Mid-Term Review (MTR) of the Health Sector Strategic Plan V (HSSP V)

RMNCAH-N Report

Submitted to The Ministry of Health,

Dodoma – Tanzania

By The Ifakara Health Institute,

Dar es Salaam – Tanzania

In March 2025

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Embassy of Switzerland in Tanzania

World Health Organization

Irish Aid
Rialtas na hÉireann
Government of Ireland

ISO 9001: 2015 certified
IFAKARA HEALTH INSTITUTE
research | training | services

AUTHORS:

Dr. Sophia Kagoye

Dr. Serafina Mkuwa

Table of Contents

Acronyms/Glossary

BEmONC	Basic Emergency Obstetric and Neonatal Care
CEmONC	Comprehensive Emergency Obstetric and Neonatal Care
DHIS2	District Health Information System
FPET	Family Planning Estimation Tool
mDFPs	Demand for Family Planning satisfied by modern methods
MPDSR	Maternal and Perinatal Death Surveillance and Response
TDHS	Tanzania Demographic and Health survey
WUENIC	WHO and UNICEF estimates of national immunization coverage

Executive Summary

This report presents the findings from a statistical analysis of progress and performance in Reproductive, Maternal, Newborn, Child, and Adolescent Health and Nutrition (RMNCAH-N) indicators during the 2019-2023 period as part of the review the performance of the current Health Sector Strategic Plan V (HSSP V) (2021-2026) and One Plan III (2021/2022-2025/2026) which are currently halfway of their implementation. The findings at a national and subnational level are based on an extensive analysis of health facility data from the DHIS2 database (from January 2019 to December 2023), Vaccine Information Management System (VIMS) (from January 2019 to December 2023), national surveys and administrative data. National survey data on levels and trends on several health indicators were obtained from the Tanzania Demographic and Health Survey (TDHS 2022). Additionally, we include quotes obtained from qualitative interviews among key RMNCAH+N implementing partners and stakeholders.

What progress has been made towards achieving One Plan 3 impact and Outcomes indicators?

Overall, Tanzania has made progress towards achieving RMNCAH+N impact indicators during its first implementation of the HSSP V and One Plan III. Institutional Maternal mortality that occurs in health facilities declined from 94 in 2018 to 65 per 100,000 live births in 2023, averaging 78 over six years, from MPDSR data. Regional referral hospitals accounted for one-third of deaths, followed by district hospitals (29%) and health centers (20%). Over nearly two decades, neonatal mortality only declined by 25% (from 32 to 24 deaths per 1,000 live births) between the 2004/05 and 2022 TDHS surveys, compared to larger declines in under-five (62%) and infant (51%) mortality.

To what extent were service utilization and service coverage targets of the One Plan 3 achieved?

Majority of indicators along the RMNCAH continuum are on the right track in reaching the HSSP V targets, however attention is needed in some indicators such as Early ANC visits, unmet needs for FP, demand for family planning satisfied by modern methods among currently married women of reproductive age and adolescents and child stunting.

How effectively has the One Plan III addressed equity in RMNCAH service delivery?

Despite the high coverage of interventions, geographical and wealth inequalities[1] remain as one of the challenges. High institutional maternal mortality ratio and child mortality rates are still observed in Dar es salaam and other urban areas. Coverage of majority of interventions are still lagging behind for the poorest and while regional coverage has improved, coverage at a council level is still important. Also, despite the availability of RMNCAH-N services, readiness to provide services is still an issue, particularly staff readiness is still below 50% across all RMNCAH-N services.

[1] Inequalities defined as differences between individuals / groups; measurable through health indicators. Equity is the value judgement of the observed inequalities.

Further progress in RMNCAH-N indicators is possible when inequalities are addressed, integration of services is considered and the Ministry of Health's efforts extends beyond infrastructures including staff training and motivation.

1 Introduction

Tanzania has made substantial progress in improving child survival and reducing maternal mortality ratios from 556 deaths/100,000 live births in 2016 to 104 deaths/100,000 live births in 2022 [1]. However, progress towards newborn survival is still stalling. Further progress is needed to reach SDG targets, reduce preventable deaths and support maternal, newborn, child and adolescent well-being across the life course.

This evaluation provides detailed insight into the progress made towards impact indicators and service coverage indicators for RMNCAH-N in Tanzania during the implementation of HSSP V in alignment with the One Plan III.

2 Results 1: Progress towards achieving impact and outcome indicators

Maternal mortality in health facilities

Target 2025	Baseline	Achievement	Comments
Reduce institutional MMR to <100 deaths per 100,000 live births	94 in 2018 (MPDSR)	65 in 2023 (MPDSR)	
	54 deaths per 100,000 live births in 2019 (DHIS2)	43 deaths per 100,000 live births (DHIS2)	

Health facility reports on maternal deaths in Tanzania are collected from the monthly reporting system in the District Health Information Management System (DHIS2) and the Maternal and perinatal death surveillance and response system (MPDSR) which involves continuous reporting of individual deaths. Maternal mortality ratio based on DHIS2 and MPDSR shows a decline over time.

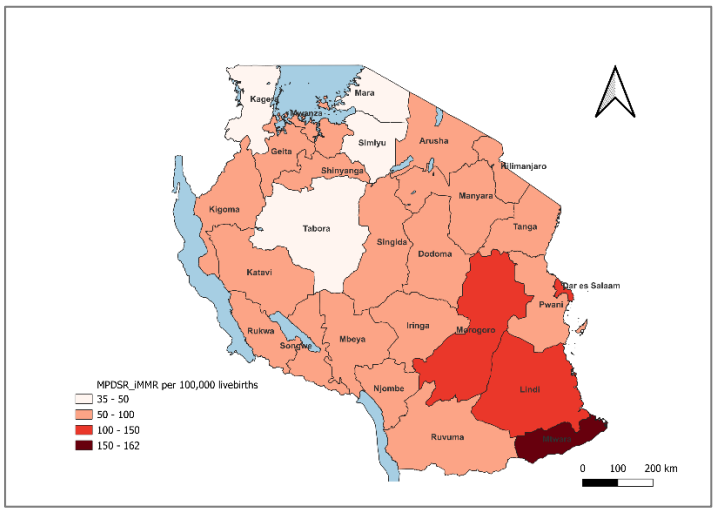
A detailed assessment of the completeness of reporting in the MPDSR and DHIS2 for 2019-2023 period (Annex 6.2). The MPDSR includes more maternal deaths than the DHIS2 (7,367 compared to 5,049). There are also more councils in the DHIS2 with unlikely low numbers of maternal deaths reported than in the MPDSR: Among 41% and 31% of councils in DHIS2 and MPDSR, respectively, MMR was less than 25 per 100,000 live births in 2023 (which is two times the level in high-income countries).

This is consistent to what was reported in qualitative study done among various stakeholders involved with MPDSR implementation at different levels. Where it was reported that, after daily reporting of deaths in the MPDSR daily report forms, the information was later entered into the DHIS2 system; it was further reported that due to lack of credentials and staff incompetency in using the DHIS2 system, there resulted into inconsistencies between the two systems where DHIS2 appeared to have fewer numbers than what was reported in health facilities [2].

"…We use DHIS2 system to enter maternal and perinatal cases with reference to other documents like summary book, register book and daily report form…" ***Respondent*** [2]

Additionally, an analysis of MPDSR data from 2018 to 2023 reveals that the regions with the lowest maternal mortality ratios in health facilities are Simiyu, Kagera, Tabora, and Mara, with an average institutional mortality ratio of 44 deaths per 100,000 livebirths. Conversely, the regions experiencing the highest maternal mortality ratios in health facilities—Dar es Salaam, Morogoro, Lindi, and Mtwara—have an average institutional mortality ratio of 133 deaths per 100,000 livebirths, which is three times higher than that of the regions with lower mortality ratios (Figure 1).

While some of the higher mortality regions may be attracting higher risk deliveries from other regions, the regional patterns also suggest under-reporting of maternal deaths in health facilities given the coverage of births in health facilities. The four lower mortality regions have an average institutional delivery rate of 76%, with higher average reporting rates of 95% (Annex 6.2). And the higher mortality regions have an average institutional delivery rate of 79%, with higher reporting rate of 96% (Annex 6.2). Taking into account the under-reporting of deaths in health facilities is important to ensure better tracing of the progress in impact indicators.



Dar es salaam, Morogoro, Lindi and Mtwara are high maternal mortality regions with average maternal mortality ratio 133 deaths per 100,000 livebirths for 2018-2023 period (Figure 1)

Figure 1: Maternal mortality ratio by region, MPDSR data (2018-2023 averages)

Number of maternal deaths in health facilities

The Maternal and Perinatal Death Surveillance and Response Report for 2018-2023 recorded a total of 9,668 maternal death out of these 2,654 (27%) came from three regions namely Dar Es Salaam, Mwanza and Morogoro regions. Dar es salaam and Mwanza alone contributed 20.7% of total death (MoH & UNICEF,2023). City councils present higher maternal death in absolute numbers; with Dar es salaam city, Mwanza city, Mbeya city and Dodoma city leading. (Figure 2)

Between 2019 to Dec 2020, the Ministry of Health conducted a Reproductive Age Mortality Survey in Dar es salaam region. A total of 848 maternal death were recorded, translating to a Maternal Mortality of 239 per 100,000 live births. Ilala city alone had 99,364 live birth and 412 maternal deaths translating to 412 maternal mortalities (MoH, 2020).

This indicates that a higher number of health facilities in certain regions does not necessarily correlate with a reduction in maternal deaths. For example, the Health Facility Registry of Tanzania lists a total of 12,860 health facilities, with 3,043 (23.6%) located in Dar es Salaam, Mwanza, and Morogoro. Dar es Salaam alone accounts for 1,540 (12%) of all health facilities, yet it has the highest number of maternal deaths [2]. Therefore, it is crucial to move beyond

merely assessing the availability of infrastructure and also focus on enhancing the quality of care provided in health facilities.

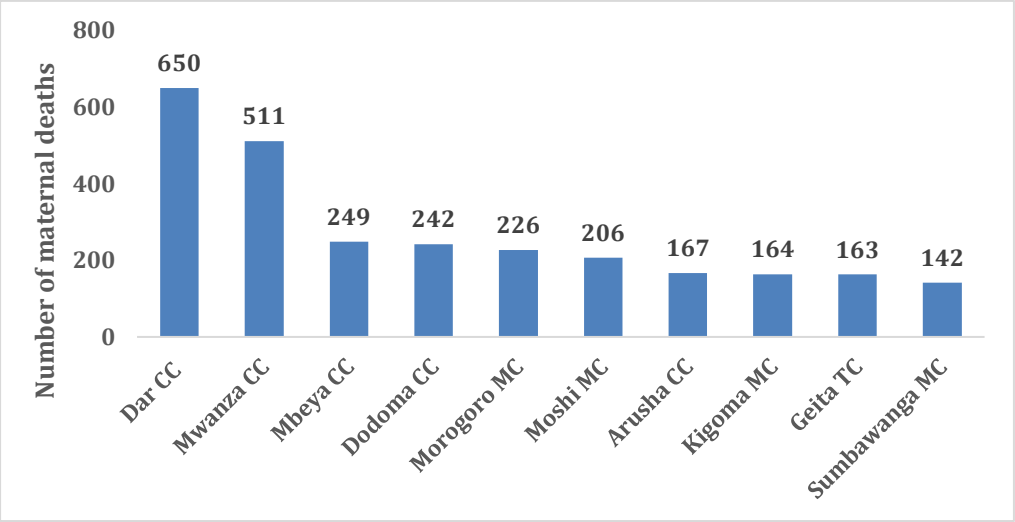


Figure 2: Number of maternal deaths by councils; top 10 councils in MPDSR data (2018-2023 averages)

Child mortality

Target 2025	Baseline (year)	Achievement	Comments
Neonatal mortality rate: 15 deaths per 1000 livebirths[2]	25 deaths per 1000 live births (TDHS 2015)	24 deaths per 1000 live births (TDHS 2022)	
Under-five mortality: 38 per 1000 livebirths[3]	67 deaths per 1000 live births (TDHS 2015)	43 deaths per 1000 live births (TDHS 2022)	

Neonatal mortality which is a good proxy of quality of care has plateaued at 24 deaths per 1,000 live births since 2015/16 (TDHS), far from the HSSP V target of 15. The stagnation in neonatal mortality rate indicates the need for improved care and interventions among small and sick newborns.

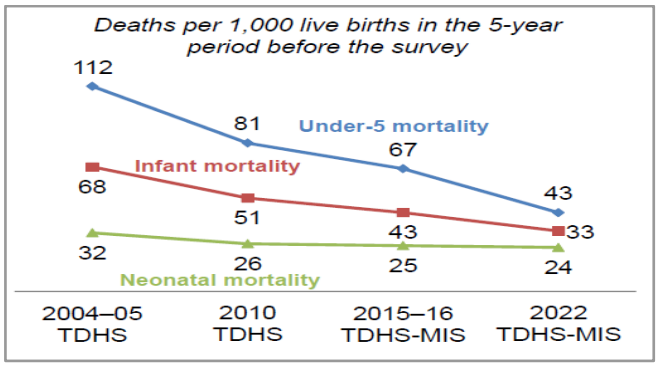
For nearly two decades, neonatal mortality only declined by 25% (from 32 to 24 deaths per 1,000 live births) between the 2004/05 and 2022 TDHS surveys, smaller compared to the nearly 62% decline in mortality observed among children under five and 51% decline observed among infants during the same period (Figure 3).

Further insights and what can be improved was also reported in the qualitative interviews:

"Quality of care. You know that many newborns die within 7 days of birth, meaning the care of the baby while it is in its mother's womb before birth (…) that is, we were concentrating too much on the

[2] Estimates are made for 5 years prior the survey
[3] Estimates are made for 5 years prior the survey

mother but not the baby (..) but also the care of newborns after birth is not good. So, if they would look at the quality of care, it would be very good." – **MOH representative**



Neonatal and Under-five mortality rates are still far from the 2025 HSSP V targets of 15 and 38 deaths per 1000 live

Figure 3: Trends in under-five, infant and neonatal mortality rates in Tanzania, TDHS 2004/05-2022

TDHS 2022 also reports on disparities in child mortality by area of residence. Urban-rural divide in neonatal mortality present a clear view that urban leads by 29 per 1,000 compared to rural 20 per 1,000. Southern highlands and eastern zone leading by 37 and 39 neonatal deaths per 1,000 respectively [1]. These findings challenge the previous thinking that urban geographies with good network of hospitals are more advantaged compared to rural counterparts.

3 Results 2: Improving access and utilization of quality RMNCAH services.

Coverage of services

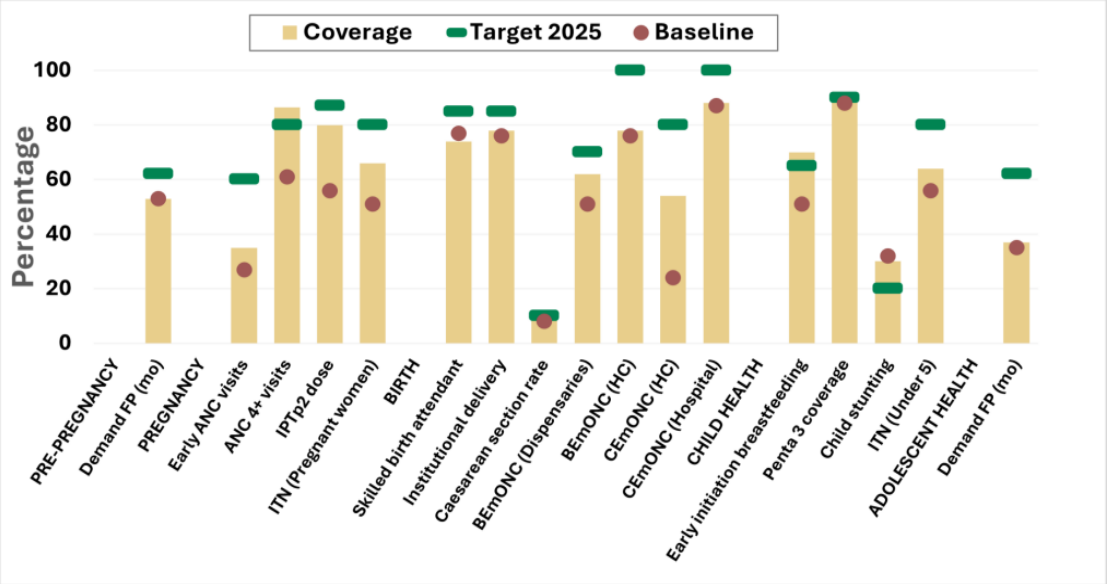


Figure 4: Progress towards coverage indicators in the continuum of care

Antenatal care

Target 2025	Baseline	Achievement	Comments
60% of early ANC coverage among pregnant women <12 weeks	30% in 2019 (DHIS2)	35% in 2023	Attention needed
80% of women with four or more antenatal visits	68% in 2019 (DHIS2)	98% in 2023 (DHIS2)	
85% of IPTp2 doses among pregnant women	79% in 2019 (DHIS2)	79% in 2023 (DHIS2)	Likely to achieve target

Progress in antenatal care (ANC) services has been notable, but early ANC coverage of less than 12weeks remains a challenge, there is a need of possible mitigation

Antenatal care interventions

ANC 1 visit is universal across all populations with coverage >90% [1]. Sustaining and improving the quality of a full range ANC services has contributed to an improvement in maternal health in Tanzania.

Challenges in providing ANC services

Only 11% of dispensaries and 32% of health centers and district hospitals provides all the required services during a standard visit. Urban-rural disparities also persist, with fewer rural facilities equipped with essential ANC items such as hemoglobin tests and urine dipsticks.

Table 1: Distribution of Antenatal care services by health facility type and area of residence

	Facility types			Area of residence	
	Dispensary (n= 282) %	**Health Centre (n =182) %**	**Hospital (n = 73) %**	**Urban (n=399) %**	**Rural (n = 142) %**
Guidelines available for ANC	47	57	62	46	62
ANC checklists	48	68	80	53	53
Trained staff	46	64	66	45	69
Blood pressure apparatus	99	100	100	99	99
Hemoglobin test	59	88	100	61	84
Urine dipstick test	49	91	87	53	74
Iron tablets	91	95	92	92	94
Folic acid tablets	94	96	92	92	90
Tetanus toxoid vaccine	91	93	88	83	94
IPT drug	93	99	93	92	90
ITNs	92	93	90	93	90

Facilities with all items	**11**	**32**	**32**	**12**	**25**

Safe delivery

Majority of women in Tanzania deliver in lower-level health facilities and are being assisted by nurses/midwives (70%).

Target 2025	**Baseline** (DHIS2 2018)	**Achievement** (DHIS2 2023)	**Comments**
85% Institutional deliveries (complemented by SBA rate)	76%	78% (DHIS2 2023)	Nearly reaching target
Institutional delivery	74% in 2019 (DHIS2)	76% in 2023 (DHIS2)	
Births attended by skilled health care providers	64% in 2015/16 TDHS	89% in 2022 TDHS	
>75% Institutional deliveries among the poorest	Poorest households: 41%	Poorest households (64%) TDHS 2022	Further efforts are needed to address geographical and wealth inequalities
At least 75% of councils with >75% Institutional deliveries coverage		34% of councils with >75% coverage)	Likely to reach national target
65% Postnatal care within 48 hours	65%	70% (DHIS2 2023)	Target achieved

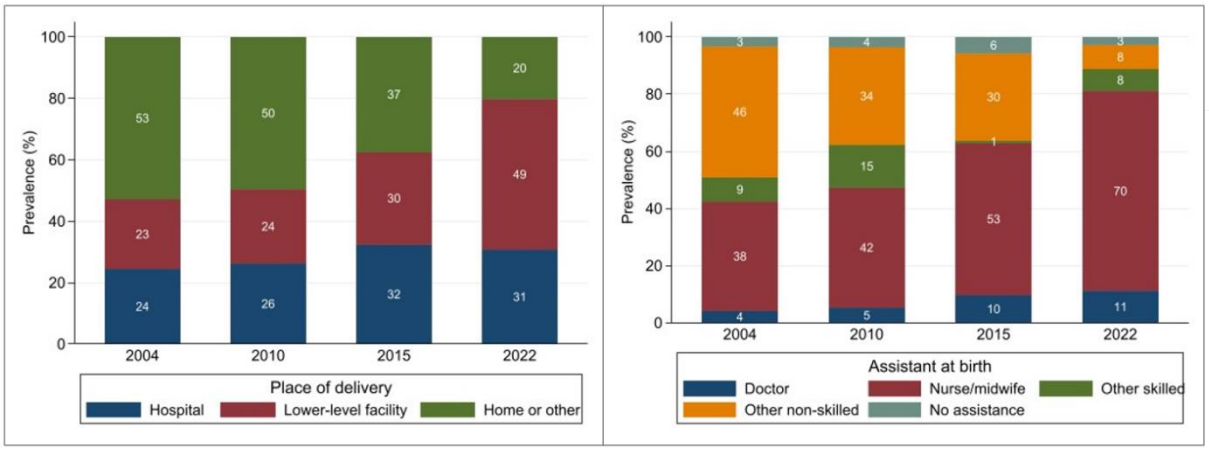


Figure 5: Place of delivery (Left) and Assistance at birth (Right) for deliveries 2 years prior the survey, TDHS 2004/05 - 2022

The national C-section rate has increased over-time during the implementation of HSSP V to nearly 9% as reported in DHIS2 data (Figure **6**). Similar increases were also observed in TDHS data, were C-section rates increased to 11% in the most recent survey.

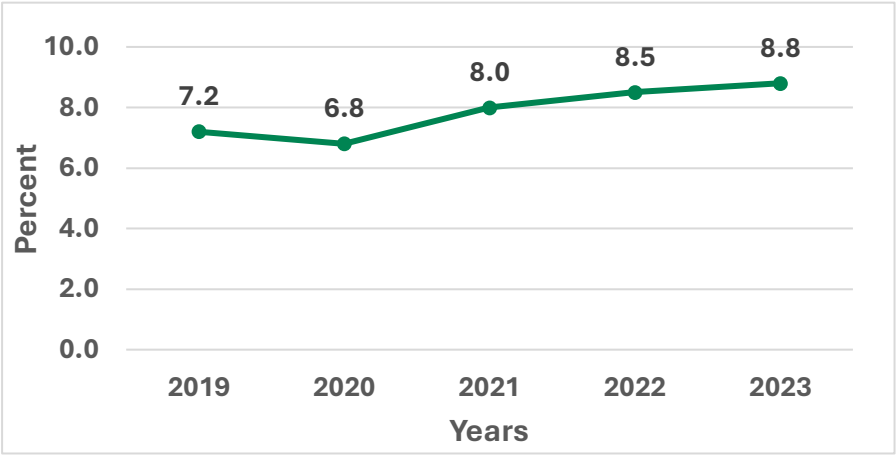


Figure 6: National C-section rates, DHIS2 data 2019-2023

C-section rates have gone up for the richest wealth group over time, these rates are near to what is considered by WHO as the normal rates that meet population need for emergency C-sections (10-15%). However, the C-section rates for lower wealth groups has stagnated over time, and only a small increase was observed for the fourth quintile group, suggesting ongoing gaps in access (Figure **7**).

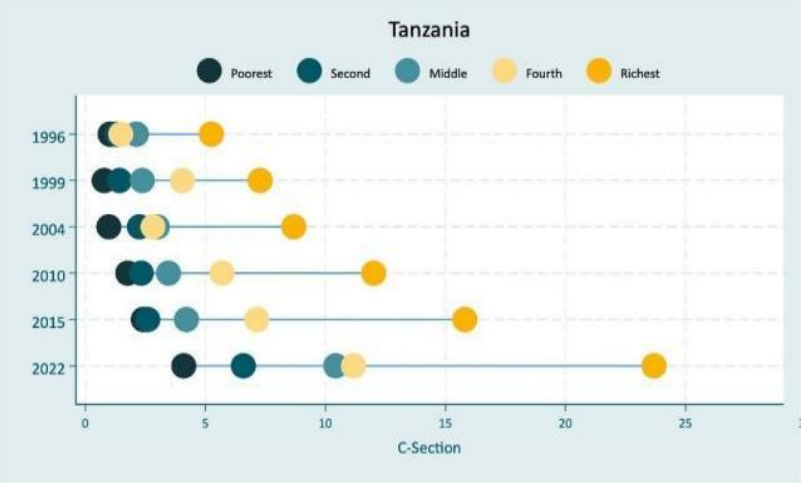


Figure 7: Trends in C-section rates by wealth quintiles, TDHS 1996-2022

Family Planning

Target 2025	Baseline (year)	Achievement	Comments
Total fertility rate of 4.2		4.8 per 1000	
62% of FP satisfied by modern methods among currently married women aged 15-49 years	53% (TDHS 2015/16)	53% (TDHS 2022)	Attention needed, stalling trends: With current trends, the target of 62% for mDFPs by 2025 may not be reached.
<17% Unmet need for FP	22% (TDHS 2015/16)	21%	Attention needed

Despite significant investment in family planning services, progress remains slow. The decline of total fertility rate is in line with the stagnation of the demand for Family planning at 53% 2015/16 (survey) to 2022. This stagnation is evident in the utilization of modern contraceptives among currently married women, which has remained stable at 32% and 31% in the surveys conducted in 2015/16 and 2022, respectively. Also with significant regional variations, with rates ranging from 56% in Njombe to just 9% in Simiyu.

Furthermore, despite having a lower total fertility rate, Dar es Salaam experiences poorer maternal and newborn outcomes compared to other areas.

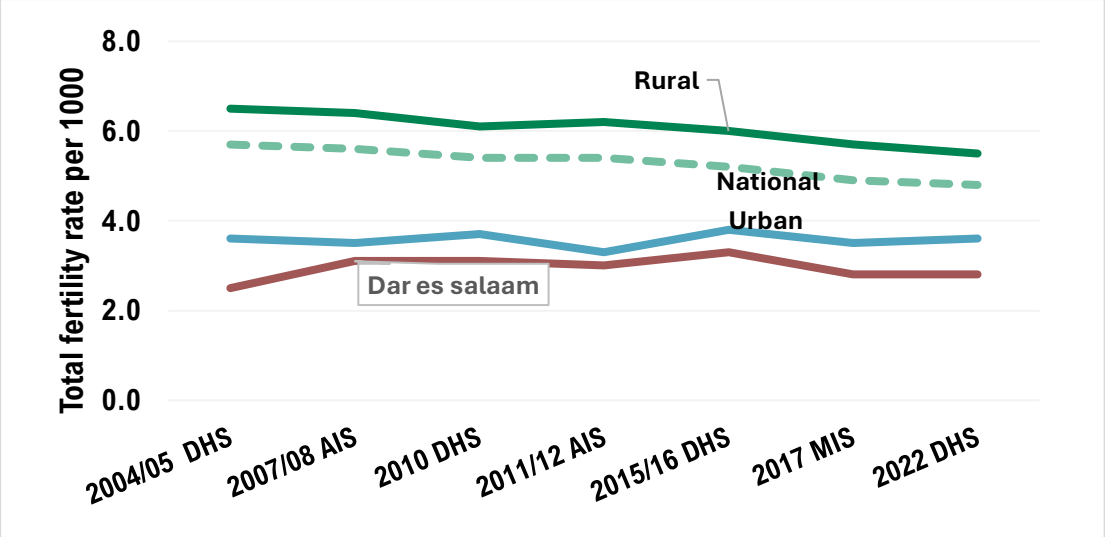


Figure 8: Trends in total fertility rate (for three years preceding each survey), National and by place of residence

Interventions on SRH

Tanzania has invested in ensuring universal access to sexual and reproductive health care services, including family planning. Currently 84% of health facilities provide family planning services, availability of family planning services and commodities still varies by the level of health facilities, ranging from 47% in dispensaries, 60% in health centers and 71% in hospitals [3].

Adolescent health

Target 2025	Baseline (year)	Achievement	Comments

<20% Teenage girls (15-19) who are pregnant or have a child	27% (TDHS 2015/16)	21(TDHS 2022)	Efforts are required in regions lagging behind
25% Modern contraceptive use among adolescents aged 15-19 years	19% (TDHS 2015/16)	15%	Attention needed
62% Demand for FP satisfied by modern methods (15–19 years)	48% (TDHS 2015/16)	37%	Attention needed

The reduction in teenage pregnancies remains minimal, and significant regional disparities persist. According to the TDHS 2022 data, nine out of 26 regions have teenage pregnancy rates exceeding 25%, with 3 regions surpassing 30%; notably, Songwe (45%), followed by Ruvuma at 35% and Katavi at 34% [1];
Furthermore, we have observed a notable shift in the high teenage pregnancy rates from the western and lake zones to the south west highlands and southern highland zones. These findings underscore the urgent need to review our current programming and support strategies. Teenage pregnancies jeopardize the future opportunities of teenage girls and young women, limiting their access to quality education and increasing their health risks, while also negatively impacting the social determinants of health

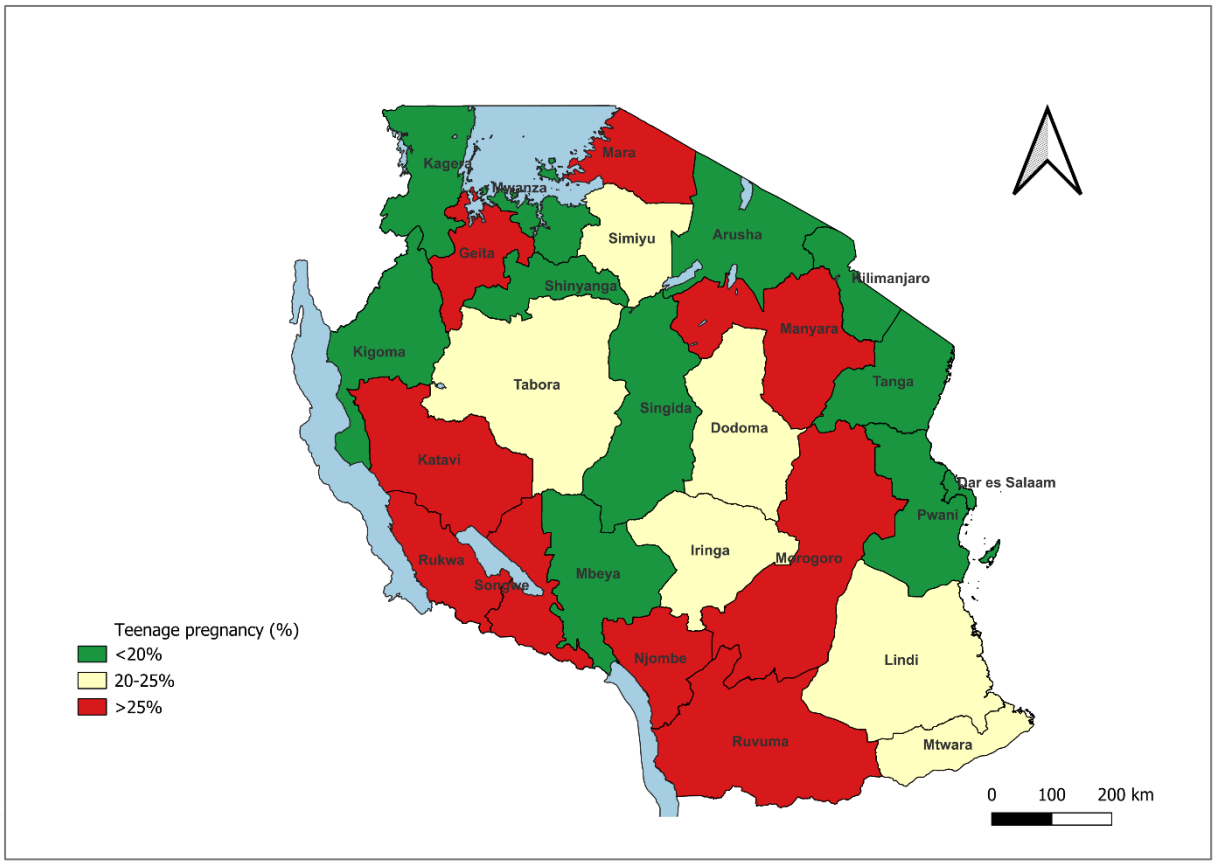


Figure 9: Rates of teenage pregnancies by regions, TDHS 2022

Demand for Family Planning satisfied by modern methods among adolescents

As a proxy indicator for reproductive health among adolescents, we assessed the progress on the demand for FP satisfied by modern methods in this age group. Based on HSSP V targets, the coverage for this indicator in 2025 should be at least 62%, whereas according to the available data, this needs much attention; coverage is still at 37% (TDHS 2022), non-comparable to older women (Figure 10). This highlights the unmet need for modern contraception and the lack of progress in reducing teenage pregnancies, thereby affecting the maternal and newborn health outcomes of adolescent mothers. This has also been highlighted in qualitative interviews as quoted below:

"Currently, we still have poor indicators for young people, and the use of family planning is low. early marriages are rampant, teenage pregnancy is high, and there is limited provision of adolescent-friendly services. However, the needs of adolescents are not prioritized, and the services are not friendly enough to accommodate adolescents' health needs, especially the issue of mental health among adolescents"- **Stakeholders**

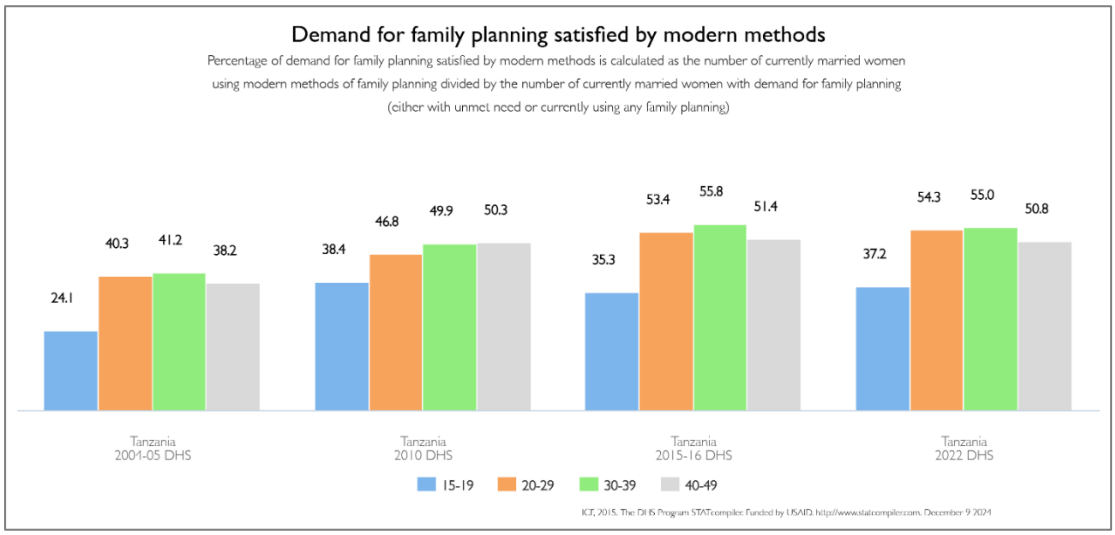


Figure 10: Proportion demand satisfied by modern methods among currently married adolescents aged 15-19 years, compared to older women, TDHS 2004/05 - 2022

Child healthcare and nutrition

Target 2025	Baseline (year)	Achievement	Comments
>90% Full immunization coverage among infants (Penta 3)	88% (TDHS 2015/16)	90% (DHIS2 2023)	National target achieved.

Target 2025	Baseline (year)	Achievement	Comments
At least 80% of councils with Penta3 coverage >90%		59% of districts have >90% coverage of Penta3	Geographical inequalities should be addressed
DPT3, Measles and Polio	75 percent in 2016	94% in 2022	

Child vaccination coverage

Focusing on the coverage of Pentavalent 3rd dose, an indicator of interest in HSSP V, the national coverage is within target (above 90%) from DHIS2 2023 estimates. This highlights the good progress made for vaccination indicators.

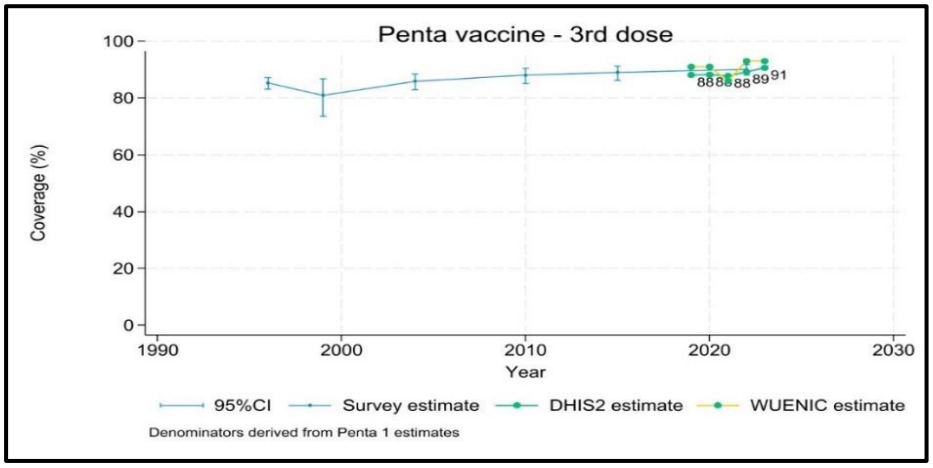


Figure 11: National coverage of Pentavalent 3rd dose, DHIS2 data, TDHS data, WUENIC estimates

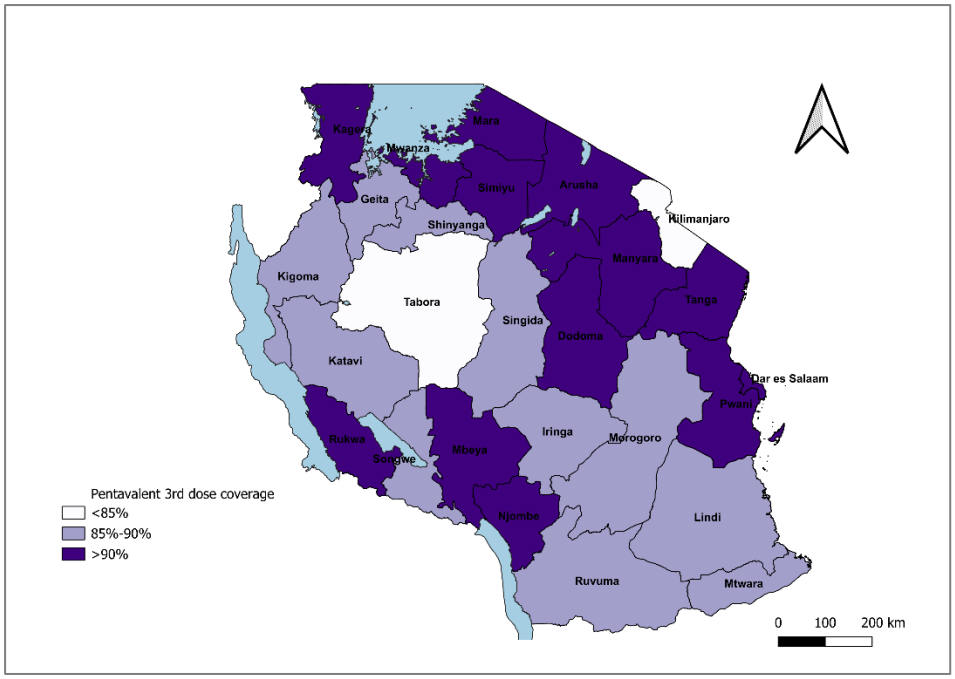


Figure 12: Coverage of Pentavalent 3rd dose by regions in Tanzania, DHIS2 2023

Child immunization services

Child immunization services have been more accessible, with 86% of facilities providing child immunization services, varying across different levels of health facilities (84% in dispensaries, 93% in health centers and 58% in hospitals).

Preventive child services have also been accessible during the implementation of HSSP V for 86% of cases

Mixed Outcomes in Health and Nutrition

Target 2025	Baseline (year)	Achievement	Comments
65% Early initiation of breastfeeding among all newborns	54% (TNNS 2018)	41% (TDHS 2022)	Likely to reach target
90% Exclusive breastfeeding for 6 months	58% (TNNS 2018)	64% (TDHS 2022)	On track to reach target

Target 2025	Baseline (year)	Achievement	Comments
Less than 20% Children under 5 years are stunted	32% (TNNS 2018)	30%	Attention needed

Reducing the rates of stunting is reciprocated in having positive outcomes for reducing under-five mortality. However, the rates of child stunting are still not improving.

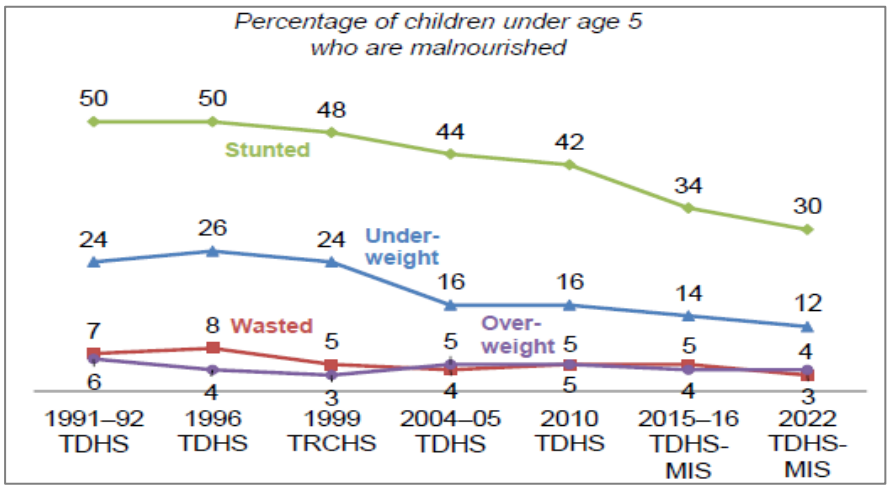


Figure 13: Trends in child malnutrition indicators over time, TDHS 1991/92 - 2022

4 Result 3: Strengthening the capacity of health systems for RMNCAH planning, management and service delivery

Availability and quality of RMNCAH services

The HSSP V and One Plan III prioritize improving RMNCAH outcomes, with a focus on delivering high-quality care to ensure equitable access and utilization of services, leaving no one behind. As of 2023, service availability across all levels of health facilities has improved significantly. However, service readiness—particularly for family planning and adolescent health services—remains a challenge, especially in dispensaries and health centers. This discrepancy underscores the need for targeted investments in staff training and the provision of service guidelines, particularly at lower-level facilities.

Furthermore, despite efforts to enhance reproductive, maternal, newborn, and child health, the country struggles to meet its reproductive health commodity needs through domestic funding, owing to its heavy reliance on donors for procuring lifesaving maternal health commodities, including contraceptives. The multi-year quantification report for RMNCAH commodities projects a supply value of USD 71.7 million for 2025, 2026, and 2027, with USD 59.8 million still uncommitted. This situation is further exacerbated by a decline in donor support and insufficient budget allocation for reproductive health commodities by the government, which has resulted in a funding gap of USD 19.7 million in 2025, thereby increasing the risk of potential commodity stockouts nationwide. The need for market segmentation through the total market approach is crucial in addressing the gaps and sustainability of FP services. This has also been highlighted in the qualitative interviews:

"*The current health financing plan is not sustainable. It is not clear how funds will be made available to address local priorities. We have a basket fund but this is not a suitable funding mechanism since most of the funds are contributed by donors. A sustainable funding mechanism is important to sustain the health sector's strategic areas and support the coordination structure*" – **MOH Representative**

Progress in Maternal and Neonatal Health Services

Readiness of dispensaries to provide BEmONC services has increased from 51% in 2020 to 62% in 2023 (SARA survey), moving closer to the HSSP V target of 70% by 2025.

Health centers offering Comprehensive Emergency Obstetric and Neonatal Care (CEmONC) services have nearly doubled from 24% in 2020 to 54% in 2023. However, this progress falls short of the ambitious 80% target for 2025. The issue of ensuring EmONC (BEmONC and CEmONC) functionality has also remained a challenge following expansion of infrastructures. The HRH doesn't tally with the facilities constructed and in fact it has widened the HRH shortage. Likewise, inadequate availability of life-saving maternal and newborn commodities compromise the realistic measurement of this indicator.

Further insights from qualitative interviews regarding shortage of human resources:

"First of all, there are few employees, so when there are few employees, the services are not good, not only are there few, but their competence is not good and the competence is not good because, we are going backwards because this is a cross-cutting issue of employees, we are here but also those who bring them to our colleges, that is, measuring the quality of colleges has become a problem right now, there are people who need to look at the quality of colleges, the curriculum they use, they need to look at whether they are teaching the people they are supposed to work with…" **-MOH Representative**

Figure 14: Service availability and readiness of RMNCAH services by level of health facility, SARA 2023

Family Planning

Readiness for family planning services remains below optimal levels, with 42% of dispensaries, 57% of health centres, and 69% of hospitals adequately equipped. This contrasts with the overall availability of family planning services, which exceeds 80%. The need for expansion of choice, including new and lesser-used commodities and skilled service providers, is critical for quality RH/FP services.

Adolescent Health Services:

While 84% of facilities report availability of adolescent health services, only 56% of facilities meet quality benchmarks, primarily due to a lack of trained staff and expertise in providing adolescent- and youth-friendly services. A critical gap remains in integrating dual services for family planning and adolescent reproductive health, available in just 34% of facilities. Additionally, should also include HPV vaccination as one of the most important components.

Child Health and Immunization Services

Readiness for child immunization services remains high at 76%, consistent with SARA 2020 findings. Stockouts of childhood vaccines are under 10%, and more than 85% of dispensaries and over 90% of health centers provide preventive child services showcasing robust immunization delivery.

Service readiness for child treatment services is 75%, reflecting a well-functioning system for managing common childhood illnesses.

Contribution of health systems inputs in extending coverage and utilization of RMNCAH services

To assess the impact of health system inputs availability on the coverage of RMNCAH interventions, institutional live birth coverage used as health system output was compare to health facility density in the regions (health facility/population ratio) as a health system input.

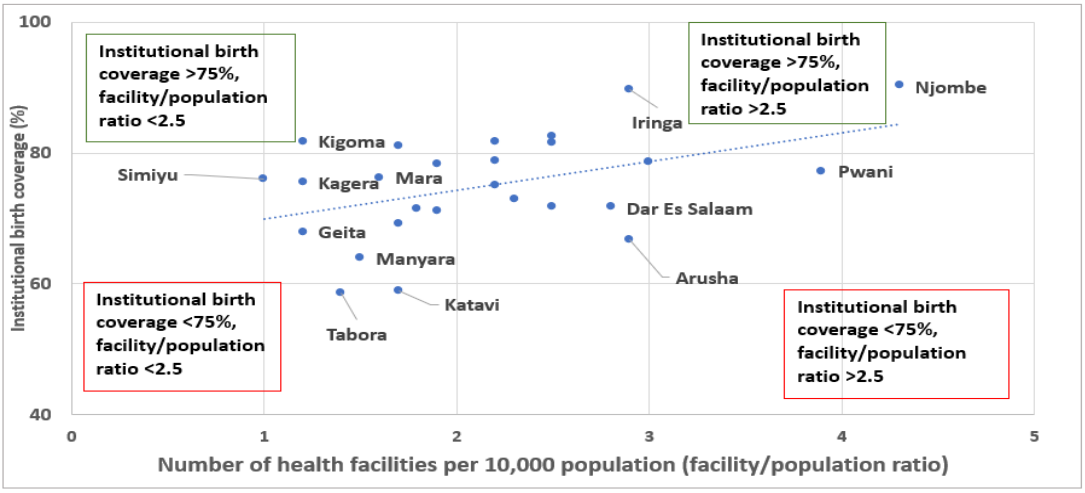


Figure 15: Comparison of institutional birth coverage to facility per population ratio in Tanzania mainland

The targets 2025 are >75% for the institutional livebirth coverage target and 2.5 facilities/10,000 population health facility/population.

As of 2023, five regions—Iringa, Lindi, Njombe, Pwani, and Ruvuma—achieved both targets, reflecting effective resource allocation and service utilization. Conversely, nine regions, including Tabora, Katavi, Geita, and Tanga, lagged in both metrics, indicating disparities that require focused interventions to enhance service accessibility.

Human Resource for Health

The availability of well-trained staff across different health facility levels for RMNCAH-N services is still a challenge. Service readiness for staff & guidelines is below 50% for ANC, Basic Obstetric care, Child curative services and Adolescent Health services. Major efforts in staff training are needed to bridge the gap.

Despite higher availability and readiness for other RMNCAH services, only 61% of health facilities have at least one trained staff for CEmONC, and just 40% are equipped with trained personnel for family planning services. While 98% of facilities possess infrastructure for HIV diagnostics, only 44% have staff trained in comprehensive HIV prevention, care, and treatment. Guideline readiness is also insufficient, particularly in lower-level facilities.

Support health training institutions to have enabling curriculum to produce graduates with basic core competencies in RMNCAH services. Shifting the focus from the quantity of staff trained to the number of staffs who are competent will help ensuring the provision of quality services.

"Let's focus more on the quality of services but also invest in professional performance but also manage the centers so that they have enough staff" – **MOH Representative**

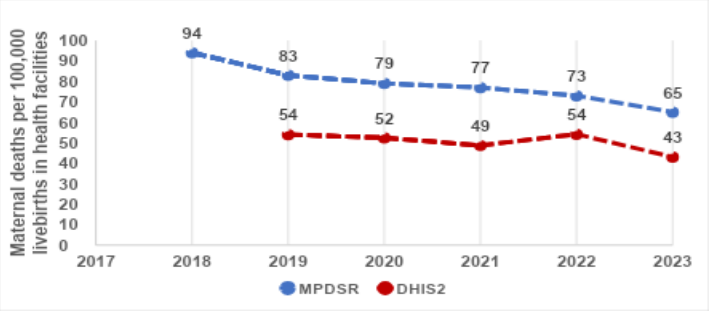
Enhance basic infrastructures for RMNCAH Services

Only 21% of facilities had anesthesia equipment. Similar challenges with equipment, infrastructure and service availability were indicated by experts, such as shortage of suction machines, phototherapy, CPAP, and immediate thermal care, and limited space in CEmONC units [1,2].

5 Result 4: To create an enabling environment for provision and utilization of quality, equitable and accessible RMNCAH and Nutrition services

Improve Health Management Information System (HMIS)

Improve capacity for RMNCAH data use for planning, service provision and decision-making at all levels. Support generation of electronic RMNCAH data from all service delivery points are the key aims of One Plan 3. However, the integration of health management systems in RMNCAH-N, for example the maternal deaths reporting systems could be one step further to better track the progress.



The two available maternal deaths recording systems reported different numbers of deaths, between 2019-2023, 7,367 MPDSR maternal deaths compared to 5,049 in DHIS2.

Figure 16: Summary of facility-based sources of institutional maternal mortality in Tanzania (MPDSR data (2018-2023), DHIS2 data 92019-2023))

Support comprehensive RMNCAH operational research to provide data for decision-making.

Through available data sources, monitoring, evaluation and research can be improved to strengthen knowledge management and evidence-based decision-making in RMNCAH-N.

Analysis and interpretation of results

Completeness of situation analysis

The problem analysis informing One Plan III is comprehensive. However, **deeper integration of structural determinants** (e.g., socio-economic inequities, cultural barriers) and stronger connections between the major problems and root causes could further inform the logic of interventions/strategies. For instance, the document provides data-driven insights on trends in mortality, morbidity, and service coverage to supports the problem analysis and the choice of strategies but evidence-based investigations of the roots causes of identified inequalities and inequities evidenced by the high maternal and newborn mortality in urban areas and Dar es salaam would have informed the identification of more practical solutions.

In addition, while primary problems are well-articulated, there is limited linkage between the major deprivations and their intermediate causes, and systemic barriers like social norms or other socio-economic determinants of health such as gender dynamics, poverty, and barriers to education. A more detailed exploration of how governance issues (e.g., weak accountability mechanisms) affect RMNCAH outcomes could also strengthen the analysis.

Relevance of interventions

The One Plan III provides a broad and aligned framework with clear objectives and relevant strategies. It's aligned with various policies and national strategies governing the health sector and integrates national goals (Tanzania Vision 2025, HSSP V) and global frameworks (SDGs, Global Strategy for Women's, Children's, and Adolescents' Health). Nevertheless, the adequacy of the proposed interventions may be limited for the magnitude of the problems, such as addressing stunting with limited emphasis on food security and poverty reduction. The plan acknowledges that multiple root causes need to be addressed comprehensively but how some root causes, such as governance and accountability gaps, will be addressed is not very clear.

Major changes in planned interventions

Though the One Plan 3 was developed during the COVID-19 pandemic, the influence of the pandemic did not influence the strategic choices. Therefore, the change in the context do not affect the logic of the interventions. Enhancing multisectoral coordination of nutrition through improved food security and feeding practices; improving availability and access to sexual and reproductive health services for adolescents; enhancing provision of life skills; and improving the quality of RMNCAH care are still relevant. The key focus is improving the quality of care, including actions to address the availability of skilled providers, adequate infrastructure, and equipment, and fostering an integrated client-centered approach is emphasize by the findings of the mid-term evaluation, as well as the need to strengthen community engagement and communication to increase utilization and adherence to interventions; strengthening the health system, and enhancing data to inform future planning.

Assessment of values and principles

People-Centeredness

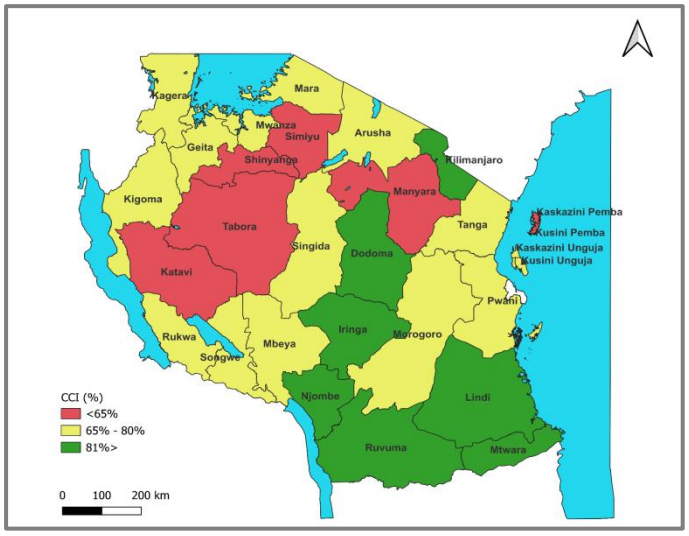
The interventions have made progress in engaging communities and delivering services tailored to population needs. However, gaps remain in ensuring services are responsive and accessible, particularly for adolescents in poor households in urban settings and individuals with disability.

"In our country right now, there are people who are unable to access service because of income…" – **MOH Representative**

"Yes, they were forgotten, the group of people with disabilities and special needs, because even if you look at our (….) there is no group of people with disabilities and special needs…" – **MOH Representative**

Equity

Significant geographical and wealth disparities hinder equitable access to RMNCAH services. Coverage indices, ranging from 52% in Katavi to 90% in Iringa, reflect stark regional inequalities. Regions with coverage index <65% are Katavi, Tabora, Shinyanga, Simiyu and Manyara. Wealth disparities are evident in C-section rates, with the highest quintile at 24% versus 4% in the lowest quintile. Urban-rural variations also reveal that rural facilities surpass urban ones in ANC service availability. Despite the latter having greater infrastructure, the number of staff trained on ANC services is still at 45% for facilities in urban areas compared to 69% in rural areas. Targeted efforts to address these inequities are critical, particularly in regions with low composite coverage indices and among the urban poor.



Distribution of coverage index used as proxy measure to assess inequalities in the coverage of mother and child health interventions. The index is an average of seven mother and child health indicators from 2022 TDHS: ANC4, institutional live birth coverage, skilled birth attendance, IPTp2, postnatal care, pentavalent and measles vaccination coverage. The index ranges from 0-100 with 100 indicating good coverage while 0 being poor coverage.

Figure 17: Reginal variation in the composite coverage index for RMNCAH indicators in Tanzania, TDHS 2022

There are also greater disparities in neonatal mortality rates with urban areas, especially Dar es salaam lagging behind. Similar observation for under-five mortality which despite declining in both areas, is still higher in Dar es salaam compared to other areas.

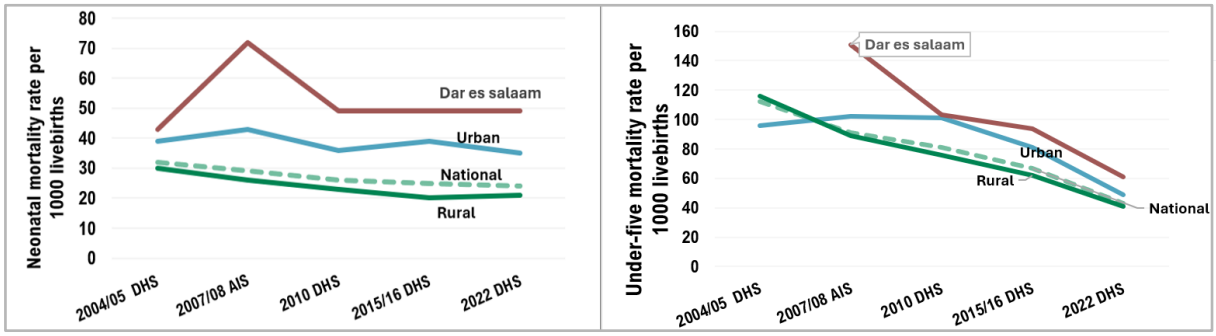


Figure 18: Neonatal mortality rate (Left) and Under-five mortality rate 9Right) by place of residence, TDHS, 2004/05 - 2022

Efficiency

Efficiency in implementation remains a challenge due to fragmented efforts and weak coordination among stakeholders. Resource allocation disparities, coupled with uneven service readiness, indicate inefficiencies in cost control and prioritization.

Major efforts have been made in building infrastructures but integration of programs to maximize the benefits is poor. Even within the same program, integration of Family Planning services, Adolescent health services is still poor. Dual service provision for family planning and adolescent sexual and reproductive health is available in only 34% of facilities.

Effectiveness

The effectiveness of interventions has been mixed. Coverage and access of maternal care is improved, driven by increased availability of Emergency Obstetric and Newborn Care (EmONC) and comprehensive EmONC services in health centers.

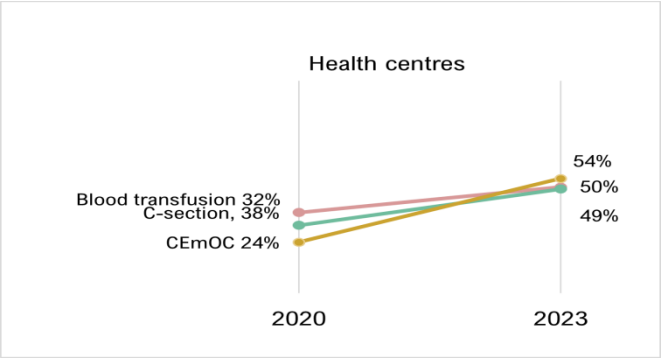


Figure 19: Availability of essential maternal and newborn health services in health centres in Tanzania (SARA 2020, SARA 2023)

Nevertheless, while some indicators, such as institutional live birth coverage and skilled birth attendance, show improvement, others lag. The inability to address stunting in Iringa, Njombe, Rukwa, Geita and Ruvuma highlights gaps in achieving desired outcomes. Further, only 32% of health facilities have guidelines tailored for adolescents' healthcare.

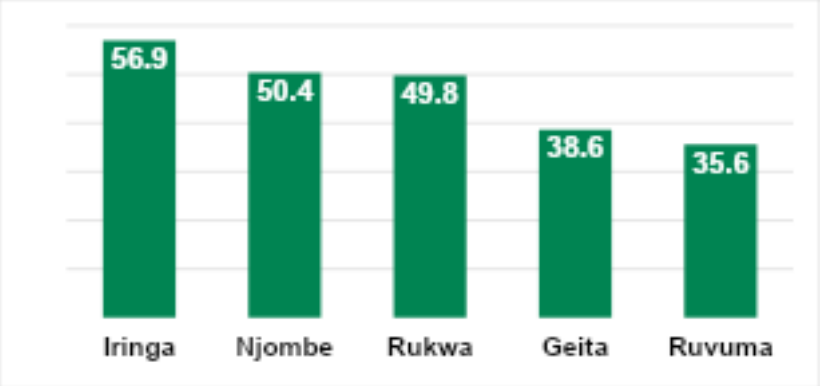


Figure 20: Regions with higher prevalence of child stunting, TDHS 2022

Recommendations

Key Recommendations for improving the One plan 3

1. **Strengthen Linkages Between Levels of Analysis**: Explicitly connect primary problems to intermediate and root causes for better clarity. For example, how infrastructure gaps (root cause) lead to low facility-based deliveries (intermediate cause) and high maternal mortality (primary problem).
2. **Address Overlooked Determinants**: Explore non-health determinants like education, income levels, and gender norms that exacerbate disparities in health outcomes.
3. **Deepen Structural Analysis**: Provide more actionable insights on structural issues like political governance, policy gaps, and intersectoral coordination.
4. **Enhance Data Use**: Incorporate more granular data to identify regional and districts disparities and prioritize more targeted interventions.
5. **Strengthen If-Then Logic**: Clearly outline how each activity contributes to outputs, outcomes, and impacts. For instance, community engagement activities should specify expected behavior changes and their contribution to health outcomes.
6. **Expand Causal Analysis**: Link activities more explicitly to underlying root causes.
7. **Enhance Sufficiency and Adequacy**: Ensure all root causes are addressed comprehensively by linking the interventions to the multisectoral nutrition plan and the Human resource for Health strategic Plan for example, and by describing the coverage extension strategy at District and county levels.

Key recommendation to accelerate the achievement of One plan 3 objectives.

Recommendations

1. Prioritize Adolescent Health in High-Need Regions: The Ministry of Health should prioritize resource allocation and targeted interventions for adolescent health in regions with higher rates of teenage pregnancy such as Songwe Region, by implementing targeted training programs for family planning and adolescent health services at dispensaries and health centers by December 2025.
2. Strengthen Multi-Sectoral Collaboration for Adolescent Health: The Ministry of Health should establish formal partnerships with the Ministry of Education, Ministry of community development, and relevant stake holders, i.e. Joint TWGs meetings to address multisectoral factors affecting adolescent health by December 2025.
3. Regional Health Management Teams (RHMTs) to develop and implement Coverage extension plans focusing on integrating family planning and adolescent health services by December-2025.
4. Ministry of health and Developing partners to allocate additional equipment and infrastructures based on coverage extension plans Strengthen health system inputs in

lagging regions by prioritizing infrastructure development and resource allocation by December 2026.

5. Directorate of Human Resources for Health Ministry of Health to design and implement a comprehensive program for training and motivating healthcare workers, prioritizing lower-level healthcare facilities by July 2025.
6. RMNCAH unit to develop and implement an integrated maternal death reporting system to ensure comprehensive tracking in health facilities and beyond labor wards by July 2025.
7. DPP to commission a mapping of health interventions for disadvantaged populations in urban and rural areas and a study on equity in access to health services in urban settings situational analysis of maternal and newborn health in Dar es Salaam to identify targeted interventions.
8. The Ministry of Health (MOH) should intensify efforts to strengthen domestic resource mobilization to ensure sustainable funding for Reproductive, Maternal, Newborn, Child, and Adolescent Health (RMNCAH) programs, with a particular focus on lifesaving reproductive health (RH) commodities reducing dependency on external funding.

6 Annexes

6.1 Method

6.1.1 Evaluation questions

Evaluation question	Evaluation sub questions
Is the One Plan 3 theory of change still relevant amid changes in national context?	Was the root cause analysis clear and relevant?
	How did contextual changes (such as the end of the COVID-19 pandemic and the emergence of other outbreaks) impacted the relevance and effectiveness of strategic choices and health interventions
	To what extend was the One Plan 3 aligned with the main HSSP V document?
	To what extend could the improvement in RMNCAH be attributed to the One Plan 3?
What progress has been made towards achieving One Plan 3 impact and Outcomes indicators?	How effective have the interventions planned in the One Plan 3 in addressing the drivers of maternal and child mortality?
	How effective have the interventions been in reducing teenage pregnancies?
	What were the key facilitators and barriers to achieving One Plan 3 targets?
To what extent were service utilization and service coverage targets of the One Plan 3 achieved?	Were specific targets per region/Districts identified to allow focused interventions for the achievement of the One Plan 3 Objectives without leaving any one behind?
	To what extend did the service coverage in BEmONC and CEmONC services contributed to increased access to and utilization of RMNCAH services?
	To what extend did essential RMNCAH equipment and medicines contributed to improved health outcomes?

How effectively has the One Plan III addressed equity in RMNCAH service delivery?	What disparities exist in RMNCAH service coverage across regions and socioeconomic groups?
	How have interventions addressed the needs of vulnerable populations (e.g., adolescents, people with disabilities)?
How effective were resource mobilization for the implementation of the One Plan 3?	To what extend was the HRH accelerated Plan and Community Health Workers Programs aligned with One Plan 3 objectives and strategies?
	To what extend did CHWs program contributed in sexual and reproductive rights awareness and improved health-seeking behavior?
	What proportion of the One Plan 3 budget was mobilized and effectively disbursed?
	What proportion of external funding earmarked for the One plan 3 was allocated to service delivery?
What are the main challenges and lessons learned from the One Plan 3 implementation?	What is the bottleneck for the achievement of One Plan 3 objectives? (link with drivers of maternal and child mortality)
	What are the key action point to fast track the implementation of the One Plan 3?

6.1.2 Data sources

Tanzania mainland has 26 regions and 184 councils including municipal, town and district councils. Facility level data from the DHIS2 were used in this report and according to the DHIS2 database there are 12,359 health facilities in mainland Tanzania. Monthly district data from DHIS2 system were extracted and analysed for 16 indicators. These data from DHIS2 covered the period between January 2019 and December 2023. Data quality assessment and adjustments were conducted, and thereafter, the monthly district data were aggregated to obtain annual regional data for this analysis.

National level survey data were also used for assessment of the denominators of the health facility data derived coverage statistics and for external comparison of the coverage statistics. The main surveys conducted from 2016 were TDHS 2016, TPHIA 2017 (HIV), TMIS 2017 (malaria), TNNS 2018 (nutrition) and TDHS 2022. The last census was conducted in 2022, with data still in progress, the population projections used in this analysis were from the 2012 census data. Further details on the data description are presented in Table 1 below.

Table 1: Health facility data summary

Indicator	
Administrative organization	
Number of regions	26
Number of districts/councils	184
Health facilities	
Number of health facilities in the country (mainland Tanzania)	12,359
Facility data analysis period	
First month and year with health facility data	1st January 2019
Last month and year with health facility data	31st December 2023
Indicators with facility data included in this analysis	
• **Maternal health indicators:** Antenatal care for 1st & 4th visit, IPT 2nd dose, Institutional deliveries (livebirths), Caesarean Section, Postnatal care within 48hrs • **Child health indicators**: BCG vaccination, Penta 1 & 3 vaccination, Measles vaccination • **Mortality (maternal & perinatal) indicators:** Maternal deaths in health facilities	

6.1.3 Methods

Health facility data quality assessment and adjustments

We assessed the data quality for monthly data by district for 2019-2023 using the following indicators:

Table 2: Health facility data quality indicators (*Source: Countdown 2030 Guidebook*)

	Indicator	Numerator	Denominator	Interpretation
1	**Completeness of monthly facility reporting**	Mean of 4 reporting forms (ANC, delivery, immunization, OPD)		
1a	% of expected monthly facility reports (national)	N of monthly facility reports received	Total N of facility reports expected (usually 12* N of facilities with the service)	Reporting rates over 90% are good; changes in reporting completeness over time affects trend analysis
1b	% of districts with completeness of facility reporting >= 90%	N of districts with at least 90% monthly reporting complete-ness in a year	Total N of districts	Can be used to identify districts with low reporting rates in multiple years
1c	% of districts with no missing monthly values in a year for any of the 4 forms	N of districts with no missing values for any of the 4 forms in a year	Total N of districts	Additional indicator, is not used to compute the overall data quality score
2	**Extreme outliers**	Mean of outliers in ANC, delivery, PNC, vaccination, OPD and IPD indicators		
2a	% of monthly values that are not extreme outliers[4] (national)	N of monthly values that are not extreme outliers in a specific year	Total N of monthly values (usually 12 * N years to be analyzed)	At least 99% of monthly data expected **not** to be an extreme outlier; consider reasons
2b	% of districts with no extreme outliers in a year	N of districts with no extreme outliers in a specific year	Total N of districts	At least 90% of districts should have no extreme outliers at all; consider reasons
3	**Consistency of annual reporting**			
3a	ANC1 to penta1 ratio in the reported data (national)	N of ANC1 reported	N of penta1 reported	National ratio within an expected range (1.05 to 1.10 if survey coverage

[4] An extreme outlier is defined as a monthly value that is 5 times the median absolute deviation (MAD) from monthly median value for a particular year.

				ANC1 and penta1 are the same)
3b	Penta1 to penta3 ratio in the reported data (national)	N of penta1 reported	N of penta3 reported	National ratio within an expected range, based on the survey results
3c	% of districts with ANC1-penta1 ratio between 1.0 and 1.5	N of districts with ratios within the expected range	Total N of districts	For districts there is more variation in the ratio: a wider range is considered
3d	% of districts with penta1-penta3 ratio between 1.0 and 1.5	N of districts within the expected range	Total N of districts	For districts there is more variation in the ratio: a wider range is considered
4	**Summary of performance**			
	Annual data quality score (mean 1a, 1b, 2a,2b, 3c,3d)			

Table 3: Summary of adjustments made to the raw health facility data in preparation of a clean data set for the endline analysis *(Source: Countdown 2030 Guidebook)*

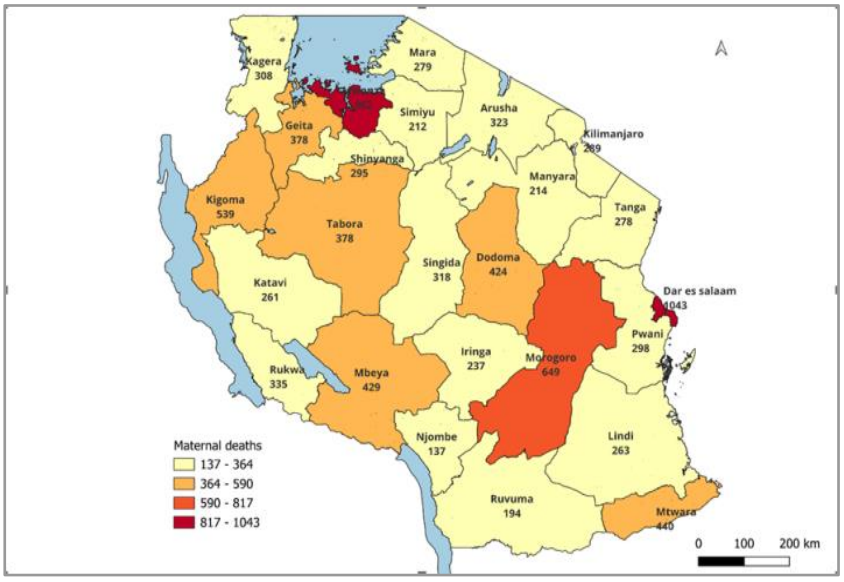
Problem	Action	Adjustment
Low reporting rates: identifying low rates that were adjusted	If below 75% (default), data were imputed	Median monthly value for the district year was imputed for the month with low reporting
Incomplete reporting by districts, variable over time, affecting trend assessment	If reporting rates were >=75% and <= 100% default), an assumption was made about the volume of services provided by the non-reporting facilities	Adjustment factor k value was used to adjust for incomplete reporting k default value 0.25 (replace if different value used; state if used for all reporting forms or different k factors between forms)
Extreme outliers can greatly affect coverage trend assessments	If a monthly value was greater or smaller than 5 times the median absolute deviation (MAD) from district monthly median value, an adjustment was made	Extreme monthly outliers are corrected and given the district median value for the same year
Missing values	If there is a missing value, data were imputed	District median monthly value for the year was imputed for the month with missing value

6.2 Additional results

Table 1: Comparison of DHIS2 and MPDSR data

	DHIS2	MDSR
Total number of maternal deaths reported 2019-2023	5,049	7,367
Councils with MMR below 25 per 100,000 live births (N, %), 2023	76 (41%)	58 (31%)
N of councils with zero maternal deaths reported in 2023	26	12

Number of maternal deaths



Number of maternal deaths by regions, MPDSR data (2018-2023 averages)

Table 2: Coverage of institutional deliveries and reporting rates for institutional deliveries by regions in DHIS2 2023 data

Region	Institutional delivery coverage (%) (DHIS2 2023)	Reporting rates – Institutional deliveries (DHIS2 2023)
Arusha	67	97
Dar es salaam	74	95
Dodoma	82	96
Geita	73	93
Iringa	88	95
Kagera	79	97
Katavi	64	93
Kigoma	82	97
Kilimanjaro	72	95
Lindi	80	95
Manyara	63	94
Mara	78	97
Mbeya	77	96
Morogoro	75	97
Mtwara	86	95
Mwanza	85	97
Njombe	89	98
Pwani	83	94
Rukwa	72	96
Ruvuma	83	98
Shinyanga	75	97

Simiyu	82	91
Singida	75	95
Songwe	76	96
Tabora	63	93
Tanga	77	97

7 References

1. Ministry of Health (MoH) [Tanzania Mainland], Ministry of Health (MoH) [Zanzibar], National Bureau of Statistics (NBS), Office of the Chief Government Statistician (OCGS), ICF. Tanzania Demographic and Health Survey and Malaria Indicator Survey 2022 Final Report. Dodoma, Tanzania and Rockville, Maryland USA; 2022.
2. Ministry of Health: Division of Reproductive M and CHS (DRMCH). Tanzania Maternal and Perinatal Death Surveillance Response (MPDSR) 2018-2023 - Draft Report. Dodoma; 2024.
3. Ministry of Health, Ifakara Health Institute, The Global Fund. Tanzania Service Availability and Readiness Assessment (SARA) Report 2023. Dodoma, Tanzania; 2024.