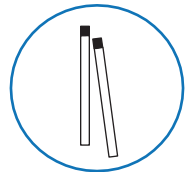
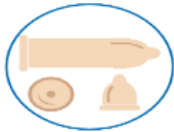
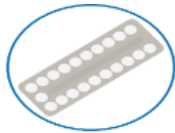




**ጤና ሚኒስቴር - ኢትዮጵያ**  
**MINISTRY OF HEALTH - ETHIOPIA**

**የዜጎች ጤና ለሃገር ብልፅግና!**

**HEALTHIER CITIZENS FOR PROSPEROUS NATION!**



# **NATIONAL REPRODUCTIVE HEALTH COMMODITY SECURITY STRATEGY**

**2022 - 2026**

**RMNCH DIRECTORATE, MOH**

**DECEMBER 2022**





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# **NATIONAL REPRODUCTIVE HEALTH COMMODITY SECURITY STRATEGY**

## **2022 - 2026**

**RMNCH DIRECTORATE, MOH**

**DECEMBER 2022**



## Forward

The Government of Ethiopia has made remarkable progress over the past two decades in making family planning services available and increasing contraceptive coverage in the country. From 2000 to 2019, the contraceptive prevalence increased from 8.2% in 2000 to 41% in 2019; the percentage of married women with an unmet need for FP decreased from 37% in 2000 to 22% in 2016. Despite this considerable progress, Ethiopia is still characterized by rapid population growth (2.6%), a high fertility rate (4.6 births per woman in 2016), and significant urban-to-rural fertility variations (2.3 in urban areas and 5.2 in rural areas).

The Ministry of Health (MOH) has approved the second round five-year Health Sector Transformation Plan (HSTP II) (2022-2026). Through the HSTP II, the country envisions equitable and affordable access to all types of health services for all its citizens. MOH is cognizant of the fact that Reproductive Health Commodity Security is one of the core elements of a functional health system to contribute significantly to the achievement of HSTP II and Sustainable Development (SDG) targets.

The Reproductive Health Commodity Security Strategic Plan for Ethiopia was developed through a wide stakeholder engagement and consultation process. The stakeholders conducted joint Reproductive Health Commodity Security (RHCS) Situation Assessment at the national level and in all regional states of the country. The Situation Assessment identified gaps in each component of reproductive health commodity security i.e., context (policy and regulatory environment), commitment, coordination, capital, capacity, commodity, and client utilizations. Results from the Situation Assessment informed the development of this 5-year national strategic plan for addressing the challenges that are affecting the Reproductive Health Commodity Security in Ethiopia.

This strategy serves as a valuable tool in mobilizing and enhancing our collective efforts for increased and sustainable availability of high-quality reproductive health commodities. Implementation of the strategic plan, therefore, requires a concerted and coordinated effort of government, private sectors, civil societies, and development partners in strengthening the policy, regulatory, financing environment, and supply chain system and increasing demand and utilization for reproductive health commodities. MOH is committed to providing the required leadership for the implementation of this Reproductive Health Commodity Security Strategic Plan and to ensuring that every Ethiopian can choose, obtain, and use quality contraceptives and other reproductive health products.

I, therefore, call upon all stakeholders (public sector, private sector, civil societies, development partners, and donors) for their continued support in implementing this strategy, and hence, ensuring sustainable access to reproductive health services and commodities for Ethiopians.



**H.E. Dereje Dhuguma (MD, MPH)**

State Minister -Program

Federal Ministry of Health, Ethiopia



## Acknowledgment

On behalf of the Ministry of Health (MOH) and myself, I would like to acknowledge the contributors who worked together for the development of this National Reproductive Health Commodity Security (RHCS) strategic plan for Ethiopia over many months.

MOH's special appreciation extends to the United States Agency for International Development (USAID) Global Health Supply Chain Program - Procurement and Supply Management (GHSC-PSM) Project in Ethiopia for their comprehensive technical and financial support, including availing consultant for the course of this national RHCS Strategic Plan development. Great appreciation goes to Ethiopian Pharmaceutical Supply Service (EPSS) for leading the RHCS task force, and for their invaluable technical contributions through the strategic plan development process.

MOH also extends its gratitude to members of the RHCS taskforce who devoted their time, expertise, and technical resources throughout the strategic plan development process. Gratitude also goes to USAID, UNFPA, GHSC-PSM, Engender Health, Pathfinder, Transform PHCU, THDR, and DKT- Ethiopia - for assigning dedicated resource persons, and exerting significant efforts in the development process

Finally, we would also like to recognize the contributions of the Ethiopian Food and Drug Administration (EFDA), the Ethiopian Health Insurance Agency (EHIA), and all regional state health bureaus for playing a leading role in the provision of technical expertise in the development of the RHCS strategic plan.



**Hon. Meseret Zelalem (MD, Pediatrician)**

Director, Maternal and Child Health/Nutrition Directorate  
Federal Ministry of Health, Ethiopia

## Taskforce members/contributors

Dr. Birikty Lulu	Maternal and Child Health/Nutrition Directorate, MOH
Dr. Meseret Zerihun	Maternal and Child Health/Nutrition Directorate, MOH
Rahwa Belay	Maternal and Child Health/Nutrition Directorate, MOH
Genet Deres	Maternal and Child Health/Nutrition Directorate, MOH
Dr. Tadele Kebede	Maternal and Child Health/Nutrition Directorate, MOH
Dr. Abebe Abadi	Maternal and Child Health/Nutrition Directorate, MOH
Girma Gemechu	Maternal and Child Health/Nutrition Directorate, MOH
Shentema Adugna	Ethiopia Pharmaceutical Supply Service, EPSS
Fekede Shiferaw	Ethiopia Pharmaceutical Supply Service, EPSS
Elizabeth Kassaye	MOH/GHSC-PSM
Habtamu Berhe	GHSC-PSM, RHCS Consultant
Gulilat Teshome	GHSC-PSM
Almaz Yirga	Pathfinder
Wondwossen Alemu	Engender Health
Belay Mekonnen	USAID/Ethiopia
Sufyan Abdulber	MOH/UNFPA
Abubaker Hussien	USAID/THDR
Dagnachew Alemayehu	DKT Ethiopia
Dr. Yoseph Woldegebriel	USAID/Ethiopia
Helen Tesfaye	GHSC-PSM
Tesfaye Seifu	GHSC-PSM
Edmealem Ejigu	GHSC-PSM
Habtamu Tesfaye	GHSC-PSM
Berhan Mebratu	GHSC-PSM



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## Acronyms

CS	Contraceptive Security
EFDA	Ethiopian Federal Drug Administration
NHA	National Health Accounts
EHIA	Ethiopian Health Insurance Agency
EPHI	Ethiopian Public Health Institute
EPSS	Ethiopian Pharmaceuticals Supply Service
FP	Family Planning
GDP	Gross Domestic Product
GTP	Growth Transformation Plan
GHSC-PSM	Global Health Supply Chain Program-Procurement and Supply Management
HEP	Health Extension Program
HEW	Health Extension Worker
HPMRR	Health Post Monthly Report and Resupply Form
HSTP	Health Sector Transformation Plan
IPLS	Integrated Pharmaceuticals Logistics System
MOH	Ministry of Health
PHCU	Primary Health Care Unit
PPM	Public Private Mix
PSTP	Pharmaceutical Sector Transformation Plan
RH	Reproductive Health
RHB	Regional Health Bureau
RHCS	Reproductive Health Commodity Security
RRF	Report and Requisition Form
MSI	Marie Stopes International
THE	Total Health Expenditure
TWG	Technical Working Group
UNFPA	United Nations Population Fund
USAID	United State Agency for International Development
WHE	Warehouse Equipment
WHO	World Health Organization
ZHD	Zonal Health Department



# I Executive Summary

Improving demand, access, and utilization of family planning services are among the priority strategic interventions indicated in the government's five-year Health Sector Transformation Plan (HSTP) II for the period from 2022-2026. In this plan, the government aims to increase the contraceptive prevalence rate to 50%, and reduce the maternal mortality ratio to 279 per 100,000 live births, under-five mortality to 44, and neonatal mortality to 21 per 1,000 live births by the year 2025. Reproductive Health Commodity Security (RHCS) is pivotal to achieving the targets set out in HSTP II, and Sustainable Development Goals by ensuring access to reliable family planning services and supplies. For this reason, the Ministry of Health (MOH) together with Ethiopia Pharmaceutical Supply Service (EPSS), with the involvement of all stakeholders, has developed a national RHCS strategy for five years from 2022-2026. This strategy aims to enable every person in Ethiopia can choose, obtain, and use reproductive health commodities whenever they need them.

The development of the RHCS Strategic Plan has been guided by the challenges or gaps identified through the Situation Assessment. The Situation Assessment explored issues of RHCS in the areas of context (policy and regulatory environment), commitment, coordination, capital, capacity, commodity, and client. Therefore, this 5-Year Strategic Plan on RHCS has been developed to address the critical challenges affecting reproductive health commodities in Ethiopia. This RHCS strategic plan implementation, including costs of commodity procurement, requires an average of USD 49 million per annum, and a total of USD 245 million over five years.

Below is a summary of key RHCS issues addressed in this strategic plan.

## I.1 Context

This component aims to ensure the availability and implementation of RHCS policies, strategies, guidelines, and other documents at each level of the government health structures in all regions. Ethiopia has developed adequate policies, strategies, and other documents to create a conducive environment to promote and use family planning products and services. However, these documents are not supported with adequate resources to ensure their implementation. This component focuses on updating and implementing the different RH policies, strategies, guidelines, and other documents developed. Also, it focuses on creating an enabling environment for the private and social marketing sectors to enhance their role to contribute to RHCS and support the public sector (the MOH) to reach its strategic goals. Lastly, it focuses on developing the capacity of health facilities and health care providers to create a favorable environment for service providers to satisfy the clients' needs.

## I.2 Coordination

Establishing and strengthening collaboration and coordination platforms to engage all stakeholders – the public, private, NGO, CSO, and others at all levels and across all regions - and ensuring collaborative

planning, management, and implementation of RHCS activities is among critical components in ensuring RHCS.

There is a lack of adequate coordination and collaboration amongst stakeholders of RHCS at all levels. This component focuses on creating platforms to establish, coordinate and boost coordination and collaboration efforts amongst a broad range of stakeholders. Also, it introduces and implements M&E systems and tools for joint planning (plan-alignment) and monitors the implementation of the aligned plan to ensure commitments are met. In addition, it considers building the leadership capacity of the coordination-platform leaders as a sound understanding of leadership is required to run the platform effectively.

### **1.3 Capital**

Ethiopia is transitioning to becoming a low-middle-income country. As such, Ethiopia needs to devise a mechanism for self-reliant, sustainable domestic financing as both Family Planning and other development funds have plateaued or are declining. This component focuses on resource mobilization. First, it strategizes to enhance the budget from an internally generated resource. Second, it devises a mechanism to work with local philanthropies, and large companies: Banks, Tele, and other organizations as they have corporate social responsibilities, and it also introduces innovative finance-generating systems like sin-tax. Third, it strategizes to segment the market and have the private sector serve the population who can afford to pay to get the service. Last, it ensures that the service payment for supply chain activities is reasonable.

### **1.4 Commitment**

This component tries to measure governmental and non-governmental stakeholders' engagement in leveraging resources in ensuring RHCS. It also emphasizes the need to mobilize adequate resources and allocate progressively increasing domestic resources to different RHCS-related initiatives

### **1.5 Commodity, Client Utilization, and Demand**

These two components – Commodity and Client Utilization and Demand - aim to increase the supply of commodities and demand for services, improve access to more vulnerable groups of society and provide choice-based family planning services. They also address the challenges encountered by the private sector that provides family planning services and supplies commodities.

To address the provider's bias that is affecting the utilization of FP products and services, these components also consider providing targeted training that aims to equip health care providers with a deeper understanding of the services and products. Also, to allow clients to get all services in one place, these components consider service integration.

### **1.6 Capacity**

This component, which contains seven sub-components, focuses on the capacity of the government health structure at all levels to deliver FP and other reproductive health commodities to clients. It

focuses on addressing key supply chain challenges, including promoting rational use of FP and RH commodities, strengthening the logistics management information system (LMIS), improving forecast accuracy and procurement, as well as improving the storage, distribution, and transportation systems. In this component, the strategy focuses to shorten procurement lead time, ensuring procurement of full contraceptive supplies, and build stock according to plan across the supply chain level. Also, it considers advocacy for the availability of standards for storage facilities in health facilities, including maximizing existing space utilization within EPSS warehouses. In addition, this component focuses on mechanisms to decrease the wastage of FP and reproductive health commodities and the implementation of proper waste management.

In general, this strategic plan document contains detailed activities that need to be adopted by all stakeholders of reproductive health to ensure commodity security. It includes the description of the objectives, strategies, actions, sub-actions, and expected outcomes. It also contains an estimated budget and M & E plan that comprises output indicators for each activity, with a timeframe.

This strategy is a multi-stakeholder strategy that requires the collaboration of all governmental and non-governmental actors directly or indirectly engaged in providing FP and RH products and services for its success. The MOH is positioned to take the leadership role for the coordination of the broad range of stakeholders to align them towards a common goal which is enabling every woman and man to choose, obtain and use family planning products of their choice whenever she or he needs them.

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## 2 Background

Ethiopia is a landlocked country situated in the horn of Africa. It occupies 1.104 square kilometers in area. Administratively, Ethiopia is a federal state divided into eleven regional states and two administrative cities: Tigray, Afar, Amhara, Oromia, Somali, Benishangul-Gumuz, Southern Nations, Nationalities, and Peoples Region (SNNPR), Gambela, Harari, South-Western Ethiopia, and Sidama Regional states, and Addis Ababa and Dire Dawa cities. The regions are divided into zones and woredas. The Woredas are the lowest administrative units that are responsible for key local administrative and management works. There are 956 woredas, each having 115,100 people on average.

Ethiopia is the second-most populous country in Africa. Its population has been growing steadily by 2.6% per year since the last census which was conducted in 2007. The current population is estimated to be over 110 million; the youth constitute a remarkably high percentage of the total population. The urban population is increasing from year to year, yet most of the population, around 80%, still lives in the rural parts of the country.

### 2.1. The Ethiopian Health System

Ethiopia's health system is organized into a three-tier system (Fig 1): primary, secondary, and tertiary level care. At the primary level is the primary health care unit which is comprised of a primary hospital, health center, and five satellite health posts. Health centers serve about 25,000 people in rural areas and 40,000 people in urban settings. A health post, which exists only in rural areas, is expected to serve 5,000 people. Primary hospitals are designated to serve up to 100,000 and provide inpatient, ambulatory, and emergency surgical services, including cesarean sections and provide access to blood transfusion services. A general hospital that is expected to serve 1.5 million people is categorized at the secondary level. A general hospital provides inpatient and ambulatory services to an average of one million people. At the final tier, i.e. tertiary-level care, are specialized hospitals expected to serve an average of five million people.

There are 39,878 health extension workers (HEWs) working in about 17,587 health posts (HP) in more than 97% of kebeles (the lowest administrative units of the country). The health extension program includes eighteen modular "packages" including a module on family planning.

### 2.2. Reproductive, Maternal, Neonatal, and Child Health

Over the last 20 years, Ethiopia has scored remarkable health achievements. Under 5 mortality reduced from 166 (2000) to 55 (2019) per 1,000 livebirths, maternal mortality decreased from 871 per 100,000 live births in 2000 to 401 in 2016, infant mortality from 97 in 2000 to 43 in 2019, contraceptive prevalence rate (CPR) among married women has increased from 8% in 2000 to 41% in 2019, total fertility reduced from 5.9 per woman in 2000 to 4.6 in 2016 and life expectancy has increased from 46.92 in 1990 to 67.01 in 2021. [1,3,4]

A study on "Global, regional, and national causes of child mortality published in the journal Lancet indicates that worldwide 51.1% of children who died before the age of 5 in 2013 died of infectious causes,



and of these 43% of under-five deaths in Ethiopia are occurring among neonates [5]. Under-five mortality levels are variable by geographic and socio-economic status.

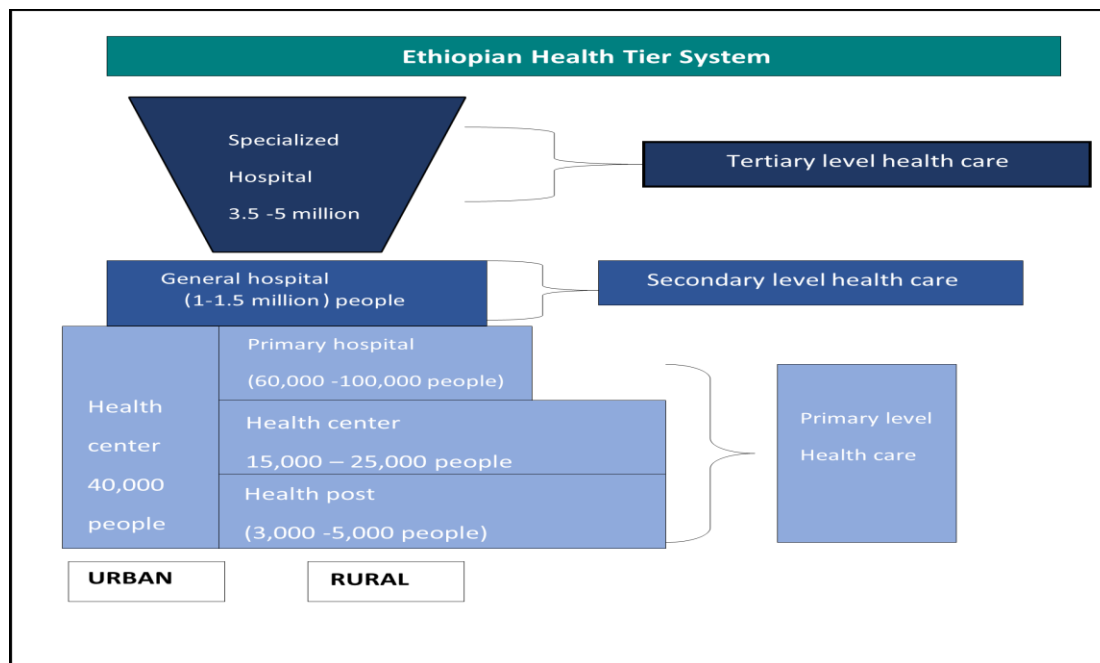


Fig 1. Ethiopia Health Tier System

The most recent Ethiopia Demographic and Health Survey (EDHS) indicates that pregnancy-related deaths are 412 per 100,000 live births [2]. Although this is off the national target of 199 and the SDG goal of seventy maternal deaths/100,000 live births by 2030, it shows a significant reduction from before. Several factors including home delivery contribute to the lack of significant reduction in maternal mortality. Data from the 2019 mini-EDHS shows that skilled delivery remains still low with only 50% of Ethiopian women delivering in a health facility.

At the care seeker level, some of the challenges include cultural norms, distance to functioning health facilities, and financial barriers to access care. According to EDHS, 70% of women reported that they experienced problems accessing health care when they are sick. The two most frequent problems were getting money for advice or treatment (55%), followed by the distance to a health facility (50%) [3].

### 2.3. Family planning

Ethiopia, as a member of the global community, has endorsed, signed, and ratified many conventions related to women’s rights and reproductive health services including family planning. Recognizing FP as a women’s right, the Ethiopian constitution article 35.1 states “To prevent harm arising from pregnancy and childbirth and to safeguard their health, women have the right of access to family planning education, information, and capacity” [7]. Ethiopia affirmed its support for increasing the utilization of voluntary family planning through the FP2030 commitments. Through the FP2030 country commitments, the Ethiopian government has pledged for increasing family planning financing, improving contraceptive

commodity security, expanding access to adolescent and youth reproductive health, and availability of quality family planning information and services [28].

Contraceptives have been available in Ethiopia since the mid-sixties and the contraceptive prevalence rate (CPR) among women in the country has shown a fast-paced growth in the past two decades – from 6% in 2000 to 41% in 2019. However, the unmet need is still high at 22% [2, 9] with the highest unmet need among adolescents of age 15-19 years. Among contraceptive users who are married women, the most popular method is injectable (27%), followed by implants (8.5%) [4].

The FP2030 commitments are designed as an integral component of the Health Sector Transformation Plan (HSTP II), which aims at decreasing the unmet need from 22 percent to 17 percent by 2030 [8] and increasing the CPR from 41% to 50% in 2024/25 [9]. The Ministry of Health has, therefore, developed this national strategy as a demonstration of the government’s strong commitment to meeting the targets set on the FP2030 agenda [28].

## **2.4. The Ethiopian Pharmaceutical Supply Chain System**

The provision of an uninterrupted supply of products is central to providing complete health care services, including family planning. To supply quality and affordable pharmaceuticals to public health facilities, the government established EPSS in 2007.

Since its establishment, EPSS has been working to set up an efficient and responsive supply chain system to ensure fair access to affordable medicines for all Ethiopians. To this end, the EPSS has made marked improvements: it has expanded the number of hubs from 11 to 19, it has built new, modern warehouses and equipped them with modern warehouse equipment (WHE) across regions, it operates with more than 200 vehicles, it has installed cold stores and increased its cold storage capacity, introduced an electronic health commodities management information system, built incinerators in some of its hubs, etc. [11, 26]

Further, it has also established a pharmaceutical supply chain system called the Integrated Pharmaceutical Logistics System – (IPLS), whereby all program commodities are procured, stored, and distributed in an integrated fashion. In the IPLS, health facilities (Hospitals and Health Centers) fill an order for all program pharmaceuticals every two months on a Report and Requisition Form (RRF) and send them to EPSS within the first 10 days of the month following the reporting period. EPSS hubs then deliver the requested products to the health facilities within 20 days of the request or until the end of the month following the reporting month [11]. Some health centers that are off the main roads are supplied indirectly through the woreda health offices. Currently, EPSS serves, directly or indirectly, all public health facilities in the country.

Health posts, found at the lowest level of the health tier system, are established to provide basic health services to the community with two health extension workers in the eighteen selected health packages including family planning.

They receive products from their supplying health centers. Health posts fill in selected data items in the Health Post Monthly Report and Resupply form (HPMRR) and send it to health centers every month.

Health centers calculate and provide health posts with the amount to last them for two months. The picture (Fig 2) shows how information and commodities flow in the IPLS.

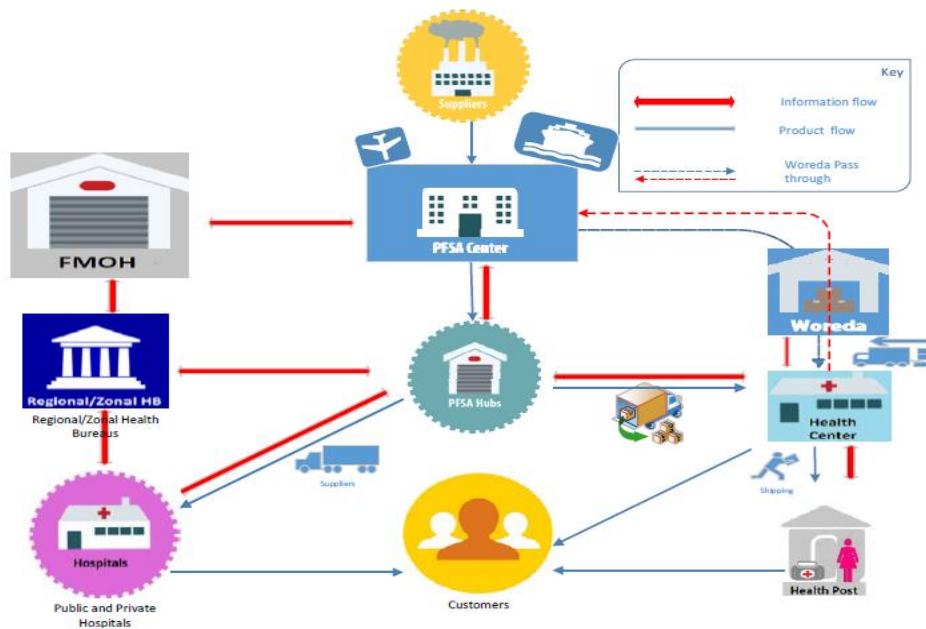


Fig 2. Information and Product flow in the IPLS (Source IPLS SOP - 2018)

### 3 Status of the Reproductive Health Commodity Security

#### 3.1 Context

The success of the RHCS strategy depends on a range of contextual factors affecting individuals' ability to choose, obtain and use RH supplies. The definition of this section considers policies, regulations, and socio-economic and religious factors that bear on the ability of public and private sector programs to secure and deliver reproductive health supplies.

Ethiopia has demonstrated its commitment to reproductive health services through the policies, plans, programs, strategies, and other documents it has issued. Article 35.1 of the constitution of the Federal Democratic Republic of Ethiopia (FDRE) states that "... women have the right of access to family planning education, information, and capacity." The constitution is reflected in the policies and other documents developed and issued regarding reproductive health. The following are some of these documents that support reproductive health:

- The National Health Policy of Ethiopia
- The Population Policy of Ethiopia (outdated)
- The National RH strategy
- The Adolescent and Youth Health Strategy
- The Health Sector Transformation Plans (HSTP), both I and II
- The Family Planning Guideline for service provision

Positive changes are observed in increasing the availability of, and access to, quality reproductive health services and the provision of quality products. Family Planning service is provided at all levels of the health system throughout the country. The government has made a concerted effort to expand the service and currently, family planning is provided in Primary Health Care Units (PHCUs) that include 17,587 health posts and 3,735 health centers in addition to the higher tier of the health system. The capacity of all health centers and some health posts (with level IV trained health extension workers (HEW)) was built to enable them to provide a range of family planning services including IUCDs.

Health posts with only level III trained health extension workers can provide all short-acting and long-acting family planning services except IUCDs. The end-use verification assessment conducted in March 2021 by GHSC-PSM in collaboration with MOH showed that there was a family planning products stock-out in the visited facilities at the time of the visit. The percentage of facilities with stock-out was 3% for Implants, 4 % for COCs, and 5 % for injectables. This is very encouraging that EPSS hubs that supply these health facilities had no or little stock out of any of these products at the time of the visit (see Fig 3).

The IPLS enables all health commodities to be integrated and supplied bimonthly to every health facility. HIV and family planning services, for example, are delivered in an integrated fashion at the health facility level. The pharmaceutical supply chain management system also allows health facilities to place emergency orders when the stock level gets at or below the set emergency order point.

Family Planning services are provided both in the public and private health sectors with no operational restrictions that limit service utilization. The private sector is playing a significant role, especially in urban areas, in providing family planning and other reproductive health services to the community.



### Stockout rates on the day of visit

Exhibit B1. Percent of facilities stocked out on day of visit - SDPs

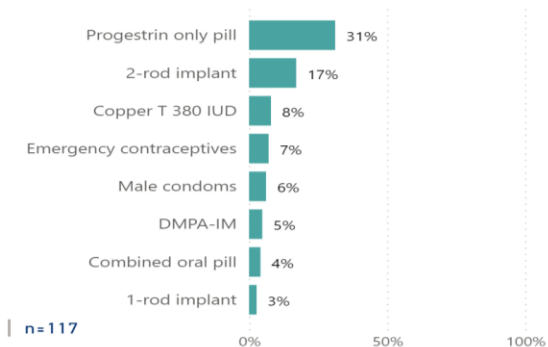


Exhibit B1. Percent of facilities stocked out on day of visit - EPSS hubs

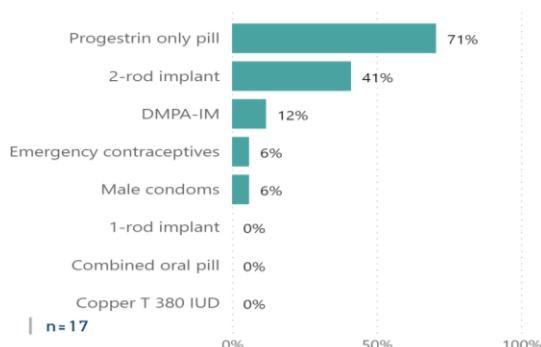


Fig 3. Stock out rate of FP at the time of visit (Source EUV assessment report)

Modern contraceptive use for married women has been increasing over the last 20 years: from 8% in 2000 to 41% in 2019; the largest increases being in the use of injectables from 3% to 27% and that of implants from less than 1% to 9% in the same period.

These data support that there are remarkable improvements in the provision and utilization of quality reproductive health services and products which may be attributed to the general enabling environment or context.

Despite these remarkable successes, Ethiopia still faces major challenges, among which insufficient funding for the health sector, in general, and for the FP program, in particular, is the major one. According to the seventh round of NHA 2016/2017, Ethiopia's annual health expenditure is estimated at USD 3.1 billion, which accounts for only 4.2% of the national GDP. This rate is lower than the 5% average for low-income countries and well below the global average of 9.2%. This budget allocation also affects the purchase of RH commodities where there is an estimated 30% budget gap for the procurement of FP products in the current budget year alone.

## **3.2 Coordination**

Coordination is an all-inclusive concept that links organizations, resources, systems, and services together to bring about efficiency by avoiding duplication of efforts, harnessing teamwork, and facilitating information sharing, thereby resulting in unity of direction. Coordination is critical to RHCS, as ensuring RHCS inherently requires the involvement of a range of organizations across many sectors: donors, government agencies, public and private health institutions, social marketing organizations, and the commercial sector. Though similar in some ways, the coordination mechanism implementation across the regions varies with strengths and weaknesses distinct to the region.

Major MOH stakeholders concerning RH in Ethiopia are government line minister sectors, agencies, and bureaus like EPSS, EFDA, EHIA, RHBs, zonal health departments, woreda health offices, SDPs; and donors like USAID, UNFPA the Buffett Foundation, and DfID, including implementing partners, like GHSC-PSM, Engender Health, FGAE, I-PAS; social marketing organizations like DKT, MSIE; and commercial endeavors like the private sector.

Nationally, there are a few technical working groups, task forces, and committees that bring reproductive health stakeholders together to discuss implementation experiences and the plan of stakeholders in reproductive health. These include Family Planning Program Technical Working Group led by MOH and Family Planning Logistics Technical Working Group led by EPSS. These coordination platforms meet regularly to address technical challenges and achieve the designed RHCS objectives. Similarly, there are also regional and zonal technical working groups that coordinate the programmatic and logistics activities related to reproductive health in regions and zones.

In all cases, it is the MOH, the RHBs, or the ZHDs that lead these coordination platforms to the corresponding levels and members of the platform assume the secretariat position interchangeably.

The TWG platform helps in harmonizing activities and resources among stakeholders to maximize efficiency and avoid duplication of efforts. It also imparts accountability by tracking the progress made by each stakeholder. Review Meetings are held at regular intervals to evaluate the work done.

One of the challenges in establishing and sustaining the momentum of TWGs is the lack of solid leadership. A TWG is as strong as the commitment of its leadership. Another major challenge is the

inability to involve all stakeholders. The regional assessment discovered that some regions had established FP/RH TWGs, but these TWGs did not involve the supply chain, logistics, or pharmacy department of their regions. Having the logistics/pharmacy department as a standing member of the TWG would facilitate discussions around commodities.

### 3.3 Commitment

Commitment is central to ensuring RHCS. It often starts at the top level of the government structure and extends to other stakeholders and opinion leaders and down to the lower levels of the government structure. For RHCS to exist, commitment and coordination should always be welded together. They are mutually reinforced in that a strong commitment facilitates effective coordination and effective coordination leads to enhanced commitment.

The constitution, policies, strategies, and other documents issued by the MOH and other sectors express Ethiopia's commitment to ensuring RHCS. In addition, Ethiopia also allocates an internally generated budget to purchase reproductive health commodities every year. This budget, though not enough, has been increasing steadily over the years. In HSTP II, the total estimated budget for the next five years is estimated at USD 21.88 billion and USD 27.54 billion using base case and high case scenarios respectively, where 50% to 45% percent these budgets are required for procurement of medicine & medical equipment [9]. This, coupled with Ethiopia's commitment to reducing maternal mortality, for which Family Planning is known to contribute significantly [15], demonstrates the commitment of Ethiopia to ensure RHCS and enhance FP services. Donors, NGOs, private sectors, social marketing agencies, and civil society organizations also work hand in hand with the government by providing funds to procure RH/FP products and implementing RH programs to increase access to and improve the quality of FP services.

The MOH, NGOs, and civil society organizations are working to raise public awareness and promote family planning service utilization through advocacy. Also, the MOH has established an advocacy group that promotes and advocates FP to policymakers, the parliament, and other stakeholders to get their buy-in and support in planning, budgeting, and executing FP programs.

The provision of quality reproductive health services, a fundamental women's right, is stated in many government documents including the constitution. It is also explicitly addressed in the Growth and Transformation Plan (GTP), the HSTP-II, and other global initiatives like the SDG to which Ethiopia is committed.

Having RH services integrated into many government documents and planning, budgeting, and rolling out their implementation down to a health facility level, with proper monitoring and evaluation, ensures increased access to and utilization of FP commodities and services. This contributes to the reduction of maternal mortality and morbidity.

Despite the commitment of the central government, commitment to RH services varies across regions. Some have adopted the commitment of the federal government and are allocating resources, while others are reluctant to do the same.

### 3.4 Capital

Based on the review of the NHA report, the real annual allocation of past year, and the current pattern of the declining trend of donor support for FP funding. Assessments of the current financing of FP services indicate that while disbursements for FP increased steadily from 2012 to 2016, became stagnant for some years, and then, it is declining since 2018. Key Findings of the fifth round (2010/11) national health account (NHA) report for Reproductive Health expenditure i.e. (maternal health, family planning & other RH conditions) has accounted for 14 percent of Total Health Expenditure (THE); while 2013/14 (NHA) report showed an expenditure of about 9% of THE. The latest NHA report of 2016/17, revealed that reproductive health services accounted for 8% of THE, which showed a declining trend. The current financing gap is estimated at 60% [17].

Ethiopia is one of the countries that have made insufficient progress over 10 years period in increasing general government health expenditure as a percent of general government expenditure to meet the 15% target set by the Abuja Declaration [17].

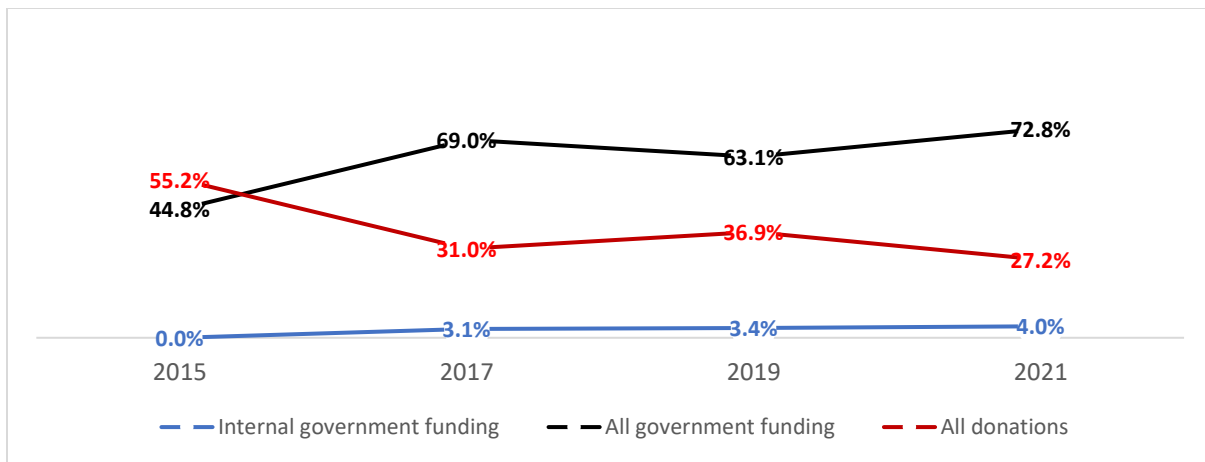
The MOH, together with EPSS and other development partners, conducts family planning commodity quantification annually for three years. The quantified data is being utilized for budget allocation, resource mobilization, and procurement of FP commodities.

The contraceptive funding sources in Ethiopia comprise internally generated funds from the treasury, SDG, UNFPA, and Buffet fund. SDG and internally generated funds are considered as government funding as the government decides how to allocate and spend these funds. In-kind donations from UNFPA and Buffet fund are considered donor sources.

In 2016, 69% of the finances for the family planning program was flowing from donor sources, however, as of 2018, USAID and other donors have stopped or reduced their funding for family planning commodities – making the country face a significant decline in external funding and budget shortages.

In 2020, Ethiopia has spent close to 25.7 million USD to procure FP products. This has covered only 83% of the forecasted needs. Of the total expenditures on FP commodities, 72.8% comes from the government funding source (i.e., internally generated and SDG funds) while the rest 27.2% comes from donor sources (UNFPA in-kind donation and Buffet). The percentage share of contraceptive expenditure from the government internally generated funds has shown steady increment from zero in 2015 to 4% in 2021 proportion of contraceptive spending (fig 4)





**Fig 4.** Funding for contraceptives by source as a percentage of all funding (2015-2021)

These issues, coupled with current changes in the US Family Planning/Reproductive health funding (the largest global funder of FP) and aid cuts from several European countries, will compel Ethiopia to prepare and plan to diversify and increase its domestic government finance. In line with this, the MOH should also look for alternative domestic financing mechanisms as stipulated in the HSTP-II.

### 3.5 Commodities

The public sector is the primary source of family planning products in Ethiopia. It covers about 85% of the total commodities distributed or sold in the country. Other sources like social marketing and the private sector contribute the rest – around 10% and 5% respectively.

A range of options for family planning are offered in Ethiopia: these include Combined Oral Contraceptives (Microgeon, Nordate, Lofeminal, Choice, Style), Progesterone Only contraceptive Pills (Exluton, Melaone, I-Plan), implants (Levoplant, trust implant, Implanon, Jadelle, Sino-plant). IUCDs (Copper T and Levonorgestrel containing IUCD), Male Condoms of various brands, and female condoms (FC2). The major suppliers of family planning products include EPSS, MSI, and DKT.

Registering and importing a new product requires one to go through several steps that the Ethiopian Food and Drug Authority (EFDA) set to assure the safety, quality, and efficacy of products imported to the country. However, this process is lengthy and is enforced in all health products. Except for health products registered through the fast-track registration mechanism, often, the registration process takes from 6 to 12 months.

Contraceptive is one of the commodities that is considered in the fast-track registration mechanism and usually follows a distinct line of registration and market authorization process when imported. But there is a limitation in the information dissemination related to the fast-track registration process as a significant number of stakeholders do not have sufficient information about it.



The procurement process is also blamed for prolonged bidding time and protracted shipping time, which results in the long lead time of family planning products. This affects the stock status of products in the country.

As Ethiopia plans to become a low-middle-income country soon, the role of the private sector and social marketing in providing family planning services and products needs strengthening and support. Social marketing and the private sector can leverage the efficiency and competitive behavior of the commercialized sector to keep the cost low and expand the service and commodities.

However, the partnership between the government and the private sector or social marketing is still at its infantile stage and needs more effort to enhance collaboration.

### **3.6 Client Utilization and Demand**

Ethiopia is committed to increasing the number of family planning users. To this end, it has developed the HSTP-II and RH strategies considering FP as one of its core targets and priority actions for implementation. In addition, there are committed partners and new initiatives to expand access, increase utilization, and enhance the quality of service.

There has been a dramatic increase in Contraceptive Prevalence Rate (CPR) over the last 20 years; this is attributed to the expansion of the Health Extension Program (HEP) [20]. The HEP is a community health program in Ethiopia that brings basic health services, including family planning, close to the community. Also, it increases access to and coverage of essential health services. Ethiopia has improved health outcomes remarkably since the introduction of the HEP in 2003 [19][20].

The contraceptive Prevalence Rate has increased from 8% in 2000 to 41% in 2019[1][4]. The most preferred contraceptive, and hence the major contributor to the national CPR, is injectable (27%) followed by implants (9%) and pill and IUCD, 2% each.

A stark disparity exists in modern contraceptive use across regions. Women in Addis Ababa and the Amhara region have the highest contraceptive prevalence (CPR - 47.7% and 49.5%, respectively). On the contrary, women in Somali and Afar regions have the lowest CPR of 3.4 and 12.7%, respectively. This stark difference is attributed to the cultural differences and the extent of religious influences among regions [4].

Level of Education, level of income, age, and place of residence (urban vs rural) are some of the factors that affect the use of contraceptives. Although the difference in contraceptive use due to these factors has diminished over the years, there still exists a significant gap. Modern contraceptive use increases with increasing level of education: high school and college graduates have the highest use rate - 55.8% and 53.8% respectively while the use among women with no education is 32%.

Similarly, an increase in contraceptive use is found to be associated with the level of income. The use of modern contraceptives among women in the highest wealth quantile is 55.1%, twice as much as women of the lowest quantile which is 27.2%.

### **3.6.1 Unmet need**

The unmet need for contraceptives has not decreased significantly over the last 10 years - it was 25% in 2011 and 22% in 2020 [2, 9] though it was planned to be 10% at the end of HSTP-I (2020). Several factors may be attributed to the unmet need for FP. In the assessment, operational (service delivery, postponing schedule, shortage of products, lack of skilled healthcare provider), cultural (cultures that do not promote use, cultures that do not empower women), and religious (beliefs that demonize use), as well as other factors like inaccessibility especially in pastoralist areas, were mentioned as reasons in different assessment areas. Many studies also support these findings. In addition, several studies indicated that early marriage, lack of formal education, and lack of discussion are a few among many reasons for unmet needs [21, 22].

### **3.6.2 Health Service**

The HEP is run with 17,000 health posts (two health extension workers per health post) allowing the MOH to provide essential health services, including family planning, close to the community. However, the utilization of health services is still low due to a lack of access to basic amenities, a shortage of skilled and committed leadership, high staff turnover, and low motivation. These reasons have a direct effect on family planning use, resulting in user dissatisfaction and method discontinuation. Other reasons for discontinuation were side effects, misconception - that it causes sterility, method-related spousal objections, shortage of products, and lack of education.

## **3.7 Capacity**

Capacity encompasses several critical functions that directly affect a client's ability to choose, obtain and use reproductive health commodities. The subcomponents under capacity are service providers, logistics management information systems (LMIS), forecasting and quantification, procurement and obtaining supplies, inventory control system, warehousing and storage, and transport and distribution. Each of these subcomponents was evaluated during the assessment and the result is discussed in each sub-section.

The EPSS has nineteen hubs throughout the country grouped into seven clusters – each comprising primary and secondary hubs. Primary hubs are well-equipped warehouses, with better infrastructure and experienced staff while secondary hubs are new with few experienced professionals. According to MOH's 2020/21 health and health-related indicators, there are hundred 367 functional hospitals, 3777 functional health centers, and 17,699 functional health posts in the country [29].

There have been significant improvements in the overall logistics system of the country. Huge investments were made to improve the infrastructure, and cold chain management system, and to develop the capacity of the staff. Consequently, marked progress was made in creating efficient warehousing and distribution systems, cutting long and non-value-adding processes short, and developing and utilization of logistics management information systems (LMIS) to facilitate informed decision-making and other functional areas.

Nonetheless, with the rapid expansion of services and enhanced service utilization, the system needs further improvement to satisfy the growing need for the health system.

### **3.7.1 Service Provider**

The health extension program with more than 17,000 health posts at its disposal is well-positioned to provide basic health services including family planning services to most of the rural areas where 80% of the total population of the country lives. The family planning service given by HEWs at a health post varies according to the level of education of the HEWs. Level-IV HEWs can provide all family planning services (except permanent FP methods) while level-III HEWs are not allowed to insert IUCDs. On the other hand, women living in urban areas can access high-standard care by going to general practitioners (GPs) and obstetric and gynecologists (Ob-Gyn) at public and private clinics, health centers, and hospitals.

There is a national family planning guideline and communications strategy that sets the standard to provide family planning services. In addition, there are also standard treatment guidelines and protocols that support the practice of family planning services.

Pre-service training on providing comprehensive family planning services, including IUCD insertion is provided to all healthcare providers, including level-IV health extension workers and above. In addition, in-service training is provided to healthcare providers engaged in the provision of family planning services. To ensure the quality of services, especially in the insertion of long-acting contraceptives, a certificate that warrants their skill is offered only after they have successfully inserted a set number of implants – under the supervision of an experienced healthcare professional.

To increase awareness, family planning day is celebrated nationally once a year. Furthermore, several partners are working with different advocacy groups and media outlets in different regions to increase family planning awareness of the public and thereby uptake of the services.

However, the progress made in expanding the family planning service is not fairly distributed across regions and it is not accompanied by high service quality. There is a stark difference in family planning service availability and utilization between urban and rural, across pastoralist and agrarian regions, and among different religions and cultural communities. Furthermore, there are differences in the quality of services given by public and private health facilities, between urban vs rural dwellers, among different wealth quantiles, and levels of education.

Although some health facilities have trained staff, they do not have the infrastructure to provide some services. In addition, though there are standards set, the practice of family planning service varies from place to place, requiring continuous monitoring and evaluation mechanisms to ensure the provision of quality service. Rural health facilities and public health facilities were found to provide better counseling services than their urban and private counterparts, indicating that private and urban health institutions need support to ensure quality family planning services [22].

It is evident that there is still a long way ahead to bridge the gap among different population groups affiliated with gender, culture, and religious practices to increase their knowledge of family planning services.

### **3.7.2 Logistics Management Information System**

A logistics management information system (LMIS) is critical for the proper functioning of a supply chain system. A properly functioning logistics system helps fulfill the six rights i.e., the right goods, in the right quantities, in the right condition, are delivered to the right place, at the right time, for the right cost. In the absence of a proper logistics system, health program cannot achieve its goal

In Ethiopia, there has been a strong LMIS, the IPLS, for the last ten years that was designed and led by EPSS. As of 2020, EPSS integrated the supply chain management systems of various vertical program commodities i.e., products for programs: TB, malaria, MCH, HIV, and vaccines, to be procured (not all the time), stored, and distributed through a single public entity – EPSS. The integration of the supply chain system of these program commodities has improved the supply chain system, ensuring an uninterrupted supply of products to many health facilities across regions of the country.

EPSS rolled out the implementation of IPLS to health facilities by setting a standard for inventory management, LMIS, and storage. IPLS improved the drug supply chain by integrating product requisition, distribution, and reporting into a single system.

In IPLS, all public health facilities are expected to have updated bin cards and/or stock cards in their stores and dispensing units. In addition, they are required to send reports and requests in a single form— Reports and Requisition Form (RRF) — with inputs on the three important logistics data items (consumption, loss/damage, and stock on hand) every two months. The supplying hubs use the data sent by the health facilities within their catchment to cross-check the requested amount with the consumption data and make resupply decisions. The same practice is repeated between the hubs and EPSS central warehouses.

The IPLS follows a pull system at all levels except for health posts where the supplying health center calculates the resupplied amount based on health posts' reports. The system delivers products in two ways: direct delivery to health facilities that have accessible roads and indirectly through woredas for off-road health facilities. Direct delivery health facilities are usually bigger, found in cities, better staffed, and usually, report and request on time. On the other hand, off-road facilities that are in rural areas are smaller, and they do not have adequate staff. The reporting and requisition are, therefore, made through woredas, consequently suffering from reporting delays. In addition, indirect delivery health facilities suffer from the frequent interruption of family planning products and supplies and other products as woredas usually fail to send reports and deliver products on time for a lack of budget, transportation, staff, etc.

IPLS is implemented in two ways: electronic and manual. However, the implementation of the IPLS, particularly the electronic IPLS system, has been significantly challenged in many health facilities because of a lack of the necessary infrastructure, lack of trained personnel, lack of commitment, lack of organizational support, staff turnover, etc.

Studies done on IPLS showed that the reporting rate of health facilities using RRF is remarkably high, but the quality measures indicate that more work is required to improve the quality of reporting [23, 24]. In addition, often there is poor data validation within the health facilities. Similarly, there is no mechanism set in the hubs to validate the RRF data sent by health facilities.

### **3.7.3 Forecasting and Quantification**

Nationally, there is an established forecasting and quantification task force that undergoes the process of predicting future family planning product needs based on previous data and future trends. This task force is led by EPSS and the MOH and it comprises stakeholders from GHSC-PSM, UNFPA, and others that support family planning services and the purchase of family planning products.

The task force meets once every month to review and discuss issues related to commodities – the procurement process of the forecasted product, stock status monitoring, supply planning, and distribution of commodities. The team also reviews the supply plan every quarter to observe what the situation is like, assess risks and explore risk mitigation strategies.

The task force establishes smaller teams that will prepare the inputs required for the forecasting and quantification workshop. Service data from the MOH reports, DHIS-2, Logistics data (issue data) from EPSS hubs, stock status, and commodities on pipeline as well as other programmatic and logistics considerations are collected before the workshop.

This undergoes a rigorous process to ensure forecast accuracy. The forecasting process uses service data, logistics data, and demographic data to triangulate the validity of data obtained from diverse sources. This is usually done every year before the beginning of the next budget year, so stakeholders have enough time to plan and allocate a budget for procurement. Quantification and supply planning tools and pipelines are employed for this exercise.

### **3.7.4 Obtaining Supplies and Procurement**

EPSS is responsible for the procurement of almost all family planning products and UNFPA also procures and provides in-kind contraceptives that are distributed to the public health sector: injectables, implants, emergency contraceptive pills (ECPs), combined oral contraceptives (COCs), progesterone-only pills (POPs), condoms, and IUCDs. It has improved its procurement process over the last two years. Recently, new procurement modalities, like framework agreement procurement, have been introduced. Family planning is currently procured by a framework agreement procurement system to avoid year-round repetitive tendering and procurement.

The procurement process follows a government proclamation - the Ethiopian Federal Government Procurement and Property Administration Proclamation No. 649/2009; relevant directive - Federal Government Public Procurement Directive; and the national procurement guidelines, which are aligned with the global procurement standards, to ensure efficiency, encourage competition and equal opportunity for all firms and persons, and create business opportunities in the country. The procurement process includes preparing a procurement plan and a bidding document, an invitation to bid/request for proposals/or request for quotation, bid evaluation, awarding bidder, contract agreement with the

supplier based on national and international trade agreements, regulatory restrictions, and finally supplier performance evaluation.

The procurement process is done by three distinct EPSS units: ordering and supply planning by the Quantification Unit of EPSS, procurement plan by the Tender Management Unit, and shipment scheduling by the Contract Management Unit. There is a strong link between these three units in information sharing to help them make informed decisions.

Procurement in EPSS, in general, is not limited to the purchase of only registered products or only from WHO pre-qualified institutions depending on the various situations. Most of the family planning products are registered and procured from known suppliers.

There is a national TWG that oversees the procurement of commodities quantified by the forecasting and quantification team. The TWG meets regularly to assess the national stock status and takes appropriate action including initiating procurement or order of shipment. Supply disruptions may occur due to several reasons: poor supplier performance, inadequate supplier capacity, extended regulatory processes, insufficient budget, or, rarely, because of pandemics like COVID-19.

The Ethiopian Food and Drug Administration (EFDA) is a government entity that ensures the quality, safety, and efficacy of products imported to the country. The family planning program relies on EFDA for ensuring the quality of the family planning products it procures. The process of quality assurance of medicines starts with the registration process which includes an application for registration, an application for a GMP visit, a dossier submission, a dossier evaluation, and approval of registration.

Suppliers are required to submit sample products before registration and shipment/consignment inspection is done at the port of entry. Further, there are procedures in place for recording and reporting product quality complaints to suppliers.

In general, there is a strong procurement team with distinct units responsible for specific functions of procurement. This promotes specialization and results in quality and efficiency of work. The procurement team has capable staff that is trained in basic and advanced procurement training. Having worked for many years in this area, the EPSS has established a partnership with suppliers, making communication and facilitation of procurement easier. All relevant units work hand and glove to ensure timely procurement and guarantee a sustainable supply of products. The procurement process also has a strong M&E system that monitors the pipeline, the supply planning, and the stock status of products to initiate the procurement process.

### **3.7.5 Inventory Control Procedures**

EPSS uses a forced ordering min-max inventory control system. Thus, health facilities place orders at the end of every review period. The review period is one month for health posts and two months for hospitals and health centers. As some hubs have become a center of excellence, they changed their review period from two months to one month to enhance efficiency. The system is a pull system except for health posts, where it is a push system. Reports and requests come through RRF (Reporting and

Requisition Form) from health facilities or woredas until the 10th day of the month following the reporting period. Then, EPSS hubs resupply the health facilities within 20 days of the RRF reporting.

The minimum and maximum stock levels are set to two and five months for EPSS central store. EPSS hubs, hospitals, and health centers, on the other hand, have a minimum stock level of two months and a maximum stock level of four months. Health posts have a minimum of one month and a maximum of two months. Monitoring of the stock status based on a given min-max inventory control system is conducted at all levels of the supply chain system. Enforcing this has been a challenge in many health facilities. Many health facilities tend to have more stock of medicines as safety stock, including family planning products lest stockouts.

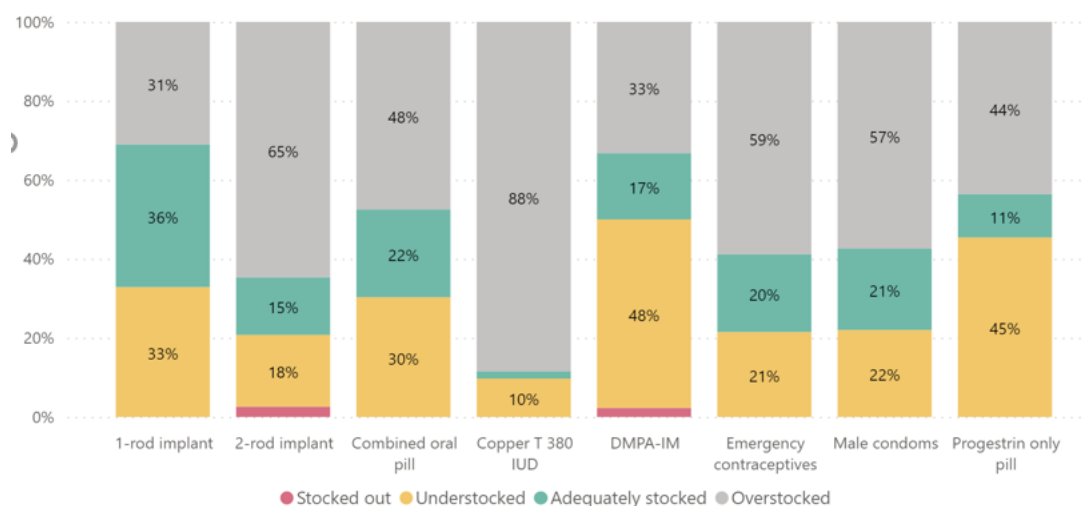


Fig 6: Percentage of facilities stocked appropriately between min-max. (Source – EUV report)

Based on the End-Use Verification (EUV) assessment conducted jointly with MOH and GHSC-PSM from December to March 2021, family planning products at the health facility level are not maintained according to the established min/max inventory level, where products stocking majorly reflected either under or overstocking is. For instance, over stocking is observed for IUD in 88% of health facilities, followed by the 2-rod implant in 65% and emergency contraceptives in 59% of health facilities. On the contrary, health facilities were stocked out of the 2-rod implant, one of the overstocked products. Similarly, health facilities were understocked with some products, the highest being DMPA at 48%, followed by POP at 45% [30].

In a different study conducted to see the min-max inventory control system at the EPSS center, significant stockouts of program commodities were observed, leading to a low level of order fill rates to hubs across the country [25]. The inventory accuracy in EPSS was 87%, which is acceptable, but it is less than the 100% target set in the Pharmaceutical Sector Transformation Plan (PSTP).

Family planning is a full-supply program but when the shortage is encountered hubs usually re-consider the stock on hand of health facilities, distance from the hub, and consumption rate to determine the quantity of contraceptives that need to be resupplied to health facilities products.



There are no nationally written provisions that guide or force the center, hubs, or health facilities to trigger them to think of redistribution of products that are overstocked. Albeit some hubs like Adama took the initiative of developing a guideline for stock redistribution.

Conversely, for some of the functions like warehouse management and operations, guidelines are developed to lead the practice, yet no mechanisms are in place to ensure compliance with the standards and guidelines set for the work. i.e., following ‘first to expire, first out’ (FEFO) is believed to be practiced by all levels of the supply chain system, but again there is no evidence that they are all implementing it.

A study conducted in 2020 found that the program commodities wastage rate at EPSS is 2.1%,[25], which is almost near to the target set in the Ethiopian health sector transformation plan II. However, some individual commodities were identified with a significantly higher wastage rate – due to the reason that not following FEFO, damage during delivery due to mishandling, and damage during the loading and unloading of products [25]. Another likely reason could be inaccurate forecasting.

Expired and damaged products are identified and placed in a separate room; this is true especially in EPSS (at the higher level of the supply chain system), but the practice varies at service delivery points. Some health facilities with enough storage space have the privilege of putting the damaged and expired products separately while others do not have that luxury and will be forced to store them together with the usable items.

The stockout rate has been significantly reduced. In the EUV assessment conducted at health facilities, only two products were stocked out, and the number of health facilities that were stocked out of these products was less than 5%. In a different study, out of 12 RMNCH products assessed, 5 (41.7%) were stocked out on average for 5.83 days. For mitigating these stockouts, EPSS placed fourteen emergency orders for products that include family program, such as Levonorgestrel - 75 mg/rod of 2rods - implant rods (Subdermal) with sterile insertion trocar, and Levonorgestrel (D-Norgestrel) - 0.75mg – Tablet [25]. Proper demand planning, forecasting, pipeline monitoring, and inventory control could prevent stockouts, thereby decreasing, or even avoiding overpriced emergency procurement.

### **3.7.6 Warehousing and Storage**

EPSS has built hubs across the country and, currently, it has nineteen hubs across the nation. Larger hubs have better storage capacity, are well equipped, and are managed with an adequate number of experienced staff, on the contrary, some relatively smaller hubs, like Semera, Jigjiga, Gambela, and Assossa have relatively inadequate storage capacity and suffered from inadequate staffing. The storage space of health facilities varies significantly. Some health facilities have spacious storage space, are well-ventilated, and are well-shelved, while others store commodities in small-sized rooms distributed over many places. The problem of not having proper storage facilities is prevalent in small-sized, rural health centers.

There are guidelines developed to direct the practice of warehousing and storage at all levels. The Pharmaceutical Warehouse Operations Management (PWOM) guideline guides the pharmaceutical warehouse operations practice at the hubs and the center. The integrated pharmaceutical logistics system – standard operating procedure (IPLS - SOP) also guides the practice of storage at health facilities



(hospitals, health centers, and health posts). To enable the staff of EPSS hubs and health facilities to follow the PWOM guideline and IPLS SOP, training was given. The warehouse and storage guidelines are very comprehensive and address the issues of storage, disposal, cold chain management, and physical inventory among many other things. Similarly, these contents are also included in the IPLS-SOP.

EPSS has installed eight environmentally friendly, modern incinerators. This increased EPSS's incinerating capacity from 500kg/hr. to 4500 kg/hr. When these plants become fully functional, all pharmaceutical waste will be collected from health facilities through a reverse logistics system and will be disposed of at these plants, ensuring the safe disposal of pharmaceutical waste. Currently, there is a disposal guideline for pharmaceuticals issued by the EFDA but poorly implemented for the lack of resources to follow the guideline. The operation of these disposal plants will be an opportunity to enforce the guidelines as well. Unfortunately, the incinerators could not be functional for a significant period for unknown reasons.

The storage capacity for both normal and cold chain products is not enough to provide the health services required to satisfy the increasing demand of the population of Ethiopia. When a need for more storage capacity arises, EPSS often rents warehouses. Similarly, the storage capacity of many health facilities is not only inadequate but also is a low standard. As such, products stored in these stores are liable to damage due to heat, moisture, fire, and pests.

### **3.7.7 Transportation and Distribution**

The transportation and distribution processes are two of the vital cost centers for any supply chain organization. EPSS center distributes products to its nineteen hubs: these hubs, in turn, transport products to all health facilities. In non-direct sites, EPSS delivers products to health facilities through woreda health offices.

The current number of hubs is enough to reach all existing health facilities. However, available vehicles across hubs seem inadequate. Although inadequate, EPSS often allocates a budget for vehicle maintenance, fuel, spare parts, salaries, and per-diem. The logistics cost is estimated at 2% of the amount of products' worth. EPSS receives this cost from the program. When this amount is not enough to cover the cost, EPSS often solicits external support.

EPSS commonly uses trucks to supply products; however, it may use other means of transportation such as boats or animals to reach some hard-to-reach areas. There are no written procedures that dictate the transportation mechanisms, but the routes outlined in each hub and the center inform product distribution. According to the system's review period, products are distributed to each EPSS hub every two months. Most of the hubs identify their facilities as even or odd. Health facilities labeled as 'even' receive products during even months of the year. In the same fashion, facilities labeled as 'odd' receive products during odd months of the year. This approach enhances efficiency in using resources used for distribution. In addition, since IPLS integrates all the supply chain functions for all program commodities, all program commodities are transported and distributed to their destination in an integrated fashion – all together, further enhancing the efficiency of the system.

Distance of health facilities from EPSS hubs, the volume and nature of commodities to be distributed, and the capacity of vehicles are some of the factors that determine route planning. But in some cases, hubs use the same route for distribution without revising the paths.

EPSS requires more vehicles to transport both dry and cold chain products. The maintenance process is usually bureaucratic and lengthy, with a less optimized process. In addition, a shortage of budget and spare parts also plays a role. Having inadequate transporting vehicles makes planning for distribution difficult. On the other hand, EPSS has installed a global positioning system (GPS) in 186 trucks, allowing monitoring and promoting efficient utilization of vehicles.

Emergency orders that are occurring due to a shortage of national supply should be addressed with priority should be given for addressing RH commodities. Designating dedicated vehicles for emergency cases could solve this issue. To enhance efficiency, outsourcing should be an alternative strategy. Currently, EPSS delivers products to non-direct sites through woreda health offices. Woreda health offices perform this task haphazardly across the hubs. Consequently, indirect-delivery health facilities usually suffer from an interrupted supply of products. However, outsourcing the transport of products to indirect-delivery sites can bring about a reliable and efficient product delivery system.

## 4 Reproductive Health Commodity Security National Strategic Plan

### 4.1 Vision, Mission, and Goal

The RHCS strategy aims to improve the lives of women who seek family planning and reproductive health products and services and yet who could not get the products and services of their choice due to many reasons. It seeks to make FP and RH commodities and services available at each health facility and ensure access to all who need it, at the time they need it. The goal is inexorably linked to broader maternal and perinatal health missions.

**Vision:** To ensure reproductive health commodity security in all public and private health facilities.

**Mission:** To reduce fertility and maternal and child mortality and contribute to achieving the set of national and global targets (HSTP II, FP2030 commitments, and SDGs).

**Goal:** To outline strategies to meet the increasing demand for family planning and reproductive health commodities through increasing financing and coordination for commodity security.

### 4.2 Objectives

All the RHCS components have specific objectives explained under each component below. These objectives are linked with a broad range of work that includes resource mobilization, coordination, advocacy, capacity development, and others. Each stakeholder, be it at the national or regional level, should find ways to regularly update each other on the development of their respective activities to ensure efficient utilization of resources.

### 4.3 Assumptions

This strategic plan has considered the following assumptions during its development:

- Decision-makers will support this initiative and will be committed to its implementation.
- Political stability will be returned throughout the country.
- There will be enough resources to run the initiative at full scale
- There is/will be adequate expertise and motivation amongst staff in each area of the RHCS components.
- MOH will take the leadership role in coordinating stakeholders and implementing the initiative.
- There is a willingness amongst the different RH stakeholders to work together towards a common goal.
- There will be national, regional, zonal, woreda, and hub-level committees that work to ensure FP and other RH commodity security.
- There will be leaders that are committed enough to establish and lead TWGs at each level.
- TWG will be inclusive to represent institutions, experts, and society.
- There will be a high-level political commitment to achieve this strategic plan.

## 4.4 Risks

This strategic plan has also considered the following risks/ challenges that may encounter during the implementation period:

- Instabilities in some parts of the country impede the implementation of the strategic plan.
- RHCS may not be recognized as a priority among political leaders of some regions.
- Insufficient allocation of budget and other resources to conduct activities.
- Some stakeholders may not be comfortable working under the umbrella of this coordination platform to address the issues of RHCS.
- Poor documentation of RHCS activities implementation at both the national and regional levels. Requiring further data collection for regular monitoring and evaluation.

## 4.5 Strategies and priority interventions

### Component I: Context

**Objective** Ensure enabling policy environment for implementation of RHCS at each level of the government health structure in all regions

#### Challenges:

- RH policies and strategies are not supported with adequate funding and budget,
- RH policy and strategic documents are not distributed down to the lower levels: zone, woreda, and health facilities.
- Traditional beliefs do not promote contraceptive use.
- Although the MOH has issued a Public-Private Mix Guidelines for RMNCH, it is not yet well implemented,
- Frequent product stockouts in rural health facilities, where EPSS delivers products indirectly through Woredas,
- Certification (authorization) of health care providers to provide family planning service is required but not being enforced, affecting the quality of service provided,

#### Strategic priorities

**Strategy 1.1: Improve policy and regulatory environment that contribute to the enhancement of Reproductive Health Commodity Security**

- Review, update and implement relevant national policies, regulations, and guidelines to ensure prioritization and availability of reproductive health commodities
- Identify mechanisms to address the implementation challenges of RH policies, strategies, guidelines, and other RH-related documents.
- Advocate for a relevant policy that enhances domestic financing for FP commodities and services

- Establish an advocacy group to allow for planned advocacy to ensure sustainable financing for RHCS.
- Advocate for strengthened and harmonized implementation of policies, strategies, guidelines, and other documents across regions as well as governmental health hierarchies.

**Strategy 1.2: Strengthening Public-Private Mix (PPM) for creating a conducive environment for private sectors engagement on RHCS issues.**

- Implement the endorsed public-private mix model relevant to the FP program
- Increase the capacity of PPP stakeholders such as banks, CSOs, Investment Commission, and other line sectors for stewardship and leadership in PPP to RH services and commodities
  - Create an enabling environment for and support the private sector so that the sector thrives and becomes stronger to contribute to addressing RHCS issues in a more meaningful way.
- Motivation packages were created for civil society organizations and the private sector to participate and contribute to ensuring the RHCS.

**Key Outputs/Outcomes:**

- Incorporated RHCS issues on the national RH-related policies, strategies, guidelines, and other documents
- Secured resources to implement policies, strategies, and guidelines in all regions.
- Increased awareness of RH services among the population across all regions.
- A policy is in place that ensures budget lines for FP commodities procurement and that facilitates the allocation of meaningful budgets for FP commodities at national and subnational levels.
- The reduced disparity in utilization of family planning services and products across regions.
- Enhanced public-private partnership to improve access to quality reproductive health services and products.
- Capacitated healthcare facilities and healthcare workers in providing a range of family planning services and products.
- The existence of an enabling environment for the private sector will be defined by the PPP task force.

**Indicators:**

Progress is measured by:

- Number of national policies (strategy guidelines, regulations) enacted/revised to address RHCS investment issues
- Percent share of stakeholders involved in RHCS activities such as finance and service provision
- Percentage share of FP commodities mix provided by the private sector

## Component 2: Coordination

**Objective 1.** To strengthen inclusive collaboration and coordination for RHCS joint response among all the stakeholders at national and sub-national levels (government sectors, public, private, donors, NGOs, Civic Society Organizations/Associations (CSO/A), and others)

### Challenges:

- The RHB TWGs are not strong: they do not meet regularly, they lack the technical and financial commitment to implement their own decisions,
- Inadequate coordination mechanisms and poor program coordination platforms at all levels.
- The working relationship among MOH, EPSS, EFDA, etc. with respect to RHCS is not sufficiently strong.
- Inadequate involvement of all partners including CSOs and disfranchised groups in RH coordination platforms and RH-related decision-making sessions.
- Lack of adequate coordination between the MOH (including at RHBs, ZHDs, Woreda, and facility-level) and EPSS (at central and hub) level.

### Strategies:

**Strategy 2.1: Strengthen the coordination platform to enhance collaboration, and information sharing among all the stakeholders of RH services and commodities at national, regional, and zonal levels**

- Ensure RHCS coordination/technical working group scope and function are clearly defined and all stakeholders are included for harmonizing the implementation of the National RHCS strategy
- Improve leadership, stakeholder engagement, and communication for RHCS.
- Create mechanisms to strengthen communication, cooperation, and collaboration among the government stakeholders

### Key Outputs/Outcomes:

- Strong and effective national, regional, zonal, and woreda RHCS coordination mechanisms led by proficient leaders were established.
- An accountability matrix was created for each established coordination platform.
- Communication and collaboration among MOH, EPSS, EFDA, etc. strengthened

### Indicators: Progress is measured by:

- Well-Functioning coordination platform nationally and regionally for RHCS issues
- Presence of a TWG with non-health ministries at FMOH
- Number of TWG leaders trained on effective TWG leadership per year
- Percentage of committed/ engaged TWG members regularly

## Component 3: Capital

**Objective:** Ensure adequate and sustainable funds for reproductive health commodity security at all levels of the healthcare system.

### Challenges:

- Inadequate government contribution for the purchase of family planning products; The current share from the internally generated budget is around 8%, which is inadequate to cover the bare minimum.
- Varying level of commitment among the different government bodies – the MOH has a budget line for procuring family planning products whereas the commitment varies among regions. Some contribute to the purchase of products and others depend on centrally procured products.
- Lack of diversification in domestic financing – there is no set mechanism in place to explore new financing alternatives, mobilize resources from diversified sources, and increase domestic financing.
- Lack of a strong financial system to enable tracking and visibility of budget spent on contraceptive procurement.
- The donors' support for FP commodities and services is dwindling from time to time.

### Strategies:

#### **Strategy 3.1: Secure long-term finances from diversified funding sources for RH commodities and supplies with a focus on FP**

Ethiopia must devise a mechanism for self-reliant, sustainable domestic financing at this transition time to becoming a low-middle-income country, as both family-planning specific and development funds are declining. The government's financial commitment needs to keep pace with increasing demand as well as compensate for declining external financing by implementing below-priority interventions. Efforts should also be in place to ensure sufficient donor support will be there until the transition takes place to full government financing.

- Develop and implement an advocacy strategy to diversify and sustain the flow of adequate funds into the budget line for contraceptives
- Improve resource mobilization efforts at all levels
- Enhance domestic financing for FP commodities
- Enhance financial management system: Introducing a financial system that enhances the visibility of the budget spent by all major stakeholders.
- Conduct market segmentation and introduce innovative financing mechanisms to address the FP commodities budget gaps

#### **Strategy 3.2: Strengthen local production capacity for RH/FP commodities**

- Encourage local manufacturing of RH/FP commodities
- Allocate an adequate budget for the logistics of RH commodities.

### **Key Outputs/ Outcomes:**

- Secured funds for the purchase of family-planning products
- Enhanced government budget commitment from the internally generated funds
- Improved financial management system.
- Allocated the proper budget for logistics of RH commodities.

**Indicators:** Progress is measured by:

- Proportion of budget allocated and spent by source for RHCS

### **Component 4: Commitment**

**Objective:** To foster government commitments and ensure accountability towards RHCS at each level of the health system.

### **Challenges:**

- The implementation of available documents is not adequate for a lack of proper planning, funding, and monitoring & evaluation.
- The HSTP-II plan on reproductive health seems ambitious but may not fully consider the historical government budget commitment. The national budget allocated for RH has increased from year to year. However, the monetary value is often outpaced by inflation thereby significantly diminishing the percentage increase of its value and rendering the budget insufficient to cover the minimum required.
- The government's economic development policy lacks full consideration for financing the supply chain system and does not fully address the need for reproductive health commodity security.

### **Strategies:**

**Strategy 4.1: Foster stakeholders' commitment to advocating RH/FP commodities and services (among political and religious leaders, donors/NGOs, private sectors, Civil Society Organizations (CSOs), media, and social marketing)**

- Mobilize and sensitize stakeholders at all levels to support reproductive health commodity security.
- Demonstrate government commitment and leadership to ensure CSOs, private sector, and social market engagement Enhance the capacity of and engage stakeholders, civil society organizations (CSOs), NGOs, and the private sector as well as political, religious, and opinion leaders to enable them to be committed to RHCS and become champions and advocates for RHCS.

### **Key Outputs/ Outcomes:**

- Enhanced commitment of all RHCS stakeholders
- Accountability Matrix Introduced at each level of the commitment platform.



**Indicators:** Progress is measured by:

- Number of advocacy workshops conducted for parliamentarians
- Percentage of gov't budget spend for procurement of FP commodity

## **Component 5-6: Commodity, Client demand, and Utilization**

**Objective:** To increase demand, access, and utilization of a range of contraceptives choice and services.

**Challenges:**

- Shortage of hard currency
- Poor access to finance by the private sector to invest in FP/RH commodities/services
- Long lead time for procurement of family planning products
- Limited number of non-governmental pharmaceutical and clinical outlets in rural areas
- Donor-dependent products and commodities.
- Regional disparities are there for demand for FP commodities and services.

**Product:**

- Interruption of supply,
- Misappropriation of products,
- Frequent shortage of injectables and COC and
- Wastage of slow-moving products (IUCD, and Jadella)

**Service:**

- Non-functionality of some health posts
- Shortage of motivated and skilled service providers
- Lack of proper counseling on a range of family planning products and services
- Poor service quality
- Inadequate method mix/ products.
- Insufficient attention to family planning services in some regions,
- Insufficient attention to hard-to-reach areas.
- Insufficient pre-service training to equip health cadres with adequate knowledge and skills to provide RH and FP services,

**Client:**

- Lack of comprehensive contraceptive knowledge
- Misconception of family planning services
- Traditional beliefs discourage family planning use.
- High tendency for short-term contraceptive use by most clients

## **Strategies:**

### **Strategy 5.1: Improve RH/FP commodity regulatory quality assurance, licensing, and registration**

- Regularly update the national essential drug list with new RH commodities and contraceptives

### **Strategy 5.2: Improve demand, accessibility, and utilization of quality RH services and commodities by addressing the unmet needs**

- Conducting well-organized, evidence-based research/assessment aiming to alleviate the bottleneck for client satisfaction.
- Mobilize and empower clients to demand and utilize quality RH commodities and related services.
- Maximize demand generation activities to reach the most vulnerable clients (the less privileged, house servant, street children & women, hard-to-reach areas, adolescents, people with disabilities, IDPs)
- Ensuring the provision of FP service in places with special consideration (industry site and workplace, universities, outreach.)
- strengthen the private sector to participate more in the provision of RH/FP commodities and services
- address the unmet need for RH commodities in all regions in general & in the emerging region in particular
- Enhancing quality and proper use of RH/FP commodities and services provided
- Strengthened quality of pre-service education curriculum to improve the capacity of health providers

## **Key output/Outcomes:**

- Increased utilization of RHCS services and products.
- An enabling environment created for the private sector
- Increased availability of products and quality of service, awareness of family planning services and products.
- Reduced unmet needs.

## **Indicators:** Progress is measured by:

- Percentage of facilities providing at least five FP methods
- Contraceptive acceptance rate
- Proportion of facilities providing one-stop RH service
- Proportion of teaching institutions that integrated the RH strategy into their curriculum.
- Proportion of health facilities that met the quality of RH service standard
- No. of advocacy forums conducted
- Number of local manufacturers started manufacturing FP commodities.

## Component 7: Capacity

**Objective:** Improve supply chain and service provision capacities (human, technical, and institutional capacity) to achieve national RHCS

### Challenges:

#### a. Product use

- Inadequate number of skilled professionals at service delivery points (inadequate training, high turn-over rate)
- Unavailability of essential documents: standard treatment guidelines, family planning guidelines, and protocol and communications strategies at health facilities.
- Disparity in the knowledge of family planning services across different regions, wealth quantiles, institution types, cultures...
- Lack of M&E to ensure safety and quality of services.

#### b. LMIS

- Lack of reliable web-based electronic systems – that connect the center with the hubs and hubs with facilities, enhance data visibility to allow to always see real-time data at all levels to make an informed decision – avoiding the need for reporting and requesting.
- Inconsistent implementation of IPLS at different sites – some having a robust system and others having a very weak system. Places with poor IPLS system implementation i.e., poor recording of data, often have a poor inventory control system, poor data quality in RRF, and poor storage, and as a result, suffer from the frequent interruption of supplies.
- Frequent failure or unavailability of the existing electronic LMIS at health facilities.
- Poor report quality due to low staff commitment, high attrition rate, and low organizational ownership.
- Poor data validation mechanism at supplying hubs, hospitals, health centers, and health posts.

#### c. Forecasting

- No participation of regions in the forecasting process.
- Forecasting is not based on actual consumption data. It uses issue data from the hubs, assuming all the products issued from the hubs are consumed.
- Forecasting is currently exercised only at the national level
- Failure to include/ consider other sectors: the private and social marketing sectors.

#### d. Obtaining Supplies and Procurement

- Poor coordination among government entities (this is a solution)
- Shortage of budget for procuring family planning products.
- Long procurement lead time (an average of 296 days) as well as long port clearance time, an average of 27.6 days.
- Weak implementation of the supplier performance evaluation
- Insufficient number of suppliers for some products like Implanon

- Inadequate number of WHO-prequalified suppliers for registered family planning products and limited data sources on suppliers.
- Lack of data visibility across the procurement pipeline and poor procurement data quality
- Communication gap between EPSS and the supplier and donors about the procurement plan

#### e. Inventory Control System

- Poorly implemented min-max inventory control system set in the IPLS leading to interruption of supplies, expensive emergency orders, and wastage at all levels.
- The min-max inventory control system has not been reviewed for 10 years.
- Lack of standard procedures that guide how to decide the distribution of products when there is inadequate stock for all requests and when redistribution should be triggered and how it should be implemented.
- The M&E system to regularly check the compliance of staff with the guidelines set for the practice of inventory control is not in place.
- Lack of sufficient storage space in health facilities to store unusable products separately from usable products.
- Weak tracking system of products that are lost/damaged (loss/adjustment) even if it is reported from health facilities bimonthly.

#### f. Warehousing and Storage

- Poor implementation of the warehousing and storage guidelines set by PWOM and IPLS-SOP
- Poor follow-up of the implementation of guidelines of the PWOM by EPSS and IPLS SOP by health facilities.
- Inadequate and substandard storage facilities, particularly in health facilities
- Inadequate cold chain storage capacity at all levels
- Lack of introducing and enforcement of M&E tools to the implementation of guidelines set for the practice.
- Improper disposal of pharmaceutical waste and poor implementation of the pharmaceutical waste disposal guideline.

#### g. Transportation and Distribution

- Insufficient budget for logistics.
- In-efficient, unreliable, and less accountable distribution system to indirect delivery sites to ensure products reach health facilities on time.
- Lack of resources in woredas to deliver products to indirect-delivery health facilities.
- Low vehicle capacity
- Fleet management and route planning are not supported by technology.

### Strategies:

#### **Strategy 6.1: Build capacity of stakeholders at all levels for RHCS management towards achieving the 6 “Rights” of logistics management**

- Strengthen existing LMIS for enhancing data visibility and use at all levels.
- Institute logistic data analysis, validation, and monitoring for data quality assurance

### **Strategy 6.2: Improve forecast accuracy for RH/FP commodities**

- Strengthen Central level quantification exercise for RH/FP commodities based on the accurate LMIS, DHIS, and demographic survey data
- Ensure Involvement of regional health Bureaus in quantification exercises to ensure regional-level budget allocation
- Mobilizing resources, and enhancing coordination of stakeholders to ensure the allocation of enough budget in line with the forecast result
- Strengthen procurement capacity for RH/FP commodity to ensure efficient, transparent, and timely procurement orders
- Establish strategic supplier relationships for an increasing number of competitive prequalified suppliers for RH/FP commodities

### **Strategy 6.3: Procurement of adequate contraceptive commodities**

- Develop procurement/supply plan, place timely procurement orders

### **Strategy 6.4: Strengthen Inventory Control System at all levels of the supply chain system**

- Strengthen implementation of Pharmaceutical Warehouse Operations Management guidelines and IPLS SOP

### **Strategy 6.5: Strengthen Warehousing/Storage management for RH/FP commodities**

- Ensure proper warehouse/storage management system for RH/FP commodities

### **Strategy 6.6: Improve management of RH pharmaceutical waste disposal system**

- Ensure functionality of incinerators and proper disposal of non-usable RH/FP commodities
- Strengthen the reverse logistics system for RH/FP commodities

### **Strategy 6.7: Enhance integrated transportation and distribution systems**

- Strengthen integrated delivery of RH/FP commodities with other products.

### **Key Outcomes:**

**Indicators:** Progress is measured by:

- Number of expertise trained on rational use of RH commodities
- Stock out rate at health facilities
- Wastage rate
- Forecast error
- On Time Delivery (OTD)
- Procurement lead time
- Proportion of deliveries as per schedule

- Percentage of HFs submitted RRF with acceptable data quality standard
- Proportion of HFs with updated stock-keeping records
- Proportion of HFs met good storage practice
- Percentage of HFs maintaining Max-Min stock level

## 5 RHCS strategy implementation plan

#	RHCS Component/Strategy/Intervention/Activity/Sub-Activity	Implementing Agencies	Coordinating Agencies	Implementation years					
				2022	2023	2024	2025	2026	
<b>I</b>	<b>RHCS Component: CONTEXT (POLICY AND REGULATORY ENVIRONMENT)</b>								
<b>1.1</b>	<b>Strategy 1.1: Improve policy and regulatory environment that contribute to enhancement of Reproductive Health Commodity Security</b>								
<b>1.1.1</b>	<b>Intervention: Review, update and implement relevant national policies, regulations, and guidelines to ensure prioritization and availability of reproductive health commodities</b>								
	<b>Activities/Sub-activities:</b>								
	a	Conduct desk review of the health-related policy, strategy, and regulatory documents for ensuring a reliable supply of quality Reproductive Health (RH) commodities (contraceptives and condoms)	MOHs USAID Projects UNFPA	MOH EPSS	x	x	x	x	x
	b	Update/Integrate RHCS explicitly in health-related policies and regulations for prioritization, and revitalizing of family planning and RH commodity in line with global commitment for family planning			x	x			
	c	Prepare and disseminate advocacy campaign to harmonize and decentralize implementation of RHCS operational plans			x	x	x	x	x
	d	Solicit funds and secure enough budget for RHCS implementation.			x	x	x	x	x
	e	Monitor progress on addressing barriers and policy practices			x	x	x	x	x
<b>1.2</b>	<b>Strategy 1.2: Strengthening Public-Private Mix (PPM) for creating a conducive environment to private sectors' engagement on RHCS issues in a meaningful way.</b>								
<b>1.2.1</b>	<b>Intervention: Design and implement a public-private partnership model</b>								
	<b>Activities/Sub-activities:</b>								
	a	Establish /Strengthen PPM TWG.	MOH RHB ZHD Wo HO Private sector Civil Society Organizations Social Marketing Institutions/ Organizations	MOH EPSS RHB		x			
	b	Design and develop the PPP model.				x	x	x	x
	c	Develop SOP to implement the PPP model.				x	x	x	x
	d	Build the capacity of the private sector.				x	x	x	x
	e	Monitor the implementation of the SOP				x	x	x	x

#	RHCS Component/Strategy/Intervention/ Activity/Sub-Activity	Implementing Agencies	Coordinating Agencies	Implementation years					
				2022	2023	2024	2025	2026	
1.2.2	<b>Intervention: Increase the capacity of PPM stakeholders such as banks, CSOs, Investment commission office, and other line sectors for stewardship and leadership in PPP to RH services and commodities</b>								
	<b>Activities/Sub-activities:</b>								
	a	Create awareness of PPM stakeholders.	MOH RHB ZHD Wo HO Private sector Civil Society Organizations Social Marketing Institutions/ Organizations	MOH		x	x	x	x
	b	Hold policy dialog for creating enabling environment for the private sector and CSOs to enhance their contribution to secured RH services and commodities.				x	x	x	x
	c	Design and implement motivation package for the private sector and CSO – e.g., seed money.				x	x	x	x
<b>2</b>	<b>RHCS component: COORDINATION</b>								
<b>2.1</b>	<b>Strategy 2.1: Strengthen the coordination platform to enhance collaboration, and information sharing among all the stakeholders of RH services and commodities at national, regional, and zonal levels</b>								
<b>2.1.1</b>	<b>Intervention: Ensure RHCS coordination/technical working group scope and function for overseeing/harmonizing implementation of the National RHCS strategy</b>								
	<b>Activities/Sub-activities:</b>								
	a	Update RHCS/ Family planning Technical Working Groups' (TWGs) scope, role, and function to ensure mandate for implementing RHCS strategy	MOH EPSS RHB EPSS hubs ZHD USAID projects UNFPA & other Stakeholders Private organizations, civil society associations	MOH EPSS RHB		x			
	b	Conduct stakeholder mapping and ensure regular inclusion of key stakeholders, including private sector and civil societies in the RH/FP TWG				x	x	x	x
	c	Hold stakeholder meetings to review and endorse updated TOR with MOU				x	x	x	x
	d	Advocate for increased participation of stakeholders in RHCS strategy implementation				x	x	x	x
<b>2.2</b>	<b>Intervention: Improve leadership, stakeholder engagement, and communication for RHCS</b>								
	<b>Activities/Sub-activities:</b>								
	a	Develop an annual plan and design accountability matrix to ensure implementation of RHCS strategic plan	MOH EPSS RHB	MOH EPSS RHB	x	x	x	x	x



#	RHCS Component/Strategy/Intervention/ Activity/Sub-Activity	Implementing Agencies	Coordinating Agencies	Implementation years				
				2022	2023	2024	2025	2026
	Conduct periodic reviews of RHCS implementation progress	EPSS hubs ZHD USAID projects UNFPA & other Stakeholders Private organizations, civil society associations		x	x	x	x	x
b	Conduct scheduled meetings regularly to review RH commodity supply status, identify challenges and address them			x	x	x	x	x
c	Establish a mechanism to exchange information and/or progress report exchange among collaborating stakeholders			x	x	x	x	x
d	Conduct RHCS training for a member of TWGs					x	x	x
e	Identify and recognize Champions of RHCS					x	x	x
<b>3</b>	<b>RHCS component: CAPITAL</b>							
<b>3.1</b>	<b>Strategy 3.1: Secure long-term finances from diversified funding sources for RH commodities and supplies with focus on FP</b>							
<b>3.1.1</b>	<b>Intervention: Develop and implement an advocacy strategy to diversify and sustain flow of adequate funds into budget line for contraceptives</b>							
	<b>Activities/Sub-activities:</b>							
a	Develop financial requirements for RH commodities focusing on contraceptives based on sound forecasting	MOH EPSS RHB USAID projects UNFPA and other Stakeholders Private organizations, civil society associations	MOH RHB		x	x	x	x
b	Explore to identify and adopt diversified funding and coordination mechanisms among the public, donor, NGO, and private sectors				x	x	x	x
c	Advocacy for widespread financial support across sectors (within the different Ministries and Departments, regional state, private sectors, and other potential sources)				x	x	x	x
d	Advocate with the appropriate parliamentary standing committee to increase budget allocation for RH commodities from the government treasury (domestic financing)				x	x	x	x
e	Conduct ongoing dialog with Ethiopia Health Insurance Agency (EHIA) to ensure readiness for including FP commodities and services in health insurance systems						x	x
<b>3.1.2</b>	<b>Intervention: Ensure adequate fund mobilization for procurement of reproductive health commodities, including contraceptives</b>							
	<b>Activities/Sub-activities:</b>							
a	Annually monitor/track funding for RH/FP commodities and services in the national budget and expenditure through reproductive health subaccounts.	MOH EPSS RHB	MOH		x	x	x	x

#	RHCS Component/Strategy/Intervention/ Activity/Sub-Activity		Implementing Agencies	Coordinating Agencies	Implementation years					
					2022	2023	2024	2025	2026	
	b	Ensure budget allocation from sectoral, regional governments, private sector, and other potential sources for RH commodity procurement	USAID projects UNFPA and other Stakeholders Private organizations, civil society associations			x	x	x	x	
	c	Hold advocacy workshops with political leadership for sustaining earmarked and protected budget line items for RH/FP commodity procurement				x	x	x	x	
	d	Conduct policy dialogue with donors for obtaining additional donor funding (cash/in-kind)				x	x	x	x	
	e	Convene workshop for donor harmonization and financing for RH/FP commodities, and alignment of such support with government budget frameworks.				x	x	x		
<b>3.2</b>	<b>Strategy 3.2: Strengthen local production capacity for RH/FP commodities</b>									
	<b>Intervention: Encourage local manufacturing of RH/FP commodities</b>									
	<b>Activities/Sub-activities:</b>									
	a	Explore and feasibility of local production for contraceptive	MOH EPSS EFDA Trade and industry ministrel USAID projects UNFPA and other Stakeholders Private organizations, civil society associations	MOH		x	x			
	b	Ensure enabling environment for encouraging local manufacturing of contraceptives						x	x	x
	c	Facilitate arrangement of startup loans for potential local manufacturers to initiate local production of RH/ FP commodities							x	x
	d	Facilitate institutional arrangement and policy dialog for addressing local production challenges and constraints						x	x	x
<b>4</b>	<b>RHCS component: COMMITMENT</b>									
<b>4.1</b>	<b>Strategy 4.1: Foster stakeholders' commitment to advocating RH/ FP commodities and services among (Political and religious leaders, donors/NGOs, private sectors, Civil Society Organizations (CSOs), media, and social marketing)</b>									
<b>4.1.1</b>	<b>Intervention: Mobilize and sensitize stakeholders at all levels to support reproductive health commodity security.</b>									
	<b>Activities/Sub-activities:</b>									
	a	Establish an advocacy group to advocate for and engage different stakeholders of RHCS and increase their level of commitment.	MOH EPSS RHB USAID projects UNFPA and other Stakeholders	MOH RHB		x				
	b	Establish an institutional framework to enhance stakeholder commitment in budgeting, planning, and coordination for RHCS					x	x	x	x
	c	Support integration of reproductive health commodities security issues in the agenda of media and CSO networks					x	x	x	x

#	RHCS Component/Strategy/Intervention/ Activity/Sub-Activity	Implementing Agencies	Coordinating Agencies	Implementation years					
				2022	2023	2024	2025	2026	
	d	Develop advocacy campaign to encourage stakeholders in ensuring availability of RH/FP commodities at private and social marketing outlets	Private organizations, civil society associations		x	x	x	x	
<b>4.1.2</b>	<b>Intervention: Demonstrate government commitment and leadership for ensuring CSOs, private sector, and social market engagement</b>								
	<b>Activities/Sub-activities:</b>								
	a	Conduct consultative meetings to discuss bottlenecks for engagement and implement recommendations	MOH EPSS RHB USAID projects UNFPA and other Stakeholders Private organizations, civil society associations	MOH RHB		x	x	x	x
	b	Create favorable environment for NGOs, social marketing, and private sectors to expand coverage beyond urban areas				x	x	x	x
	c	Review of health sector reforms and reproductive health policies to encourage public and private provision of contraceptives				x	x	x	x
	d	Support conduct and participation of key stakeholders in international and/or country-level advocacy and/or technical meetings on reproductive health commodities security.				x	x	x	x
	e	Annually celebrate World Contraception Day by ensuring stakeholder engagement				x	x	x	x
<b>5</b>	<b>RHCS component: COMMODITY, CLIENT DEMAND, AND UTILIZATION</b>								
<b>5.1.</b>	<b>Strategy 5.1: Improve RH/FP commodity regulatory quality assurance, licensing, and registration</b>								
<b>5.1.1</b>	<b>Intervention: Regularly update the national essential drug list with new RH commodities and contraceptives</b>								
	<b>Activities/Sub-activities:</b>								
	a	Identify new products that are in the global market for the country introduction	MOH EFDA EPS USAID projects UNFPA and other Stakeholders Private organizations, civil society associations	MOH EFDA		x	x	x	x
	b	Establish mechanisms for ensuring timely registration, licensing, and clearance.				x	x	x	x
	c	Update the national medicine list to include the new products.				x	x	x	x
	d	Facilitate institutional arrangements for importing the new RH/FP commodities				x	x	x	x
	e	Advocate for in-country quality testing of RH commodities				x	x	x	x

#	RHCS Component/Strategy/Intervention/ Activity/Sub-Activity	Implementing Agencies	Coordinating Agencies	Implementation years					
				2022	2023	2024	2025	2026	
5.2.	<b>Strategy 5.2: Improve demand, accessibility, and utilization of quality RH services and commodities for addressing the unmet needs</b>								
5.2.1	<b>Intervention: Conduct well-organized, evidence-based research/assessment aiming to alleviate the bottleneck for client satisfaction.</b>								
	<b>Activities/Sub-activities:</b>								
	a	<b>Conduct assessment of the current RH/FP commodities and service</b> a. R/FP commodity market segmentation; b. RH/FP user profile, and reasons for non-use and discontinuation c. issues related to the quality of care and recommendation for improvement	MOH EPSS RHB USAID projects UNFPA and other Stakeholders Private organizations, civil society associations	MOH RHB		x		x	x
	b	Design and implement additional interventions to increase the range of contraceptive choices in a phase-wise manner to promote utilization				x	x	x	x
5.2.2	<b>Intervention: Mobilize and empower clients to demand and utilize quality RH commodities and related services.</b>								
	<b>Activities/Sub-activities:</b>								
	a	Update and disseminate IEC/BCC materials to create community awareness to generate demand and utilize reproductive health commodities and related services.	MOHEPSSRHBUSAID projectsUNFPA and otherStakeholdersPrivat e organizations, civil society associations	MOHRHB	x	x	x	x	x
	b	Mobilize and sensitize communities (including men) on benefits and need to use reproductive health commodities and related services.			x	x	x	x	x
	c	Work with political, religious, and cultural leaders and community-based organizations to enhance use reproductive health commodities and related services.			x	x	x	x	x
	d	Conduct community mobilization and education on availability of reproductive health commodities and services.			x	x	x	x	x
	e	Promote male involvement in accessing and utilizing reproductive health commodities and related services for themselves and support their wives to access and utilize it as well.			x	x	x	x	x
5.2.3	<b>Intervention: Maximize demand generation activities to reach the most vulnerable clients (the less privileged, house servant, street children &amp; women, hard-to-reach areas, adolescents, people with disabilities, IDPs)</b>								
	<b>Activities/Sub-activities:</b>								
	a	Identify vulnerable clients or groups of society.			x	x	x	x	x

#	RHCS Component/Strategy/Intervention/ Activity/Sub-Activity		Implementing Agencies	Coordinating Agencies	Implementation years				
					2022	2023	2024	2025	2026
	b	Develop a strategy to best respond to their RH service need.	MOH EPSS RHB USAID projects UNFPA and other Stakeholders Private organizations, civil society associations	MOH RHB	x	x	x	x	x
	c	Strengthen family planning commodity and service delivery through health extension workers in rural and hard-to-reach households and most vulnerable clients			x	x	x	x	x
	d	Train service providers in both public and private sectors in the provision of quality, non-judgmental, friendly, and client-centered reproductive health services, and commodities.			x	x	x	x	x
5.2.4	<b>Intervention: Ensuring the provision of FP service in places with special consideration (industry site and workplace, universities, outreach.)</b>								
	<b>Activities/Sub-activities:</b>								
	a	Develop a mechanism to best respond to address RH needs at workplaces, universities, and society.	MOH EPSS RHB USAID projects UNFPA and other Stakeholders Private organizations, civil society associations	MOH RHB	x	x	x	x	x
	b	Establish clinics and provide RH/FP commodity and related services at industrial sites, universities, and other similar areas			x	x	x	x	x
5.2.5	<b>Intervention: strengthen private sector to participate more in the provision of RH/FP commodities and services</b>								
	<b>Activities/Sub-activities:</b>								
	a	Assess potential benefits of the whole market approach to product availability to the public and private sectors and civil society.	MOH EPSS RHB USAID projects UNFPA and other Stakeholders Private organizations, civil society associations	MOH RHB		x	X		
	b	Promote private sector engagement for provision of range of reproductive health commodities, including family planning product mix such as male and female condoms, short and long terms methods, etc.				x	x	x	x
	c	Create an enabling environment for public-private partnerships by identifying and regularly addressing challenges that limit private and social marketing engagements for RH/FP commodity and services				x	x	x	x
	d	Establish reporting and monitoring system for the private sector.				x	x	x	x
5.2.6	<b>Intervention: address the unmet need for RH commodities in all regions in general &amp; in the emerging region in particular</b>								
	<b>Activities/Sub-activities:</b>								
	a	Conduct a desk review on factors contributing to unmet needs (e.g., sociocultural, service delivery).	MOH EPSS	MOH RHB		x			

#	RHCS Component/Strategy/Intervention/ Activity/Sub-Activity		Implementing Agencies	Coordinating Agencies	Implementation years				
					2022	2023	2024	2025	2026
	b	Develop a plan and implement it to best respond to the issues identified.	RHB USAID projects UNFPA and other Stakeholders Private organizations, civil society associations			x	x	x	x
	c	Prepare and disseminate evidence-based materials for advocacy.				x	x	x	x
	d	Monitor actions that have been taken by regions				x	x	x	x
<b>5.2.7</b>	<b>Intervention: Enhancing proper use of products</b>								
	<b>Activities/Sub-activities:</b>								
	a	Revise/Develop guidelines/protocols for rational use of RH/FP commodities, and services	MOH EPSS RHB USAID projects UNFPA and other Stakeholders Private organizations, civil society associations	MOH RHB		x	x	x	x
	b	Provide orientation on the developed standard service guideline and rational use of FP products.				x	x	x	x
	c	Disseminate revised guidelines				x			
	d	strengthen collaboration and communication mechanisms between service providers and pharmacy reactionaries for sharing drug information				x	x	x	x
	e	Ensure the use of protocols for provision of contraceptives products and services through dissemination, training, monitoring, and supervision				x	x	x	x
<b>5.2.8</b>	<b>Intervention: Enhance quality of RH/FP commodities and related services provided within health facilities</b>								
	<b>Activities/Sub-activities:</b>								
	a	Provide counseling training to enhance health care providers' skills in providing proper counseling services.	MOH EPSS RHB USAID projects UNFPA and other Stakeholders Private organizations, civil society associations	MOH RHB	x	x	x	x	x
	b	Institute Compassionate, Respectful, and Care (CRC) for family planning services				x	x	x	x
	c	Conduct regular supervision and mentoring assistance to improve the quality of RH/FP services and client satisfaction.				x	x	x	x
	d	Ensure availability of range of quality RH/FP commodities				x	x	x	x
<b>5.2.9</b>	<b>Intervention: Strengthened quality of pre-service education curriculum to improve the capacity of HPs to provide a range of FP services</b>								
	<b>Activities/Sub-activities:</b>								
	a	Develop a standard curriculum for PST and IST, with reasonable time assignments for theory and practice/internship.	MOH RHB TVET Ministry of Education	MOH RHB	x	x	x	x	x
	b	Harmonize the pre-service curriculum, across all universities and health science colleges.							

#	RHCS Component/Strategy/Intervention/ Activity/Sub-Activity		Implementing Agencies	Coordinating Agencies	Implementation years					
					2022	2023	2024	2025	2026	
	c	Improve the capacity of trainers/ Lecturers.	All training Institutions RHB USAID projects UNFPA and other Stakeholders							
	d	Strengthen skill labs and practicum sites.								
	e	Facilitate and endorse the scope of practice for Health Professionals.								
	f	Encourage students to do research/ term papers/ etc. on RHSC issues								
<b>6</b>	<b>RHCS component: CAPACITY</b>									
<b>6.1</b>	<b>Strategy 6.1: Build capacity of stakeholders at all levels for RHCS management towards achieving the 6 “Rights” of logistics management</b>									
<b>6.1.1</b>	<b>Intervention: Strengthen existing LMIS for enhancing data visibility and use at all levels.</b>									
	<b>Activities/Sub-activities:</b>									
	a	Strengthen electronic logistics data for capturing storage, integration, and visualization system.	MOH RHB USAID projects UNFPA and other Stakeholders	MOHEPSS RHB	x	x	x	x	x	
	b	Enhance linkages and utilization of RRF from the electronic system at all levels of the supply chain system					X	X	X	X
	c	Ensure expansion of the electronic system to enroll additional health facilities					x	x	x	x
	d	Build capacity of supply chain staff across the supply level to ensure timely reporting, ordering, and distribution of RH/FP commodities through the IPLS system					x	x	x	x
<b>6.1.2</b>	<b>Intervention: Institute logistic data analysis, validation, and monitoring for data quality assurance</b>									
	<b>Activities/Sub-activities:</b>									
	a	Develop a tool to help data quality analysis and validation of RRF reports at all levels of the supply chain system	MOH RHB RHB USAID projects UNFPA and other Stakeholders	EPSS	x	x				
	b	Train EPSS and health facility supply chain staff to enhance data analysis and validation of information contained on bin cards/SRCs, as well as RRF reports.					x	x	x	x
	c	Strengthen coordination among EPSS, and RHB for improving data quality					x	x	x	x
	d	Promote reconciliation of service statistics with logistic/consumption data for RH/FP commodities					x	x	x	x

#	RHCS Component/Strategy/Intervention/ Activity/Sub-Activity	Implementing Agencies	Coordinating Agencies	Implementation years					
				2022	2023	2024	2025	2026	
6.2	<b>Strategy 6.2: Improve forecast accuracy for RH/FP commodities</b>								
6.2.1	<b>Intervention: Strengthen Central level quantification exercise for RH/FP commodities based on the accurate LMIS, DHIS and demographic survey data</b>								
	<b>Activities/Sub-activities:</b>								
	a	Develop and implement quantification procedures/guidance/tools to enable more accurate demand forecasting for RH/FP commodities		EPSS MOH	X	X	X	X	x
	b	Conduct training needs assessment, update curriculum and train EPSS/MOH staff to ensure forecast accuracy for RH/FP commodities		EPSS MOH	X	X	X	X	x
	c	Conduct annual quantification exercise for RH/FP commodity requirements		EPSS MOH	X	X	X	X	x
6.2.2	<b>Intervention: Ensure Involvement of regional health Bureaus in quantification exercises to ensure regional-level budget allocation</b>								
	<b>Activities/Sub-activities:</b>								
	a	Provide training on quantification to regional-level appropriate staff		MOH EPSS			X	X	x
	b	Ensure regions' involvement during the quantification exercise.		MOH EPSS			X	X	x
	c	Disaggregate quantified products by region and encourage them to play a role in securing resources for procurement.		MOH EPSS			X	X	x
6.2.3	<b>Intervention: Mobilizing resources, and enhancing coordination of stakeholders to ensure allocation of enough budget in line with the forecast result</b>								
	<b>Activities/Sub-activities:</b>								
	a	Organize advocacy workshops with donors, including government and other financing institutions for raising awareness on required funding	MOH RHB	MOH EPSS	X	X	X	X	x
	b	Advocate for donor harmonization and financing for RH/FP commodities with government budget frameworks.	RHB USAID projects UNFPA and other Stakeholders	MOH EPSS	X	X	X	X	x
	c	Conduct periodic supply plan reviews and update		MOH EPSS	X	X	X	X	x
6.2.4	<b>Intervention: Strengthen procurement capacity for RH/FP commodity to ensure efficient, transparent, and timely procurement orders</b>								
	<b>Activities/Sub-activities:</b>								
	a	Advocate for timely and adequate budget allocation and disbursements of funds to ensure timely procurement of RH/FP commodities	MOH RHB	EPSS	X	X	X	X	x
	b	Monitor and evaluate procurement procedures to address procurement challenges/risks timely	RHB USAID projects	EPSS	X	X	X	X	x



#	RHCS Component/Strategy/Intervention/ Activity/Sub-Activity		Implementing Agencies	Coordinating Agencies	Implementation years				
					2022	2023	2024	2025	2026
	c	Evaluate procurement capacity/framework agreement to ensure that the best prices and quality of RH/FP commodities are procured through transparent, efficient, and timely purchase ordering	UNFPA and other Stakeholders		X	X	X	X	x
	d	Strengthen supplies relationship and performance evaluation mechanism			X	X	X	X	x
	e	Monitor shipments schedule to ensure timely clearance and delivery of RH/FP commodities			X	X	X	X	x
	f	Institute accountable mechanism with EFDA for ensuring timely post-shipment testing			X	X	X	X	x
	g	Advocate for Implementing an e-procurement system.				X	X	X	x
<b>6.2.5</b>	<b>Intervention: Establish strategic supplier relationships for increasing number of competitive prequalified suppliers for RH/FP commodities</b>								
	<b>Activities/Sub-activities:</b>								
	a	Strengthen collaborative registration procedure for RH/FP commodities	MOH RHB RHB USAID projects UNFPA and other Stakeholders	EPSS	X	X	X	X	x
	b	Create a conducive and transparent environment to attract more FP suppliers.				X	X	X	x
	c	Establish strategic supplier management system				X	X	X	x
	d	Measure supplier performance using KPIs				X	X	X	x
	e	Establish communication mechanisms with the suppliers				X	X	X	x
<b>6.3</b>	<b>Strategy 6.3: Procurement of adequate contraceptive commodities</b>								
<b>6.3.1</b>	<b>Intervention: Develop procurement/supply plan, place timely procurement orders</b>								
	<b>Activities/Sub-activities:</b>								
	a	Develop procurement plan	MOH RHB RHB USAID projects UNFPA and other Stakeholders	EPSS	X	X	X	X	X
	b	Ensure timely cash transfer			X	X	X	X	X
	c	Regularly review and update supply plan			X	X	X	X	X
	d	Place procurement orders, monitor shipments, and delivery			X	X	X	X	X
<b>6.4</b>	<b>Strategy 6.4: Strengthen the Inventory Control System at all levels of the supply chain system</b>								
<b>6.4.1</b>	<b>Intervention: Strengthen implementation of Pharmaceutical Warehouse Operations Management guideline and IPLS SOP</b>								
	<b>Activities/Sub-activities:</b>								

#	RHCS Component/Strategy/Intervention/ Activity/Sub-Activity		Implementing Agencies	Coordinating Agencies	Implementation years				
					2022	2023	2024	2025	2026
	a	Support EPSS and health facilities to ensure adherence with the established min-max inventory control system.	MOH RHB RHB USAID projects UNFPA and other Stakeholders	EPSS	X	X	X	X	x
	b	Develop tools/systems for monitoring inventory level adherence			X	X	X	X	x
	c	Provide supportive supervision			X	X	X	X	x
	d	Strengthen functionality of redistribution for overstocked RH/FP commodities			X	X	X	X	x
<b>6.5</b>	<b>Strategy 6.5: Strengthen Warehousing and Storage management system for RH/FP commodities</b>								
<b>6.5.1</b>	<b>Intervention: Ensure proper warehouse/storage management system for RH/FP commodities</b>								
	<b>Activities/Sub-activities:</b>								
	a	Conduct warehouse/storage assessment regularly for identifying storage management gaps	MOH RHB RHB USAID projects UNFPA and other Stakeholders	EPSS	X	X	X	X	x
	b	Support for Implementing good storage guidelines at all levels of the supply chain system.			X	X	X	X	x
	c	Monitor proper warehouse management system through the existing KPIs			X	X	X	X	x
	d	Support for De-junking and reorganizing of warehouse/ storage to maximize storage space spaces to				X	X	X	x
	e	Coordinate for mobilizing resources for equipping needy health facilities with appropriate storage equipment (shelves, pallets, etc.)				X	X	X	x
<b>6.6</b>	<b>Strategy 6.6: Improve management of pharmaceutical waste disposal system for RH/FP commodities</b>								
<b>6.6.1</b>	<b>Intervention: Ensure functionality of incinerators and proper disposal of non-usable RH/FP commodities</b>								
	<b>Activities/Sub-activities:</b>								
	a	Advocate for higher level support to maintain incinerators	MOH RHB RHB USAID projects UNFPA and other Stakeholders	EPSS	x	x			
	b	Support EPSS in mobilizing stakeholders for ensuring proper maintenance and full functionality of inclinators			x	x			
	c	Ensure timely disposal of non-usable RH/FP products				X	x	x	x
<b>6.6.2</b>	<b>Intervention: Strengthen reverse logistics system for RH/FP commodities</b>								
	<b>Activities/Sub-activities:</b>								
	a	Assess institutional capacities to strengthen reverse logistics system functions	MOH RHB	EPSS		X			

#	RHCS Component/Strategy/Intervention/ Activity/Sub-Activity	Implementing Agencies	Coordinating Agencies	Implementation years				
				2022	2023	2024	2025	2026
	b Assess the feasibility of outsourcing for managing a defined reverse logistics system	RHB USAID projects UNFPA and other Stakeholders			X			
<b>6.7</b>	<b>Strategy 6.7: Enhance integrated transportation and distribution Systems for RH/FP commodities</b>							
<b>6.7.1</b>	<b>Intervention: Strengthen integrated delivery of RH/FP commodities with other products</b>							
	<b>Activities/Sub-activities:</b>							
	a Develop communication mechanism ahead to ensure facility readiness for receiving products	MOH RHB RHB USAID projects UNFPA and other Stakeholders	EPSS	X	X	X	X	x
	b Monitor the effectiveness of integrated product transportation and delivery system with KPIs			X	X	X	X	x
	c Identify mechanism to ensure timely delivery of products for indirect resupply facilities				X	X		
	d Assess the feasibility of outsourcing fully/partially the transportation and distribution of products				X			
	e Implement recommendations from the feasibility assessment					X	X	X

## 6 Budget Summary of Operational Plan

The budget for each operational activity of the operational plan was estimated based on experts' list of inputs that they thought would be required to implement each activity. Each input was then quantified in frequency, number (qty), days, expertise, and many other inputs depending on the type of input to estimate the total need during the lifetime of the strategic plan.

The cost for each input was then estimated using the ministry of health's costing tool (adapted from the WHO OneHealth Tool). This tool has many assumptions.

- price of products and services
- inflation of prices over the coming 5 years
- quantities of products and services required in the lifetime of the strategic plan
- prices related to training and workshops such as per-diem
- prices related to products related to the development of infrastructure,
- prices related to media and communication including the development and transmission of TV/Radio programs
- prices related to products and services related to products and stationery services.
- prices related to expertise: hiring consultants
- prices related to conducting research and knowledge sharing

### Cost breakdown by strategy

Estimated cost by Strategy		Investment Needs (in USD)					
#	Strategy	2022	2023	2024	2025	2026	Total
1	<b>CONTEXT (POLICY AND REGULATORY ENVIRONMENT)</b>						
	<b>Strategy 1.1:</b> Improve policy and regulatory environment that contribute to the enhancement of Reproductive Health Commodity Security	\$ 315,527	\$ 326,598	\$ 337,670	\$ 348,741	\$ 362,580	\$ 1,691,115
	<b>Strategy 1.2:</b> Strengthening Public-Private Partnership (PPP) for creating an enabling environment for the private sectors for RHCS	\$ 22,142	\$ 22,142	\$ 22,142	\$ 22,142	\$ 24,910	\$ 113,479
2	<b>RHCS component: COORDINATION</b>						
	<b>Strategy 2.1:</b> Strengthen the coordination platform to enhance collaboration, and information sharing among all the stakeholders of RH services and commodities at national, regional, and zonal levels	\$ 149,460	\$ 154,996	\$ 160,531	\$ 166,067	\$ 171,603	\$ 802,657
3	<b>CAPITAL</b>						
	<b>Strategy 3.1:</b> Secure long-term finances from diversified funding sources for RH commodities and supplies with a focus on FP	\$ 593,966	\$ 613,617	\$ 634,376	\$ 659,009	\$ 679,491	\$ 3,180,459
	<b>Strategy 3.2:</b> Strengthen local production capacity for RH/FP commodities	\$ 88,569	\$ 94,105	\$ 96,872	\$ 99,640	\$ 102,408	\$ 481,594
4	<b>COMMITMENT</b>						
	<b>Strategy 4.1:</b> Foster stakeholders' commitment to advocating RH/ FP commodities and services among (Political and	\$ 38,749	\$ 38,749	\$ 41,517	\$ 41,517	\$ 44,285	\$ 204,816

Estimated cost by Strategy		Investment Needs (in USD)					
#	Strategy	2022	2023	2024	2025	2026	Total
	religious leaders, donors/NGOs, private sectors, Civil Society Organizations (CSOs), media, and social marketing)						
<b>5</b>	<b>COMMODITY, CLIENT DEMAND &amp; UTILIZATION</b>						
	<b>Strategy 5.1:</b> Improve RH/FP commodity regulatory quality assurance, licensing, and registration	\$ 813,728	\$ 844,174	\$ 874,619	\$ 905,065	\$ 935,511	\$ 4,373,097
	<b>Strategy 5.2:</b> Improve Commodity choices, demand, accessibility, and utilization of quality RH services and commodities by addressing the unmet needs	\$ 1,502,906	\$ 1,555,494	\$ 1,608,082	\$ 1,666,205	\$ 1,724,329	\$ 8,057,016
<b>6</b>	<b>CAPACITY</b>						
	<b>Strategy 6.1:</b> Build the capacity of stakeholders at all levels for RHCS management toward achieving the logistics information management system	\$ 625,519	\$ 647,661	\$ 669,803	\$ 694,714	\$ 719,624	\$ 3,357,321
	<b>Strategy 6.2:</b> Improve forecast accuracy for RH/FP commodities	\$ 141,157	\$ 141,157	\$ 146,692	\$ 152,228	\$ 157,764	\$ 738,998
	<b>Strategy 6.3:</b> Ensure procurement of adequate contraceptives as per the annual quantification result	\$ 40,762,355	\$ 42,526,598	\$ 44,367,199	\$ 45,938,540	\$ 47,631,703	\$ 221,226,394
	<b>Strategy 6.4:</b> Strengthen the Inventory Control System at all levels of the supply chain system	\$ 44,285	\$ 44,285	\$ 47,052	\$ 47,052	\$ 49,820	\$ 232,494
	<b>Strategy 6.5:</b> Strengthen warehousing and storage management system for RH/FP commodities	\$ 44,285	\$ 58,123	\$ 74,730	\$ 91,337	\$ 107,944	\$ 376,418

Estimated cost by Strategy		Investment Needs (in USD)					
#	Strategy	2022	2023	2024	2025	2026	Total
	<b>Strategy 6.6:</b> Improve management of pharmaceutical waste disposal system for RH/FP commodities	\$ 27,678	\$ 27,678	\$ 27,678	\$ 30,446	\$ 30,446	\$ 143,925
	<b>Strategy 6.7:</b> Enhance integrated transportation and distribution Systems for RH/FP commodities	\$ 8,303	\$ 8,303	\$ 8,303	\$ 8,303	\$ 8,303	\$ 41,517
	<b>TOTAL</b>	\$ 45,178,629	\$ 47,103,680	\$ 49,117,268	\$ 50,871,006	\$ 52,750,718	<b>\$245,021,302</b>

## 7 Monitoring, and Evaluation

This chapter aims to guide the implementation of the strategic plan. The M&E plan is aligned with the FMOH, HSTP II, M, and E framework. It focuses on the main indicators of each of the RHCS components that need to be followed up to monitor the implementation status and objectively measure the progress and take timely corrective actions. The M&E plan also lays the foundation for tracking progress toward the expected outcomes/impacts of the RCHS.

- This M&E plan will build on the existing resources and platforms of key stakeholders. The MOH has coordinated efforts and integrated this work particularly to track output and outcome indicators. Some of the activities to be conducted are mapping data generated and utilized by RHCS key stakeholders.
- developing an accountability matrix whereby there will be a list of organizations, and specific teams or personnel for the different activities listed in the plan,
- integrating the activities at every level of the structure – starting from the woreda-based plan to the ministry’s plan.
- developing mechanisms to share RHCS-related information across the different sectors and hierarchies, also triangulate the data obtained from diverse sources
- by conducting baseline surveys at the beginning and impact estimation studies at the mid and end of the strategic plan period.
- conducting market segmentation, and financial gap studies at the beginning of the strategic plan.
- leveraging the existing studies such as the Service Availability and Readiness (SARA) and Service Provision Assessment (SPA) to integrate some or all the components of the studies mentioned above.
- conducting an in-depth analysis of surveys and routine information systems
- conducting inequality analysis to understand the commodity security gap between the well-performing regions and the lower-performing regions and to prioritize resources to narrow the gap.

Effective implementation of the monitoring and evaluation plan requires a full-time dedicated M&E specialist.



## 7.1 Results Indicators

S. No	Indicator Name	Definition	Type	Calculation/Measure (Quantitative)		Means of Verification			
				Numerator	Denominator	Data Source	Frequency of Collection	Responsibility	Collection Method
<b>1</b>	<b>Context</b>								
	Number of national policies (strategy guidelines, regulations) revised to address RHCS investment issues	This measures the extent of creating a conducive environment for RHCS	0	Revised # of Health-related policy documents	Number of RH-related policy documents required for revision or update	MOH record	Annually	MOH	
	Percent share of stakeholders involved in RHCS activities such as finance and service provision	This measures the status of stakeholder engagement for RHCS strategic interventions	0			Teaching institutions	Annually	MOH	Assessment Report
	Percentage share of FP commodities mix provided by private sector	This measures extent of private sector involvement in offering FP methods/ services	0	# Of clients obtaining FP commodities from private sector by type of commodities	Total number of FP users	MOH record	Annually	MOH	DHIS report
<b>2</b>	<b>Coordination</b>								

S. No	Indicator Name	Definition	Type	Calculation/Measure (Quantitative)		Means of Verification			
				Numerator	Denominator	Data Source	Frequency of Collection	Responsibility	Collection Method
2	Well-Functioning coordination platform nationally and regionally for RHCS issues	measured by holding scheduled meetings with meeting minutes prepared and circulated)	○	# Of TWG meetings held with minutes prepared and circulated	Total # meetings scheduled in a year	MOH, RHB, EPSS (minutes report)	Every year	MOH and RHB	physical count/Obse rvation
	Presence of a TWG with non-health ministries at FMOH	This indicator checks the presence or absence of a functional TWG comprised of non-health ministries (Ministry of Education, Ministry of Agriculture, Ministry of Women and Youth, etc.) at the FMOH	○	Presence of a functional TWG		MOH (TWG meeting minutes, and report)	Every year	MOH	TWG meeting minutes
	Number of TWG leaders trained on effective TWG leadership per year	Leaders of each TWG should be trained in effective TWG leadership. This checks the number of leaders trained in a year.	○	Number of trained TWG leaders per year	1	MOH – HR MOH - FP	Routine	MOH	Review of Report
	Percentage of committed/engaged TWG members regularly	Committed or engaged is defined as contributing technically or financially.	○	Number of engaged/commi tted TWG	Total number of TWGs members	MOH	During TWG meetings	MOH	Review of Report

S. No	Indicator Name	Definition	Type	Calculation/Measure (Quantitative)		Means of Verification			
				Numerator	Denominator	Data Source	Frequency of Collection	Responsibility	Collection Method
<b>3</b>	<b>Commitment</b>								
<b>3</b>	Number of advocacy workshops conducted for parliamentarians	This measures the number of advocacy workshops for parliamentarians conducted per year	O	Number of workshops per year		MOH	During conducting workshop	MOH	Report
	Percentage of gov't budget spend for procurement of FP commodity	The amount of budget allocated for FP against the total health expenditure disaggregated by level (Federal and Region)	Outcome	Government budgets spend on commodities	Total budgets spend for family planning commodities	MOH and RHBs	Annually	MOH	Annual report
<b>4</b>	<b>Capital</b>								
<b>4</b>	Proportion of budget allocated by stakeholders to improve RHCS and FP services	Proportion of funding raised by stakeholders for RHCS and FP services against the total demand	Outcome	Funding raised by stakeholders	Total fund for RHCS.	MOH	Annually	MOH	Annual report review
<b>5</b>	<b>Client Utilization and Demand</b>								
<b>5</b>	Percentage of facilities providing at least five FP methods	It is the proportion of health facilities that provide at least five FP methods against all health facilities providing FP services each year It shows the extent of method choice.	O	Number of HF providing at least five methods	Number of HFs providing FP service during the year	DHIS/PMA	Annually	MOH	Annual report

S. No	Indicator Name	Definition	Type	Calculation/Measure (Quantitative)		Means of Verification			
				Numerator	Denominator	Data Source	Frequency of Collection	Responsibility	Collection Method
	Contraceptive acceptance rate	It measures the number of new clients that receive FP services each year by type of FP method. New clients will be registered once a year.	Outcome	Number of clients who received contraceptives in the year	Women of reproductive age group seeking contraceptives	DHIS/PMA	annually	FMOH	Annual report
	Proportion of facilities providing one-stop RH service	It measures HFs that fully integrated FP services across RH programs using a standard checklist.	Outcome	Number of HFs integrated FP service across RH programs	Total number of assessed HFs providing FP service	HFs survey	annually	MOH	Annual report
	Proportion of teaching institutions that integrated the RH strategy into their curriculum.	The integration of an updated RH curriculum into the curricula of Health Science colleges and Universities	OP	Number of teaching institutions integrated the RH strategy	Total number of teaching institutions (Universities and health science collages)	Teaching institutions	Annually	MOH	Assessment Report
	Proportion of health facilities that met the quality of RH service standard	This indicator measures the number of health facilities that meet minimum service quality standards for RH services	OC	The number of HFs that met minimum service delivery standard for RH disaggregated by service type	Total number of Health facilities assessed	Health facility records, and observation	2-3 years	MOH	Survey

S. No	Indicator Name	Definition	Type	Calculation/Measure (Quantitative)		Means of Verification			
				Numerator	Denominator	Data Source	Frequency of Collection	Responsibility	Collection Method
	No. of advocacy forums conducted	No. of advocacy forums conducted by the government for stakeholders such as NGOs/religious/traditional leaders and the media	O	Number of advocacies forums conducted		Admin report (MOH, RHBs)	annually	MOH	Annual report
<b>6</b>	<b>Commodities</b>								
	Number of local manufacturers started producing FP commodity	Number of local manufacturers' newly established lines to produce FP commodities during a year.	Outcome	Number of local manufacturers newly established to produce FP commodity		EFDA	Annually	MOH	Annual report
<b>7</b>	<b>Capacity</b>								
	Number of expertise trained on rational use of RH commodities	IPLS training to pharmacy experts & FP providers. Awareness creation on FP products for pharmacy stores.	O	Number of expertise trained on rational use of RH commodities		Training Database	Quarterly	MOH	Report
	Stock out rate at health facilities	The number of HF stocked out for specific tracer products against the total number of reported (visited) HFs		Number of HFs that were stocked out of a tracer product according to the ending	Total number of HFs that reported the tracer product (total visited HFs)	RRF report or assessment report	Bi-monthly or annually	EPSS or MOH	Document review or observation

S. No	Indicator Name	Definition	Type	Calculation/Measure (Quantitative)		Means of Verification				
				Numerator	Denominator	Data Source	Frequency of Collection	Responsibility	Collection Method	
				balance of the most recent RRF (during visit)						
	Wastage rate	The percentage of pharmaceuticals wasted by value due to expiry and damage from the total of pharmaceuticals stocked and distributed in the period.	OC	Total value of pharmaceuticals wasted	Total value of pharmaceuticals stocked and distributed in the period	HCMS/ Physical Inventory	Quarterly	HF, WoHO, EPSS		Review documents and inventory
	Forecast error	The percentage difference b/n qty of forecast and actual consumption.	O	The sum of the absolute % of the actual qty minus forecasted qty divided by actual qty for a given period.	Total no of items forecasted for a given period	Quantification Document (and HCMS)	Annually	EPSS		Annual report
	On-Time Delivery (OTD)	Percentage of line items delivered <b>on time</b> , within the minimum delivery window (within -14/+7 calendar days of the agreed delivery date (ADD)).	O	Number of line items with an ADD during the quarter that were delivered to the recipient on time.	Total number of line items with an ADD during the quarter.	HMIS, PO, Contract management system	Quarterly	EPSS		Document review

S. No	Indicator Name	Definition	Type	Calculation/Measure (Quantitative)		Means of Verification			
				Numerator	Denominator	Data Source	Frequency of Collection	Responsibility	Collection Method
7	Procurement lead time	Procurement average lead time is the days between MOH order being submitted to EPSS and the shipment being delivered to EPSS warehouses.	○	The sum of lead times for all line items delivered in a specified period.	The count of all line items delivered in a specified period.	MOH request, EPSS tender, and contract management system	Quarterly	EPSS	Data analysis
	Proportion of deliveries as per schedule	No of HFs obtained supplies within the specified time (within 1 month after the resupply month) divided by the total no of HFs by odd and even routes	○	No. of HFs received supplies as per schedule	Total no. of HFs planned to be supplied per distribution schedule	POD, distribution schedule	Monthly	EPSS	Document review
	Percentage of HFs submitted RRF with acceptable data quality standard	The number of HF-submitted RRFs with acceptable quality parameters (timeliness, completeness, accuracy) from the total number that submitted RRFs,	○	# Of HFs with RRF met quality parameters	Total no of HFs submitted RRF.	RRF, Parameters	Monthly	EPSS,	Document review
	Proportion of HFs with updated stock-keeping records	# Of HFs with updated stock-keeping records (bin card) divided by the total number of HFs.	○	No of HFs with updated stock-keeping records	Total no of assessed HFs	Bin cards, Stock cards, HCMIS	Annually	MOH	Observation

S. No	Indicator Name	Definition	Type	Calculation/Measure (Quantitative)		Means of Verification			
				Numerator	Denominator	Data Source	Frequency of Collection	Responsibility	Collection Method
	Proportion of HFs met good storage practice	Number of HFs that met Good Storage Practice (GSP) for FP commodities against the total number of assessed health facilities	○	# Of HFs that meet	Total no assessed HFs	Assessment	Quarterly	MOH	Observation
	Percentage of HFs maintaining Max-Min stock level	The number of HFs that maintain Max-Min Stock level between 2 to 4 months is divided by the total number of HFs.	○	# Of HF that maintain Max-Min Stock level	Total number of assessed HFs	HF bin card and inventory	Annually	MOH	Observation



## 8 References

- 1 Central Statistical Agency of Ethiopia and ORC Macro [USA]. (May 2001). Ethiopian Demographic and Health Survey 2000. Addis Ababa. <https://dhsprogram.com/pubs/pdf/FR118/FR118.pdf> [Accessed May 2021]
- 2 Central Statistical Agency/Ethiopia and ICF International. 2012. Ethiopia Demographic and Health Survey 2011. Addis Ababa, Ethiopia: Central Statistical Agency and ICF International. <https://dhsprogram.com/pubs/pdf/FR255/FR255.pdf> [Accessed in May 2021]
- 3 Central Statistical Agency of Ethiopia and ICF Macro [USA]. (2016). Ethiopian Demographic and Health Survey 2016. Addis Ababa. [https://dhsprogram.com/publications/publication-fr328-dhs-final-reports.cfm?cssearch=310329\\_1](https://dhsprogram.com/publications/publication-fr328-dhs-final-reports.cfm?cssearch=310329_1) [Accessed in May 2021]
- 4 Ethiopian Public Health Institute (EPHI) [Ethiopia] and ICF. 2021. Ethiopia Mini Demographic and Health Survey 2019: Final Report. Rockville, Maryland, USA: EPHI and ICF. <https://dhsprogram.com/publications/publication-FR363-DHS-Final-Reports.cfm> [Accessed May 2021]
- 5 Lui L., Hogan D., Perin J., Rudan I., Lawn JE., Cousens S., Mathers C., Black R.E. Global, regional, and national causes of child mortality in 2000-13, with projections to inform post-2015 priorities: an updated systematic analysis. *Lancet* 2015 Jan 31; 385.
- 6 Federal Ministry of Health. HSTP 2015/16 -2019/20. 2015.
- 7 The Federal Democratic Republic of Ethiopia. Constitution of the Federal Democratic Republic of Ethiopia, 21 August 1995, available at: <https://www.refworld.org/docid/3ae6b5a84.html> [accessed 29 May 2021]
- 8 Govt. Of Ethiopia. Family Planning 2020 Commitment. <http://www.familyplanning2020.org/ethiopia>
- 9 Federal Ministry of Health HSTP II | 2020/21 -2024/25 10 2013 EFY - 2017 EFY.
- 10 Pharmaceuticals Fund and Supply Agency (PFSA), January 2018. Standard operating procedure manual for the integrated pharmaceutical logistics system in health facilities of Ethiopia, 6th Edition.
- 11 Pharmaceuticals Supply Transformation Plan 2020/21 – 2029/30
- 12 Count down 2030 Europe. Contraceptive supplies financing: what role for donors? June 2018.
- 13 Hare, L., Hart, C., Scribner, S., Shepherd, C., Pandit, T. (ed.), and Bornbusch, A. (ed.). 2004. SPARHCS: Strategic Pathway to Reproductive Health Commodity Security. A Tool for Assessment, Planning, and Implementation. Baltimore, MD: Information and Knowledge for Optimal Health (INFO) Project/Center for Communication Programs, Johns Hopkins Bloomberg School of Public Health.
- 14 USAID|DELIVER PROJECT. The Logistics System Assessment Tool (LSAT). USAID | DELIVER PROJECT, Task Order 1 January 2009
- 15 Saifuddin Ahmed, Qingfeng Li, Li Liu, Amy O Tsui, Maternal deaths averted by contraceptive use: an analysis of 172 countries, *The Lancet*, Volume 380, Issue 9837, 2012, Pages 111-125, ISSN 0140-6736, [https://doi.org/10.1016/S0140-6736\(12\)60478-4](https://doi.org/10.1016/S0140-6736(12)60478-4). (<https://www.sciencedirect.com/science/article/pii/S0140673612604784>)

- 16 Ministry of Health of Ethiopia. (2019). Ethiopia Health Accounts, 2016/17. Addis Ababa, Ethiopia.
- 17 WHO. The Abuja Declaration: Ten Years On. Report. 2011.
- 18 Fagan, T., and A. Dutta. 2019. Opportunities for Achieving Sustainable Family Planning Financing in Ethiopia. Washington, DC: Palladium, Health Policy Plus.
- 19 Assefa, Y., Gelaw, Y.A., Hill, P.S. et al. Community health extension program of Ethiopia, 2003–2018: successes and challenges toward universal coverage for primary healthcare services. *Global Health* 15, 24 (2019). <https://doi.org/10.1186/s12992-019-0470-1>
- 20 MERQ Consultancy. (2020). National Assessment of The Ethiopian Health Extension Program. Addis Ababa.
- 21 Getaneh T, Negesse A, Dessie G, Desta M, Moltot T. Predictors of unmet need for family planning in Ethiopia 2019: a systematic review and meta-analysis. *Arch Public Health*. 2020; 78:102. Published 2020 Oct 16. <https://doi.org/10.1186/s13690-020-00483-2>
- 22 Hrusa G, Spigt M, Dejene T, Shiferaw S (2020) Quality of Family Planning Counseling in Ethiopia: Trends and determinants of information received by female modern contraceptive users, evidence from national survey data, (2014- 2018). *PLoS ONE* 15(2): e0228714. <https://doi.org/10.1371/journal.pone.0228714>
- 23 [IPLS Reporting] Bekele, A., & Anbessa, G. T. (2021). Logistics Management Information System Performance of Program Medicines in Public Health Facilities of East Gojjam Zone, Northwest Ethiopia: A Cross-Sectional Study. *Journal of multidisciplinary healthcare*, 14, 81–89. <https://doi.org/10.2147/JMDH.S286981>
- 24 [IPLS Reporting] Tiye, K., Gudeta, T. Logistics management information system performance for program drugs in public health facilities of East Wollega Zone, Oromia regional state, Ethiopia. *BMC Med Inform Decis Mak* 18, 133 (2018). <https://doi.org/10.1186/s12911-018-0720-9>
- 25 Boche, B., Mulugeta, T., & Gudeta, T. (2020). Assessment of Inventory Management Practices at the Ethiopian Pharmaceuticals Supply Service, Addis Ababa, Ethiopia. *Integrated pharmacy research & practice*, 9, 175–183. <https://doi.org/10.2147/IPRP.S269421>
- 26 Press Release, the government of Ethiopia. EPSS Inaugurates Chill Hub, a State-of-the-Art Cold Chain. January 2020. <https://reliefweb.int/report/ethiopia/EPSS-inaugurates-chill-hub-state-art-coldchain#:~:text=The%20warehouses%20have%20also%20300,capacity%20to%204278%20meter%20cube.> [accessed May 2021]
- 27 Berhane Y, Demissie M. Cold chain status at immunization centers in Ethiopia. *East Afr Med J*. 2000 Sep;77(9):476-9. doi: 10.4314/eamj.v77i9.46692. PMID: 12862137.
- 28 Ministry of Health of Ethiopia. (2021). FP2030 Ethiopia government commitment. Addis Ababa, Ethiopia
- 29 Ministry of Health of Ethiopia. (2022). Health and Health Related Indicator 2013 EFY (2020/21). Addis Ababa, Ethiopia.
- 30 GHSC-PSM 2022. Maternal, Newborn & Child Health Commodity Availability: End-Use Verification Survey Results.