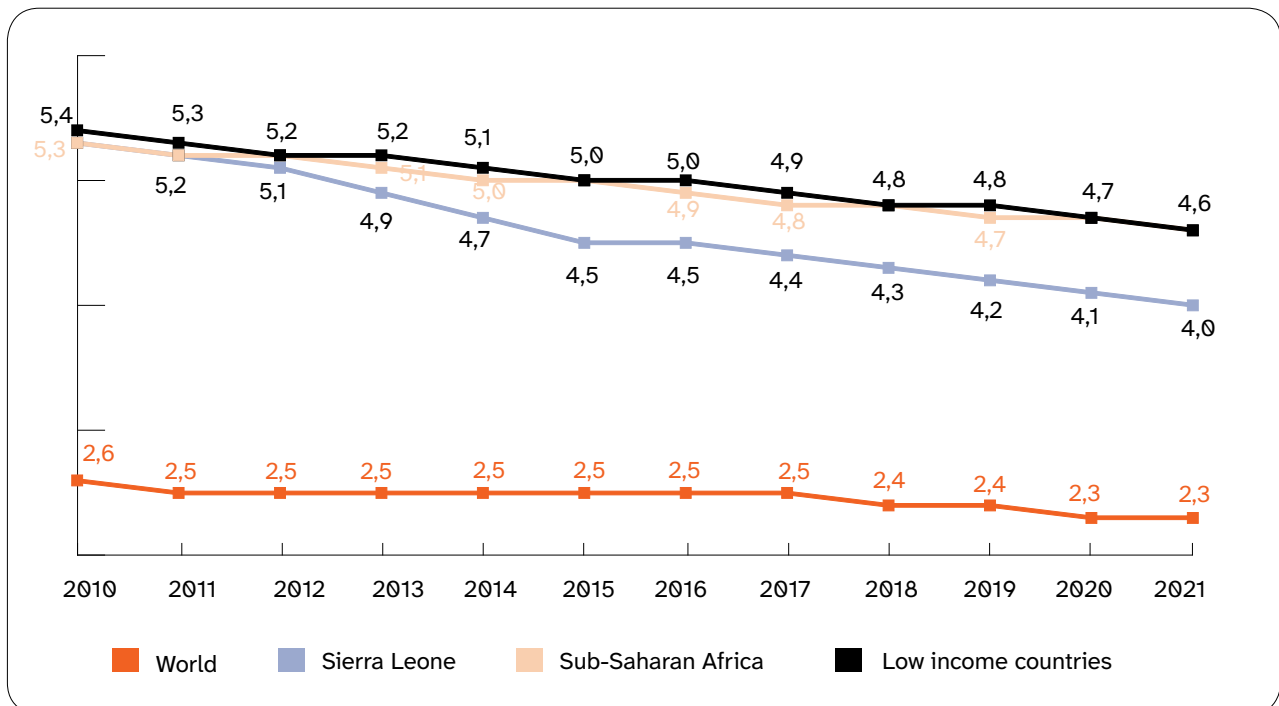


Figure 14: Total Fertility Rate in Sierra Leone and across selected regions.

Source: World Bank, 2023.

Focusing on country-specific data from the DHS, Figure 15 shows significant difference in the fertility rate between rural and urban areas, and this has been consistent over the years. Women in rural areas will have an average of five children by the end of their childbearing age while their counterparts in urban areas will have three children. Thus, the fertility rate in rural areas is 1.6 times and 1.2 times the fertility rate at the urban and national level respectively. However, in both areas, a marginal decline was observed across the years. The DHS also reports that the fertility rate was relatively lower among educated and women from wealthier households. Strikingly, more than 21 per cent of girls between the ages of 15-19 have already started having children. The situation is more worrying in rural (29 per cent) than in urban (14 per cent) areas. About 16.8 per cent of adolescent women and 6.5 per cent of adolescent men between the ages of 15-19 had already initiated sexual intercourse (Statistics Sierra Leone & ICF, 2020). While this rural-urban difference in the fertility rate is also observed in other countries, the gap is higher for Sierra Leone (difference =2) relative to Ghana (difference =1.6) and Kenya (difference=1.1).

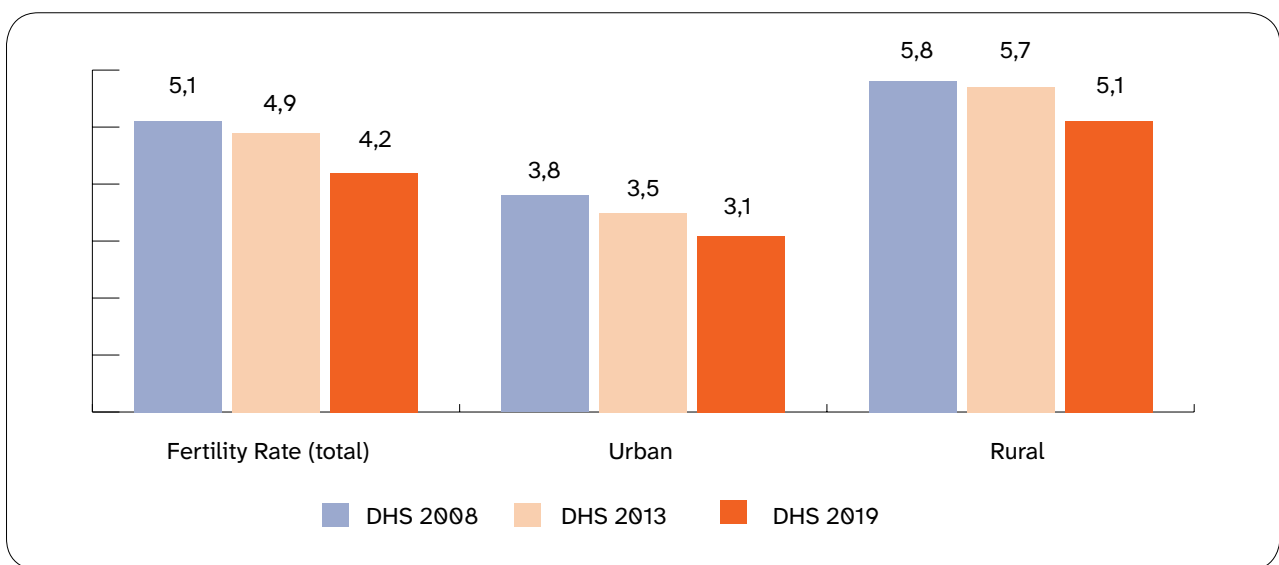


Figure 15: Total Fertility Rate for women age 15-49 disaggregated by rural-urban location. Source: Statistics Sierra Leone (Stats SL) and ICF, 2009, 2014 & 2020.

Interventions to reduce the fertility rate have far-reaching impacts including reducing the dependency ratio and fully harnessing the potential DD. A controlled fertility rate reduces family size, improves life expectancy and reduces the dependency ratio which has been shown to propel economic growth and well-being. In 2023, the dependency ratio in Sierra Leone is estimated at 72 per cent (67 per cent among children 0-14 years and 5 per cent among those above 65 years). This is projected to reduce to about 50 per cent (42 per cent among children 0-14 years and 8 per cent among those above 65 years) by 2050. With increased efforts to control population, the dependency ratio could reduce even further.

2.7 The family planning outlook in Sierra Leone

A dedicated FP policy is currently on the verge of approval by the MoH. However, the country has successfully developed two successive costed implementation plans (CIPs) for FP. The first CIP covered the period of 2018 to 2022 and targeted a reduction in the mCPR for currently married women from 15.6 per cent to 33 per cent by 2022 while for all women the target was from 20.9 per cent to 33.7 per cent. Evidence suggests that while this target was not fully met, the CIP facilitated some progress in mCPR for all women that increased to 26 per cent by 2022. Following the expiration of the first CIP, a new CIP has been developed seeking to scale up FP interventions by 2027.

The CIP targets an mCPR of 32 per cent among all women of reproductive age by 2030 and has committed to scaling up several interventions grouped under the following strategic priority areas.

- Reaching 50 per cent of pregnant women with post-partum FP services and 50 per cent of health facilities offering these services;
- Reducing all FP commodity stockouts by 50 per cent;
- Implant services provided by all PHUs while IUD services are scaled to 50 per cent of facilities.

Some of the key bottlenecks that limit progress in scaling FP service delivery include inadequate financing, lack of coordination across stakeholders and proper alignment of resources. Indeed, stakeholders acknowledged that FP interventions in the country had not been closely guided by the CIP. Achieving success in the future will therefore require concerted efforts to not only increase funding but also improve coordination to reduce resulting challenges such as supply chain bottlenecks. Subsequent sections of this investment case will assess budgeting and spending for FP as well as analysing potential sources of fiscal space for the health sector as a whole and FP, in particular, in Sierra Leone.

A national health facility survey to assess availability of reproductive health commodities and services in 2022 reports that about 99.3 per cent and 90.4 per cent of the service delivery points (SDPs) offered at least three and modern contraceptive methods, respectively.¹³ Some of the reasons provided for not offering some methods include stockouts due to demand in SDPs and supply side delays in source institution/warehouse, non-availability of contraceptives for purchase, low or no client demand and no trained staff to provide service. In the three months preceding the survey, about 60 per cent of SDPs reported no-stock out of any modern contraceptive method, suggesting a 40 per cent stockout.¹⁴

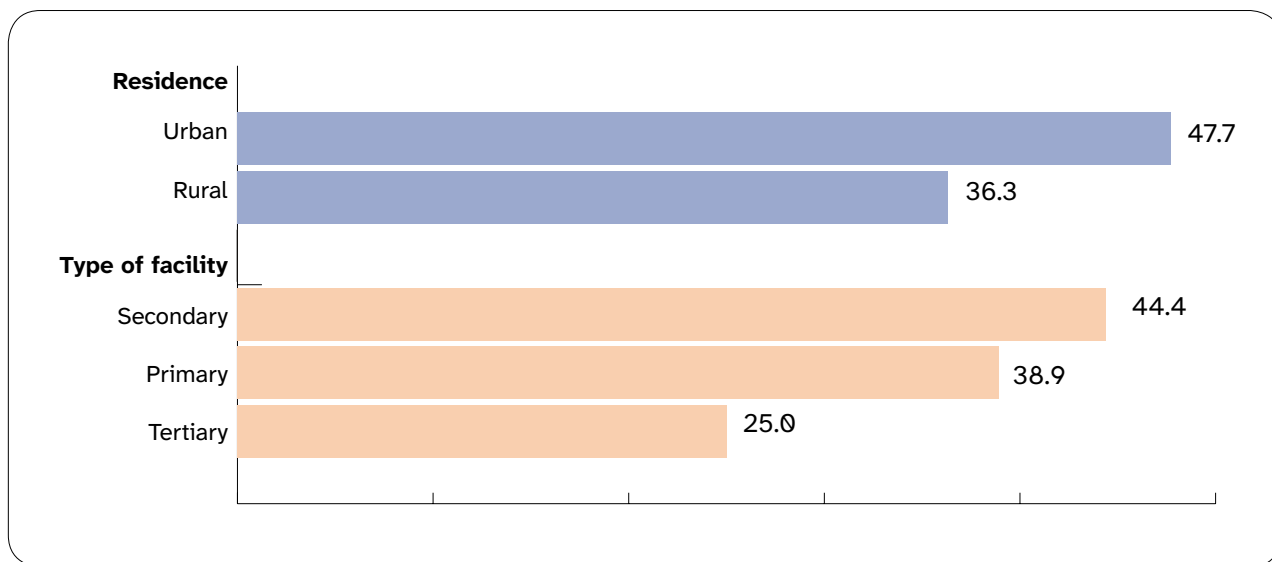


Figure 16: Percentage of SDPs with stockouts of any modern contraceptive methods within three months of survey. Source: MoHS, 2022.

13. Ministry of Health and Sanitation, 2023.

14. Ibid.

On the day of survey, about 59.3 per cent of SDPs reported no stockout of any modern contraceptive method which suggests a stockout rate of 40.7 per cent. The rate of stockout by residence and type of facility is presented in Figure 17. Main reasons provided for stockouts include supply chain related delays (from warehouses or source institutions), delays on the part of SDPs in requesting restock, low client demand and lack of equipment.

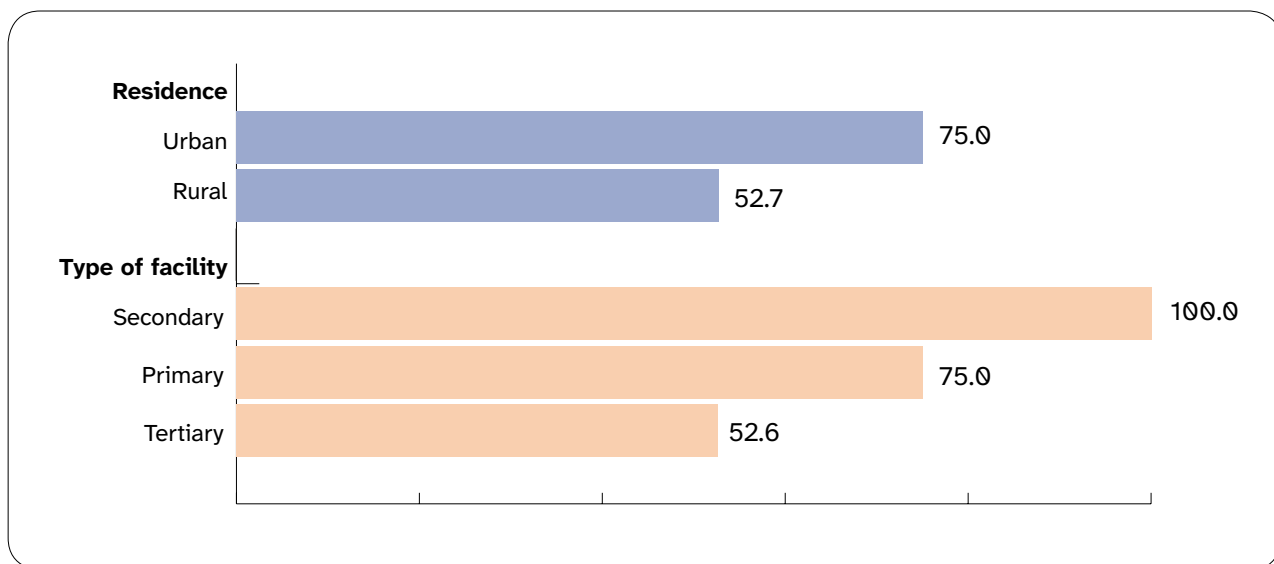


Figure 17: Percentage of SDPs with stockouts of any modern contraceptive methods on the day of survey. Source: Ministry of Health and Sanitation, 2022.

The National Composite Index on Family Planning allows for an assessment of the policy-enabling environment that can influence mCPR growth. A strong enabling environment is a factor enabling the success of intervention scale-ups. The index measures the strength of existing policies and programme implementation. Figure 18 shows the index's scores for Sierra Leone in 2017 across five dimensions with an overall score of 70 per cent. The scores also suggest that there is room for improvement across all five dimensions with a particular focus on data, quality and accountability.

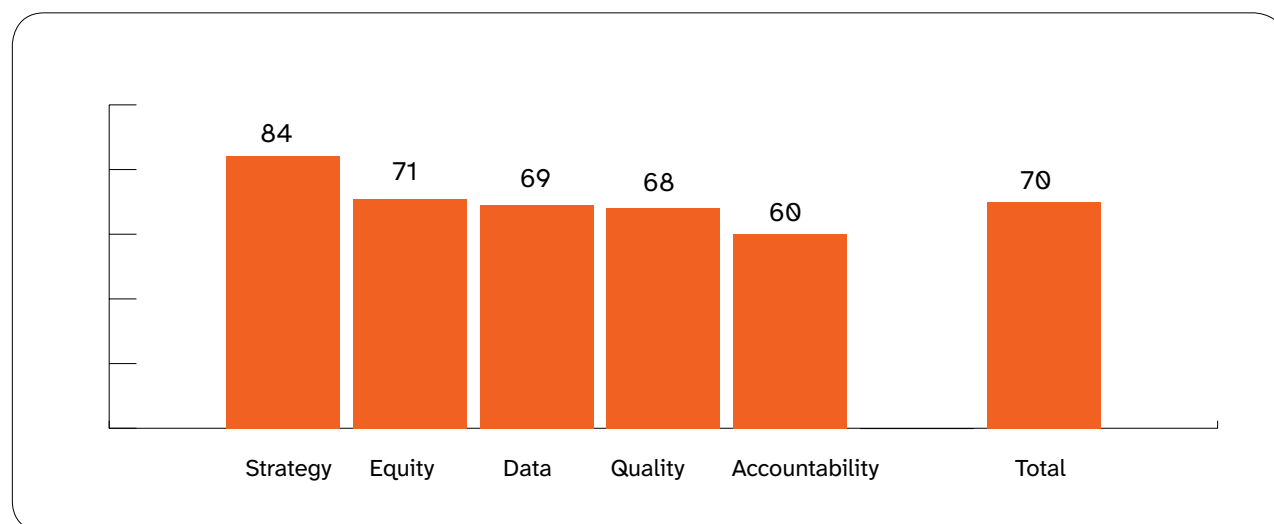


Figure 18: NCIFP scores. Source: Track20, n.d.

2.8 Budget analysis

2.8.1 Overall health spending and funding trends

In 2022, general health spending in Sierra Leone was about NLe897 billion amounting to 11.3 per cent of total government discretionary spending. Only expenditure on education (21.4 per cent), general public services (25.4 per cent) and economic affairs (18.8 per cent) was higher than that for health.¹⁵ In the 2023 fiscal year, the health sector allocation in the budget was reduced to about NLe903 million, representing about 9.2 per cent of the total discretionary budget. Allocations for general public services (25.6 per cent), public order and safety (12 per cent), economic affairs (18 per cent) and education (21 per cent) were all much higher than allocations to the health sector.¹⁶ It is notable that in both years, health sector allocations were less than the 15 per cent recommended by the Abuja Declaration. Of the total allocation to the health sector about 51 per cent (NLe456 billion) in 2022 and 64 per cent (NLe580 million) in 2023 was for health workers' payroll.¹⁷ This raises concerns about budget sufficiency for operational purposes including infrastructure, drugs and supplies. Another important recent trend is that the health sector has undergone steeper budget cuts than other economic and social sectors. Between 2022 and 2023, allocation to education and economic affairs declined by 0.4 and 0.8 percentage points respectively while health allocation declined by about 2.1 percentage points (see Table 3 for allocated amount).

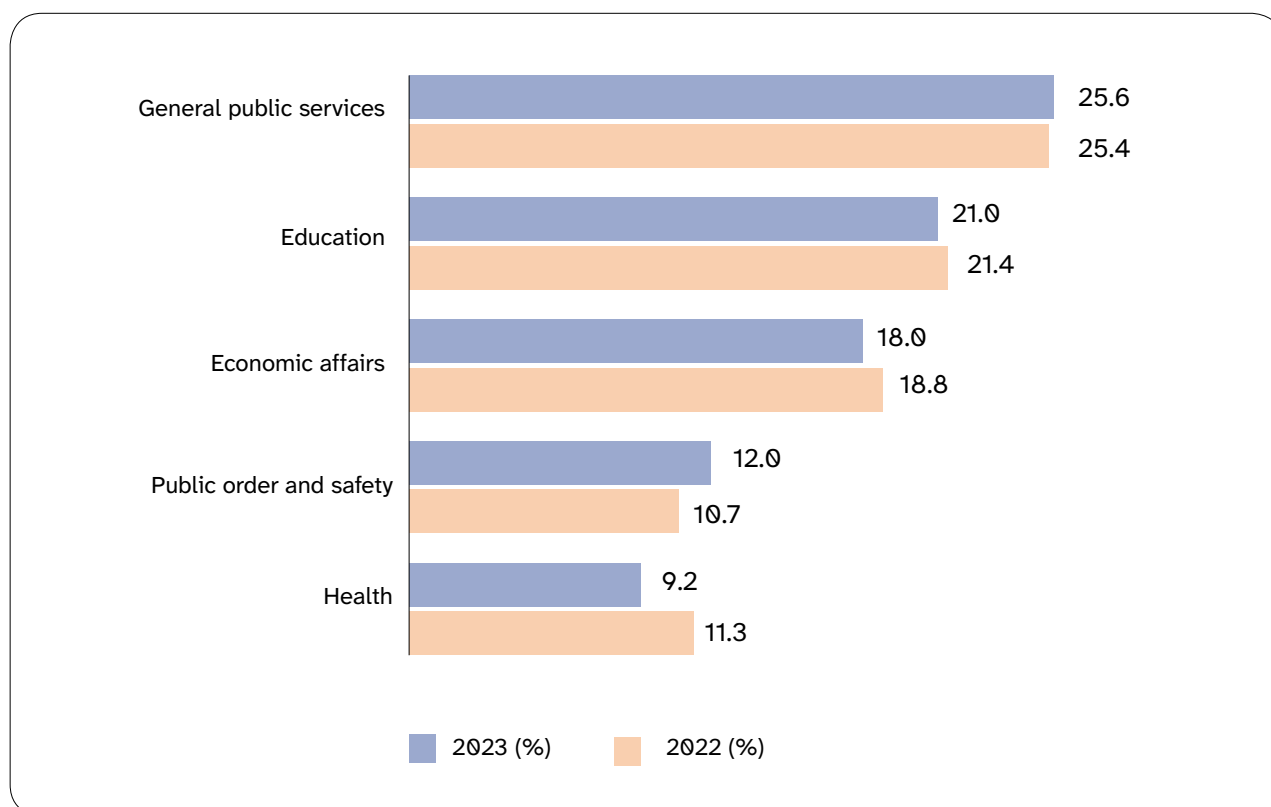


Figure 19: Selected component allocation of the national budget.
Source: Government of Sierra Leone, 2022 and 2023.

15. Government of Sierra Leone, 2022.

16. Government of Sierra Leone, 2023.

17. Government of Sierra Leone, 2022; Government of Sierra Leone, 2023.

Table 3: Selected components of budget allocation with allocated amounts

Expenditure classifications	2022 budget allocation		2023 budget allocation	
	Amount (in billions of new Leones)	%	Amount (in millions of new Leones)	%
Health	897	11.3	903	9.2
Education	1,699	21.4	2,069	21
Economic affairs	1,496	18.8	1,771	18
General public services	2,014	25.4	2,526	25.6
Public order and safety	851	10.7	1,179	12

Source: Government of Sierra Leone, 2022 & 2023.

The national health account for 2019 and 2020 suggests that much of the health spending in both years was on recurrent spending. In 2019, only 2 per cent of health spending went to capital spending which increased to 11 per cent in 2020.

Table 4: Health expenditure by classification

Expenditure classifications	2019		2020	
	Amount (in billions of Leones)	%	Amount (in billions of Leones)	%
Recurrent	3,353.50	98	3,724.58	89
Capital	66.57	2	459.96	11
Total	3,420.08	100	4,184.54	100

Source: NHAS, 2019 & 2020.

2.8.2 Main funding sources

The latest National Health Accounts (NHA) show that in 2019, about 52 per cent of health financing was from households, which slightly declined to 47 per cent in 2020. This suggests that to achieve global targets of universal health coverage with no financial restrictions to health care access for households, substantial efforts are required to reduce out-of-pocket spending. Donors contributed about 34 per cent of health spending in 2019, which marginally increased to 36 per cent in 2020. Government spending comes third, at 13.5 per cent of total health spending in 2019 and 16.8 per cent in 2020. As indicated earlier, more recently available data suggest that the government's contribution may have declined since 2020.

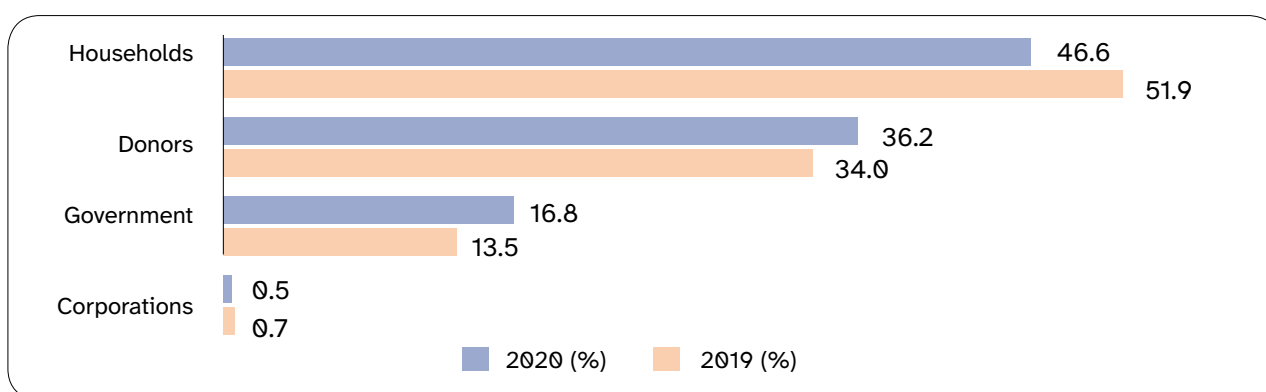


Figure 20: Health expenditure by financing source.
Source: GoSL, 2020.

2.8.3 Family planning spending trends

Reproductive and maternal health accounted for 15.71 per cent (NLe526,806.8 million) of total health expenditure in 2019. In 2020, this increased to 21.33 per cent (NLe794,637.1 million). FP contraceptive management accounted for 1.92 per cent (NLe64,307.8 million) in 2019 which increased to 3.13 per cent (NLe116,705.9 million) in 2020 (see Table 5).

Table 5: Reproductive health expenditure, 2019 and 2020

Reproductive and maternal health	2019		2020	
	Amount (million SLL)	Share of total health spending (%)	Amount (million SLL)	Share of total health spending (%)
Family planning	64,307.80	1.92	116,705.90	3.13
Total reproductive and maternal health	526,806.80	15.71	794,637.10	21.33

Source: NHA Data Analysis, 2019 & 2020.

Track20's FP spending assessment in 2020 shows that the Ministry of Finance (MoF), through the national budget, committed about \$1,305,108.17 to FP services. However, about 7.5 per cent of this amount remained in the MoF as overhead costs and were not directly spent on FP commodities. While this may be a legitimate allocation, it is important to ensure that it is efficient use of the limited resources allocated to FP services. About 85 per cent of the budget was spent on public health centres. Table 6 (and Figure 21) also shows that most of the spending was on providing implant services and related commodities, reflecting the high preference for implants in the country's FP method mix.

Table 6: Family planning input factors in 2020

	Value (USD)	Share (%)
Direct FP service provision staff cost	98,267.29	8.2
Pills	98,762.36	8.2
Injectables and related consumables	21,957.65	1.8
IUD and related consumables	1,525.00	0.1
Implants and related consumables	955,498.38	79.3
Male condoms for FP	25,053.07	2.1
Female condoms for FP	2,719.75	0.2
Training	1,324.67	0.1
Total	1,205,108.17	100

Source: (Track20, n.d.).

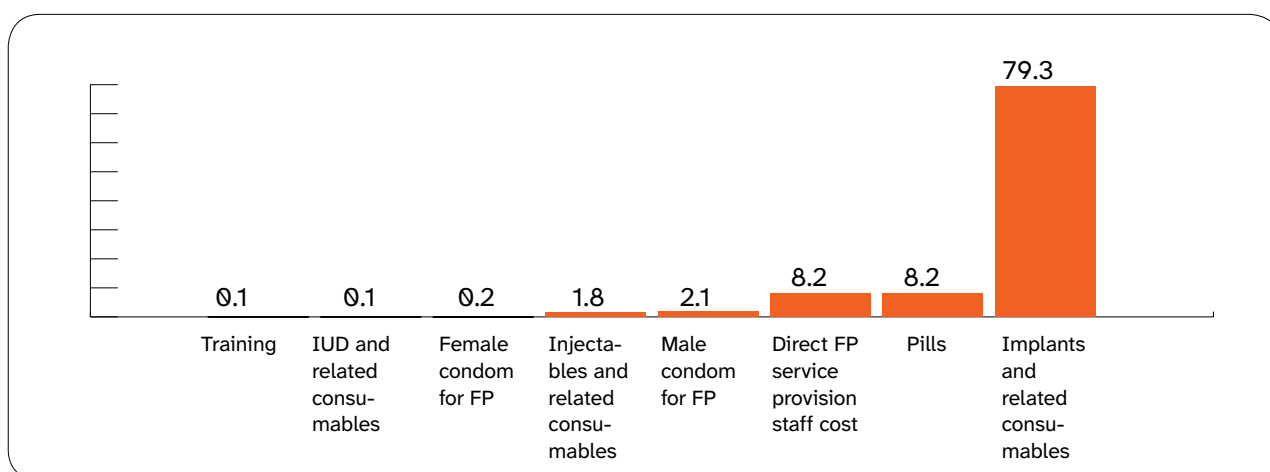


Figure 21: Proportion of family planning spending, by commodity.

The spending assessment in 2021 revealed that the MoF, through the national budget, allocated USD272,796 to FP services, which was only around 20 per cent of the amount allocated in 2020. Even more worrying is that 36 per cent of this amount remained within the MoF, which raises concerns about efficiency in the use of these resources allocated to FP services. Of the amount that was spent by the MoH, none can be directly traced to FP service provision. These are sometimes referred to as overheads or indirect costs.

Focusing on FP spending and comparing it to other disease areas or health programmes highlights the extent of underfunding for FP. Putting all funding sources together, FP accounted for a little over 2 per cent relative to all other disease spending in 2019. This increased to approximately 4 per cent in 2020. Malaria, nutrition and non-communicable diseases were among the highly funded programmes in both years (see Table 7).

Table 7: Health spending by disease/programme

Disease/programme	2019		2020	
	Amount (million Leones)	%	Amount (million Leones)	%
Family planning	64,307.80	2.24	116,705.90	3.84
HIV and other STDs	125,489.90	4.36	194,688.60	6.41
Malaria	776,611.00	27.00	1,055,400.80	34.74
Tuberculosis	49,598.60	1.72	54,900.10	1.81
Respiratory infections	32,641.00	1.13	66,687.20	2.20
Diarrhoeal diseases	235,949.10	8.20	187,394.70	6.17
Neglected tropical diseases	27,091.80	0.94	31,511.90	1.04
Vaccine preventable diseases	142,605.40	4.96	113,065.70	3.72
Other and unspecified infectious and parasitic diseases	321,976.70	11.19	176,310.70	5.80
Nutritional deficiencies	329,349.10	11.45	338,057.70	11.13
Noncommunicable diseases	615,856.80	21.41	597,858.70	19.68
Injuries	84,504.70	2.94	67,266.10	2.21
Non-disease specific	70,469.70	2.45	38,061.60	1.25
Total	2,876,451.60	100.00	3,037,909.70	100.00

Source: NHA Data Analysis, 2019 & 2020.

2.8.4 Funding for family planning services in Sierra Leone

External funds account for the lion's share of FP spending. In 2019, about 82 per cent of FP spending was from external sources which increased to about 90 per cent in 2020. Over these same years, the Government of Sierra Leone (GoSL) accounted for almost no investment in FP services. In fact, for 2019 and 2020 combined, the GoSL contributed less than 1 per cent to total FP spending.

Table 8: Family planning spending, by source

Sources	2019		2020	
	Amount (million Leones)	%	Amount (million Leones)	%
Government	95.1	0.15	29.2	0.03
Corporations	1,290.70	2.01	1,015.30	0.87
Households	-	-	-	-
NPISH	10,098.90	15.7	11,141.10	9.55
External aid	52,823.00	82.14	104,519.90	89.56
Total	64,307.80	100	116,705.90	100

Source: NHA Data Analysis, 2019 & 2020.

Note: Non-profit institutions serving households (NPISH).

It is worth mentioning that while the NHA does not report household spending on FP, it is not clear if this is due to unavailability of information or there are indeed no costs to households for FP. However, a 2019 facility assessment on the availability of reproductive health commodities and services reports user fee charges to households. About 16.1 per cent of the SDPs charged FP method users for consultation while 22.2 per cent charged for medicines. User fee charges were substantially higher in urban (40.7 per cent) than in rural (13 per cent) locations.

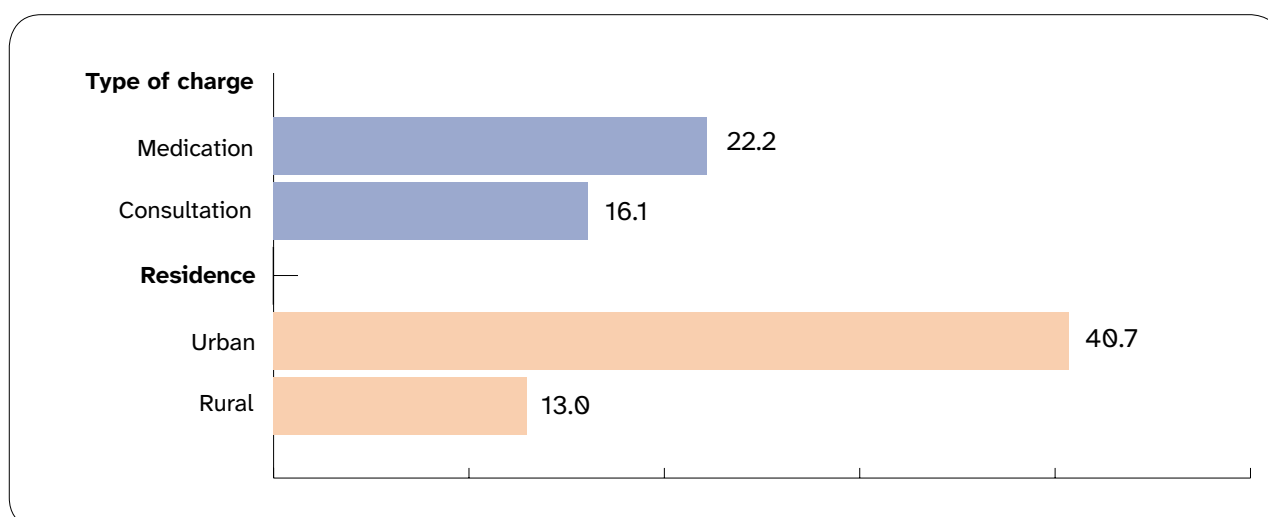


Figure 22: Percentage of SDPs that charge user fees, by facility location and type of charge.

Source: Ministry of Health and Sanitation, 2022.



CHAPTER 3: BENEFIT-COST ANALYSIS

3.1 Tools and methods

3.1.1 Estimating intervention costs

For each intervention (modern method) included in the cost-benefit analysis, the total cost of scaling up the intervention in a particular year was computed as a product of the target population, the population in need, the target coverage and the cost per person per year.

The cost for each intervention includes the required drugs and consumable supplies, provider time, and outpatient visits needed. The resource requirement for each intervention therefore includes drugs and supplies, labour, capital, and other recurrent costs. Estimates of appropriate drugs and labour are based on WHO's standard guidelines for delivering the intervention in question.¹⁸



3.1.2 Estimating impact

The health impact of scaling up these FP interventions was measured by three outcomes: (1) number of unintended pregnancies averted; (2) number of abortions averted; and (3) number of maternal lives saved. To estimate the health impacts, the case-specific impact of the outcome indicators from an intervention is multiplied by the coverage of the intervention and its effectiveness. Intervention effectiveness is based on a literature review for each intervention.¹⁹

3.1.3 Projection scenario

The costs and impacts are estimated under three mutually exclusive projection scenarios. The scenarios make assumptions about what mCPR could be achieved by the endline. The three projection scenarios are presented below.

- The business-as-usual (BAU) scenario is based on historical trends in modern contraceptive use and assumes that these historical trends remain the same until 2030. To determine the target in this scenario, the average rate of change in the mCPR using data from five years preceding the baseline is computed.
- The achievable scenario target increasing the mCPR from 29.1 per cent at baseline to 43.1 per cent by 2030. This is in line with the national target proposed in the GoSL FP2030 commitments.
- The ambitious scenario assumes that current total demand for modern contraceptives will be fully met by 2030, pushing the mCPR from 29.1 per cent at baseline to 49.5 per cent by 2030.

18. Avenir Health, 2023.

19. Ibid.

3.2 Results

3.2.1 Health impact of scaling up FP interventions

Table 2 reports the expected impact of scaling up coverage of the FP interventions described earlier. The results show that if historical trends are maintained as described in scenario 1 (BAU), there will be about 904,000 modern FP users by 2030. Scaling up these interventions to achieve an mCPR of 43.1 per cent by 2030 (the achievable scenario) will increase the number of users by 2030 to 1.1 million. A further increase in the mCPR to 49.5 per cent by 2030, in line with the third scenario (ambitious) will increase the number of users to about 1.3 million.

Three other health benefits of increasing coverage of modern FP methods are reported in Table 9. The result shows that under the BAU scenario, a total of 2,421,846 unintended pregnancies will be averted between 2023 and 2030 if historical trends persist. In the two scale-up scenarios (scenarios 2 and 3), a total of 2,811,315 and 3,068,107 unintended pregnancies will be averted respectively – representing a 16 per cent and 27 per cent increase respectively, relative to the BAU scenario. Similarly, the number of maternal deaths that could be averted due to an increase in the number of modern method users are estimated at 7,938, 9,200 and 10,017 under the BAU, achievable and ambitious scenarios, respectively. A total of about 864,599; 1,007,706 and 1,095,291 abortions will also be averted under the three scenarios as reported in Table 9.

Table 9: Summary of health impacts of scaling up modern contraceptive methods (2024-2030)

	BAU (Business-as-usual)	Achievable	Ambitious	Percentage increase relative to scenario 1	
				Achievable	Ambitious
Number of modern method users by 2030	904,977	1,132,791	1,302,781	16	27
Unintended pregnancies averted	2,421,846	2,811,315	3,068,107	16	27
Maternal deaths averted	7,938	9,200	10,017	16	26
Unsafe abortions averted	864,599	1,007,706	1,095,291	17	27

The annual trend in the number of modern FP users is reported in Figure 23 and it shows an increase from 640,153 in 2023 to about 904,977 in 2030 (the last year of implementation) under the BAU scenario. The number of users is estimated at 640,153 for each scenario in 2023 and is expected to increase to 1,132,791 and 1,302,781 by 2030, under the achievable and ambitious scenarios, respectively.



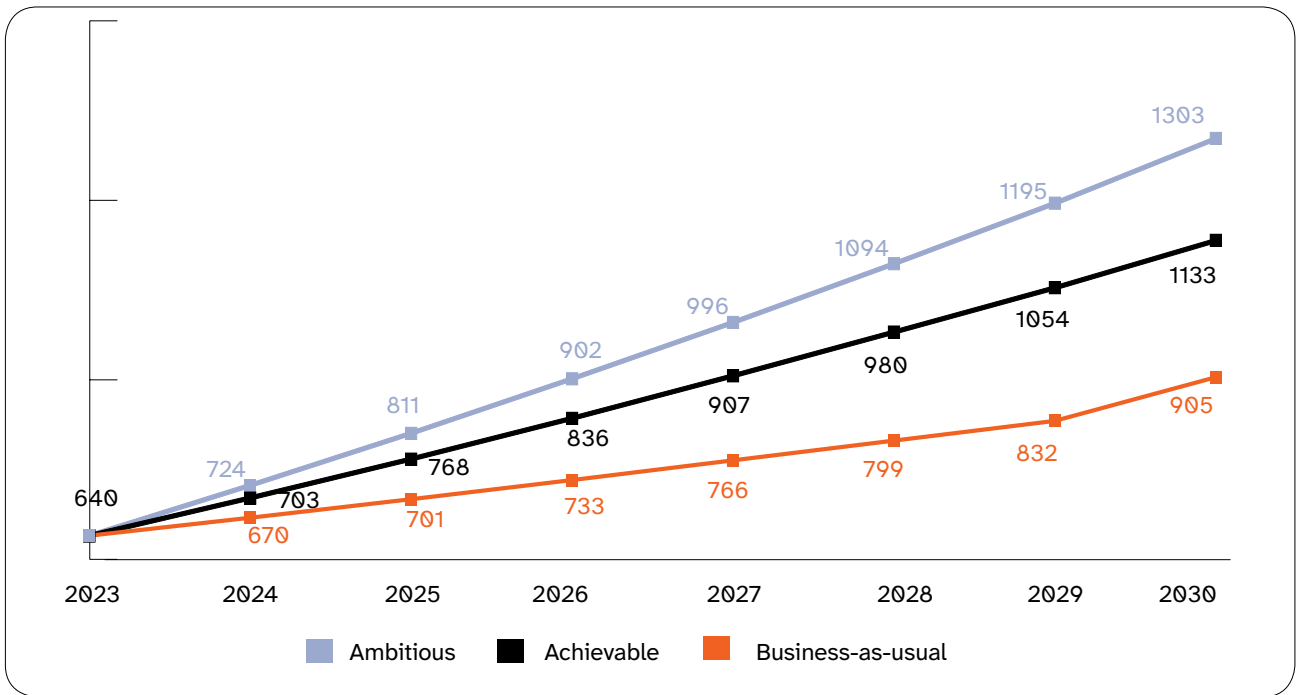


Figure 23: Annual trend in modern method users, by scenario.

Figure 24 reports the trend in the number of maternal deaths averted, increasing from 835 in 2023 to 1,195 in 2030 under BAU. Under the achievable and ambitious scenarios, the number of maternal deaths increases from 835 in 2023 to 1,491 and 1,703 by 2030, respectively. Over the seven-year period 2024 to 2030, this represents a 36.5 per cent, 62.5 per cent and 80.4 per cent increase in the number of maternal deaths averted in the three scenarios, respectively.

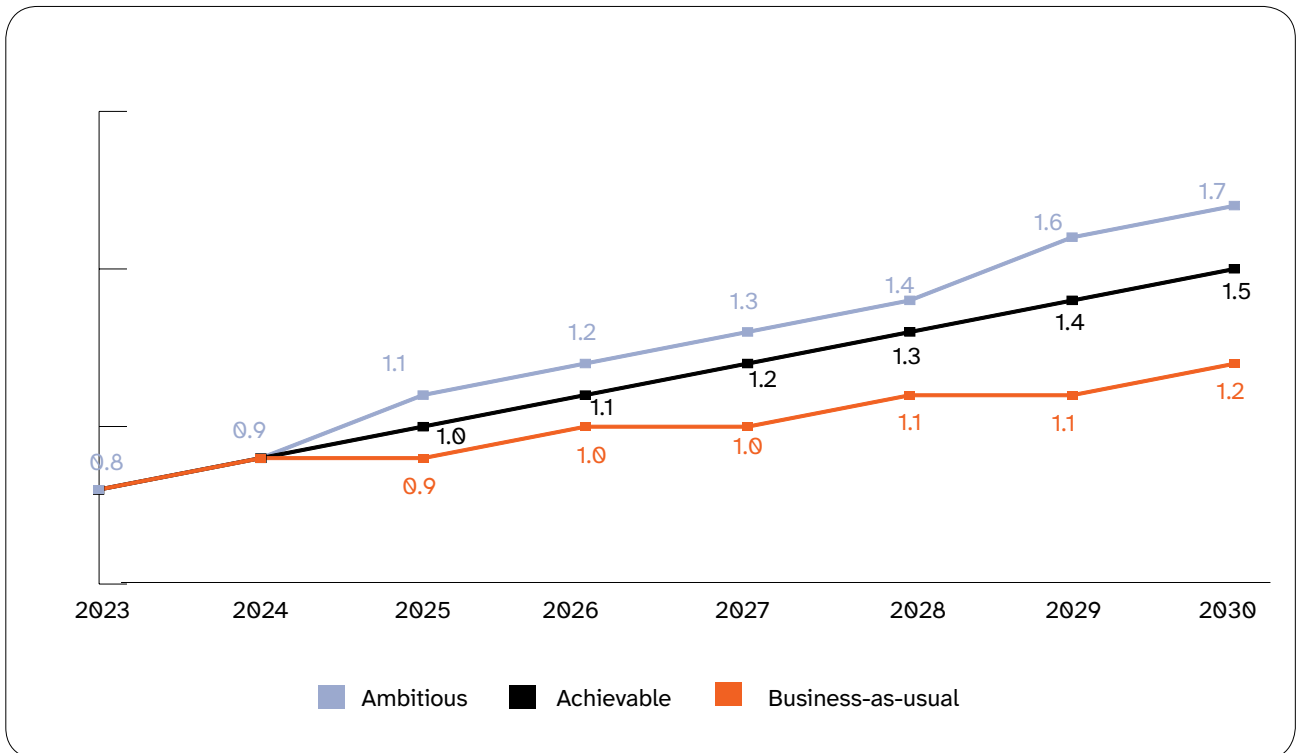


Figure 24: Annual trend in maternal deaths averted, by scenarios (in thousands).

The trend in the number of abortions averted shows a consistent increase from 91,527 in 2023 to 129,386 in 2030 under BAU (see Figure 25). For both the achievable and ambitious scenarios, the number of abortions averted increase from 91,527 in 2024 to 165,740, and to 185,679 by 2030. Again, it can be observed that over the seven-year period (2024 to 2030), there is a positive increase in the number of abortions averted, of about 35.0 per cent, 64.9 per cent and 79.5 per cent under the three scenarios, respectively.

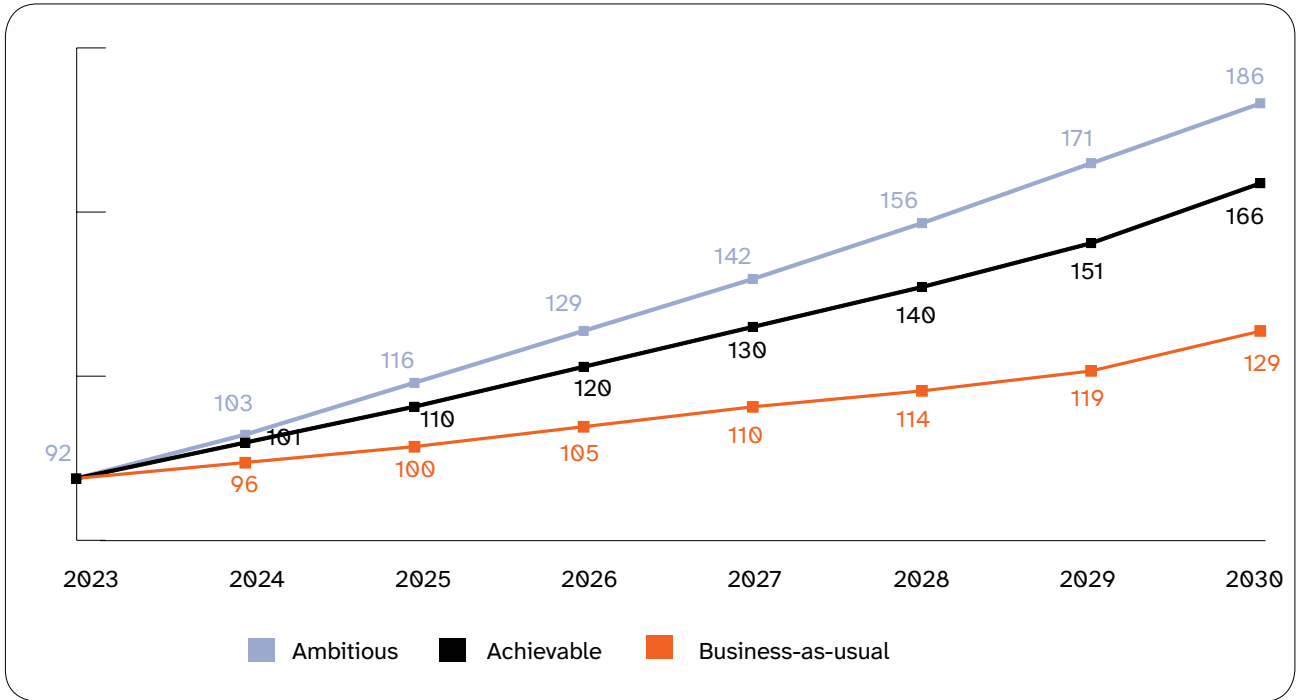


Figure 25: Annual trend in unsafe abortions averted, by scenario (in thousands).

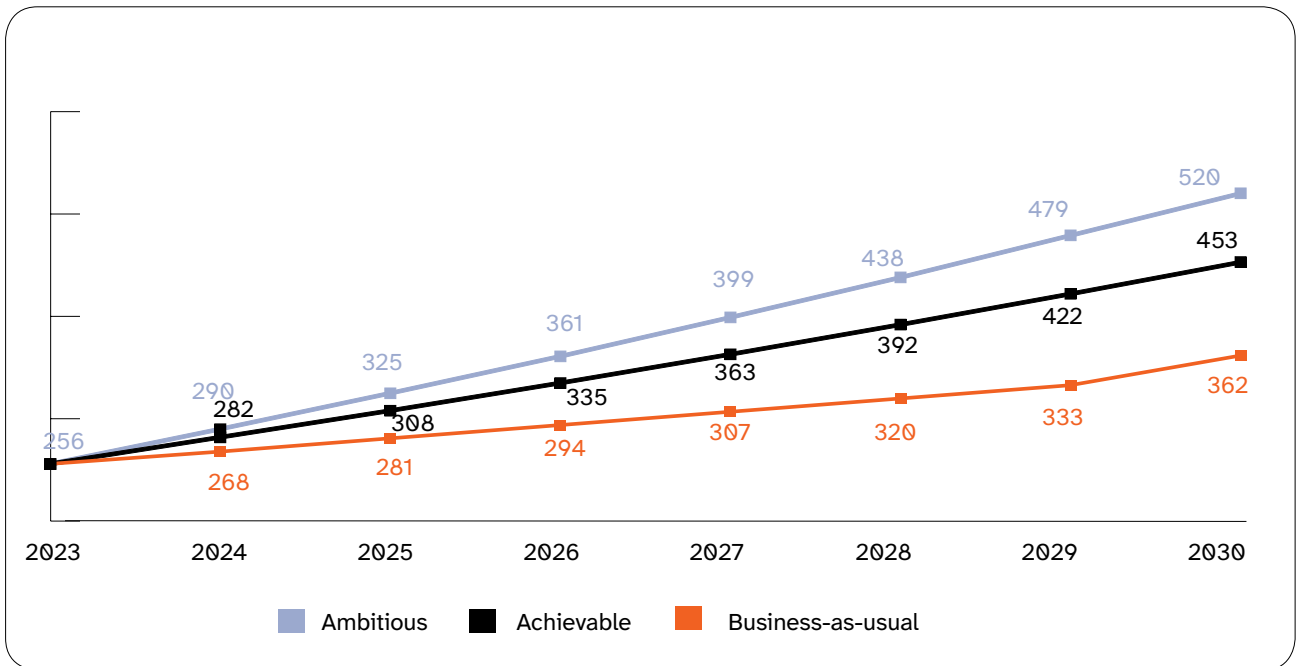


Figure 26: Annual trend in unintended pregnancies averted, by scenario (in thousands).

3.2.2 Opportunity cost of inaction

The opportunity cost of inaction is measured here as the potential gains that could be lost if interventions are not scaled up beyond the BAU scenario. This is a measure of the losses if historical trends are followed without any additional efforts to improve coverage of the interventions. The results show that under the achievable scenario, more than 900,000 potential users of modern FP methods will not be reached, if no action is taken to scale up. This will result in more than 300,000 unintended pregnancies, over 1,000 maternal deaths due to pregnancy and childbirth related causes and more than 100,000 unsafe abortions. The situation is even more worrying under the ambitious scenario where over 1 million modern FP users could be left without access. This will result in more than 600,000; 2,000 and 200,000 unintended pregnancies, maternal deaths and unsafe abortions respectively, over the period under study. The corresponding DALYs and economic benefits lost due to inaction are reported in Table 10.

Table 10: Opportunity costs of inaction (2023-2030)

	Achievable scenario	Ambitious scenario
Total number of users not reached	974,479	1,617,603
Unintended pregnancies not averted	389,470	646,261
Maternal deaths not averted	1,261	2,079
Unsafe abortions not averted	143,107	230,692
Total DALYs lost	218,823	344,910
Total economic benefits lost as share of GDP	0.32	0.81

3.2.3 Economic benefits of investing in FP

Investing in FP services also has economic benefits beyond the immediate health benefits UNFPA (2022). Three main benefits identified are in the realms of the social, work force participation and labour force productivity. The societal benefits accrue through the number of maternal lives saved and maternal disabilities averted. Workforce participation is related to increased longevity in the working population, while labour force productivity is related to increased school years completed hence raising productivity and lifetime earnings.²⁰ Figure 27 shows the total monetary benefits of scaling up interventions towards ending the unmet need for FP in Sierra Leone between 2023 to 2030. These benefits translate to benefit-cost ratios of about US\$3.3, US\$6.9 and US\$9.8 per dollar invested across the scenarios (see Figure 28). The positive benefit-cost ratio also confirms that investing in FP interventions has favourable health, social and economic returns to the individual and the country as a whole.

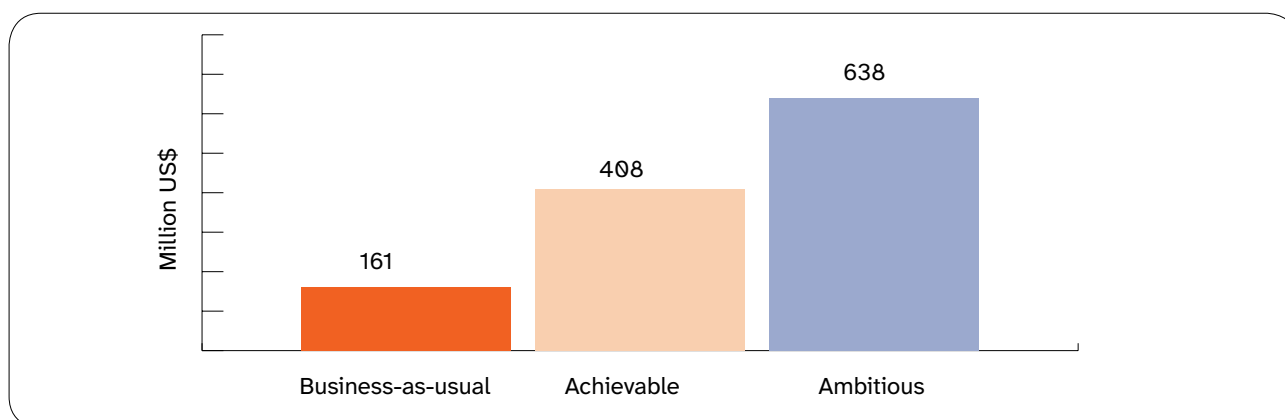


Figure 27: Total economic benefit of investing in family planning, 2023-2030.

20. See United Nations Population Fund, 2022, for detailed methodology.

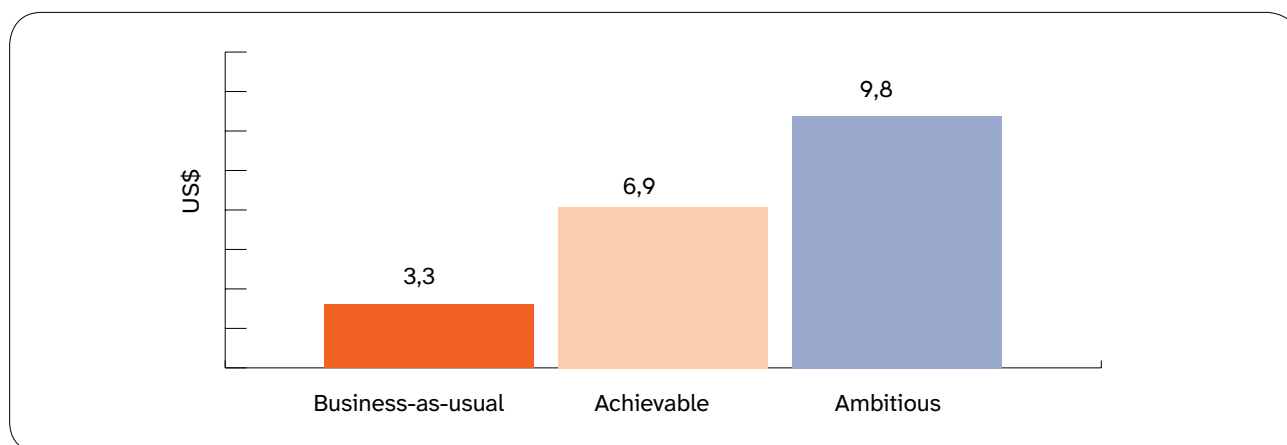


Figure 28: Benefit-cost ratio.

3.2.4 Estimated financial investments required

Achieving the benefits outlined earlier would require substantial resource commitments at all levels of the health system. The total amount of resources required increases from \$48,573,127 under the BAU scenario to \$58,712,695 under the achievable scenario and \$65,141,415 under the ambitious scenario (see Table 11). These costs translate to spending about \$8.03, \$8.36 and \$8.50 for each modern method user under the three scenarios, respectively. Intervention costs make up about 61.0 per cent, 60.1 per cent and 59.6 per cent of the costs for BAU, achievable and ambitious, while the remaining 39.0 per cent, 39.9 per cent and 40.4 per cent cover programme costs, health system infrastructure and logistics costs for BAU, achievable and ambitious scenarios, respectively.

Table 11: Summary of resources required to scale up modern FP methods

	BAU	Achievable	Ambitious
	(Costs in USD)		
Total intervention cost	\$29,638,661	\$35,266,707	\$38,832,993
Total programme-related activity cost	\$18,934,466	\$23,445,989	\$26,308,422
Total investment required	\$48,573,127	\$58,712,695	\$65,141,415

Under the BAU scenario, the total cost of scaling up these interventions increases from \$3,068,852 in 2023 to \$4,379,227 in 2030 (see Figure 29 and Table A9 in appendix). However, if other implementation costs to improve health systems are accounted for, the cost rises from \$4,939,059 in 2023 to \$7,266,886 in 2030 (see Figure 31).

If interventions are scaled up as described in the achievable scenario, the scale-up cost for the interventions increases from \$3,068,852 in 2023 to \$5,807,299 in 2030 (see Figure 29). However, if all other cost components to facility implementation of the intervention by improving health systems are accounted for, the total resources required increases from \$4,939,059 in 2023 to \$9,844,677 in 2030 (see Figure 31 and Table A10 in appendix).

As expected, the ambitious scenario requires the highest resource needs. If interventions are scaled up with a target of increasing the mCPR by about 20 percentage points between 2023 and 2024, the intervention cost needed increases from \$3,068,852 in 2023 to \$6,712,216 in 2030 (see Figure 29). If other implementation costs to improve health systems are added, the total resource required increases from \$4,939,059 in 2024 to \$11,478,650 in 2030 (see Figure 31 and Table A11 in appendix).

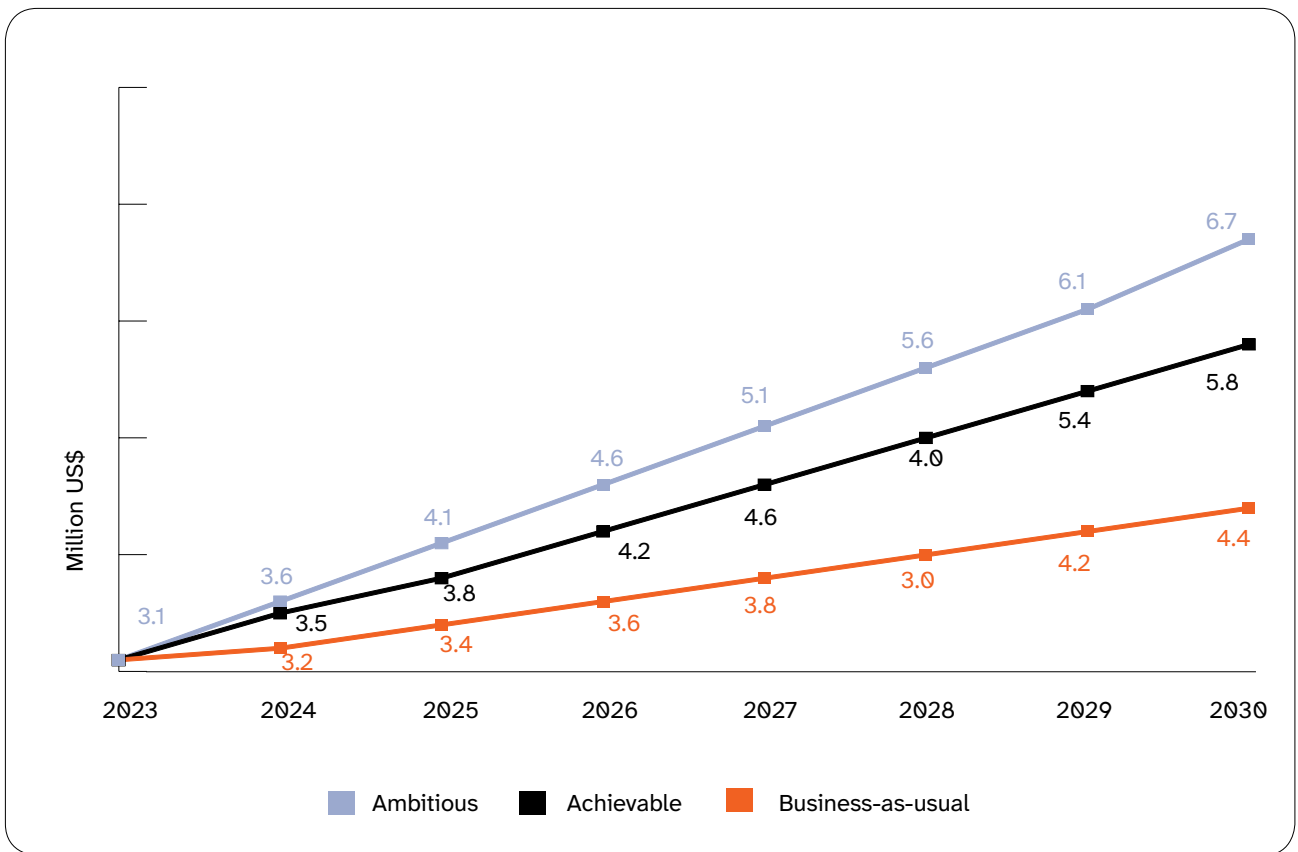


Figure 29: Annual trend in total intervention cost, by scenario (in million USD).

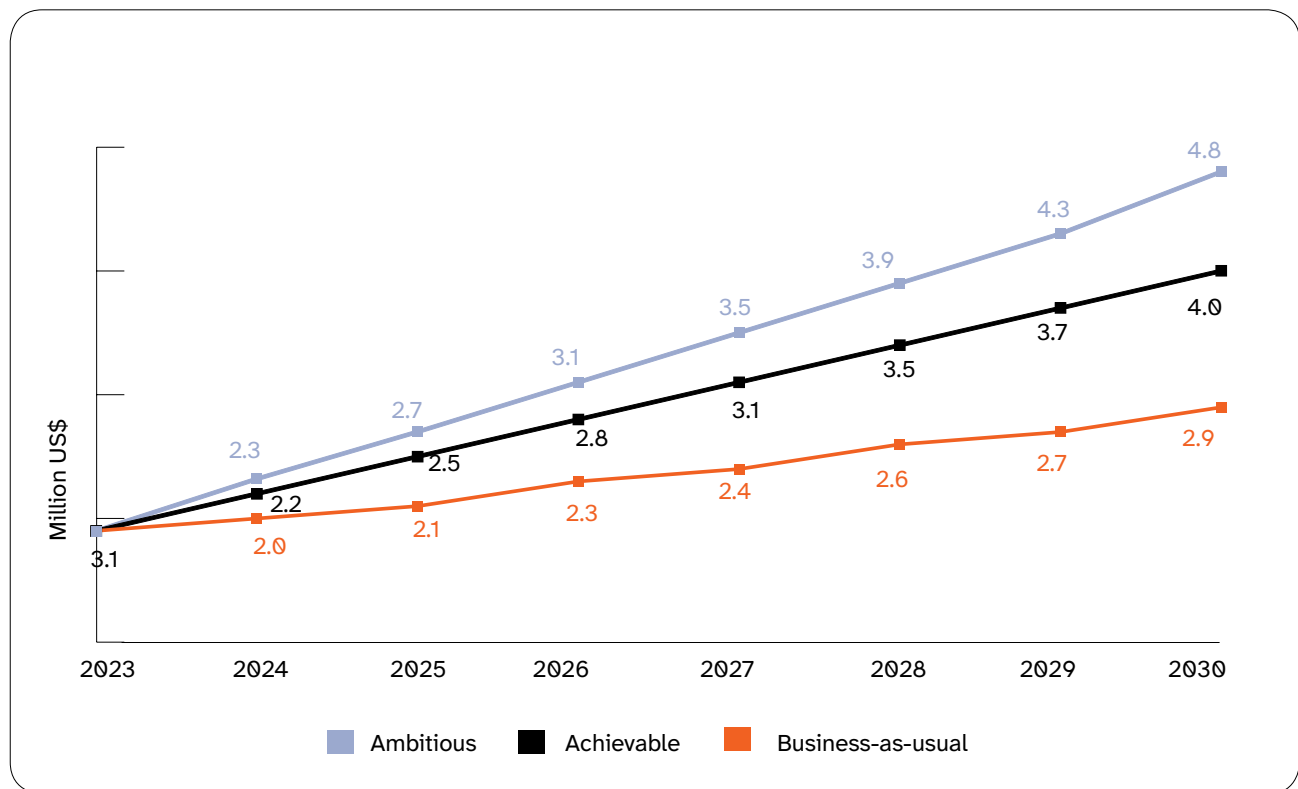


Figure 30: Annual trend in total programme-related activity cost, by scenario (in million USD).

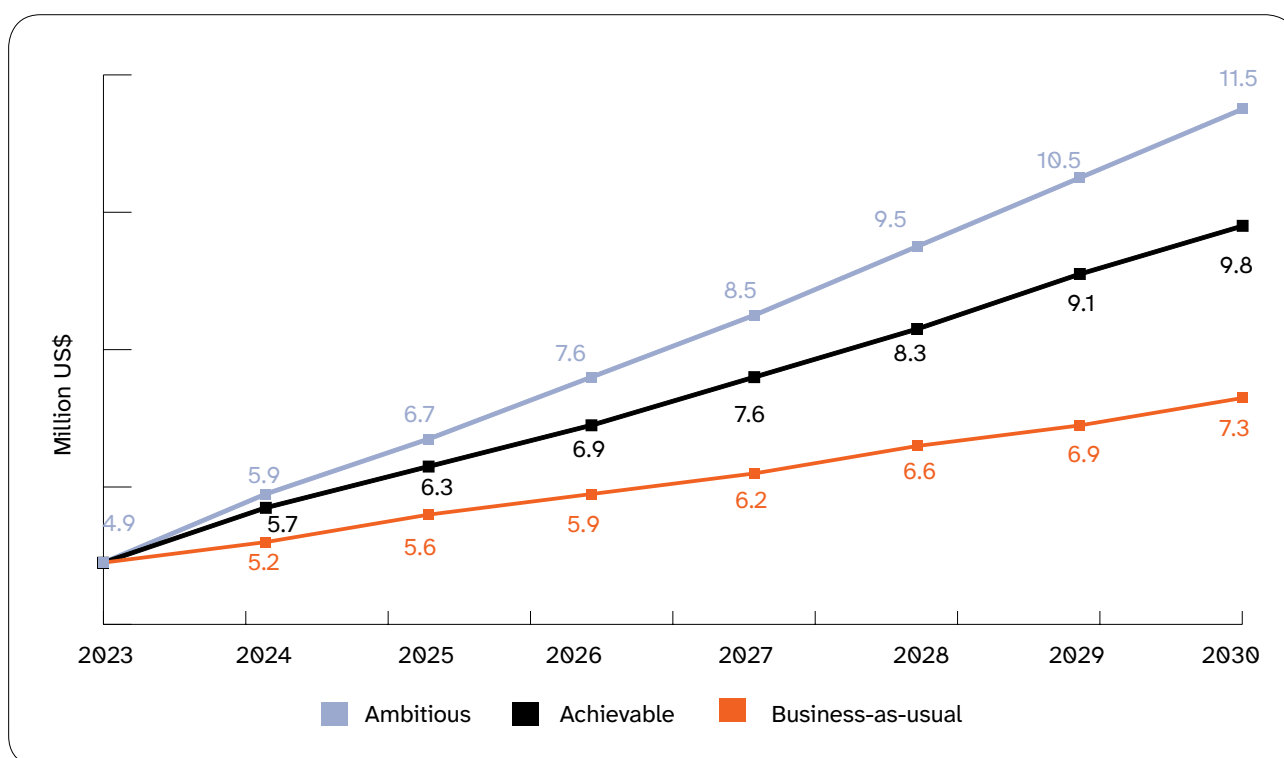


Figure 31: Annual trend in total investment required, by scenario (in million USD).

3.2.5 Funding gap analysis towards achieving required investment

The funding gap is defined as the difference between available and required resources. Available resources here represent a projected budgetary allocation for reproductive health and FP until 2030. Using budgetary allocations for 2023 and 2024, a total of \$315,604 is estimated to be available by 2030. This translates to a funding gap ranging from about \$48.2million under the BAU scenario to about \$64.8 million under the ambitious scenario.

Table 12: Funding gap analysis

Scenario	Total investment required	Projected funding	Funding gap
(Costs in USD)			
BAU	\$48,573,127	\$315,607	\$48,257,520
Achievable	\$58,712,695	\$315,607	\$58,397,088
Ambitious	\$65,141,415	\$315,607	\$64,825,808

3.2.6 Key messages

- If the GoSL continues its current investment trajectory (i.e., the BAU scenario), by 2030 the country will prevent an estimated 2.4 million unintended pregnancies; 7,900 maternal deaths and 864,000 unsafe abortions.
- If FP services are scaled up in a way that increases the mCPR from 29.1 per cent to 43.1 per cent, a total of 1,132,791 modern method users will be reached. This will increase the number of unintended pregnancies, maternal deaths and unsafe abortions averted by 16.1 per cent, 15.9 per cent and 16.6 per cent, respectively, relative to BAU. About \$58.3 million will be required in total investments under this scenario (20.9 per cent more than BAU).

- In contrast, if the GoSL were to achieve the investment levels under an ambitious scenario, which is around \$64.8 million, it could avert an additional 646,261 unintended pregnancies, 2,079 maternal deaths and 230,692 unsafe abortions compared to the base scenario.
- In addition to the deaths and adverse social outcomes, in economic terms, not investing more in FP services is projected to slow GDP growth by 0.81 per cent between 2023 and 2030, which translates into a loss of \$248 million of economic output (total amount).
- Investing in FP services from 2023 to 2030 delivers total economic benefits of up to \$160 million, \$407 million and \$638 million for BAU, achievable and ambitious scenarios, respectively. This amounts to positive benefit-cost ratios of approximately 3:1, 7:1 and 10:1, respectively.





CHAPTER 4: FISCAL SPACE ANALYSIS

4.1 Introduction

An investment case provides policy makers with an understanding of what resources are needed to achieve some desired impacts of specific health interventions. However, effective implementation of an investment case requires ensuring that funding is available to support the new and expanded interventions. In this report, Heller's fiscal space framework is used to identify potential opportunities to expand the resource envelope to fund the cost of scaling up FP interventions through increased funding for the health sector.²¹ Heller defined fiscal space as “the capacity of government to provide additional budgetary resources for a desired purpose without any prejudice to the sustainability of its financial position.” Based on this definition, and the peculiar context of Sierra Leone, two broad sources of fiscal space, namely, domestic and external sources, were identified. Under domestic sources, tax revenue mobilization, improved efficiency, achieving the Abuja Declaration and the International Conference on Population and Development (ICPD) commitment were explored. Under external sources, the viability of borrowing and external grants as potential fiscal space options for the health sector were identified. Each of these themes are explained below.



4.2 Domestic resource mobilization options

4.2.1 Mobilizing tax revenue

To examine tax revenue as a potential source of fiscal space for health, the trend of tax revenue as a percentage of GDP is first examined. Figure 32 shows that between 2009 and 2020, Sierra Leone's tax revenue as a percentage of GDP saw a general upward trend, increasing from 8.2 per cent in 2009 to 11 per cent in 2020. This is, however, below the 15 per cent benchmark set for low-income countries.²²

The country's average tax revenue performance, at 9.8 per cent, also lies below the African average for this period, which was 15.4 per cent.

21. Heller, 2006.

22. Gaspar et al., 2016.

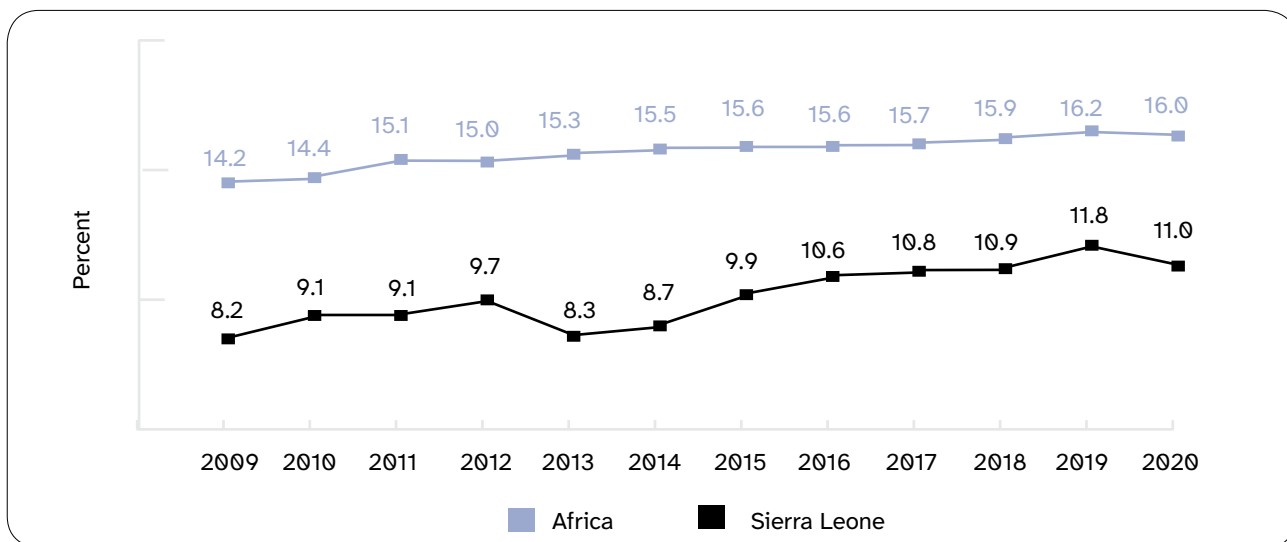


Figure 32: Tax to GDP ratio for Sierra Leone vs. Africa.

Source: OECD Statistics Database (https://stats.oecd.org/Index.aspx?DataSetCode=RS_GBL).

Figure 33 shows the potential fiscal space that could be raised if additional effort is made to catch up with average revenue performance in Africa. This was calculated by first computing the year-on-year proportionate change in the tax-to-GDP ratio from 2009 to 2020. The average proportionate change was then used to compute the tax-to-GDP ratio for each successive year until 2030. The potential fiscal space was computed as the annual difference between the projected tax revenue for Sierra Leone and the African average (see Table A18). The potential fiscal space from improved tax revenue ranges from 3,140 billion Leones to 5,445 billion Leones between 2024 and 2030. The results indicate that there indeed exists potential for raising revenue not only for the health sector, but also for funding other government developmental activities by improving tax revenue mobilization in Sierra Leone to match average performance in Africa. The projections are based on historical performance and are therefore more conservative. The fiscal space projections should therefore be interpreted as minimum attainable.

In order to tap into this potential, it is important for Sierra Leone to build its tax capacity, which includes the policy, institutional and technical frameworks that are required to facilitate tax revenue mobilization²³. Some efforts are already underway in this regard, with the adoption of the medium-term revenue strategy (MTRS). The MTRS aims to enhance tax compliance by leveraging automation and streamlining the tax payment process to reduce the costs of administration and of compliance.²⁴ As part of the MTRS, measures have been put in place to broaden the goods and services tax base to include gambling tokens and tickets, first sale of commercial and residential buildings, and digital services including satellite TV. The measures also include converting ad valorem excise taxes on alcohol, cigarettes, and tobacco products to specific excise rates. For alcoholic beverages with alcohol content less than 10 per cent, the rate is NLe 30 per litre, while for those with alcohol content between 10 per cent and 20 per cent it is NLe 40 per litre. For alcohol content exceeding 20 per cent, the excise rate is NLe 60 per litre. To estimate the potential fiscal space from these taxes, alcohol consumption estimates from the 2016 WHO report on alcohol consumption in Sierra Leone²⁴ was used. The report puts per capita alcohol consumption for the population aged 15 and older at 5.7 litres of pure alcohol. Total alcohol consumption for the year was estimated at approximately 21,793,488.3 litres of pure alcohol. Using the average of the proposed tax rates (NLe 43.3), this means that approximately, a total of NLe 943.66 million could be raised from these taxes per year.

23. Benitez et al., 2023.

24. Government of Sierra Leone, 2023.

25. WHO, Sierra Leone, <https://cdn.who.int/media/docs/default-source/country-profiles/substances-abuse/sle.pdf>.

The MTRS also includes a tax of NLe 1.5 on a pack of 20 cigarettes and progressively increases it to NLe 3.0 by 2027, and a tax of NLe 0.50 per kilogram of tobacco which will progressively be increased to NLe 1.0 by 2027. According to the 2009 STEPS survey in Sierra Leone, the average number of cigarettes smoked daily among smokers was 7.2.²⁶ Using this as a benchmark, considering that the survey was conducted among adults aged between 25 and 64 years, and that 25.8 per cent of respondents were current smokers, this translates to a total of 1,094,885 smokers.²⁷ The average daily cigarettes smoked among the population of smokers is therefore 7,883,175, and the annual average is 2,877,359,036 cigarettes or 143,867,952 packs. Using these estimates, the tax revenue generated over the period from 2024 to 2027 is estimated to be about NLe 1,402 million (see Table A22 in appendix).

Overall, the target of the MTRS is to increase the tax-to-GDP ratio to 20 per cent by 2027.²⁸ Achieving this target would certainly go a long way to making funds available for the health sector as well as other sectors of the economy. Figure 33 shows the tax revenue that could be raised in each year by following a trajectory where Sierra Leone reaches the target of 20 per cent tax-to-GDP by 2027. A total of about \$6,795 million in tax revenue would be raised by the end of that period.

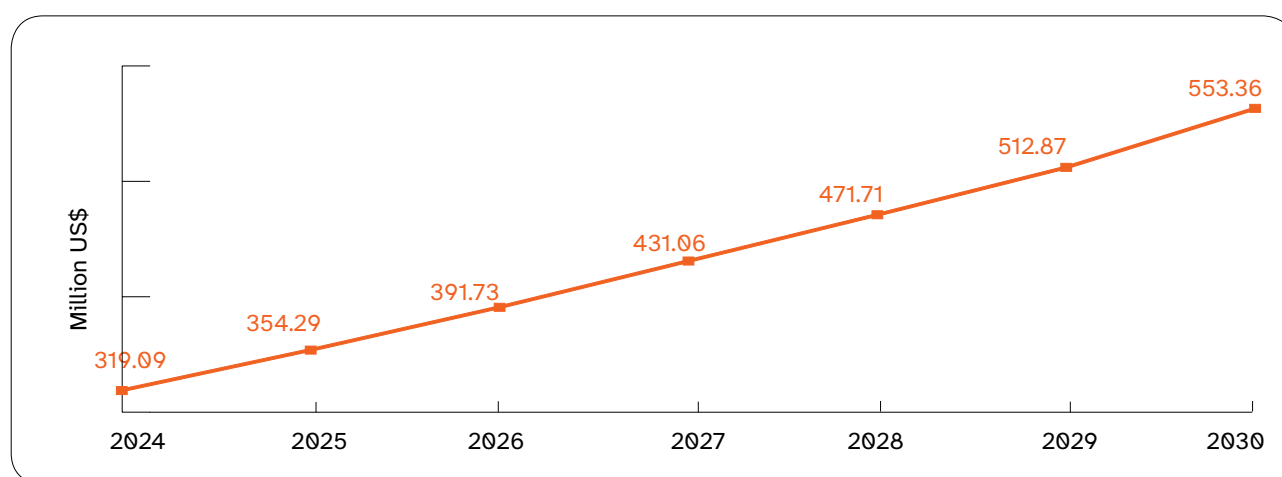


Figure 33: Projected tax from meeting the 20 per cent target.
Source: Author's projections using OECD and WDI data.

4.2.2 Improving health system efficiency

Several studies have shown that there is a relatively high level of inefficiency in Sierra Leone's health system, even compared to other low-income countries. Technical efficiency is defined as a decision-making unit's ability to produce the highest possible output given available input levels or use the lowest possible inputs to produce a given level of output. Novignon and Akanni found Sierra Leone to be among the lowest performers in health system technical efficiency among the 45 sub-Saharan African countries studied.²⁹

26. World Health Organization, Sierra Leone STEPS Survey 2009, at https://cdn.who.int/media/docs/default-source/ncds/ncd-surveillance/data-reporting/sierra-leone/steps/2009_sierra_leone_factsheet_en.pdf.

27. WDI data on population is used to estimate the population aged 25 to 64 in 2009, and 25.8 per cent of this number was then computed. Based on the WDI, Sierra Leone's population in 2009 was 6,259,842, and those aged 25-64 were 4,243,742.

28. Government of Sierra Leone, 2023.

29. Novignon and Akanni, 2014.

Zere et al. also found that Sierra Leone has the lowest efficiency score (58.7 per cent) among 50 African countries studied over the period from 2000-2015.³⁰ Studies focused on Sierra Leone have highlighted significant levels of inefficiency at the health facility level. Renner et al., studied a sample of 37 primary health units (PHUs) in Sierra Leone and found that 59 per cent of the PHUs studied were technically inefficient, while 65 per cent were scale inefficient.³¹ Kirigia et al. reported an average technical efficiency of 68.2 per cent among maternal and child health posts, 69.2 per cent among community health centres and 59 per cent among community health posts.³² These findings underscore the need to improve efficiency in the use of the limited health system resources.³³ Indeed, Barroy et al. also note that improving health system efficiency has the potential to create fiscal space for health within existing resource envelopes.³⁴

Several policy options exist to improve health system efficiency and general additional fiscal space for health. First, policies that emphasize proper alignment and harmonization of existing resources should be encouraged. An assessment of health service delivery indicators in Sierra Leone showed a wide disparity across regions and between rural and urban areas.³⁵ The average number of health workers per facility in Freetown alone is 22.5, which is way above the national average of 6.4. Furthermore, about 98 per cent of doctors, 79 per cent of Community Health Assistants/Community Health Officers, and 71 per cent of nurses and midwives work in urban areas, whereas about 64 per cent of the population lives in rural areas. Secondly, policies that improve the implementation of the health sector budget should be encouraged. This has been identified as one of the challenges of the health sector as allocated budgets are not exhausted even in the face of the numerous health sector challenges. A third policy strategy is to reduce corruption and improve public financial management (PFM) systems to ensure easy flow of funds and accountability in the use of those funds. Barroy et al. noted that harnessing the gains from improved efficiency requires an effective PFM system.³⁶ This can significantly reduce overhead costs and help reduce the actual cost of intervention implementation. Evidence from Track20 suggests that more than 30 per cent of the 2021 budget allocation for FP services remained at the MoF and more than 60 per cent of the funds cannot be traced directly to FP service provision. A good PFM system can reduce these inconsistencies.

4.2.3 Fulfilling international health spending targets

4.2.3.1 Abuja Declaration

In April 2001, leaders of African Union countries committed at a conference in Abuja (Nigeria) to allocate 15 per cent of their national budgets to health. This was intended to help address critical challenges that various countries on the continent were facing, including HIV/AIDS, tuberculosis and other infectious diseases. Figure 34 compares the performance of Sierra Leone to this 15 per cent benchmark from 2003 to 2020. Over this period, Sierra Leone was unable to meet the benchmark. In fact, the country was much farther away from the target in 2020 than it was in 2003. From 11.7 per cent in 2003, government health spending as a percentage of overall spending fell to 9.2 per cent in 2023. This trend calls for efforts to understand the factors behind it and to intensify efforts to increase government health spending to at least meet the 15 per cent target.

30. Zere et al., 2022.

31. Renner et al., 2005.

32. Kirigia et al., 2011.

33. Mbau et al., 2023.

34. Barroy et al., 2021.

35. World Bank, 2018.

36. Barroy et al., 2021.

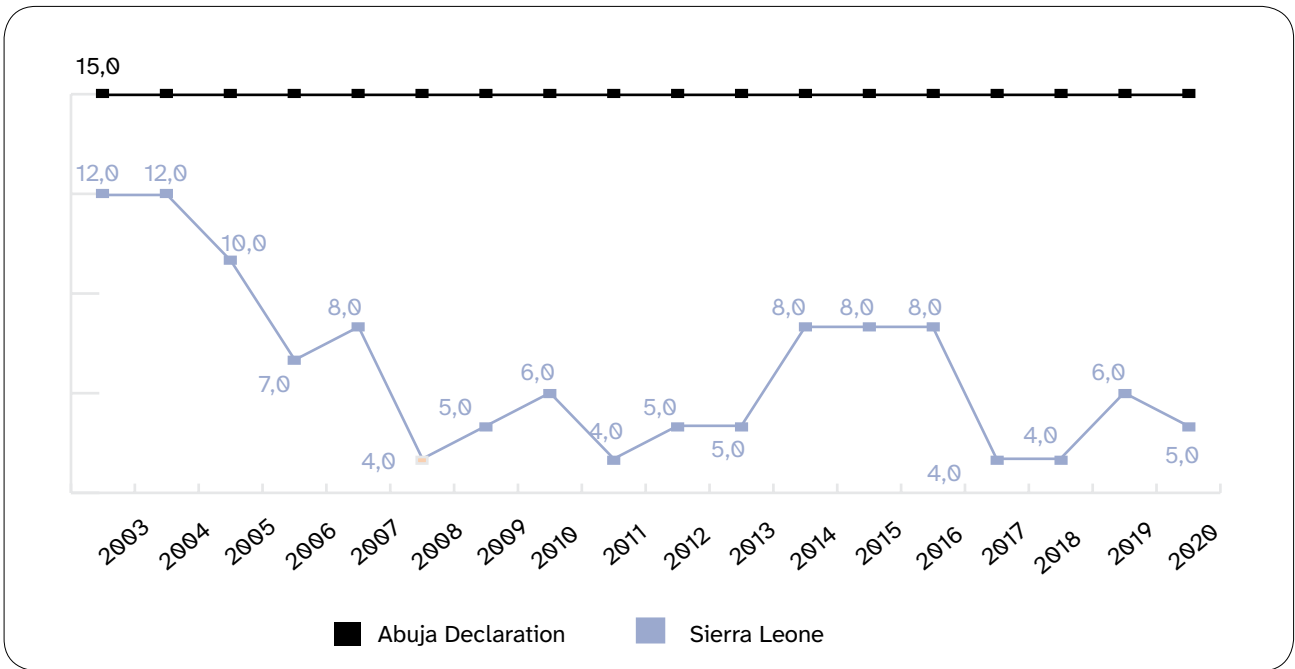


Figure 34: Government health spending as a percentage of general government spending (2003–2020). Source: World Bank WDI and GoSL Budget Statements.

Figure 35 plots the projected government health spending in each year in the scenario where Sierra Leone reaches the 15 per cent target by 2030. To do this, it was projected that the 2023 figure of 9.2 per cent would increase in linearly until the 15 per cent target was reached by 2030. The monetary value was then computed by multiplying the projected percentage by the projected government spending in each year. Table A19 in the appendix shows the forecast percentage for each year from 2024 to 2030.

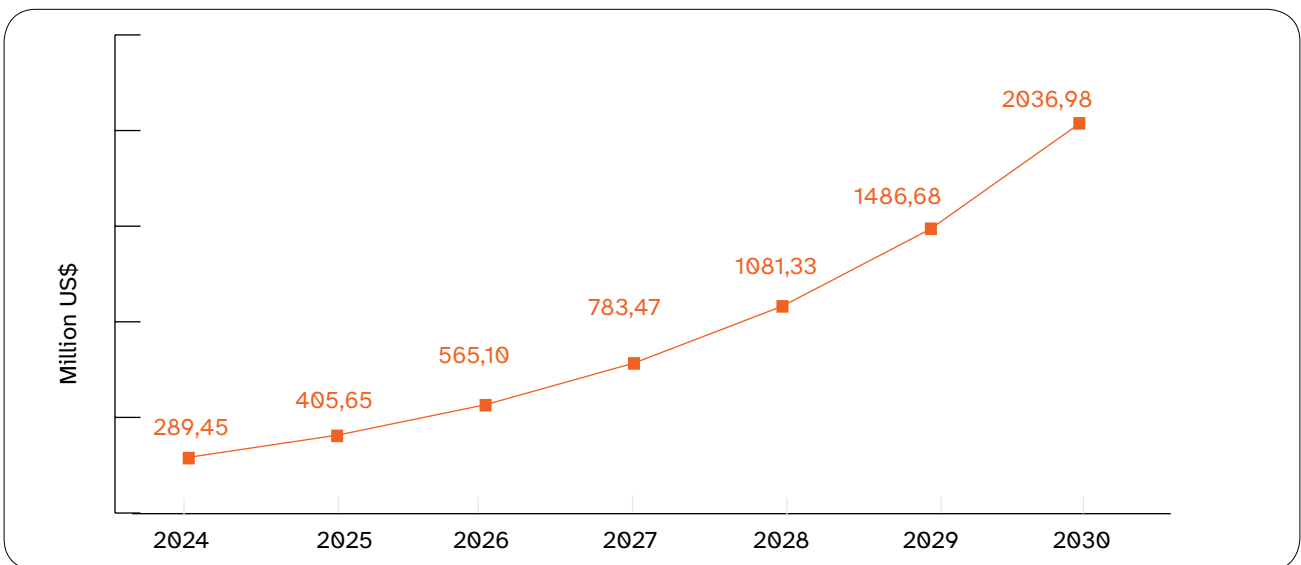


Figure 35: Projected fiscal space to meet the Abuja Declaration target. Source: Author’s projection using WDI.

The projections show that a total of \$6,648 million can be raised between 2024 and 2030. The results indicate that there indeed exists much ground to cover for Sierra Leone in terms of meeting the recommendation of the Abuja Declaration. However, if some effort is made each year, there will be room to generate fiscal space for the health sector.

4.2.3.2 International Conference on Population and Development commitment

The GoSL committed to the International Conference on Population and Development (ICPD) goal of allocating at least 1 per cent of the health budget to FP by 2022. Government spending on FP in 2019 was 95.1 million Leones, forming 0.02 per cent of total government spending on health (460,134.8 million Leones).³⁷ In 2020, the absolute amount of government spending on FP fell to 29.2 million Leones, which was 0.004 per cent of total government spending on health (701,411 million Leones).³⁸ In both 2019 and 2020, external funding has been the biggest contributor to FP in Sierra Leone, accounting for 82.1 per cent in 2019 and 89.6 per cent in 2020. In Figure 36, the potential fiscal space that could be generated from achieving the ICPD commitment of 1 per cent of the health budget for FP services is plotted. To estimate this, a projection of government spending for health was made based on historical performance and computed 1 per cent each year. The results show that a total amount of \$498.94 million could be raised over the period, ranging from \$28.86 million in 2024 to \$135.8 million in 2030.

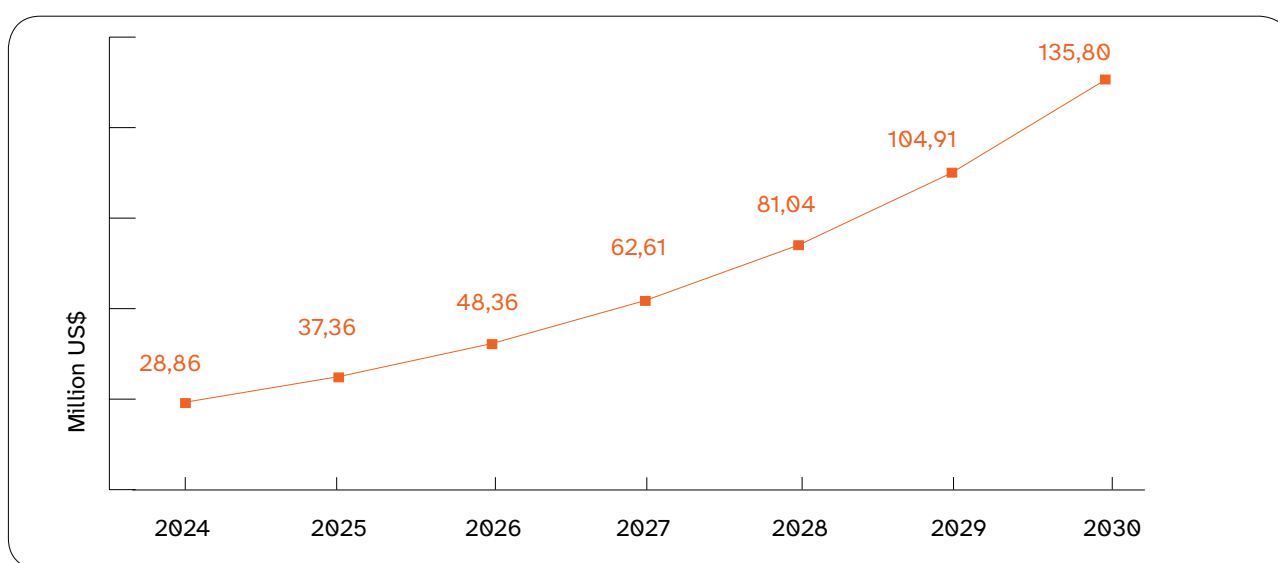


Figure 36: Projected fiscal space from meeting ICPD target.
Source: Author's projections using data from Sierra Leone NHA.

4.2.4 Borrowing from domestic financial markets

Between 2018 and 2021, domestic debt formed between 36 per cent and 40 per cent of Sierra Leone's total public debt stock. Most of the domestic debt is in T-bills, accounting for at least 60 per cent of domestic debt since 2019.³⁹ As shown in Figure 37, this heavy reliance on T-bills accounts for the country's high levels of debt service.⁴⁰ They can therefore not be a practical option for raising domestic funds going forward. However, the preferred measure outlined in Sierra Leone's Medium Term Debt Strategy for domestic borrowing is to increase the share of T-bonds in domestic debt securities by 2027.⁴¹

37. NHA, 2020.

38. Ibid.

39. Government of Sierra Leone, 2023.

40. International Monetary Fund, 2023.

41. Ibid.

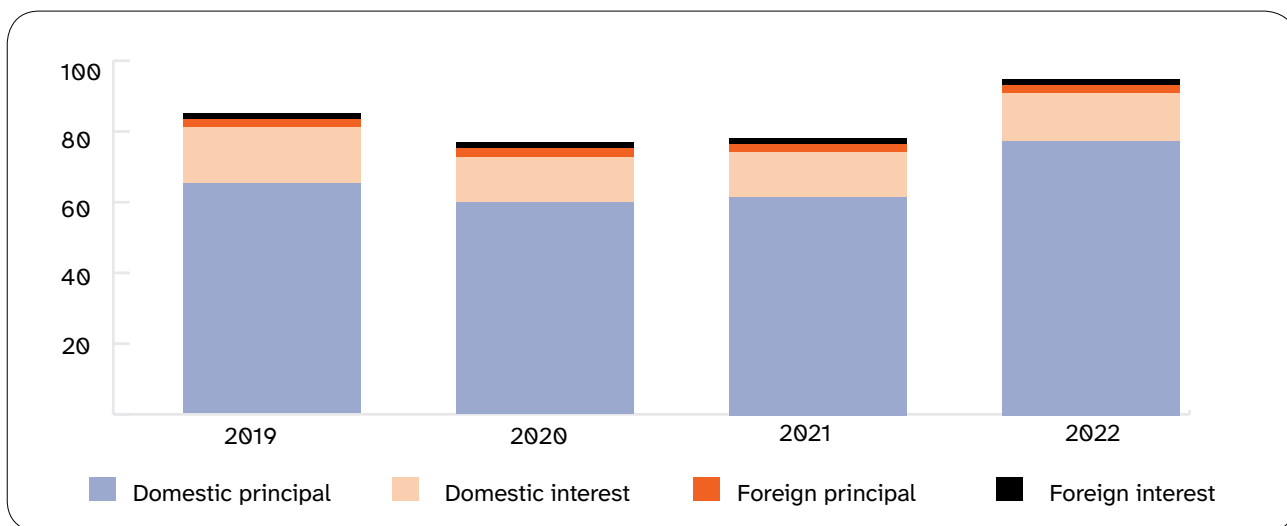


Figure 37: Trend of debt servicing (2019–2022).
Source: IMF Staff Country Report, 2023).

4.3 External resource mobilization options

4.3.1 Borrowing from external sources and external grants

The debt-to-GDP ratio is an important determinant of the viability of borrowing as a potential fiscal space avenue for financing the health sector and FP interventions. For developing countries, the recommended threshold for the debt-to-GDP ratio is 70 per cent. In the case of Sierra Leone, public debt has been on the rise. From 74 per cent in 2020, the debt-to-GDP ratio at the end of the 2021 fiscal year stood at 80.3 per cent and was projected to increase to 80.7 per cent by the end of the 2022 fiscal year.⁴² Comparing this with the country’s tax-to-GDP ratio which has averaged just 11 per cent from 2016 to 2020, there is an indication that in the long term, borrowing may not be a sustainable fiscal space option for financing FP or health sector spending in general.

4.3.2 Borrowing as a fiscal space

Furthermore, a country report by the IMF indicates that without robust implementation and continued reliance on grants and concessional finance, the already precarious debt situation of the country is likely to worsen.⁴³ The report further emphasizes that efforts to lengthen the maturity structure of already accumulated debt will be key to meeting financing needs in the long to medium term. This strategy would help to decrease current annual repayments and allow more funds to be channelled to the health sector.

During the COVID-19 pandemic, Sierra Leone participated in the Debt Service Suspension Initiative.⁴⁴ This initiative allowed low-income countries to suspend debt payment obligations in 2020 and 2021, in order to channel the funds to their response to the pandemic. In 2020, Sierra Leone was thus able to defer \$4.1 million of its external debt. While this was under special circumstances, it does highlight how refinancing can be used as a tool to meet pertinent health sector needs in the country.

42. Government of Sierra Leone, 2022.

43. International Monetary Fund, 2023.

44. World Bank Group, Debt Service Suspension Initiative, <https://www.worldbank.org/en/topic/debt/brief/covid-19-debt-service-suspension-initiative>.

4.3.3 Borrowing from external sources

Novignon and Tabiri show how external assistance played an important role in Ghana's COVID-19 response, assisting the government in implementing key initiatives to protect citizens.⁴⁵ The authors however note that for countries that are already at risk of debt distress, this option could negatively affect debt sustainability. The total outstanding external debt for Sierra Leone stood at \$2 billion at the end of 2021. External borrowing for Sierra Leone comes from multilateral creditors, bilateral creditors and commercial creditors. Multilateral creditors (World Bank, IMF, Africa Development Bank, International Fund for Agricultural Development, Inter-American Development Bank, European Investment Bank, Arab Bank for Economic Development in Africa, OPEC Fund for International Development, ECOWAS Bank for Investment and Development) accounted for 79 per cent of external debt in 2021, which corresponds to \$1.58 billion. The country is therefore faced with a high risk of debt distress. External borrowing may therefore not be a viable option for Sierra Leone.

External grants may therefore be a preferred option relative to borrowing. However, as Heller noted, it is important for these grants to be sustainable and predictable.⁴⁶ The nature of interventions in the health sector requires that to achieve any reasonable impact, investments must be sustained. As it stands, FP (and health investment in general) in Sierra Leone receive a significant contribution from external grants. In 2020, more than 36 per cent of health expenditure and 80 per cent of FP expenditure in Sierra Leone was funded by external grants.⁴⁷

A historical trend analysis also confirms that after 2003, the contribution of external sources to current health expenditure in Sierra Leone has consistently exceeded the average for sub-Saharan Africa. It has increased from 5.8 per cent in 2000 to 28 per cent in 2020. This is above the sub-Saharan African average of 13.18 per cent in 2020. This raises important questions about sustainability and highlights the need for increased government involvement through domestic resource mobilization.

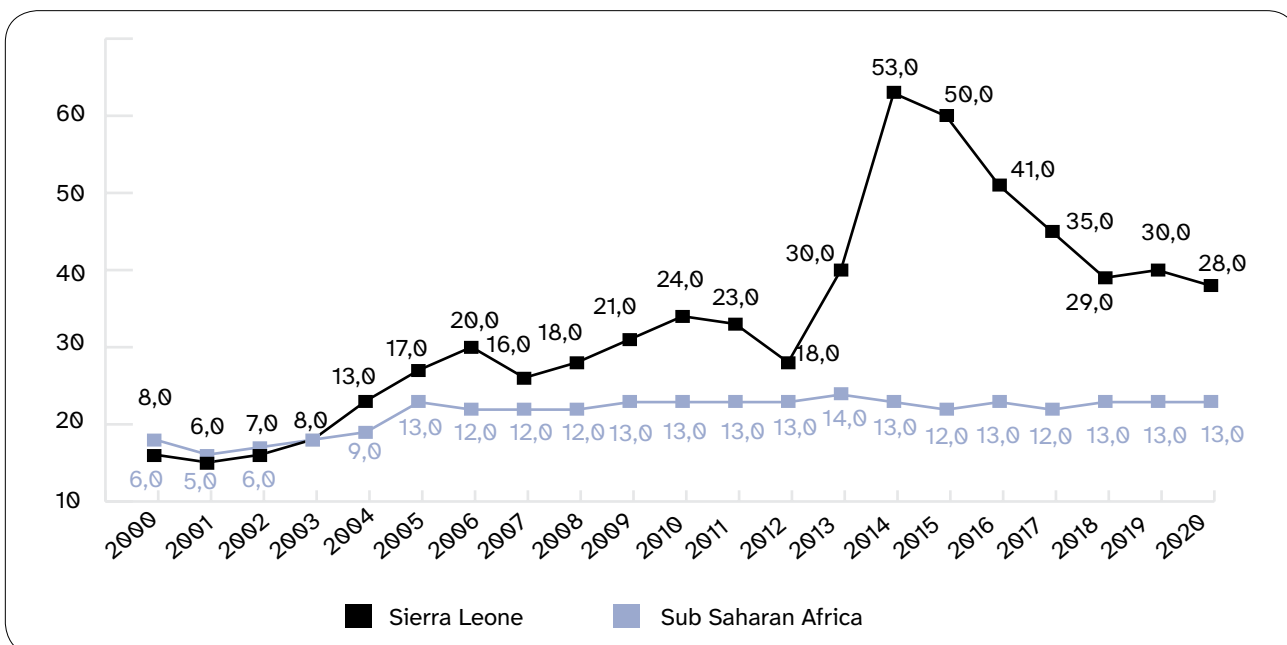


Figure 38: External health expenditure as a percentage of current health spending. Source: World Bank WDI.

45. Novignon and Tabiri, 2022.

46. Heller, 2006.

47. NHA, 2020.

4.3.4 Official Development Assistance

Sierra Leone is one of the biggest recipients of official development assistance (ODA) in sub-Saharan Africa. ODA is made up of concessional loans and grants by multilateral institutions as well as by other countries to promote economic development. As shown in Figure 39, net ODA as a percentage of gross national income for Sierra Leone is much higher than the sub-Saharan African average, making up 16.6 per cent of the country's gross national income, as compared to the sub-Saharan African average of 2.9 per cent in 2021.

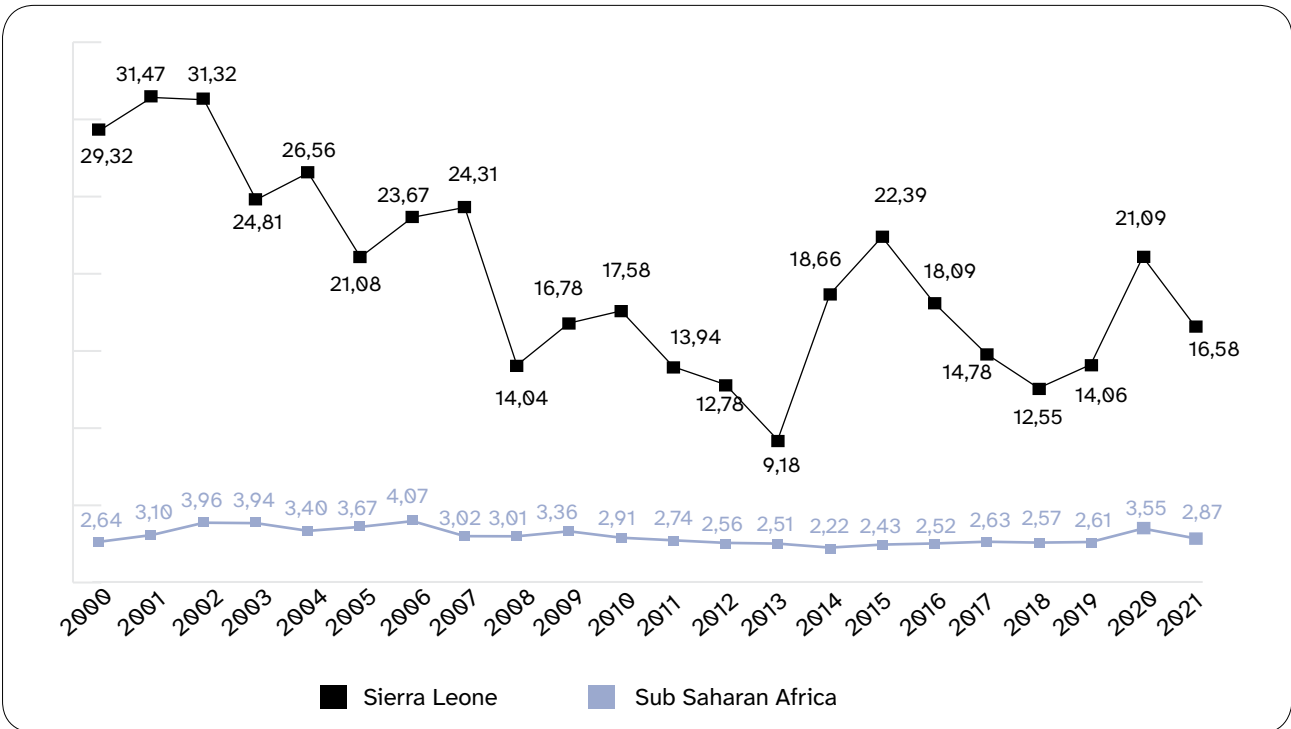


Figure 39: Net ODA as percentage of gross national income. Source: World Bank WDI.

Over the past decade, Sierra Leone has received more than \$6.62 billion in development assistance, with the UK, World Bank and the European Union being the biggest contributors (see Table A21). ODA is an important source of health sector funding in many low-income countries. Ahmad et al. note that ODA is a relatively stable source of external finance, especially compared to private flows which can be affected by economic shocks.⁴⁸ While the amounts have varied, ODA to Sierra Leone has been fairly consistent over the past decade and does give some indication that the country can leverage this source as a means of supplementing efforts to adequately support its health programmes.

4.4 Key messages

- There is substantially more potential in generating additional fiscal space for the health sector from domestic sources than external sources.
- Improving tax revenue, under a conservative projection, could raise about \$3,32 billion between 2024 and 2030. Taxes on alcohol could raise an estimated \$95,900.21 annually, while taxes on cigarettes could raise an estimated \$142,552.09 annually.

48. Ahmad et al., 2020.

- Policy options to improve efficiency through alignment and harmonization of health sector resources, improved budget execution, reduced corruption and improved FFP systems could save more resources within the existing health budget.
- Fulfilling two of Sierra Leone's commitments (Abuja Declaration and ICPD commitment) to the health sector could generate significant resources to support FP service delivery.
- The most viable option for external support is ODA, which Sierra Leone already relies heavily upon compared with other countries in the region. Taking up more debt is not a sustainable option given the already precarious debt position of the country. An option in relation to debt is to seek to extend the maturity of existing loans.





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APPENDIX A: POLICY SUMMARY ON INVESTMENT CASE FOR FAMILY PLANNING IN SIERRA LEONE

Why an investment case for FP services?

Promoting voluntary FP services have been shown to be associated with substantial improvement in well-being and national development. Scaling up FP services improves the health of women and children, leading to realizing the potential DD for Sierra Leone. Access to FP services is fundamental to reducing pregnancies that are not intended. This means that all health and monetary demands associated with these pregnancies are avoided. The immediate health benefits include reducing maternal morbidities and mortality as well as unsafe abortions. Beyond these, averting unintended pregnancies allows girls and women to realize their social and labour market potential that would have been hampered by these pregnancies. Women can participate in the labour market while girls complete their education. Ultimately, they are able to contribute their full potential to national productivity and development.

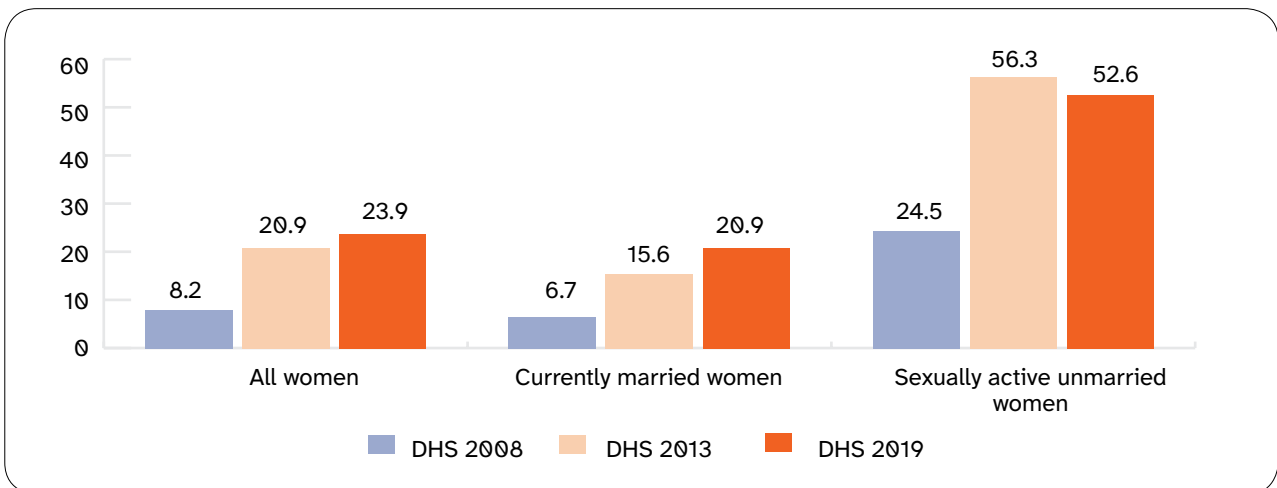


Figure 1a: Modern Contraceptive Prevalence rate (mCPR)

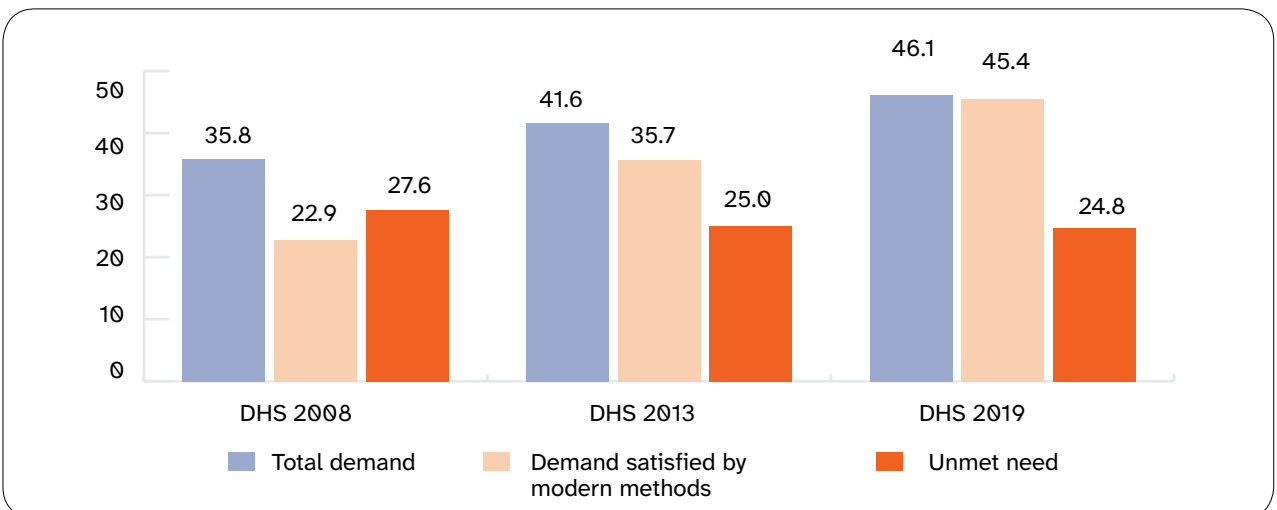


Figure 1b: Percentage of currently married women with total demand, demand satisfied and unmet need for FP.

However, the FP situation in Sierra Leone indicates the need for increased investment to achieve these benefits. While total demand for FP increased from 41.6 per cent in 2013 to 46.1 per cent in 2019 and the proportion of demand satisfied by modern methods increased from 35.7 per cent in 2013 to 45.4 per cent in 2019, the unmet need remained almost unchanged at 25 per cent. This suggests that the increase in modern method use only accounts for underlying population growth without changing the unmet need (see Figure 1b). The mCPR increased from 8.2 per cent in 2008 to 23.9 per cent in 2019 with much of this change happening before 2013. The increase in mCPR between 2013 and 2019 was accounted for by currently married women while it declined among sexually active unmarried women (see Figure 1a). Moreover, about 35 per cent of all modern contraceptive users discontinued using a method within 12 months of use. A little over 40 per cent of SDPs reported stockout of modern contraceptives in 2022. Improving this situation requires that sufficient financial resources are committed to ensure that FP services are expanded and sustained into the future. This policy brief presents estimates of the required financial resources to scale up FP services in Sierra Leone by 2030 under different scenarios. The social and economic returns associated with these investments as well as potential fiscal space opportunities that could be explored to meet the funding gap are also presented.

Scenarios

The investment case is based on increasing the mCPR under three scenarios. The first scenario (business-as-usual, BAU) targets an increase in the mCPR from 29.1 per cent at baseline to 33.0 per cent by 2030 based on historical trends. In scenario two (achievable), a target of 43.1 per cent is set by 2030, while scenario three (ambitious) targets an mCPR of 49.5 per cent by 2030. The ambitious scenario assumes that total demand for modern methods at baseline will be met by endline.

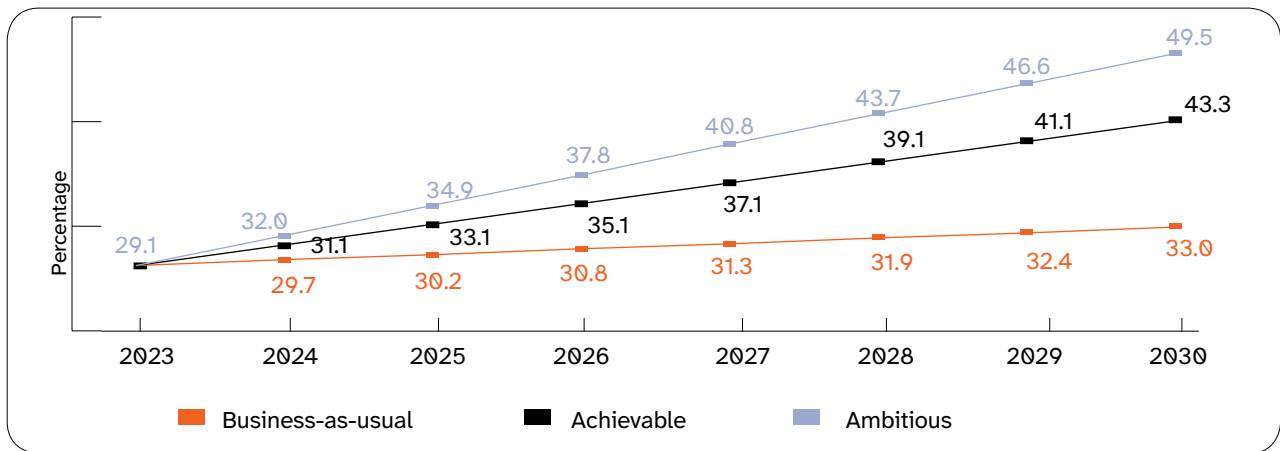


Figure 2a: Projected scenarios in mCPR.

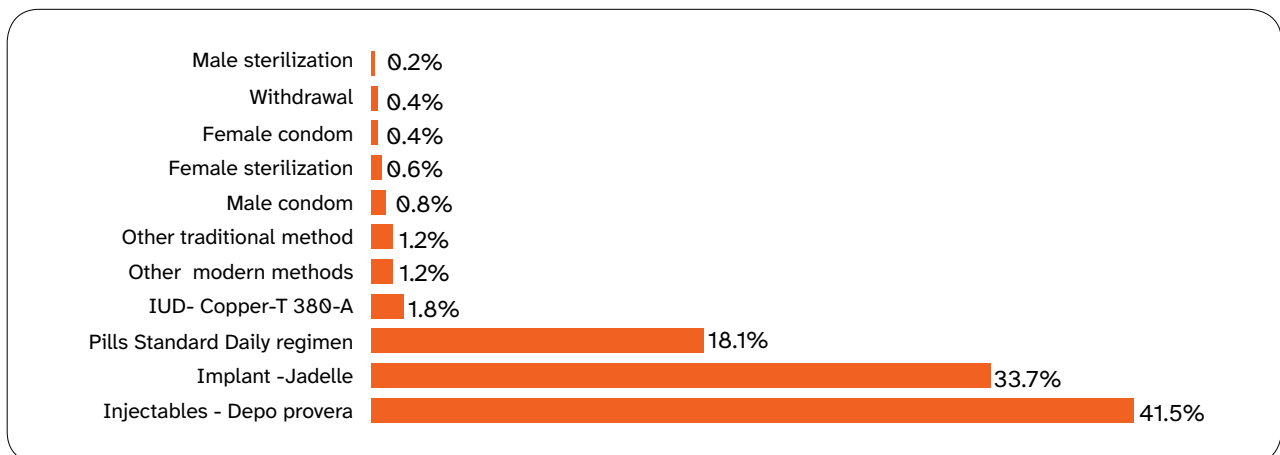


Figure 2b: Baseline Method Mix.

How much additional investment is required to scale up family planning interventions?

A total amount of \$48.5 million, \$58.7 million and \$65.1 million is required as investment in the BAU, achievable and ambitious scenarios, respectively, between 2023 and 2030.

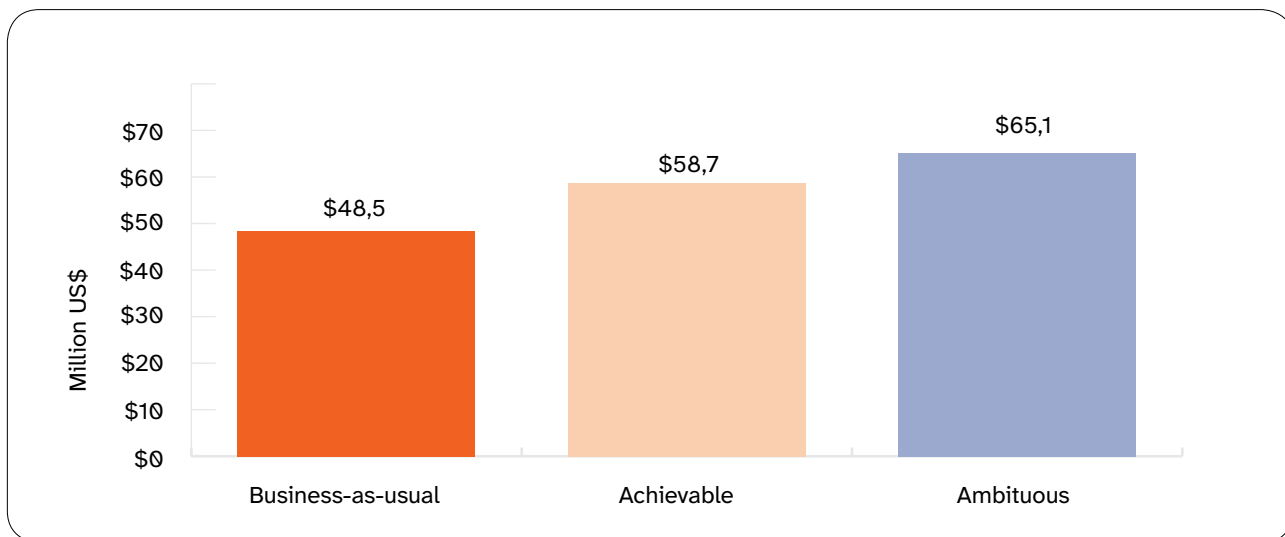


Figure 3a: Total FP investment required.

What are the health benefits from investing in FP interventions?

With the projected investments required, a total of 2.4 million, 2.8 million and 3.1 million unintended pregnancies, respectively, would be averted. Averting these unintended pregnancies will lead to averting 7,938 maternal deaths in the BAU scenario. However, if extra effort is made to scale up interventions, the number of maternal deaths averted increases to 9,200 and 10,017 under the achievable and ambitious scenarios, respectively. About 864,599; 1,007,706 and 1,095,291 unsafe abortions respectively will also be averted across the three scenarios.

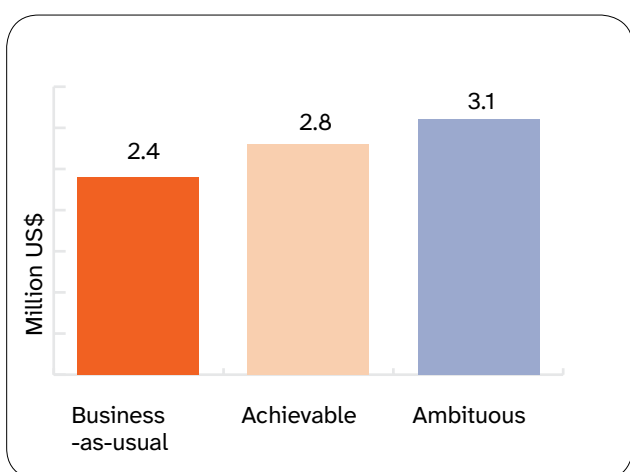


Figure 4a: Unintended pregnancies averted.

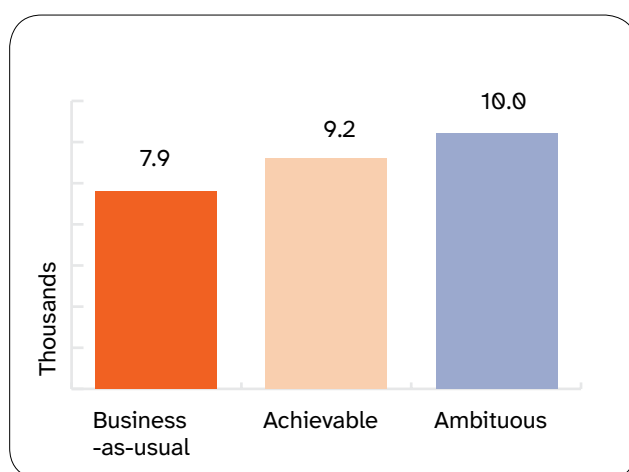


Figure 4b: Maternal deaths averted.

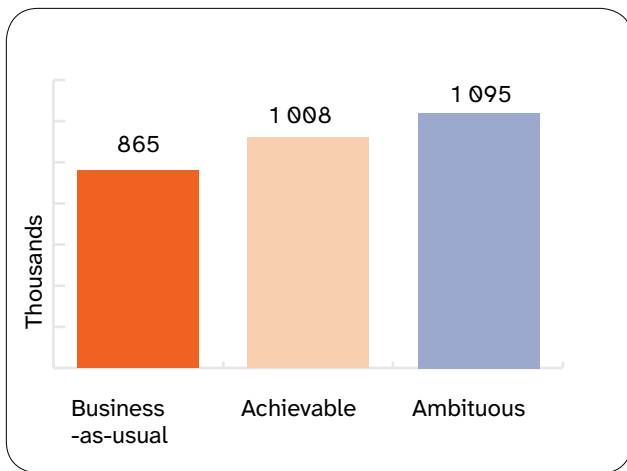


Figure 4c: Unsafe abortions averted.

What are the economic benefits from investing in FP interventions?

These health benefits translate to economic benefits (monetary gains) of up to \$161 million, \$408 million and \$638 million including social and labour market benefits for BAU, achievable and ambitious scenarios respectively, resulting in positive benefit-cost ratios of \$3.3, \$6.9 and \$9.8 for every dollar invested under the three scenarios. This confirms that resources invested in FP are not wasted but, rather, generate substantial economic gains to individuals and to the country at large.

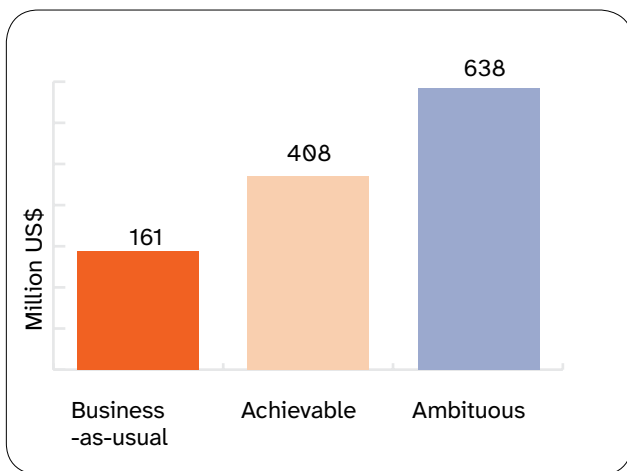


Figure 5a: Total economic benefit.

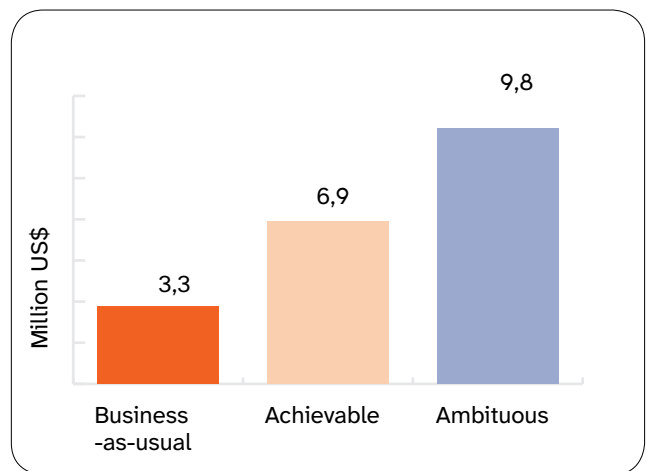


Figure 5b: Benefit-Cost Ratio (BCR).

What options exist to generate additional fiscal space?

Generating revenue from domestic sources appears to be the most feasible fiscal space option to fill the existing FP funding gap in Sierra Leone. The most feasible specific fiscal space options available are the following:

- **Additional tax revenue:** About \$3,320 million could be raised in additional tax revenues between 2024 and 2030 under a conservative projection. Taxes on alcohol and tobacco are potential avenues to expand the tax base.
- **Improved efficiency:** Policies to improve efficiency through alignment and harmonization of health sector resources, improved budget execution, reduced corruption and improved FFP systems could save more resources within the existing health budget.
- **International commitments:** Fulfilling two of Sierra Leone's international commitments to the health sector (Abuja Declaration and ICPD commitment) could generate significant resources to support FP service delivery.
- **External support:** The most viable option for external support is ODA, which Sierra Leone already relies heavily upon compared with other countries in the region. Taking up more debt is not a sustainable option given the already precarious debt position of the country. An option is to seek to extend the maturity and refinancing arrangements of existing loans.



APPENDIX B:

DETAILED INVESTMENT CASE METHODOLOGY

Data and data sources

Two main data sources were used to develop a baseline for the year 2023 for this analysis. They include (1) the most recent Sierra Leone DHS published in 2020, which provides information on key FP indicators including fertility rate, unmet need for FP, contraceptive prevalence rate (including modern and traditional methods) as well as the method mix for modern contraceptives; and (2) Track20, which provides annual data on these key FP indicators.⁴⁹

Analytical tools

The Spectrum policy software (version 6.29),⁵⁰ which houses several other modular tools, was used to estimate the costs and benefits of interventions towards ending unmet need for FP. Within Spectrum, the Family Planning (FamPlan) and Lives Saved Tool (LiST) modules were used. While the FamPlan module allows for baseline and targets to be set for all FP interventions, costs related to these interventions are extracted from the LiST tool.

The FamPlan module allows one to identify the preferred FP method mix appropriate for the country context. The method mix was then adjusted to allow a shift towards the use of long-acting and self-care modern methods by the endline. For the purposes of this analysis, the method mix only includes modern methods by the endline while traditional methods will reduce to zero. The module also requires inputs on total fertility and contraceptive prevalence, as well as the proximate determinants of fertility including the proportion of women of reproductive age married or in a sexual union, duration of postpartum insusceptibility and abortion rates.⁵¹ Together with the population projections, the total number of modern method users are estimated along with the health benefits and the costs of supplying modern methods to these users.

Estimating intervention costs

For each intervention (modern method) included in the analysis, the total cost of scaling up the intervention in a particular year was computed as a product of the target population, the population in need, the target coverage, and the cost per person per year. This is presented in the following equation: total cost of intervention = target population x population in need x target coverage x cost per person per year

The cost for each intervention includes the required drugs and consumable supplies, provider time and outpatient visits needed for the effective provision of the intervention.

49. Track20, Sierra Leone, at https://www.track20.org/Sierra_Leone.

50. The software suite was developed by Avenir Health at Johns Hopkins Bloomberg School of Public Health and funded by the Bill & Melinda Gates Foundation to support decision-making in the health sector (Spectrum Suite, 2014; Stover, McKinnon and Winfrey, 2010). The Spectrum programme consists of several modules which interact with one another to address a variety of issues in demography and population health. The demographic projection module (DemProj) forms the basis for any projection in Spectrum and requires inputs on the demographic characteristics of a country. The tool then interacts with the other modules to estimate the impact and cost of scaling up the relevant interventions.

51. Stover et al, 2010.

The resource requirement for each intervention therefore includes drugs and supplies, labour, capital and other recurrent costs. Assumptions about appropriate drug and labour are based on WHO's standard guidelines for delivering the intervention in question.⁵² For instance, to cost the delivery of condoms, the recommended 120 pieces of male condoms per person per year to be received by 95 per cent of men in their reproductive age was followed. We further assumed that a health worker would dedicate 35 minutes (20 minutes for counselling and 15 minutes for resupply) per patient per year. Similar assumptions were made for female condoms except that 5 per cent of women of reproductive age will be reached given the low uptake rate. In a similar fashion, we define the target population, coverage, and resource needs for each of the modern methods considered.⁵³ The first three components of the equation above produce the number of services required for an intervention for a particular year. This means the product of the number of services and cost of service per person per year will produce the cost of the intervention in question. Total intervention cost is therefore the sum of all individual intervention costs (see Figure 6).

Aside from the intervention costs, three other cost categories were computed to facilitate the implementation of the interventions. These are the programme costs, health system infrastructure, logistics and other health system costs. These costs combined cover activities such as human resource, training, supervision, monitoring and evaluation, infrastructure, transportation, communication, media and outreach, advocacy, general programme management and community health worker training. The cost of each of these items was computed as a proportion of the total intervention cost.

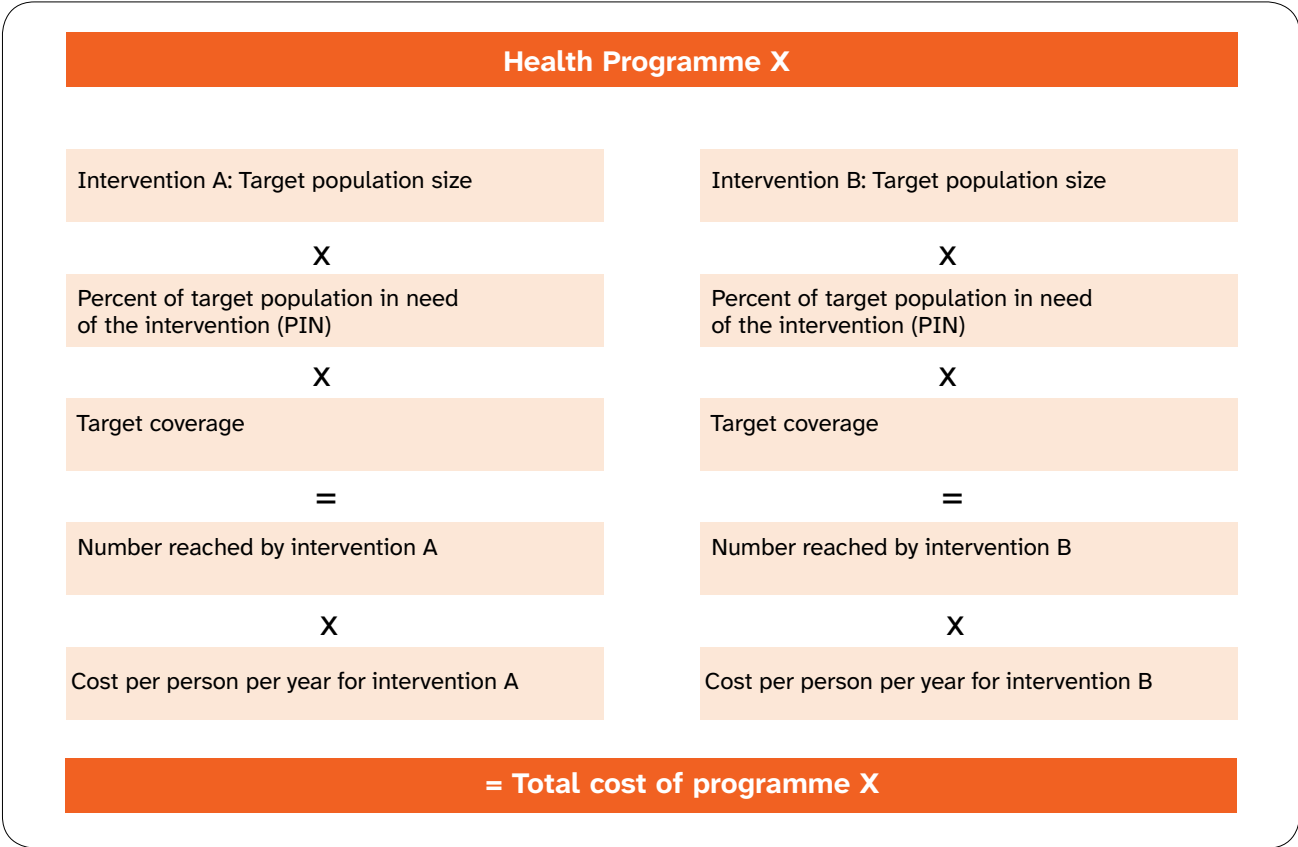


Figure 6a: Calculation of the total cost of intervention. Source: UNFPA, 2020.

52. Avenir Health, 2023.
 53. Ibid, for details of all interventions.

Estimating the health impact

The health impact of scaling up these FP interventions was measured by three outcomes: (1) number of unintended pregnancies averted; (2) number of abortions averted; and (3) number of maternal lives saved. To estimate the health impacts, the case-specific impact of the outcome indicators from an intervention is multiplied by the coverage of the intervention and its effectiveness. Intervention effectiveness is based on a literature review for each intervention.⁵⁴

Modern contraceptive interventions and method mix

In Table A1, the modern contraceptive interventions (methods) covered in this investment case are presented. The method mix at baseline as well as how it is projected to change between 2023 and 2030 are also presented. As mentioned earlier, the method mix is projected to change towards only modern methods by the end line of 2030.

Table A1: Modern contraceptive interventions and method mix

Method	2023 (%)	2030 (%)
Female sterilization	0.62	0.63
Male sterilization	0.21	0.21
Implant – Jadelle	33.70	34.26
IUD – Copper-T 380-A	1.78	1.81
Male condom	0.82	0.84
Female condom	0.41	0.42
Pills – Standard Daily regimen	18.08	18.38
Injectables – Depo provera	41.51	42.20
Other modern methods	1.23	1.26
Withdrawal	0.41	0.00
Other traditional method	1.23	0.00
Total (%)	100.00	100.00

Source: Baseline method mix is from SLDHS. Endline method mix is projected.

Projection scenarios

The costs and impacts are estimated under three mutually exclusive projection scenarios. The scenarios make assumptions about what mCPR could be achieved by the endline. Details of the projection scenarios are presented below.

Scenario 1: Business-as-usual

This scenario is based on historical trends in modern contraceptive use and assumes that these historical trends remain the same into the future (2030). To determine the target under this scenario, the average rate of change in the mCPR using data from five years preceding the baseline is computed. This translated to a modest annual increment of about 0.6 percentage points, taking the mCPR from 29.1 per cent as at the baseline to 33.0 per cent in 2030 (see Figure A1).

54. Ibid.

Scenario 2: Achievable scenario

This is the first scale-up scenario, which assumes a 2-percentage point increase in the mCPR annually between the baseline and endline. Obviously, this is more than double what would have happened if historical trends were maintained without scale-up. Existing evidence has also shown that increasing the mCPR by two percentage points each year has resulted in reasonable changes in FP outcomes and improved livelihoods. The scenario requires an increase in the mCPR from 29.1 per cent at baseline to 43.1 per cent by 2030 (see Figure A1).

Scenario 3: Ambitious scenario

The final scale-up scenario assumes that current total demand for modern contraceptives will be fully met by 2030. To compute this, the current mCPR (29.1 per cent), unmet need (20.1 per cent) for modern contraceptives and traditional method users (0.3 per cent) at baseline are summed up. The scenario therefore seeks to increase the mCPR from 29.1 per cent at baseline to 49.5 per cent by 2030, amounting to a 20.4 percentage point change over the seven-year period (see Figure A1). This is considered ambitious as it requires significant scale-up efforts each year. The corresponding total demand for FP satisfied over time across the scenarios is reported in Figure A2.

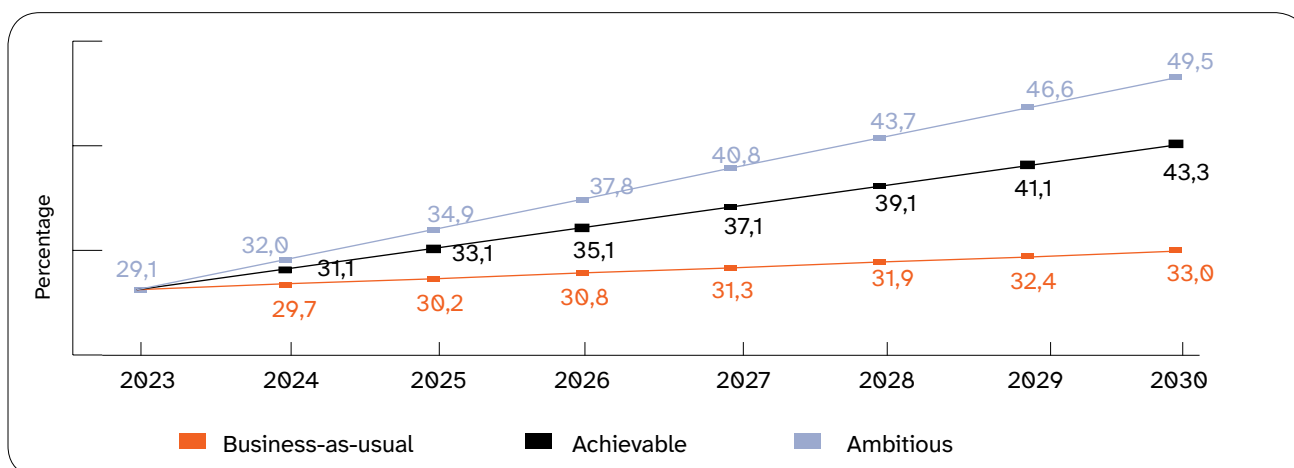


Figure 2a: Projected scenarios in mCPR.

Note: Annual projections are based on linear interpolation mCPR between baseline and endline.

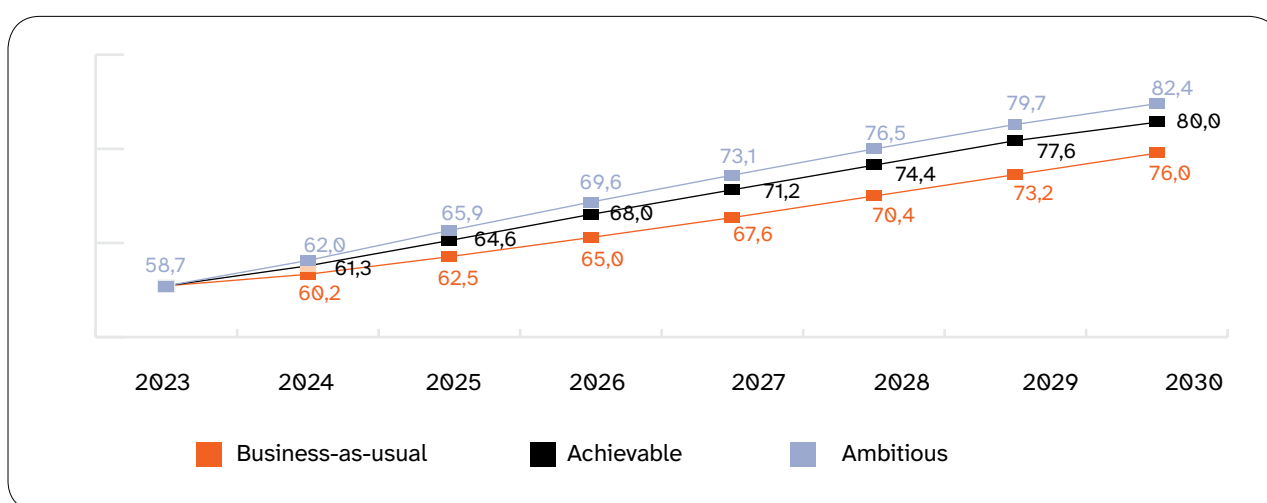


Figure A2: Annual projected total demand satisfied, by scenario.



APPENDIX C: DETAILED COSTS AND BENEFITS ESTIMATES

Table A2: Modern Contraceptive Prevalence Rate projected scenarios

Scenario/mCPR	2023	2024	2025	2026	2027	2028	2029	2030
Business-as-usual	29.1%	29.7%	30.2%	30.8%	31.3%	31.9%	32.4%	33.0%
Achievable	29.1%	31.1%	33.1%	35.1%	37.1%	39.1%	41.1%	43.1%
Ambitious	29.1%	32.0%	34.9%	37.8%	40.8%	43.7%	46.6%	49.5%

Table A3: Users by method: Business-as-usual scenario

Year	Female condom	Male condom	Female sterilization	Male sterilization	Injectables – Depo Provera	Implant – Jadelle	Pills – Standard Daily regimen	IUD – Copper-T 380-A	Other modern Methods	Total
2023	2,571	5,142	3,856	1,285	270,587	219,812	117,619	10,926	8,355	640,153
2024	2,691	5,382	4,036	1,345	283,375	230,202	123,174	11,446	8,755	670,406
2025	2,814	5,628	4,221	1,407	296,494	240,861	128,872	11,978	9,165	701,440
2026	2,940	5,880	4,410	1,470	309,977	251,816	134,728	12,527	9,587	733,335
2027	3,069	6,138	4,604	1,535	323,771	263,025	140,720	13,088	10,018	765,968
2028	3,199	6,398	4,799	1,600	337,677	274,323	146,759	13,652	10,454	798,861
2029	3,330	6,661	4,996	1,665	351,734	285,745	152,864	14,225	10,895	832,115
2030	3,620	7,240	5,430	1,810	382,534	310,769	166,244	15,475	11,855	904,977

Table A4: Users by method: Achievable scenario

Year	Female condom	Male condom	Female sterilization	Male sterilization	Injectables – Depo Provera	Implant – Jadelle	Pills – Standard Daily regimen	IUD – Copper-T 380-A	Other modern Methods	Total
2023	2,571	5,142	3,856	1,285	270,587	219,812	117,619	10,926	8,355	640,153
2024	2,822	5,644	4,233	1,411	297,162	241,402	129,166	12,003	9,181	703,024
2025	3,083	6,165	4,624	1,541	324,812	263,865	141,180	13,123	10,040	768,433
2026	3,354	6,707	5,030	1,677	353,581	287,239	153,680	14,289	10,935	836,492
2027	3,635	7,269	5,452	1,817	383,417	311,480	166,643	15,499	11,864	907,076
2028	3,923	7,846	5,884	1,961	414,078	336,390	179,964	16,742	12,819	979,607
2029	4,219	8,438	6,329	2,110	445,591	361,994	193,654	18,021	13,802	1,054,158
2030	4,525	9,045	5,430	2,266	472,534	393,117	211,244	20,475	14,155	1,132,791

Table A5: Users by method: Ambitious scenario

Year	Female condom	Male condom	Female sterilization	Male sterilization	Injectables - Depo Provera	Implant - Jadelle	Pills - Standard Daily regimen	IUD - Copper-T 380-A	Other modern Methods	Total
2023	2,571	5,142	3,856	1,285	270,587	219,812	117,619	10,926	8,355	640,153
2024	2,905	5,809	4,357	1,452	305,898	248,499	132,964	12,355	9,451	723,690
2025	3,253	6,506	4,879	1,626	342,755	278,442	148,980	13,848	10,595	810,884
2026	3,616	7,231	5,424	1,808	381,211	309,685	165,689	15,405	11,790	901,859
2027	3,993	7,986	5,989	1,996	421,213	342,184	183,070	17,026	13,034	996,491
2028	4,382	8,763	6,572	2,191	462,490	375,719	201,004	18,700	14,318	1,094,139
2029	4,782	9,564	7,173	2,391	505,066	410,310	219,502	20,427	15,645	1,194,860
2030	5,120	10,240	8,730	2,610	550,744	459,264	226,244	22,975	16,855	1,302,782

Table A6: Annual trend in health impact of scaling up modern contraceptive methods - Business-as-usual scenario

	2023	2024	2025	2026	2027	2028	2029	2030
Modern method users	640,153	670,406	701,440	733,335	765,968	798,861	832,115	904,977
Unintended pregnancies averted	256,378	268,492	280,920	293,692	306,759	319,931	333,247	362,426
Maternal deaths averted	835	876	918	961	1,006	1,051	1,097	1,195
Unsafe abortions averted	91,527	95,852	100,288	104,848	109,513	114,216	118,969	129,386

Table A7: Annual trend in health impact of scaling up modern contraceptive methods - Achievable scenario

	2023	2024	2025	2026	2027	2028	2029	2030
Modern method users	640,153	703,023	768,433	836,492	907,076	979,607	1,054,159	1,132,791
Unintended pregnancies averted	256,378	281,555	307,750	335,005	363,272	392,317	422,172	452,867
Maternal deaths averted	835	917	1,004	1,094	1,188	1,285	1,385	1,491
Unsafe abortions averted	91,527	100,515	109,867	119,597	129,688	140,057	150,715	165,740

Table A8: Annual trend in health impact of scaling up modern contraceptive methods – Ambitious scenario

	2023	2024	2025	2026	2027	2028	2029	2030
Modern method users	640,153	723,690	810,884	901,859	996,491	1,094,140	1,194,860	1,302,781
Unintended pregnancies averted	256,378	289,832	324,751	361,184	399,081	438,186	478,520	520,175
Maternal deaths averted	835	944	1,058	1,178	1,302	1,431	1,565	1,703
Unsafe abortions averted	91,527	103,470	115,936	128,943	142,472	156,432	170,832	185,679

Table A9: Resources required to scale up of modern FP methods – Business-as-usual scenario

	2023	2024	2025	2026	2027	2028	2029	2030	Total
Total intervention cost (\$)	3,068,852	3,238,966	3,414,186	3,596,784	3,785,863	3,978,360	4,176,424	4,379,227	29,638,661
Total programme-related activity cost (\$)	1,870,207	2,004,455	2,142,080	2,284,802	2,431,830	2,580,624	2,732,807	2,887,660	18,934,466
Total investment required (\$)	4,939,059	5,243,422	5,556,266	5,881,586	6,217,693	6,558,984	6,909,230	7,266,886	48,573,127

Table A10: Resources required to scale up of modern FP methods – Achievable scenario

	2023	2024	2025	2026	2027	2028	2029	2030	Total
Total intervention cost (\$)	3,068,852	3,476,231	3,821,283	4,185,099	4,567,033	4,963,591	5,377,319	5,807,299	35,266,707
Total programme-related activity cost (\$)	1,870,207	2,185,931	2,463,677	2,755,105	3,059,529	3,373,955	3,700,206	4,037,378	23,445,989
Total investment required (\$)	4,939,059	5,662,162	6,284,960	6,940,203	7,626,563	8,337,545	9,077,525	9,844,677	58,712,695

Table A11: Resources required to scale up of modern FP methods – Ambitious scenario

	2023	2024	2025	2026	2027	2028	2029	2030	Total
Total intervention cost (\$)	3,068,852	3,626,578	4,079,246	4,557,892	5,062,032	5,587,896	6,138,282	6,712,216	38,832,993
Total programme-related activity cost (\$)	1,870,207	2,301,447	2,667,982	3,053,640	3,457,800	3,877,180	4,313,733	4,766,434	26,308,422
Total investment required (\$)	4,939,059	5,928,025	6,747,228	7,611,532	8,519,832	9,465,076	10,452,015	11,478,650	65,141,415

Table A12: Intervention cost by method – Business-as-usual

Contraceptive (method)	2023	2024	2025	2026	2027	2028	2029	2030	Total
Pills - standard daily regimen	\$869,375	\$915,625	\$963,529	\$1,013,239	\$1,064,623	\$1,117,056	\$1,170,705	\$1,225,467	\$8,339,619
Condom - male	\$35,278	\$37,332	\$39,470	\$41,700	\$44,017	\$46,395	\$48,844	\$51,357	\$344,393
Condom - female	\$12,925	\$13,683	\$14,473	\$15,298	\$16,156	\$17,037	\$17,945	\$18,878	\$126,396
Injectable - Depo Provera	\$1,499,445	\$1,584,378	\$1,672,829	\$1,765,106	\$1,861,037	\$1,959,573	\$2,061,056	\$2,165,347	\$14,568,772
IUD - Copper-T380-A	\$10,440	\$11,080	\$11,719	\$12,393	\$13,090	\$13,787	\$14,515	\$15,263	\$102,286
Implant - Jadelle	\$631,048	\$665,762	\$700,288	\$736,349	\$773,379	\$810,077	\$848,003	\$886,598	\$6,051,505
Female sterilization	\$4,815	\$5,144	\$5,457	\$5,792	\$6,136	\$6,469	\$6,821	\$7,183	\$47,819
Male sterilization	\$1,052	\$1,131	\$1,208	\$1,291	\$1,376	\$1,461	\$1,550	\$1,643	\$10,712
Other modern methods	\$4,474	\$4,831	\$5,211	\$5,617	\$6,048	\$6,504	\$6,984	\$7,491	\$47,159
TOTAL	\$3,068,852	\$3,238,966	\$3,414,186	\$3,596,784	\$3,785,863	\$3,978,360	\$4,176,424	\$4,379,227	\$29,638,661

Table A13: Intervention cost by method – Achievable

Contraceptive (method)	2023	2024	2025	2026	2027	2028	2029	2030	Total
Pills - standard daily regimen	\$869,375	\$960,171	\$1,055,554	\$1,155,769	\$1,260,751	\$1,369,795	\$1,483,100	\$1,600,534	\$9,755,049
Condom - male	\$35,278	\$39,148	\$43,240	\$47,566	\$52,126	\$56,893	\$61,877	\$67,075	\$403,203
Condom - female	\$12,925	\$14,349	\$15,856	\$17,450	\$19,132	\$20,892	\$22,733	\$24,655	\$147,993
Injectable - Depo Provera	\$1,499,445	\$1,661,461	\$1,832,598	\$2,013,401	\$2,203,882	\$2,402,936	\$2,611,034	\$2,828,074	\$17,052,830
IUD - Copper-T380-A	\$10,440	\$13,206	\$14,461	\$15,795	\$17,198	\$18,641	\$20,160	\$21,744	\$131,644
Implant - Jadelle	\$631,048	\$774,340	\$844,595	\$918,604	\$995,796	\$1,074,583	\$1,156,745	\$1,241,623	\$7,637,334
Female sterilization	\$4,815	\$6,960	\$7,590	\$8,266	\$8,973	\$9,689	\$10,447	\$11,238	\$67,979
Male sterilization	\$1,052	\$1,530	\$1,680	\$1,842	\$2,012	\$2,188	\$2,375	\$2,571	\$15,250
Other modern methods	\$4,474	\$5,066	\$5,708	\$6,407	\$7,163	\$7,975	\$8,848	\$9,784	\$55,424
TOTAL	\$3,068,852	\$3,476,231	\$3,821,283	\$4,185,099	\$4,567,033	\$4,963,591	\$5,377,319	\$5,807,299	\$35,266,707

Table A14: Intervention cost by method – Ambitious

Contraceptive (method)	2023	2024	2025	2026	2027	2028	2029	2030	Total
Pills - standard daily regimen	\$869,375	\$988,398	\$1,113,867	\$1,246,086	\$1,385,030	\$1,529,946	\$1,681,052	\$1,838,201	\$10,651,955
Condom - male	\$35,278	\$40,299	\$45,629	\$51,283	\$57,264	\$63,544	\$70,136	\$77,035	\$440,469
Condom - female	\$12,925	\$14,771	\$16,732	\$18,814	\$21,018	\$23,335	\$25,767	\$28,317	\$161,678
Injectable - Depo Provera	\$1,499,445	\$1,710,305	\$1,933,838	\$2,170,736	\$2,421,130	\$2,683,879	\$2,959,535	\$3,248,020	\$18,626,887
IUD - Copper-T380-A	\$10,440	\$14,553	\$16,198	\$17,951	\$19,801	\$21,716	\$23,737	\$25,851	\$150,248
Implant - Jadelle	\$631,048	\$843,142	\$936,038	\$1,034,092	\$1,136,733	\$1,242,190	\$1,352,383	\$1,466,589	\$8,642,216
Female sterilization	\$4,815	\$8,111	\$8,942	\$9,833	\$10,771	\$11,730	\$12,745	\$13,808	\$80,754
Male sterilization	\$1,052	\$1,784	\$1,979	\$2,191	\$2,416	\$2,648	\$2,897	\$3,159	\$18,126
Other modern methods	\$4,474	\$5,214	\$6,024	\$6,907	\$7,869	\$8,908	\$10,029	\$11,236	\$60,662
TOTAL	\$3,068,852	\$3,626,578	\$4,079,246	\$4,557,892	\$5,062,032	\$5,587,896	\$6,138,282	\$6,712,216	\$38,832,993

Table A15: Total health system cost components – Business-as-usual

Programme-related activity costs	2023	2024	2025	2026	2027	2028	2029	2030	Total
Programme cost	\$1,227,541	\$1,295,586	\$1,365,674	\$1,438,714	\$1,514,345	\$1,591,344	\$1,670,569	\$1,751,691	\$11,855,464
Logistics costs	\$642,667	\$674,672	\$707,261	\$740,891	\$775,335	\$809,922	\$845,080	\$880,601	\$6,076,428
Infrastructure investment costs	\$0	\$34,197	\$69,145	\$105,197	\$142,150	\$179,358	\$217,158	\$255,369	\$1,002,573
Total	\$1,870,207	\$2,004,455	\$2,142,080	\$2,284,802	\$2,431,830	\$2,580,624	\$2,732,807	\$2,887,660	\$18,934,466

Table A16: Total health system cost components – Achievable

	2023	2024	2025	2026	2027	2028	2029	2030	Total
Programme cost	\$1,227,541	\$1,390,493	\$1,528,513	\$1,674,039	\$1,826,813	\$1,985,436	\$2,150,928	\$2,322,919	\$14,106,683
Logistics costs	\$642,667	\$725,026	\$792,535	\$863,028	\$936,279	\$1,011,469	\$1,089,056	\$1,168,755	\$7,228,814
Infrastructure investment costs	\$0	\$70,412	\$142,629	\$218,037	\$296,438	\$377,049	\$460,223	\$545,704	\$2,110,492
Total	\$1,870,207	\$2,185,931	\$2,463,677	\$2,755,105	\$3,059,529	\$3,373,955	\$3,700,206	\$4,037,378	\$23,445,989

Table A17: Total health system cost components – Ambitious

	2023	2024	2025	2026	2027	2028	2029	2030	Total
Programme cost	\$1,227,541	\$1,450,631	\$1,631,698	\$1,823,157	\$2,024,813	\$2,235,158	\$2,455,313	\$2,684,886	\$15,533,197
Logistics costs	\$642,667	\$756,934	\$846,569	\$940,422	\$1,038,262	\$1,139,182	\$1,243,655	\$1,351,348	\$7,959,038
Infrastructure investment costs	\$0	\$93,882	\$189,714	\$290,061	\$394,725	\$502,839	\$614,765	\$730,200	\$2,816,187
Total	\$1,870,207	\$2,301,447	\$2,667,982	\$3,053,640	\$3,457,800	\$3,877,180	\$4,313,733	\$4,766,434	\$26,308,422



APPENDIX D: FISCAL SPACE ESTIMATES

Table A18: Tax revenue performance and potential fiscal space

Year	Projected tax-to-GDP ratio (Sierra Leone)	Projected tax-to-GDP ratio (Africa)	Projected GDP (billion SLL)	Potential fiscal space (billion SLL)	Potential fiscal space (million USD)
2023	11.961	16.488	62,250	2,817	286.33
2024	12.316	16.666	72,176	3,140	319.09
2025	12.680	16.846	83,684	3,486	354.29
2026	13.056	17.028	97,027	3,855	391.73
2027	13.442	17.213	112,497	4,242	431.06
2028	13.840	17.399	130,435	4,642	471.71
2029	14.250	17.587	151,232	5,047	512.87
2030	14.672	17.777	175,346	5,445	553.36

Exchange rate is 2020 average: 1 USD = 9,840 SLL (Budget statement, 2022).

Table A19: Projected GHE as percentage of government spending and fiscal space

Year	Projected tax-to-GDP ratio (Sierra Leone)	Projected tax-to-GDP ratio (Africa)	Projected GDP (billion SLL)	Potential fiscal space (billion SLL)	Potential fiscal space (million USD)
2023	10.029	28,401.11	2,848.23	289.45	286.33
2024	10.857	36,764.47	3,991.57	405.65	319.09
2025	11.686	47,590.55	5,561.30	565.17	354.29
2026	12.514	61,604.61	7,709.38	783.47	391.73
2027	13.343	79,745.42	10,640.32	1,081.33	431.06
2028	14.171	103,228.17	14,628.91	1,486.68	471.71
2029	15	133,625.91	20,043.88	2,036.98	512.87
2030	14.672	17.777	175,346	5,445	553.36

Exchange rate is 2020 average: USD = 9,840 SLL (Budget statement, 2022).

Table A20: Projected fiscal space from meeting 1% target of ICPD commitment

Year	1% of government spending (billion SLL)	1% of government spending (million USD)
2023	219.40	22.30
2024	284.01	28.86
2025	367.64	37.36
2026	475.91	48.36
2027	616.05	62.61
2028	797.45	81.04
2029	103.23	104.91
2030	133.63	135.80

Exchange rate is 2020 average: USD = 9,840 SLL (Budget statement, 2022).

Table A21: Development assistance to Sierra Leone (in million USD) (2011–2021)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
World Bank	6	54	60	80	131	41	97	42	135	224	224	1094
IMF	0	0	0	0	0	0	0	22	22	164	377	585
UN Family	34	39	42	71	65	45	79	86	60	142	50	713
European Union (EU)	48	78	89	84	296	96	52	73	72	105	70	1063
UK FCDO - UK AID	71	116	132	365	389	125	97	108	99	89	55	1646
African Development Bank	5	8	41	82	20	20	22	10	29	35	17	289
Government of China	0	0	3	10	4	0	0	0	0	30	2	49
USAID	32	28	10	126	70	10	0	22	19	25	27	369
Irish Aid	2	10	5	16	9	5	6	7	8	21	18	107
Islamic Development Bank	5	7	12	16	20	23	16	10	11	12	9	141
JICA	10	11	8	10	14	7	7	2	0	11	31	111
Germany	10	3	14	11	9	21	48	24	19	7	18	184
OPEC Fund	0	0	0	0	0	0	0	0	14	4	0	18
Korean EXIM Bank	0	0	0	0	0	0	0	11	17	2	0	30
Abu Dhabi	0	0	0	1	3	0	0	0	0	2	0	6
Kuwait Fund	7	3	0	2	0	16	14	0	6	2	0	50
BADEA	5	5	7	2	0	0	0	0	0	1	0	20
Government of The Netherlands	0	1	7	3	11	0	0	0	0	0	0	22
CIDA	0	0	0	4	6	3	1	2	3	0	0	19
EBID	0	28	7	9	1	4	0	0	0	0	0	49
Saudi Arabia	2	2	2	2	0	0	0	5	3	0	0	16
Others	0	0	0	16	6	0	0	1	15	2	0	40
Yearly Totals	237	393	439	910	1054	416	439	425	532	878	898	6621

Source: 2023 Sierra Leone Budget.

Table A22: Estimated revenue from tax on cigarettes

Year	Tax rate	Estimated revenue (SLE million)
2024	1.875	269.75
2025	2.25	323.70
2026	2.625	377.65
2027	3	431.60
Total		1,402.7

Source: Author's estimation from STEPS and WDI data.

