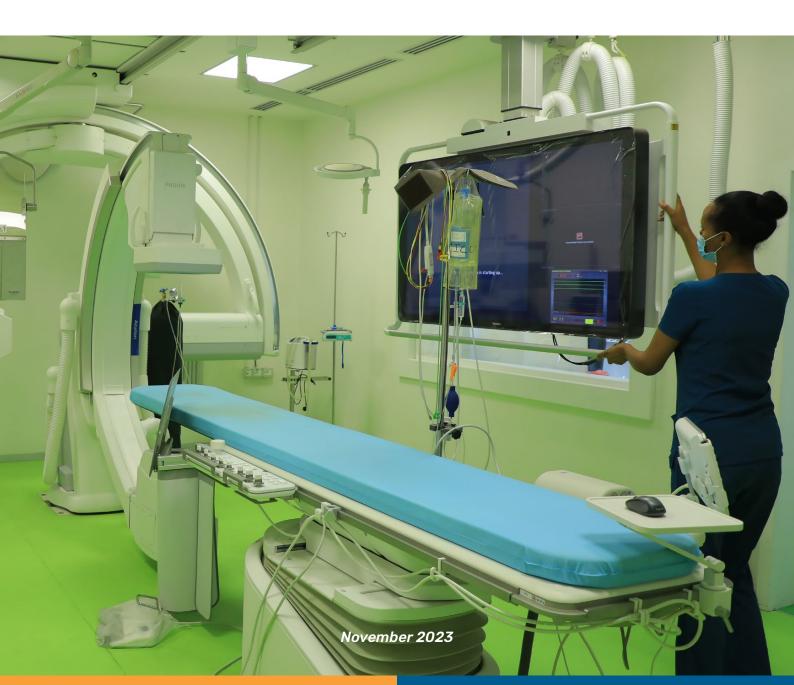
Kingdom of the Netherlands



Business Opportunities in the Ethiopian Healthcare Sector TRAIDE Ethiopia





Authors: Elham Mohammed, Sander de Raad, Mehari Kettema

Editor: Trevor Anderson

Layout, illustration: Erika Endrődiné Benkő

Photos: TRAIDE Foundation

Commissioned by: Embassy of the Kingdom of the Netherlands, TRAIDE Foundation

Suggested citation: TRAIDE Ethiopia (2023), Business Opportunities in the Ethiopian Healthcare Sector

For more information, visit www.traide.org







Contents

SUMMARY

1.	OVERVIEW	4	
1.1	Introduction	4	
1.2	Ethiopia's healthcare system	5	
1.3	Major health indicators	6	
1.4	Health financing in Ethiopia	6	
2.	GOVERNMENT ASPIRATIONS AND		
	RELEVANT ACTORS	7	
2.1	Government plans	7	
2.2	Stakeholders in the Ethiopian healthcare sector	8	
2.3	Current demand, market and investment trend	8	
2.4	Investment incentives	10	
3.	OPPORTUNITIES	11	
3.1	Tertiary healthcare and advanced diagnostic services	11	
3.2	Healthcare tech and innovation	11	
3.3	Enhancing workforce capacity	12	
3.4	Primary healthcare	12	
3.5	Pre-hospital emergency care	12	
3.6	Medical products manufacturing	12	
REFERENCES			

4



Summary

With 114 million inhabitants, Ethiopia is the second most populous country in Africa. While Ethiopia's healthcare sector is underdeveloped, the Government of Ethiopia (GoE) has shown its commitment over the years to improving the provision of good-quality, equitable and comprehensive services at all levels.

There are business opportunities in the Ethiopian healthcare sector that foreign (Dutch) investors can tap into. In particular, Dutch companies can contribute to tertiary healthcare services, medical products manufacturing and the primary healthcare (PHC) sector through activities such as health post capacitation and infrastructure development, including the construction and maintenance of healthcare facilities. Other opportunities include digital health solutions, enhancing health information systems, workforce capacity enhancement and training, and the provision of mobile clinics. By leveraging their expertise, Dutch companies can contribute to improving access to healthcare services and supporting the goals of the Ethiopian healthcare sector.



1.1 INTRODUCTION

Ethiopia's economy has shown significant progress over the past few years. With the aim of becoming a lower-middle-income country by 2025, the GoE launched the 10 Years Perspective Plan (2020/2021 to 2029/2030). The healthcare sector is one of the GoE's priority areas in the context of economic growth through industrialisation.

Significant obstacles to the sector's progress are the inadequate provision of high-quality services, basic infrastructure, the lack of healthcare specialists, and poor information management systems.

The GoE is committed to working towards universal health coverage (UHC), as well meeting the Sustainable Development Goals (SDGs). As part of this effort, consecutive Health Sector Transformation Plans (HSTPs), beginning in 1997 (under the title 'Health Sector Development Programme'), have been launched. Over the HSTP-I period (2014/15–2019/20), the country achieved significant reductions in infant and maternal

mortality rates. Currently, the country is implementing HSTP-II (2021–2025). The plan is a response to the change in the country's socio-economic landscape and is aimed at achieving UHC that would lead to improving population health.

The Ministry of Health (MoH) is mandated to formulate national policies and strategies and develop standards in consultation with regional health bureaus (RHBs), which are found within the regions in a decentralised administrative set up. The MoH works closely with and supervises (in part) regulatory authorities, research centres and health centres, e.g. Ethiopian Food and Drug Authority (EFDA), Ethiopian Public Health Institute (EPHI) and Ethiopian Pharmaceuticals Supply Service (EPSS).

The Netherlands has been a long-standing partner of Ethiopia in terms of aid, trade, investment and other forms of cooperation. As such, the two countries have cooperated in the healthcare sector, specifically in the area of sexual and reproductive health and rights (SRHR). Through the SRHR programme, the Embassy of the Kingdom of the Netherlands (EKN) supports strengthening the public health system, capacity building of public and private stakeholders to increase access to family planning tools, and the elimination of harmful traditional practices (e.g. child marriage and female genital mutilation).



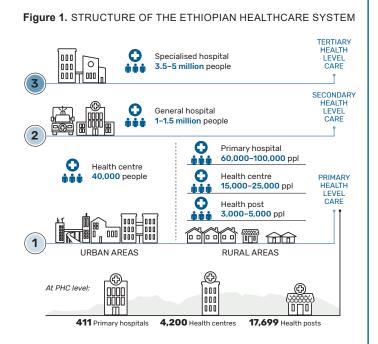
1.2 ETHIOPIA'S HEALTHCARE SYSTEM

Ethiopia's healthcare sector has a three-tier delivery system, as shown in Figure 1. The primary level consists of primary healthcare units (PHCUs, i.e., health posts and health centres) and primary hospitals; secondary-level services are provided by general hospitals; and tertiary services are provided by specialised hospitals.¹

Health posts, health centres and primary hospitals in rural areas have the capacity to treat 3,000–5,000, 15,000–25,000 and 60,000–100,000 people, respectively. In urban areas, health posts cater for around 40,000 people. Secondary hospitals treat up to 1.5 million people, and specialised hospitals treat up to 5 million people.²

The current primary care system includes 411 primary hospitals, 4,200 health centres and 17,699 health posts.³ This is where primary healthcare is administered, and primary services are facilitated under the health service delivery structure. Ethiopia's Health Extension Program (HEP) is based at health posts, which are run by nearly 40,000 health extension workers (HEWs).⁴ The HEP is the primary channel for delivering essential healthcare services to the people of Ethiopia, with a particular focus on rural areas, where healthcare accessibility is restricted. The successes of the country in meeting national and international goals are primarily associated with this community health service delivery structure.

PHC delivery, especially through the HEP, is supported by a community network that links community members with the PHC system. This link is facilitated through a basic structural unit called the Health Development Army or Women's Development Army, which involves Health Development Teams (HDTs). A single HDT comprises up to 30 households living in the same neighbourhood. The HDT is further subdivided into smaller groups of six members (households), commonly referred to as "one-to-five networks".⁵ The administration of this service



is undertaken with support from an administrative chain that extends from the MoH to *woreda* health offices. At the Ministry level, most PHC-related policies and guidelines are developed by the HEP and the PHC Directorate. Regions, on the other hand, have their own HEP teams under the Health Promotion and Disease Prevention Directorate. These teams oversee HEP- and PHC-related activities. At woreda health offices and in zonal health departments, HEP coordinators provide direct support to the PHC system.

Ethiopia has made significant strides in accomplishing its objective of providing unrestricted healthcare by constructing health posts in every rural region. Nevertheless, there is a noticeable inconsistency and frequently inadequate quality in the services and commodities available at these facilities. Although the majority of rural areas have health posts, certain areas have overlapping facilities and services. This situation has given rise to concerns regarding duplication and inefficiency.

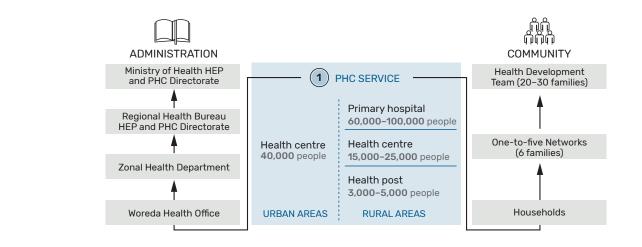
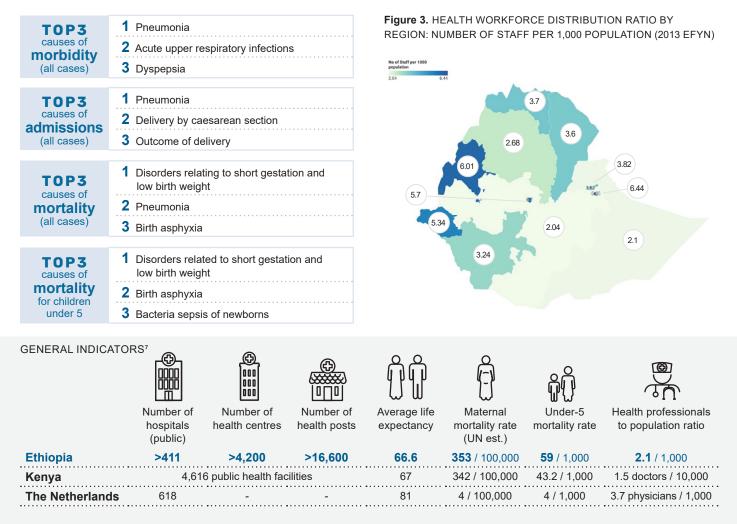


Figure 2. GOVERNANCE STRUCTURE OF THE PHC SERVICE IN ETHIOPIA



1.3 MAJOR HEALTH INDICATORS⁶



1.4 HEALTH FINANCING IN ETHIOPIA

Donations from different partners, loans and out-of-pocket expenditure finance the Ethiopian healthcare sector.⁸ As indicated in Table 1, in 2020/21 the EKN disbursed US\$10.6 million, which is 99% of the US\$10.7 million originally committed. The EKN's contribution represents 2.7% of total funds disbursed by development partners.

The healthcare sector is hindered by limited government budget allocation, inefficient use of resources, ineffective processes for the selection and financing of healthcare services for poor people who have no social health insurance (SHI), and the low level of coverage of the community-based health insurance (CBHI) scheme.

For the budget year 2022/23, the GoE has allocated ETB 19.3 billion to the healthcare sector, which accounts for only 3.4% of the total national budget.¹⁰ This is equivalent to the previous fiscal year budget allocation, but in real terms is much less due to high inflation.¹¹ In Ethiopia, out-of-pocket payments (OOPS) account for 34.4% of current health expenditure (CHE).

Table 1. FUNDS DISBURSED BY DEVELOPMENT PARTNERS IN2020/2021°

Source of funding	Disbursement (US\$)	Disbursement as a proportion of committed amount
SDG Performance Fund	87,176,789.92	93%
EKN	10,621,960.00	99%
Bilateral partners	117,374,402.05	71%
UN agencies	19,475,237.63	81%
Global Fund (GF)	112,304,324.00	77%
GAVI	25,762,288.85	87%
Different foundations	26,162,813.98	182%
Grand total	388,255,856.43	82%



2. Government aspirations and relevant actors

2.1 GOVERNMENT PLANS

Health Sector Transformation Plan II (HSTP-II) (2020/21– 2024/25)

Under HSTP-I, Ethiopia achieved significant improvements in terms of major health indicators, including decreased mortality and morbidity rates of communicable diseases such as HIV, TB and malaria. However, there is still work to be done on disease prevention and improving healthcare service quality. Thus, the aim of HSTP-II is to build on the successes of HSTP-I and set out ambitious goals with the aim of achieving UHC to improve the health of the population. (This document is currently under revision).

National Specialty and Subspecialty Service Road Map (2020–2029)

The main goal is to establish strategies to increase access to and guarantee the quality of specialty/subspecialty services appropriate to the levels of the healthcare delivery tier system, while taking into account the economic, social and epidemiological realities that Ethiopia will face in the coming years.

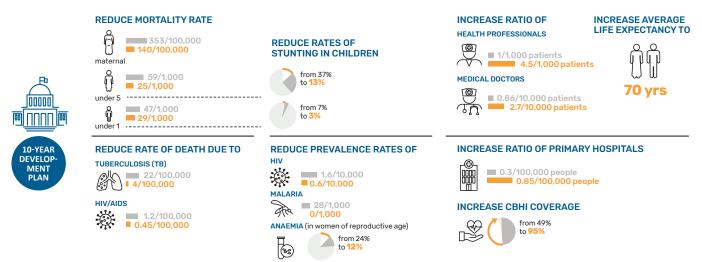
National Health Equity Strategic Plan (2020/21-2024/25)

To achieve the UHC aim that "no one should be left behind by 2030", the National Health Equity Strategic Plan, in accordance with HSTP-II, sets ambitious goals to improve health equity gaps by addressing access, coverage and utilisation of essential health services to improve the quality of healthcare services, and enhance the implementation capacity of the health system.

Roadmap for Optimizing the Ethiopian HEP (2020-2035)

The main objective is to speed up UHC in Ethiopia. UHC will mean all Ethiopians have access to essential health services, encompassing prevention, promotion, treatment, rehabilitation and palliative care. These services will be of sufficient quality to be impactful and avoid financial burdens for individuals.

Figure 4. THE 10-YEAR PERSPECTIVE PLAN OF THE GOVERNMENT (2021–2030)¹²





The roadmap aims to act as a blueprint for implementing necessary improvements to the HEP through the following interconnected priority objectives:

- Ensure equitable access to essential health services: This includes introducing the HEP at all PHCUs, restructuring service delivery platforms, contextualising service delivery modalities for pastoralist and urban settings, and monitoring the addition, modification and removal of HEP packages.
- Improve the quality of health services provided through HEP: The HEP relies on crucial elements such as the workforce, supplies, infrastructure, basic amenities, service delivery processes, health information systems and governance/leadership processes. These components work together for effective healthcare delivery, monitoring, and evaluation within the HEP framework.
- Ensure sustainable financing and eliminate financial hardship from HEP services: Government spending at the PHCU level, user fees, and CBHI are all crucial aspects of healthcare financing. Additionally, community contributions play a significant role in supporting HEP services, and allocating a specific budget for health professionals (HPs) ensures adequate resources. To further enhance funding, resource mobilisation from non-government sources is essential, while social marketing has a vital a role to play in making HEP-related supplies available.
- Strengthen community engagement and empowerment: To effectively implement the HEP, key strategies include community engagement, incentive packages for voluntary community health workers (CHWs), capacity building for CHWs, and multi-sectoral collaboration at both the *kebele* and higher levels. These approaches aim to actively involve communities, motivate CHWs, enhance CHWs' skills, and promote coordinated efforts for comprehensive healthcare delivery.
- Ensure resilience by maintaining the provision of essential services during emergencies: To enhance community safety, key measures include emergency preparedness and response, establishing a community surveillance system with HEP, efficient health emergency management, public health emergency management (PHEM) at the *kebele* level, and ensuring the resilience of HEP to political changes. These actions will help detect, report and respond to local emergencies, ensuring prompt and effective interventions.
- Strengthened and continued political leadership, multi-sectoral engagement and partnership: To achieve clarity and commitment, it is important to promote

and advocate for shared understanding. Multi-sectoral engagement should be encouraged through existing platforms, while partner engagement and coordination should be fostered. These strategies will enhance collaboration and enable effective implementation.

2.2 STAKEHOLDERS IN THE ETHIOPIAN HEALTHCARE SECTOR

Ministry of Health: Oversees the nation's healthcare system through the development of national policies and plans, in collaboration with regional health bureaus.

Regional health bureaus: Oversee and coordinate health-related activities within their respective regions.

District-level (woreda) health offices: Four or five health centres, 20 to 30 HEWs, and, in some cases, primary hospitals, are under the supervision and coordination of district-level health offices, which serve catchment regions with a population of about 200,000.¹³ Zonal health offices also have significant roles, particularly in Oromia, Amhara, SNNPR and SWEPR.

Ethiopian Public Health Institute (EPHI): Conducts research on important health and nutrition issues to transfer technology and use evidence-based knowledge to enhance the health of Ethiopia's population as a whole.¹⁴

Ethiopian Food and Drug Authority (Food Medicine and Healthcare Administration and Control Authority (FMHACA)): Has the mandate to ensure the safety and quality of medical-related goods and food items.

Ethiopian Pharmaceuticals Supply Service (EPSS): Public institution that procures and distributes pharmaceuticals and medical devices to all public health facilities in Ethiopia.

Other key stakeholders: Development partners, NGOs, CSOs, professional associations and private companies.

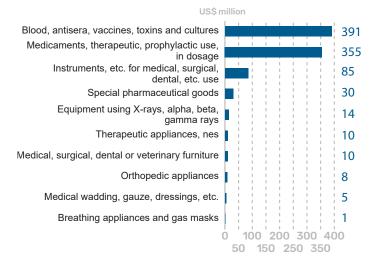
2.3 CURRENT DEMAND, MARKET AND INVESTMENT TREND

The vast majority of Ethiopia's medical-related goods are imported. Local manufacturers are engaged in production that is limited to hospital furniture and medical supplies (e.g., tablets, capsules, gloves), with a market share of 5–10%.

EPSS procures more than 50% of all health-related goods in Ethiopia. Over the past five years, the procurement trend of the EPSS had increased significantly, reaching ETB 17.14 billion in 2020.

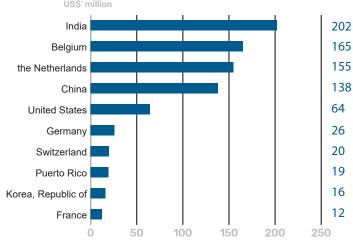


Figure 5. TOP HEALTH-RELATED IMPORTS TO ETHIOPIA, 2022 (CIF VALUE IN US\$ MILLION)¹⁵



A large amount of capital is spent on imports in the healthcare sector. There is a high demand from both the government and the private sector for medical products, indicating opportunities in terms of both trade and investment. By product value, the largest amount of imports are 'blood, antisera, vaccines, toxins and cultures' (HS code 3002). For these products, data from the Ministry of Revenues shows that the Netherlands is the second highest exporter, contributing 29% of total imports. 'Medicaments, therapeutic, prophylactic use, in dosage' (HS code 3004) is the second highest category of imported medical products to Ethiopia. The Netherlands exported these products with a total value of US\$31 million to

Figure 6. TOP EXPORTERS OF HEALTH-RELATED GOODS TO ETHIOPIA IN 2022 (US\$ MILLION)¹⁶



Ethiopia in 2022, which is an 8% contribution. The third highest category of medical imports is 'Instruments etc. for medical, surgical, dental, etc.'. The Netherlands showed a 2.4% market share in this subsector, with exports worth US\$2 million.

According to the Ethiopian Pharmaceuticals and Medical Supplies Manufacturers Association (EPMSMA), the Ethiopian pharma market is growing at 15% every year and expected to reach US\$3.8 billion by 2030. Currently, there are around 16 manufacturers producing items such as tablets, capsules, gloves, injectables and test kits, and over 200 importers of pharmaceuticals and medical supplies in Ethiopia.¹⁷

Table 2. MAIN ETHIOPIAN MEDICAL GOODS MANUFACTURERS AND THEIR PRODUCTS

Company	Products
Ethiopian Pharmaceuticals Manufacturing	Tablets, capsules, oral liquids, powder for reconstitution, small volume parenteral (vials, ampoules) containing anaesthetics, vaccines and other injectables, large volume parenteral
National Veterinary Institute	Veterinary vaccines, drugs, diagnostic kits
East African Pharmaceuticals Plc	Tablets and capsules
Pharmacure Pvt. Ltd. Plc	Large volume parenteral
MedSol Pharmaceuticals Manufacturing	Large volume parenteral
Sino-Ethiop Associate Africa Plc	Hard gelatine capsules
Cadila Pharmaceuticals Ethiopia Plc	Tablets, capsules and oral liquids
Julphar Pharmaceutical Plc	Capsules, oral liquids and semi-solids
Humanwell Pharmaceutical Ethiopia Plc	Tablets, capsules, small and large volume parenteral
Sansheng Pharmaceutical Plc	Tablets, capsules, small and large volume parenteral
Klitch Estro Biotech Plc	Tablets, capsules, injectables, and dry powder for suspension syrups
Glocare Pharma Manufacturing Plc	Tablets and oral liquids
Access Bio Inc. (Ethiopia Branch)	Malaria rapid diagnostic test (RDT)
CGF Business Group Plc	Medical gloves
SA-MED Plc	Intravenous (IV) cannula, IV giving sets, PVC bags for IV solutions
The New Millennium World Medical Device Manufacturing Plc	In vitro diagnostic (IVD) tests



Medical devices, pharmaceutical products and supplies require registration, following approval processes based on the nature of the product and according to the EFDA registration directives. Unless there is an in-country emergency, no product can be imported without the approval of the EFDA. The EFDA has guidelines for every medical sector product. The overall process is shown in Figure 7.

For the registration process, the required certificates and documents depend on the product type. Good manufacturing practice (GMP), certification of pharmaceutical products (CPP) and certificate of suitability (CEP) are among the certifications

required to register medicines, whereas the registration of medical devices requires the submission of documents including transmissible spongiform encephalopathy (TSE)/bovine spongiform encephalopathy (BSE) risk free letter submission, GMP, and product certification. Product registration is a lengthy and tedious process. To launch a medical product in Ethiopia, it is recommended to use the services of an agent who will exclusively represent the supplier/exporter, who is focused on its products only, and who can take care of all legal procedures and, most importantly, marketing and promotion. A well-established company, with a reliable sales force, good capital and dedication, are key to penetrating the market.

Figure 7. PRODUCT REGISTRATION APPROVAL PROCESS



2.4 INVESTMENT INCENTIVES

Investment incentives are applicable depending on the investment activity. Once an investor has obtained an investment licence, details of the investment incentives can be obtained from the Ethiopian Investment Commission (EIC). To understand incentives, a new legal document to refer to regarding investment incentives in Ethiopia is the Council of Ministers' Investment Incentive Regulation No. 517/2022.¹⁸ However, the following are some of the investment incentives that currently apply:

- Corporate income tax exemption.
- Duty-free importation of capital goods and construction materials necessary for the establishment of a new enterprise or the expansion or upgrading of an existing enterprise.
- Duty-free importation of spare parts, the value of which is not greater than 15% of the total value of the capital goods within five years from the date of commissioning of the project. 'Capital goods' in Regulation No. 517/2022 includes equipment and other similar tangible goods used to produce goods or render services for consideration.
- Duty-free importation of some vehicles.

Note: These incentives are for investments limited for a specific period (depending on the investment activity), and strictly dependent on the approval of the Ministry of Finance. Investors may approach the EIC to receive information on what incentives they are entitled to. Their applications will then be sent to the Ministry of Finance for a final decision.



3. Opportunities

Under Ethiopian Investment Regulation 474/2020, various investment sectors are open to foreign investors, although the regulation indicates that primary-level and middle-level health-care services are reserved for local investment, so foreign companies cannot become direct primary healthcare providers. However, primary healthcare also presents intervention areas, including health post capacitation activities and infrastructure development.

3.1 TERTIARY HEALTHCARE AND ADVANCED DIAGNOSTIC SERVICES

A situational analysis conducted by the MoH in 2019 of primary, general and tertiary hospitals indicates that there is a huge gap in the availability of medical equipment at the national level. Specifically, equipment used to support patients in their recovery from cardiac/respiratory failure, arthroscopes, diagnostic imaging equipment, spirometers, bone marrow biopsy sets and microtomes are available in only a limited number of hospitals.¹⁹

The poor availability of advanced diagnostic services and tertiary healthcare is one of the major reasons patients in Ethiopia flock to Black Lion Hospital, which is better equipped other hospitals across the country.²⁰

Construction and operation of tertiary healthcare centres, specifically for advanced diagnostic services could support the difficulties faced in tertiary healthcare sector. Such facili-

ties include advanced cardiac surgery/interventional cardiac procedures, organ transplants (renal and liver), fertility treatment, advanced orthopaedic procedures, oncology services (diagnostic, radiotherapy and chemotherapy), ophthalmology, neurosurgery, and rehabilitation medical services. There are also opportunities in terms of exporting or manufacturing medical devices, medical supplies, laboratory reagents, and pharmaceuticals to support tertiary healthcare centres.

3.2 HEALTHCARE TECH AND INNOVATION

Digital health and enhancing health information systems is another area of the Ethiopian healthcare sector that is open to intervention. Health infrastructure development, proper plan execution, and health data management all require digitalised health information technology systems for efficient utilisation of resources and better support of the community. In this regard, the GoE's digital strategy recognises e-Health as a tool to improve the effectiveness and efficiency of health service delivery. As part of its efforts to support the healthcare sector, in June 2022, the MoH, EPHI, Ministry of Innovation Technology and the Mastercard Foundation launched the Digital Health Information and Learning Centre (DHILC), which provides public health emergency information in five different languages.²¹

The subsector presents opportunities for Dutch companies engaged in health data analysis, mechanisms to generate insights on health trends, disease prevalence, and service utilisation. Additional opportunities are mobile health technologies, telemedicine, e-Health architecture, digital health solutions, digitised data collection management and analysis systems, digital solutions to aid human resource capacity, improvement of client-provider interaction systems, health data warehouse development and ICT infrastructure.





3.3 ENHANCING WORKFORCE CAPACITY

Ethiopia faces one of the most critical deficits of physicians in sub-Saharan Africa.²² The healthcare industry has consistently struggled with high turnover of personnel. Ethiopia is one of the countries listed by the World Health Organization as having a health workforce crisis.²³ To meet the human resource needs of Ethiopia's healthcare sector and advance the goals of the Health Sector Development Plan, the GoE introduced and implemented the Human Resources for Health Strategic Plan (2009–2025).²⁴

Currently, HSTP-II aims to create and maintain a skilled, caring and motivated health workforce with the right combination and numbers of skilled personnel. To motivate health staff, human resource development and management must be further enhanced.²⁵ In this regard, HSTP-II highlights the promotion of ethics and professionalism in pre-service education and in-service training programmes, and focuses on increasing the quality of pre-service training and continuing professional development.

The EFDA registration department has fewer than 20 staff members to accommodate importers, manufacturers and other health-related businesses for registration purposes. According to importers, the registration of medical devices and medicines is a very lengthy process. To mitigate this, the authority plans to increase the number of staff and offer the necessary skills training. This will make it easier for Dutch companies to invest in interventions in capacity building, recruitment, deployment, performance management, strengthening the human resource information system (HRIS), and special certification training.

3.4 PRIMARY HEALTHCARE

Expansion and establishment of new health facilities in areas with inadequate access to primary healthcare services is yet another potential area of intervention. This includes building primary health centres, community health posts, and mobile clinics to reach remote and underserved populations. Setting up system and upgrading the facilities of the primary healthcare facilities by assessing the condition of existing healthcare facilities and investing in renovations and repairs is another area to consider for Dutch companies. Facilities should be equipped with essential medical equipment, pharmaceuticals, and supplies to support the provision of good-quality primary healthcare services.

3.5 PRE-HOSPITAL EMERGENCY CARE

Pre-hospital care is less developed in Ethiopia, and there is scant research on the degree of care that is being provided and the factors that influence such care. That said, trauma accounts for 28% of emergency hospital visits in Ethiopia. Accordingly, there is a need for improved access to an emergency medical service (EMS) system to respond to the needs of those with acute diseases and injuries, often young people, as well as to Ethiopia's growing geriatric population.²⁶

The MoH has launched an initiative to enhance its EMS system over the next 10 years. Among these activities, all regions will receive ambulances – at least one for each district (*woreda*); paramedics will required to be trained; and on-board medical equipment will be required to be purchased.

Opportunities for investment in this area include the assembly, supply and distribution of disaster and emergency preparedness kits; the supply of life-saving emergency medical equipment; and the supply of fully equipped private ambulances and trained emergency medical technicians/paramedics, with potential incorporation into the national major city emergency and critical care improvement programme.

3.6 MEDICAL PRODUCTS MANUFACTURING

There are investment opportunities for Dutch companies in both trade and manufacturing. Various medical supplies – regular medicines, laboratory reagents and chemicals, routine medical equipment, capital medical equipment – are procured every one or two years by the EPSS. Promising products include medicines for therapeutic and prophylactic purposes, antibiotics, penicillin or derivatives, vitamins, corticosteroid hormones, laboratory reagents, imaging equipment such as x-ray and ultrasound scanners, dental equipment and laboratory equipment.



References

¹ Alebachew, A. and Waddington, C. (2015). *Improving health system efficiency: Ethiopia. Human resources for health reforms*. World Health Organization. https://apps.who.int/iris/handle/10665/187240

² Ministry of Health. (2020). *Realizing Universal Health Coverage Through Primary Healthcare. A Roadmap for Optimizing the Ethiopian Health Extension Program 2020–2035.*

³ Ministry of Health. Health and health related indicators. 2020/2021.

⁴ Ministry of Health. (2020). *Realizing Universal Health Coverage Through Primary Healthcare. A Roadmap for Optimizing the Ethiopian Health Extension Program 2020–2035.*

⁵ Primary health care systems (PRIMASYS): Case study from Ethiopia. Geneva: World Health Organization; 2017. Licence: CC BY-NC-SA 3.0 IGO: https://www.researchgate.net/publication/321586822_PRIMARY_ HEALTH_CARE_SYSTEMS_PRIMASYS_Case_Study_from_Ethiopia

⁶ Ministry of Health. Health and health related indicators. 2020/2021.

7 Ministry of Health. 2023. Ethiopian Health Sector at a Glance

⁸ Columbia Public Health Comparative Health Policy Library. (2022). *Ethiopia Summary*. https://www.publichealth.columbia.edu/research/comparative-health-policy-library/ethiopia-summary

⁹ Ministry of Health. Health and health related indicators 2020/2021.

¹⁰ Cepheus Research and Analytics. (2022). *Ethiopia's 2022–23 budget*. https://cepheuscapital.com/wp-content/uploads/2019/01/Ethiopias-2022-23-Budget-rev1.pdf

¹¹ Cepheus Research and Analytics. (2022). *Ethiopia's 2022–23 budget*. https://cepheuscapital.com/wp-content/uploads/2019/01/Ethiopias-2022-23-Budget-rev1.pdf

¹² Planning and Development Commission. (2020). *Ten Years Development Plan 2021–2030*. https://www.lawethiopia.com/images/Policy_documents/10_year_plan_english_final.pdf

¹³ Fetene, N., Canavan, M.E., Megentta, A., *et al.* (2019). District-level health management and health system performance. *PLoS One*; 14(2): e0210624. https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC6358064/

14 Ethiopian Public Health Institute. https://ephi.gov.et/about-us/

¹⁵ Ministry of Revenue. (2022). Trade statistics.

¹⁶ Ministry of Revenue. (2022). Trade statistics.

¹⁷ Ministry of Health and Ministry of Industry. (2015). *Developing the pharmaceutical industry and improving access*. http://admin. theiguides.org/Media/Documents/Ethiopia_strategy_local_poduction. pdf

¹⁸ Federal Negarit Gazette of the Federal Democratic Republic of Ethiopia. (2022). *Council of Ministers Investment Incentives Regulation no.* 517/2022. https://chilot.me/2022/08/03/investment-incentives-regulation-no-517-2022/

¹⁹ Ministry of Health. (2020). National specialty and subspecialty roadmap (2020–2029). https://e-library.moh.gov.et/library/wp-content/ uploads/2021/07/National-specialty-and-sub-specialty-roadmap-2020. pdf

²⁰ International Atomic Energy Agency. (2019). *Ethiopia gears up for increased cancer control with new equipment training and smooth licensing*. https://www.iaea.org/newscenter/news/ethiopia-gears-up-for-increased-cancer-control-with-new-equipment-training-and-smooth-licensing

²¹ https://mastercardfdn.org/ethiopia-launches-digital-platform-public-health/

²² Siyanne M. (2020, October). Addis Standard. *Feature analysis: A national paradox: Ethiopia struggles with shortage of physicians while physicians struggle to find employment.*

²³ Tllahun, B. Endehabtu, B.F., Gashu, K.D. *et al.* (2022). Current and future needs for human resources for Ethiopia's National Health Information System: Survey and forecasting study. *JMIR Medical Education*; 8(2): e28965. https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC9044145/

²⁴ Ministry of Health. (2015). *Human Resources for Health Strategic Plan, Ethiopia;* 2009–2020. https://govtribe.com/file/government-file/ appendix-11-fmoh-hrh-strategy-2009-2025-dot-pdf

²⁵ Ministry of Health. (2021). *Health Sector Transformation Plan (HSTP II)* 2020/21–2024/25. https://fp2030.org/sites/default/files/HSTP-II.pdf

²⁶ Menbeu S., Abebe, Y., Tsadik, A.W. *et al.* (2019). Trends and barriers of emergency medical service use in Addis Ababa; Ethiopia. *BMC Emergency Medicine*; 19(1). doi:10.1186/s12873-019-0242-5. https://www.researchgate.net/publication/332512669_Trends_and_barriers_of_emergency_medical_service_use_in_Addis_Ababa_Ethiopia



Increasing Sustainable Trade and Investment between the Netherlands and Africa

For more information, visit: www.traide.org