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MINISTRY OF HEALTH-ETHIOPIA

The Third National Neglected Tropical Diseases Strategic Plan 2021-2025

(2013/14 – 2017/18 E.C.)

November 2021

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From its inception, the strategic plan was shaped by the foresight of the National NTD Task Force and various national NTD technical working groups, the National Trachoma Task Force, the Onchocerciasis and Lymphatic Filariasis and Leishmaniasis Technical Working Groups, the Schistosomiasis and Soil-transmitted Helminths Technical Advisory Group and the NTD–WASH Task Force. The Ministry expresses its appreciation to those working groups for their commitment and contributions to this forward-thinking strategic plan.

The Ministry yet again thanks its funding and donor agencies and international and local implementing partners for their continuous support, not only with expertise in developing the plan but also in assuring the achievements reached thus far in combating NTDs in Ethiopia.

The Ministry expresses its appreciation to national stakeholders for their participation and contributions at various stages of development of the strategic plan. Increasing institutional collaboration and accountability will be required to pursue a One Health approach to tackling zoonotic NTDs and to realizing the goals and milestones.

The role of the NTD team at the Ministry was irreplaceable in developing the strategic plan. Their commitment to coordination to ensure the participation and contributions of all stakeholders, including relevant teams and experts within the Ministry, health agencies and regional health bureaus, throughout the development process was outstanding. The Ministry extends its sincere appreciation for their contributions and will assure the senior management of all that is necessary for smooth implementation of the Strategic Plan.

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Hiwot Solomon

Director, Disease Prevention and Control Directorate
Ministry of Health

Foreword

Ethiopia is disproportionately affected by a century-long scourge of multiple neglected tropical diseases (NTDs) as compared with other developing countries, including in sub-Saharan Africa. A dozen NTDs inflict morbidity, mortality and disability on the most disadvantaged population groups in our country and negatively affect socioeconomic development. Moreover, people and communities affected by these disenfranchising diseases are subject to severe stigmatization and isolation from social and cultural life and are vulnerable to mental health problems.

Cognizant of this dreadful situation, Ethiopia endorsed the global resolution on NTDs adopted at the Sixty-sixth World Health Assembly (WHA 66:12). The Government also endorsed the Addis Ababa Neglected Tropical Diseases Commitment, 2014. These global and regional commitments paved the way for Ethiopia to establish an evidence-based programme for the control and elimination of NTDs, not only to fulfil its commitments but to improve the quality of life of its people.

The Government was guided by the first and second national NTD strategic plans, 2013–2015 and 2016–2020, respectively, in conducting a data-driven national programme. These strategic plans adapted WHO-recommended interventions for the control and elimination of NTDs, including preventive chemotherapy by mass drug administration, innovative, intensified disease management, vector control and management, veterinary public health services and the provision of safe water, sanitation and hygiene (WASH). The programmes achieved many of the national milestones stipulated in the strategic plans, achieving optimal reduction of the number of people who required preventive chemotherapy and averting visual impairment and blindness due to trachoma and disabilities due to lymphatic filariasis and podoconiosis.

To ensure progress in the control and elimination of NTDs in Ethiopia, a third national NTD strategic plan was necessary to respond to the lessons learnt in the previous engagements and the findings and recommendations of evaluation of the second strategic plan. Another aim of the third strategic plan is to align it with the WHO road map for neglected tropical diseases 2021-2030, the ESPEN Strategic Framework 2025 and the Sustainable Development Goals to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030. The milestones in the strategic plan were also incorporated into the national Health Sector Transformation Plan II (2021–2025).

The third national NTD strategic plan will consolidate progress made in the control of nine NTDs (trachoma, onchocerciasis, schistosomiasis, soil-transmitted helminths, lymphatic filariasis, podoconiosis, leishmaniasis, dracunculiasis and scabies) over the past five years and to address another three NTDs (rabies, leprosy, and dengue and chikungunya) that affect people in the country. Leprosy, a long-standing NTD, will continue to be addressed within the national tuberculosis and leprosy programme, as detailed in the national Tuberculosis and Leprosy Strategic Plan July 2021–June 2026. As little is known about other NTD not included in the current strategic plan, evidence generation and application of a One Health approach will be used for decision-making.

The vision of the national NTD strategic plan – an NTD-free, healthy, productive, prosperous society – is aligned with and will eventually contribute to realization of the vision and mission of our Ministry. Moreover, a unique aspect of this third strategic plan is that it is based on the pillars of enhanced accountability, integration, cross-cutting approaches and Government ownership. The strategic plan also emphasizes coordination and partnerships, scaling-up access to interventions and tracking and taking corrective action through evidence generation. We are grateful to the Expanded Special Project for Elimination of Neglected Tropical Diseases (ESPEN) for providing the framework for development of the national NTD strategic plan 2021–2025 in the WHO region for Africa, which guided formulation of the strategic plan.

The COVID-19 pandemic will continue to affect overall socioeconomic development in general and implementation of this strategic plan in particular. Hence, I take this opportunity to call upon all national and international stakeholders to do their level best to sustain the gains registered thus far and to redouble their efforts to realize the envisaged goals and targets of the strategic plan through strategic partnerships and mutually beneficial collaboration.

Last but not least, on behalf of Ethiopia, I would like to express our Ministry's readiness to renew its commitment and play a crucial leadership role in facilitating smooth, effective implementation of the strategic plan at all levels of the administrative structure of the country.

Dereje Duguma, MD, MIH
State Minister of Health (Programmes)

Acronyms

CL	Cutaneous Leishmaniasis
CM NTD	Case Management Neglected Tropical Disease
DHIS	District Health Information System
EPSA	Ethiopian Pharmaceutical Supply Agency
HIV/VL	HIV/Visceral Leishmaniasis
HMIS	Health Management Information System
HSTP	Health Sector Transformation Plan
JAP	Joint Application Package
LF	Lymphatic Filariasis
MDA	Mass Drug Administration
MoH	Ministry of Health
NTD	Neglected Tropical Disease
PC NTD	Preventive Chemotherapy Neglected Tropical Disease
SDG	Sustainable Development Goal
SNNP	Southern Nations, Nationalities and Peoples
SOP	Standard Operating Procedure
STH	Soil-Transmitted Helminths
TAS	Transmission Assessment Survey
TT	Trachomatous Trichiasis
VL	Visceral Leishmaniasis
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization

Glossary

Control: Reduction of disease incidence, prevalence, morbidity and/or mortality to a locally acceptable level as a result of deliberate efforts; continued interventions are required to maintain the reduction. Control may or may not be related to global targets set by the World Health Organization (WHO).

Elimination (interruption of transmission): Reduction to zero of the incidence of infection caused by a specific pathogen in a defined geographical area, with minimal risk of reintroduction, as a result of deliberate efforts; continued action to prevent re-establishment of transmission may be required. Documentation of elimination of transmission is called "verification".

Elimination as a public health problem: A term related to both infection and disease, defined by the achievement of measurable targets set by WHO in relation to a specific disease. When reached, continued action is required to maintain the targets and/or to advance interruption of transmission. Documentation of elimination as a public health problem is called "validation".

Eradication: Permanent reduction to zero of the worldwide incidence of infection caused by a specific pathogen, as a result of deliberate efforts, with no risk of reintroduction.

Hygiene: Conditions or practices conducive to maintaining health and preventing disability.

Integrated vector management: Rational decision-making to optimize the use of resources for vector control.

Mass drug administration: Distribution of medicines to an entire population or to a large section of the population, e.g., school-age children, in a given administrative setting (for instance, region, zone, *woreda*, sub-*woreda* or village), irrespective of the presence of symptoms or infection; however, exclusion criteria may apply. (In this document, the terms "mass drug administration" and "preventive chemotherapy" are used interchangeably.)

Morbidity: Detectable, measurable clinical consequences of infections and disease that adversely affect the health of individuals. Evidence of morbidity may be overt (such as the presence of blood in the urine, anaemia, chronic pain or fatigue) or subtle (such as stunted growth, impeded school or work performance or increased susceptibility to other diseases).

Monitoring and evaluation: Means to improve performance and measure results to improve management of outputs, outcomes and impact.

Platform: Structure through which public health programmes or interventions are delivered.

Preventive chemotherapy: Large-scale use of medicines, either alone or in combination, in public health interventions. Mass drug administration is one form of preventive chemotherapy; other forms may be limited to specific population groups, such as school-aged children and women of childbearing age. (In this document, the terms "preventive chemotherapy" and "mass drug administration" are used interchangeably.)

Executive summary

Neglected tropical diseases (NTDs) are endemic in Ethiopia and pose a threat to the poorest and most marginalized communities in areas where access to health care, clean water and sanitation is limited. The intention of this third national Strategic Plan on NTDs is to assure the prevention, control and elimination of NTDs. In addition, it will build on the gains and strengths of the second edition, 2016–2020 **(1)** by integrating new developments in policy and programming. It covers NTD interventions that will be implemented during the period 2021–2025. The planning and implementation of all NTD programmes will be guided by this Strategic Plan. It therefore provides implementing partners and stakeholders with a harmonized tool to facilitate enhanced, coordinated support to the country.

The overall goal of the plan is to achieve the Sustainable Development Goals (SDGs) through sustainable, integrated, national NTD prevention, control and elimination with intersectoral collaboration through cross-cutting approaches and increasing Government ownership. This will also ensure achievement of the national NTD targets by 2025 and provide a secure platform for future endeavours. Ultimately, it will contribute to poverty alleviation in the country and contribute to attainment of global NTD goals, as the country shoulders a considerable NTD burden.

The Ministry of Health (MoH) is composed of agencies, institutions, specialized hospitals, the health programme and operational directorates. The national team for NTD prevention, control and elimination is under the Disease Prevention and Control Directorate. During the past decade, NTDs received increased attention from policy-makers and were included in the Second Health Sector Transformation Plan 2021-2025 **(2)**, which is the second phase of the "Envisioning Ethiopia's Path towards Universal Health Coverage through Strengthening Primary Health Care"**(3)**.

The MoH identified and prioritized eight NTDs in the past decade: Guinea-worm disease (GWD), onchocerciasis, trachoma, soil-transmitted helminths (STH), schistosomiasis, lymphatic filariasis (LF), leishmaniasis and podoconiosis. Scabies was recently included among the priority NTDs and addressed in the national NTD programme. Rabies, leprosy, and dengue/chikungunya are being considered for inclusion in the next 5 years.

The MoH has also included NTD indicators in the national health management information system (HMIS) and the *woreda* health information system (DHIS). The MoH relies on the Ethiopian Pharmaceuticals Supply Agency (EPSA) for procurement, storage and distribution of donated drugs, medical supplies and equipment directly to implementation units, at *woreda* level.

The Ethiopian NTD programme is an integrated package of services with the strategic goal of reducing the burden of NTDs through innovative, high-quality, cost-effective approaches with cross-cutting themes: integration of interventions, multisectoral coordination, assured country ownership and universal health coverage for the achievement of national programme targets by 2025. The guiding principles are core elements for smooth achievement of the goals of the programme: Government ownership and leadership, evidence-based programming, consultation, transparency, inclusiveness and community engagement. Each programme will maintain its disease-specific objectives, strategies, targets and milestones in its integrated package, on the understanding that achieving its goals will contribute to achievement of the national goal.

These strategies require three fundamental shifts and three programme approaches:

- increasing accountability for impact through use of indicators;
- movement away from siloed, disease-specific programmes to mainstreaming into the national health system and intensifying cross-cutting approaches centred on the health needs of people and communities;
- changed operating models and culture to ensure greater Government ownership of programmes;
- advocacy, coordination and partnerships, enhanced planning for results, resource mobilization and financial sustainability of national NTD programmes;
- control and elimination, scaled-up access to interventions, treatment and building system capacity; and
- enhanced NTD monitoring, evaluation, surveillance and operational research.

To ensure that interventions are implemented for each NTD endemic in Ethiopia targeted for preventive chemotherapy (PC) and for case management (CM), several milestones have been set, indicating scaling up and scaling down of interventions. Progress towards meeting the objectives will be measured against disease-specific indicators. The NTD secretariat and team at the MoH will be responsible for operationalization of the Strategic Plan, whereas regional health bureaus and zonal and *woreda* health offices will ensure day-to-day implementation of the programme. National and local NTD steering committees will provide guidance and facilitate smooth, effective programme implementation. The MoH will strengthen membership and provide documented terms of reference for programme coordination during the next 5 years.

The Ethiopia Sustainability Action Plan for NTD Control, Elimination and Eradication 2021–2025 **(4)** will serve as the road map for sustaining gains that would be achieved from the materialization of the third national NTD Strategic Plan. The Strategic Plan is also aligned with the overall Health Sector Transformation Plan framework, HSTP II **(2)**, the new WHO NTD road map (2021–2030) **(5)** and ESPEN Strategy Framework 2021-2025 **(6)**.

Assumptions, risks and mitigation plans have been identified to overcome unforeseen circumstances that could influence implementation of the programme to meet the goals and targets. The performance and accountability framework is designed to track and ensure progress towards the targets.

Ownership of the national and subnational programmes is reflected in clear programme deliverables, such as the regional NTD plan and *woreda*-based planning. Coordinating bodies will be established and strengthened at federal, regional and *woreda* levels as NTD taskforces. All levels of the health system will play critical roles in leading and mobilizing local resources to complement and sustain the health outcomes of the Strategic Plan.

Introduction

Ethiopia has completed implementation of the second edition of the National Neglected Tropical Disease Strategic Plan (2016–2020) **(1)**. Although significant achievements were made during the period, there were also significant challenges, including the COVID-19 pandemic and sporadic internal conflicts resulting in massive displacement of people, which affected smooth implementation of planned interventions and impeded progress in achieving the targets. The COVID-19 pandemic and subsequent public health measures, such as restriction of movement and social distancing, also had negative effects on implementation of interventions. Nonetheless, the country made impressive progress towards the goals of control and elimination.

The first national NTD Strategic Plan (2013–2015) defined the burden of NTDs, initiated a national programme and established structures at various levels. The second Strategic Plan (2016-2020) consolidated the NTD programme and scaled up interventions nationally and locally. Operationalization of the Strategic Plan was assessed critically and evaluated at annual review meetings and in disease-specific assessments, routine reports and a final evaluation. The reviews showed significant progress in improving people's quality of life and livelihoods through controlling NTDs. The MoH and partners provided millions of treatments through mass drug administration (MDA) for the five PC NTDs, provided morbidity management and disability prevention across the country, engaged with partners to improve access to water, sanitation and hygiene (WASH) and conducted hundreds of surveys of disease prevalence to guide programmatic decisions.

This third National NTD Strategic Plan covers Ethiopian fiscal years 2013/14–2017/18 (2021–2025 GC). During this period, the NTD programme will build on the successes and lessons from implementation of the first and second Strategic Plans consolidate the gains achieved so far in the fight against NTDs. Its aim is to build a sustainable, resilient, high-quality, equitable NTD programme that is fully integrated and mainstreamed into the national health system. The plan is based on in-depth evaluation of the second national Strategic Plan and also the HSTP II, socioeconomic direction, the global NTD road map, ESPEN Strategy Framework 2021-2025 and other global and national commitments to realizing the SDGs.

The third Strategic Plan is intended to govern the prevention, control and elimination of NTDs with new developments in policy and programming and details of the NTD interventions that will be implemented over the next 5 years. It was developed in consultation with the regional health bureaus, sector ministries and agencies, development partners, funding organizations, academia, research institutions and civil society organizations. A core team consisting of experts in the field coordinated the process. The participatory approach was instrumental to ensuring a comprehensive plan and the commitment and shared vision of all stakeholders. The Strategic Plan is intended to be used by the Government to guide planning and implementation of NTD programmes, facilitate alignment among stakeholders and accelerate progress towards the prevention, control, elimination and eradication of NTDs. It provides a harmonized tool for all partners working on NTDs to ensure joint support to the country.

This third Strategic Plan is organized into four sections: a national NTD situation analysis; the NTD objectives, targets and strategic directions; implementation, monitoring and evaluation; and the national NTD budget forecast for the 5 years, with a costing and financial gap analysis.

1 Situation Analysis

Situation Analysis

1.1 Re-assessment of national priorities and commitments on NTDs

Globally, NTDs have received more attention during the past two decades, as demonstrated by the World Health Assembly's adoption of resolutions on NTDs, the London Declaration on NTDs **(7)**, more donor funding and large-scale drug donation programmes by pharmaceutical companies **(8)**. In January 2012, WHO published accelerating work to overcome the global impact of neglected tropical diseases: A road map for implementation **(9)**. WHO has since updated this road map, setting overarching impact-oriented global targets for NTDs for 2021–2030 **(5,10)** to contribute to achievement of the health-related SDGs. The road map describes the cross-cutting, integrated approaches necessary to achieve the targets, through activities on three pillars:

- Accelerate reduction of the incidence, prevalence, morbidity, disability and death due to NTDs by using scientific advances and filling gaps in research to provide new interventions and effective, standardized, affordable diagnostics.
- Intensify cross-cutting approaches by integrated delivery of interventions that are common to several NTDs, mainstreaming them within national health systems in the context of universal health coverage and increasing coordination among stakeholders and related programmes such as WASH and vector control.
- Change operational models and culture to encourage ownership of NTD programmes by countries.

After adoption of resolutions on NTDs by the World Health Assembly, the ministers of health of Member States in the African Region expressed their commitment to scale up interventions to combat the major NTDs. In June 2012, in the Accra Urgent Call to Action on NTDs **(11)**, all stakeholders were urged to accelerate elimination of targeted NTDs in the African Region. In 2013, at the regional consultative meeting on NTDs in Brazzaville, Congo, Member States proposed a regional strategy to accelerate elimination of NTDs. The Regional Strategic Plan provided a set of public health interventions to accelerate the control, elimination and eradication of NTDs in the WHO African Region **(12)**, aligned with the resolution on NTDs adopted by the Sixty-sixth World Health Assembly in May 2013 **(13)**.

The Addis Ababa commitment on NTDs **(14)** was signed by 26 NTD-endemic African countries on 12 December 2014, which committed them to increase domestic investment, strengthen NTD programme goals, work towards global control and elimination targets and use NTD control to strengthen their overall health systems. It also included a pledge to make the world a healthier place, where families and communities can thrive. Domestic management of NTD programmes thus set the foundations for health systems strengthening and for functional universal health systems, placing countries on the path to achieving several of the SDGs.

Cognizant of the burden of NTDs in Ethiopia, the Ministry of Health (MoH) developed national NTD strategic plans for the periods 2013–2015 and 2016–2020, prioritizing eight diseases. NTDs were also included in the country's Health Sector Transformation Plans (HSTP I and II) **(15,2)**, the national essential health-care package and the national health management information system (HMIS). In the two previous NTD strategic plans, the following NTDs were prioritized: Guinea-worm disease (GWD, dracunculiasis), onchocerciasis, lymphatic filariasis (LF), trachoma, schistosomiasis, soil-transmitted helminths (STH), podoconiosis and leishmaniasis. Scabies was added to the list in the second Strategic Plan. In this third NTD Strategic Plan, the following additional NTDs are addressed: rabies, leprosy, and dengue/chikungunya.

1.2 Analysis of the national context

1.2.1 Country analysis

Administrative, community and demographic structures

Ethiopia is located in East Africa. It is the second most populous country in Africa. Administratively, the country is divided into 11 regions, Afar, Amhara, Benishangul-Gumuz, Gambella, Harari, Oromia, Sidama, Somali, South West Ethiopia Peoples', Southern Nations, Nationalities and Peoples (SNNP) and Tigray, and two municipal administrations, Addis Ababa and Dire Dawa (Figure 1). Before the publication of this Strategic Plan, an 11th region - South West Ethiopia Peoples' Region - was established split off from the SNNPR.

Figure 1. **Map of Ethiopia by region and city administration**

The demographics of the country and health indicators in 2019 are shown in Table 1.

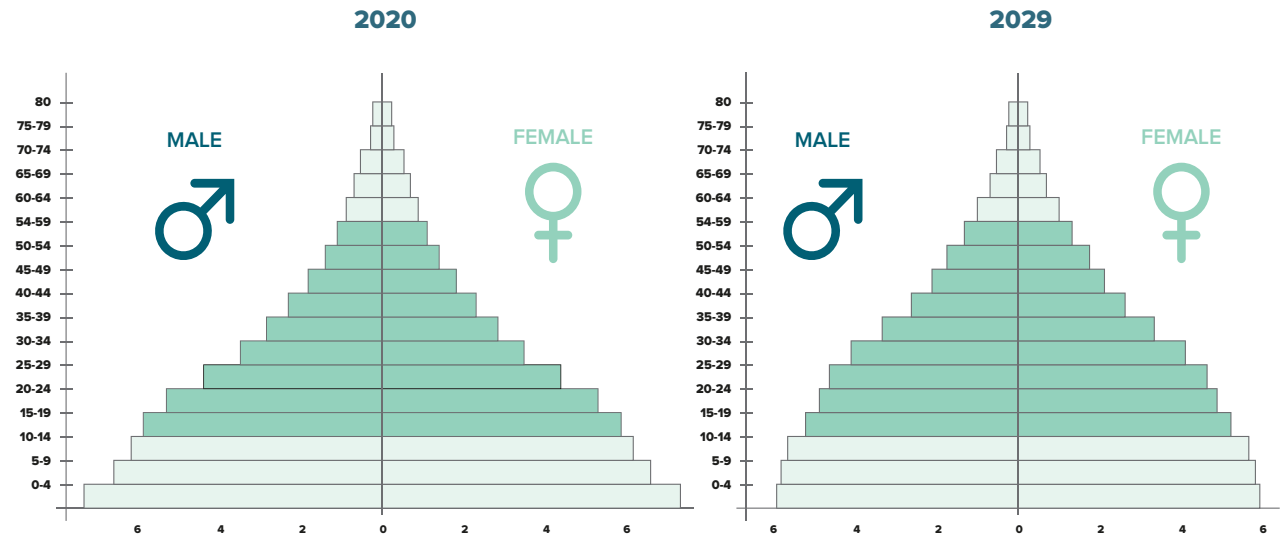
Table 1. **Demographic and health indicators, Ethiopia, 2019**

Indicator	Proportion or number
Population	112.1 million
Growth rate	2.6%
Male to Female Ratio	100.12:100
Age distribution	
Population < 5 years	16%
Population < 15 years	47%
School-age children (5 – 14 years)	31.2%
Population 15–65 years	49%
Population ≥ years	4%
Women of reproductive age (15–49 years)	23%
Total fertility rate	4.6 per woman
Crude birth rate	32 per 1000
Mortality rates	
Maternal	412 per 100 000 live births
Under-five	59 per 1000 live births
Infant	47 per 1000 live births
Neonatal	33 per 1000 live births
Life expectancy at birth	
Male	65.04 years
Female	68.91 years
Average household size	4.6

Sources: Ethiopian Mini Demographic and Health Survey 2019 (16); Central Statistical Agency, Population Projections for Ethiopia 2007–2037 (17).

The population of Ethiopia is young (Figure 2).

Figure 2. **Ethiopian population by age and sex (%)**



Source: HSTP II (3)

Geographical characteristics

Ethiopia is the tenth largest country in Africa, covering approximately 1 104 300 km^2. It shares frontiers to the north and northeast with Eritrea, to the east with Djibouti and Somalia, to the south with Kenya, to the west with Sudan and to the southwest with South Sudan. The country lies completely within tropical latitudes and is situated in the East African time zone. Ethiopia has wide geographical and topographical diversity, with a massive highland complex of mountains (more than half of the country lies 1500 m above sea level) and plateaus, with the highest peaks found in the Semien (Ras Dashen, with an altitude of 4620 m above sea level) and Bale ranges, which are divided by the Great Rift Valley and surrounded by lowlands (depression of 148 m below sea level in Dallol, Afar region).

Socioeconomic status and indicators

Nearly 80% of the population of Ethiopia lives in rural areas, mainly depending on subsistence agriculture (Central statistics agency, July 2013). Agriculture accounts for 39% of the gross domestic product, and farmers depend on rainfed agriculture for their livelihood. Ethiopia reported two-digit (10.8%) annual economic growth in recent years; however, it is a low-income country (gross national income, ≤ US$ 1045 in 2020), with 23.5% of its population living below the poverty line (US$ 1.9 per day) **(18)**.

Road coverage has increased, connecting about 10 765 rural villages (*kebeles*). Recently, innovations in information technology have been extended to more rural and pastoralist communities, creating better opportunities for socioeconomic growth.

In line with the global commitment to achieve the SDGs, Ethiopia's Growth and Transformation Plan II **(19)**, envisions a low- to middle-income country by 2025. Nevertheless, the COVID-19 pandemic and insecurity in some areas pose a threat to ongoing reforms and socio-economic growth.

Table 2. **Socioeconomic status and indicators, 2019**

Indicator		Proportion or number
Access to electricity		35% (83% in urban areas and 14% in rural)
Latrine type	Improved latrine coverage	20%
	Unimproved latrine coverage	56%
	No latrine	27%
Household drinking-water source	Improved source	69%
	Unimproved source	31%
Mobile phone subscribers		32 million
Gross domestic product per capita		US$ 862 (2020 data)
Human capital index		0.38
Health expenditure		4.2% of gross domestic product

Water source and sanitation

In Ethiopia, 69% of households have access to an improved source of drinking-water, comprising 87% of urban and 61% of rural households. Overall, only 20% of Ethiopian households (42% urban and 10% rural) use improved toilet facilities. More than half (56%) of rural households use unimproved toilet facilities.

Political, economic, social and technological analysis

In order to set the basic socio-economic assumptions for the strategic period of the third NTD Strategic Plan, a political, economic, social and technological analysis was conducted in the context of the SDGs and universal health coverage.

Political

- Inclusion of NTDs in the Government health sector transformation plans
- MoH-led development of the national NTD Strategic Plan, with clear programme deliverables at all levels of the health system, to facilitate NTD programme implementation
- Internal conflict in some areas of the country will negatively affect NTD programme implementation
- Increasing numbers of internally displaced people
- Surge of the COVID-19 pandemic

Economic

- Ethiopia remains one of the world's poorest countries, with a high burden of NTDs
- Limited domestic funding for the NTD programme
- Current inflation in the country affects livelihoods
- Rapid increase in the foreign exchange rate
- Low human capital index
- Low health expenditure per capita

Social

- Very poor access to electricity, especially in rural areas
- Poor access to improved latrines
- Poor access to improved drinking-water sources
- Common practice of open defaecation in some communities
- Insufficient use of basic sanitation services by the general population

Technological

- Less than one third of the population uses a mobile telephone
- Insufficient electricity, which limits extension of digital health care
- Extensive computer illiteracy, especially in rural areas

Health system analysis

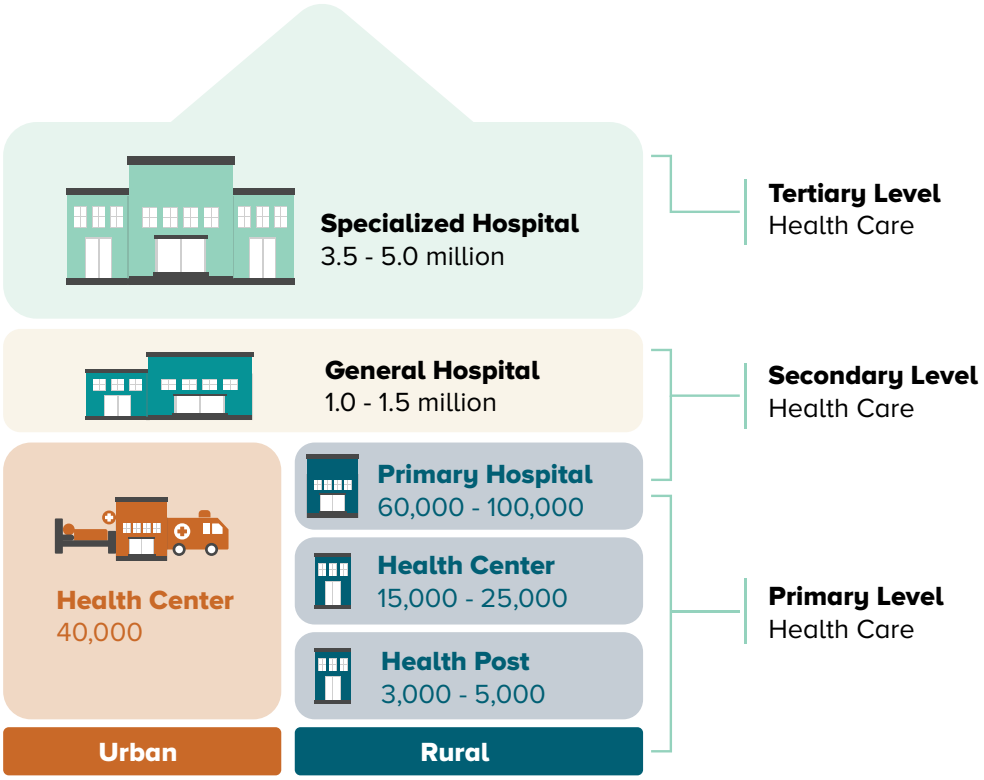
Health policy, vision and health sector transformation plan

The Government of Ethiopia formulated a comprehensive health policy in 1993 to increase access to promotive, preventive, essential, curative and rehabilitative health services for all segments of the population through decentralized, integrated health-care delivery systems. The MoH conducted a 20-year health vision exercise under the national development plan to advance towards a low- to middle-income country by 2025 and an average- to middle-income country by 2035. HSTP-I (2016–2020) was prepared with this vision to serve as the health chapter of the second Growth and Transformation Plan and the first phase of the "Envisioning Ethiopia's Path towards Universal Health Coverage through Strengthening Primary Health Care by 2035". The second HSTP **(2)** is a 5-year national health strategic plan that covers the period July 2020–June 2025. During this strategic period, the gains of HSTP-I will be built on and consolidated for a resilient, sustainable, high-quality, equitable health system. The objective of HSTP-II is to improve the health status of the population by realizing four objectives: accelerate progress towards universal health coverage, protect people from health emergencies, transform *woredas*, and improve health system responsiveness.

Health-care delivery system

The Ethiopian health system has six components: (i) service delivery, (ii) health workforce, (iii) health information systems, (iv) access to essential medicines, (v) financing and (vi) leadership and governance. Ethiopia adopted primary health care as a national strategy in 1976 to provide fair access to health services by all people throughout the country. The health services are structured into primary, secondary and tertiary levels of care (Figure 3). The primary care unit comprises five satellite health posts, a health centre and a primary hospital in rural areas and a health centre in urban settings.

Figure 3. **Structure of the Ethiopian health system**



A health centre provides both preventive and curative services. It serves as a referral centre and provides practical training for health extension workers. It coordinates and supervises all health activities, including NTD programmes, in the health posts in its catchment area. Primary hospitals, with 25–50 beds, offer inpatient and ambulatory services to about 100 000 people, including emergency surgery (such as caesarean sections and blood transfusions). Primary hospitals also handle trachomatous trichiasis (TT) and hydrocoele surgery. They are referral centres for health centres in their catchment area and provide practical training for nurses and other allied health professionals. General hospitals serve as referral centres for primary hospitals (rural areas) and health centres (in urban settings) and are expected to serve about 1.5 million people. Some general hospitals also serve as training centres for health officers and nurses. Specialized tertiary referral and teaching hospitals have catchment populations of 3–5 million.

According to the Health Extension Programme optimization road map **(20)**, health posts are either comprehensive or basic. Comprehensive health posts are staffed by health extension workers, nurses, midwives and other health professionals, while basic health posts are staffed by health extension workers and provide various preventive and health promotion services, in addition to treating conditions such as malaria, pneumonia, scabies, trachoma and mild illnesses. Both types of health post refer clients to health centres for higher-level care. Health extension workers are supported by volunteer community workers, known as the “health development army”, to reach every household. Their interventions comprise 16 health packages, organized into three themes: family health, disease prevention and hygiene and environmental sanitation. Health education and communication is a cross-cutting theme.

Each *kebele* has one health post with two health extension workers, who spend their time on community outreach programmes, including visits to households. They play a major role in MDA campaigns, as coordinators and supervisors in the *kebele*; thus, their contribution to the prevention and control of NTDs is crucial. The health extension programme is supported by the health development army to improve access to and use of health interventions. The initiative involves all households in each village and broadly all residents in every *kebele*. It is the main mechanism for reaching all households and thereby the whole community and creates wide public involvement in initiatives such as MDA and disease surveillance.

Secondary health care is provided in general hospitals, which provide inpatient and ambulatory services. They are also referral centres for primary hospitals and training centres for health officers, nurses and emergency surgeons. Tertiary health care consists of specialized hospitals. They are also referral centres for general hospitals.

Seven agencies in the national health system are responsible for guiding and implementing health and health-related activities with the MoH: the Ethiopian Public Health Institute (EPHI), the Armauer Hansen Research Institute, the HIV/AIDS Prevention and Control Office, the Ethiopian Health Insurance Agency, the Ethiopian Food and Drug Authority, Ethiopian Pharmaceuticals Supply Agency and the National Blood Bank.

The regional distribution of public health facilities is shown in Table 3.

Table 3. **Regional distribution of public health facilities in Ethiopia, 2020**

Organizational Unit, Regional Health Bureaus	Clinics	Health centres	Health posts	Hospitals	Total
Addis Ababa	1182	98	0	45	**1 325**
Afar	49	95	338	8	**490**
Amhara	1238	858	3 551	91	**5 738**
Benishangul Gumuz	138	51	505	6	**700**
Dire Dawa	51	15	34	6	**106**
Gambella	122	28	174	5	**329**
Harari	47	8	28	5	**88**
Oromia	1758	1399	7 115	109	**10 381**
SNNP	701	730	3 970	81	**5 482**
Somali	11	201	1 205	10	**1 427**
Tigray	272	226	744	44	**1 286**
All	**5569**	**3709**	**17 664**	**410**	**27 352**

Source: Ethiopia Master Health Facilities Report (20) and DHIS.

Human resources for health

The health workforce comprises all people engaged in actions whose primary intent is to enhance health. These include clinical staff, such as physicians, dentists, nurses, pharmacists and health extension workers, and management, support and administrative staff. The ability of a country to

meet its health goals depends largely on the knowledge, skills, motivation and deployment of the people responsible for organizing and delivering health services. Ethiopia has one of the lowest health workforce densities in the world, even in comparison with other African countries. Table 4 shows the health professional categories available.

Table 4. **Health professionals by category, Ethiopia, 2020**

Health occupation	Number	Ratio to population
Health extension worker	41 826	0.000373
Clinical health professionals (nurses and health officers)	14 101	0.000126
Medical doctors, clinical specialists, public health specialists	10 755	9.59E-05
Pharmacists	12 356	0.00011
Ophthalmologists, optometrists, ophthalmic nurses/officers, integrated eye-care workers	335	2.99E-06
Mental health professionals	660	5.89E-06
Health information and technology professionals	3 537	3.16E-05
Total	**83 570**	**0.000745**

Source: Ethiopia Master Health Facilities Report (20) and DHIS.

The health worker density in Ethiopia was estimated to be 1.0 per 1000 population in 2018, with an inadequate skill mix of health professionals. This is considerably lower than the 4.5 per 1000 population standard proposed by WHO to achieve universal health coverage.

Health information system

A health information system is designed for managing health-care data, including resources, indicators, data sources, data management, information products and dissemination and use of the information. These six components can be divided into three broad categories, inputs, outputs and processes, and comprise management of health information through a combination of the HMIS, research, development and knowledge management.

The HMIS contains 131 indicators, of which 10 are for NTDs (five for PC NTDs and five for CM NTDs). Inclusion of these indicators in HMIS and DHIS2 and of indicators of epidemic-prone NTDs, such as leishmaniasis, scabies and dengue, in integrated disease surveillance and response was considered an achievement in the evaluation of implementation of the second NTD Strategic Plan. The data for the indicators are derived from health institutions and centralized to provide a single source for all NTD programme data. Health workers collect information on health and health-related issues, which are passed through the *woreda* health offices and regional health bureaus to the MoH for policy and programme decision-making. After analysis, feedback is sent to the regional health bureaus and to health facilities.

The NTD DHIS2 database is a national database integrated into the national HMIS and DHIS2 and is used to capture additional data on surveys, WASH and drug requirements and inventories. This is then entered into the WHO Joint Application Package (JAP) and Trachoma Elimination Monitoring Form (TEMF).

Health-care financing

Primary health care is the lowest level of essential health care provided to the majority of the population of Ethiopia at a cost that the country and communities can afford. There are many sources of financing for Ethiopia's health sector, including the Government treasury (federal, regional and *woreda*), bilateral and multilateral donors, household out-of-pocket expenditure, international and local nongovernmental organizations, private and para-State employers and insurance companies.

To improve resource mobilization for health and better protection of the people from financial hardship, the Government has implemented several interventions including provision of a fee waiver for high-impact interventions through an exemptions programme; subsidization of more than 80% of the cost of care in Government health facilities; community health insurance schemes; and full subsidization for the very poor through fee waivers for both health services and community health insurance premiums **(3)**.

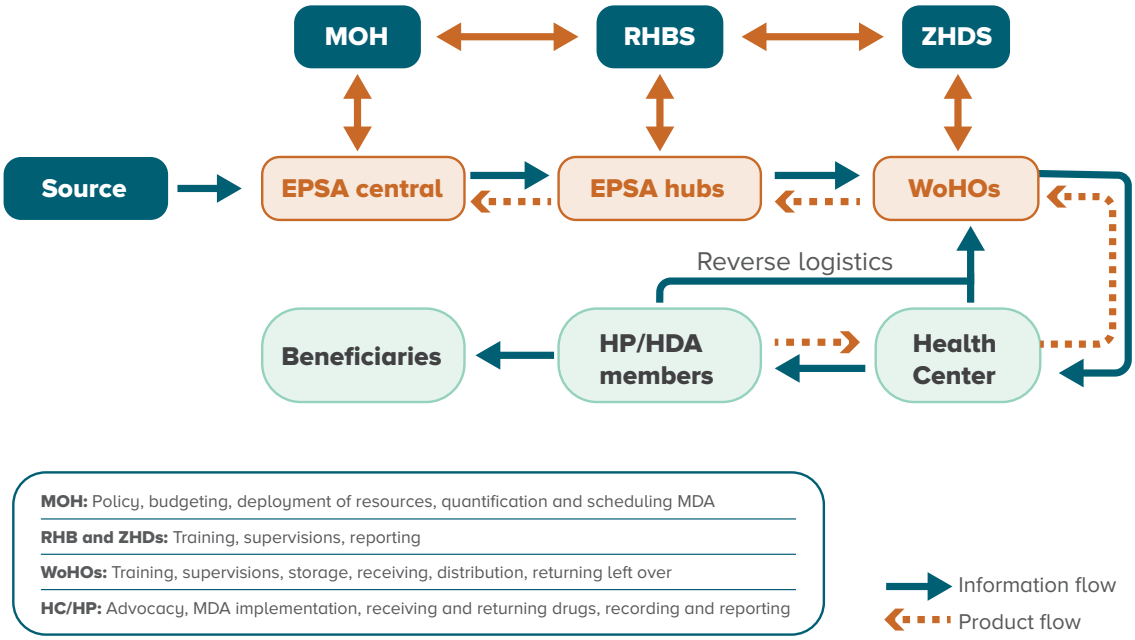
Despite a 45% increase in total health expenditure, from 49.6 billion birr in 2013–2014 to 72.1 billion birr in 2016–2017, growth was only 15% in real terms after adjustment for inflation **(21)**. There is still a gap to be filled to meet the expected average of 5% of the gross domestic product for low-income countries and the global average of 9.2%. Although the Government allocates 60–70% of its total budget to pro-poor sectors, allocations to health in Ethiopia fall short of the Abuja Declaration target **(22)** and the WHO-recommended US$ 86 per capita to deliver universal health coverage. Some of the challenges include a low Government budget allocation to health, inefficient use of resources, lack of a strategic purchasing and performance-based financing mechanism, ineffective processes for the selection and financing of the poor without social health insurance and poor coverage of the informal sector from the community health insurance scheme.

Medical products and supply chain management

As in many countries, management of the supply chain for NTD drugs is complicated by factors such as delays and shortages in pharmaceutical donations, delays in clearance by customs' authorities due to incomplete shipping documents and communication gaps, poor storage facilities and management at local level. Between 2015 and 2018, the percentage of health facilities that met at least 80% of the standard storage conditions increased from 43.0% to 71.4%, while storage availability in health centres decreased from 63.0% to 44.6%. The supply chain was thus plagued by non-availability, unaffordability, irrational use of medicines and inadequate storage and stock management.

The pharmaceuticals fund supply agency (now EPSA) was established in 2007 in response to an MoH pharmaceutical logistics strategic plan to address supply chain problems in public health institutions. The MoH has since relied on EPSA for procurement, acquiring donations, storage and distribution of drugs, medical supplies, medical equipment and chemicals and reagents. EPSA uses an integrated pharmaceutical logistics system and has established an electronic supply management system at the central warehouse and at its hubs in the regions. Currently, the system is designed for routine supply of a revolving drug fund and programme commodities based on consumption. These are not always best fit for MDA supply chains and drugs for CM NTDs. As a result, NTD medicines take longer to reach *woredas*. For effective distribution, the EPSA should be alerted at least 1 month before a planned MDA campaign. Nonetheless, during the HSTP-II, timely actions, including proper quantification and forecasting and reduced procurement lead time, are expected to ensure an uninterrupted supply of quality-assured medicines and supplies, avoid stockouts and provide timely access to essential medicines and health products.

Figure 4. **Pharmaceutical medical supply chain management system for NTDs**



Drug requirements are estimated at *woreda* level, submitted to the regional health bureau and compiled at Federal level during a national drug quantification workshop. The estimated amounts are requested through WHO joint application package (JAP) and transported to EPSA by land and air. The NTD medicines for MDAs include azithromycin, praziquantel, ivermectin, albendazole, mebendazole and tetracycline eye ointment. Medicines and reagents used for the detection and treatment of CM NTDs include liposomal amphotericin B, sodium stibogluconate, paromomycin, kala-azar detect and filariasis test strips. The MoH submits distribution plans to EPSA that take into account remaining medications in each facility. NTD medicines that remain after an MDA should be returned to the *woreda* and reported to the MoH through DHIS2 for consideration for use in the next MDA. Higher-level institutions oversee drug mobilization and redistribution. EPSA is responsible for distributing NTD medicines to *woredas* in accordance with the distribution plan (Figure 4).

Leadership and governance

Health system leadership and governance involve ensuring strategic policy frameworks combined with effective oversight, coalition-building, regulation, attention to system design and accountability. The Ethiopian health sector has various coordinating mechanisms at federal, regional and *woreda* levels, although the performance of the coordinating mechanisms weakens from federal to *woreda* level. The MoH is composed of agencies, institutions and specialized hospitals. It is organized under three State ministries, namely Programmes, Reform and Good Governance, and Operation. Each consists of a number of directorates. The health programme is led by a State Minister and consists of five directorates, where the NTD team is organized under the Disease Prevention and Control Directorate (Figure 5). The NTD team is led by a coordinator and programme officers, including WASH and monitoring and evaluation. The EPHI, EPSA, the Ethiopian Food and Drug Administration and the Armauer Hansen Research Institute work closely with the NTD team.

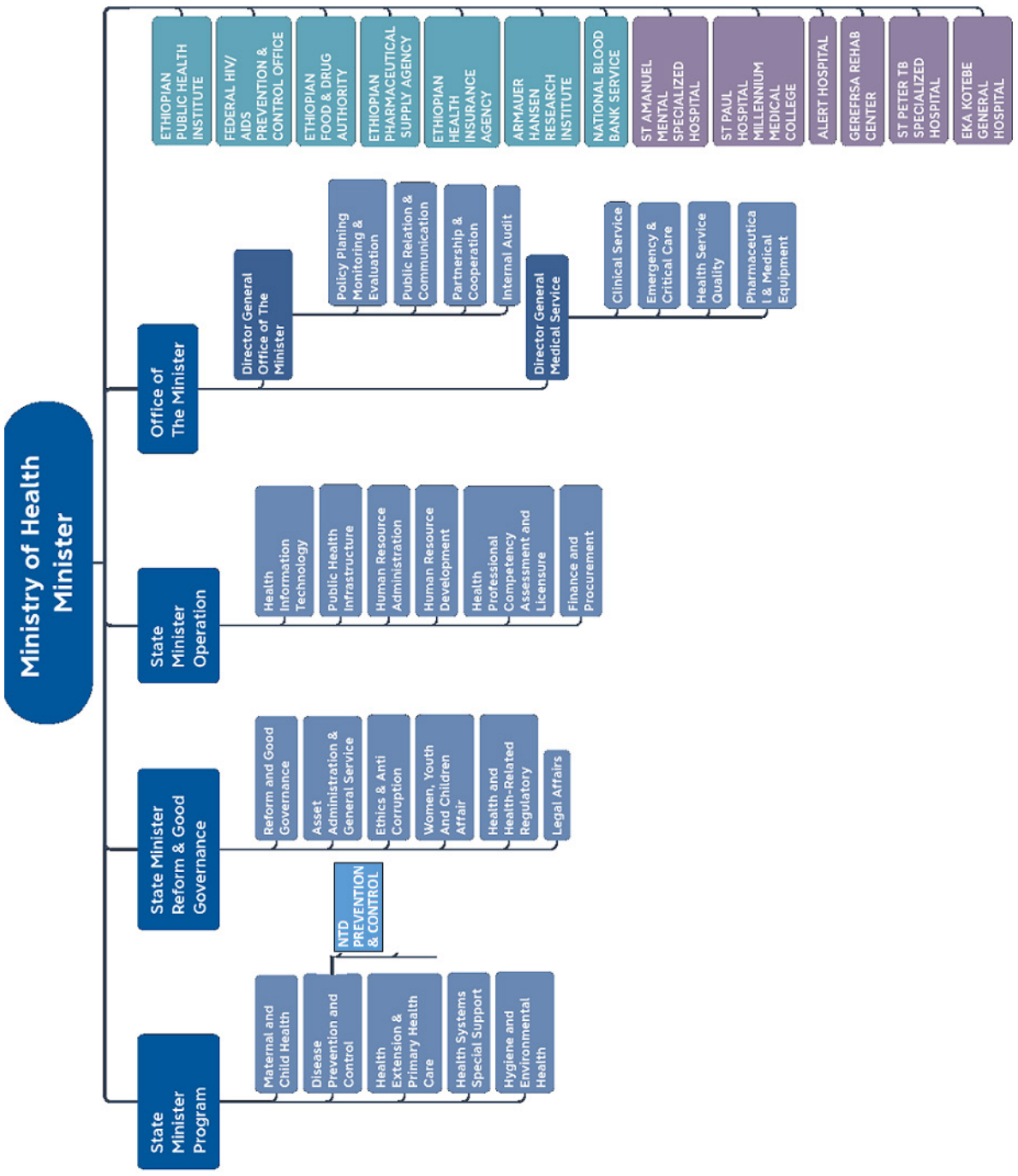


Figure 5. **Organizational structure of the Ministry of Health, Ethiopia**

1.2.2 Analysis of the national context

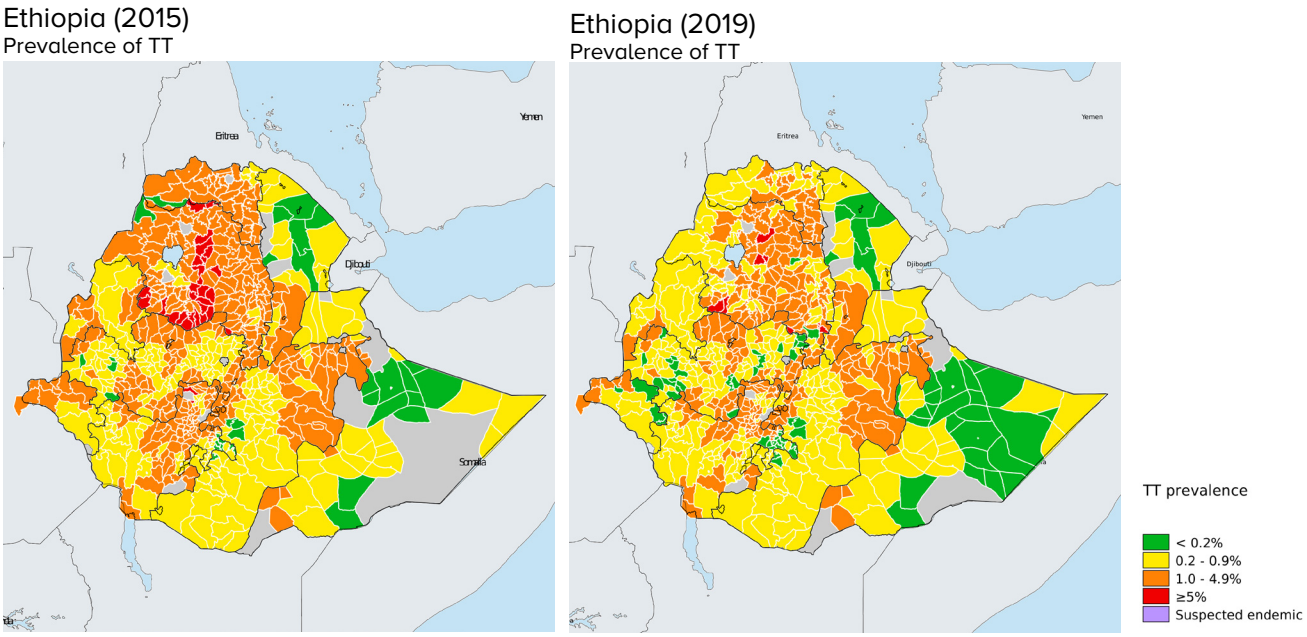
Current NTD programme organization and status

Trachoma

Epidemiology and disease burden: Ethiopia has the highest burden of trachoma in the world. As of December 2020, 798 *woredas* were endemic for trachoma, with about 342 800 people with TT, and 72 million people at risk of trachoma.

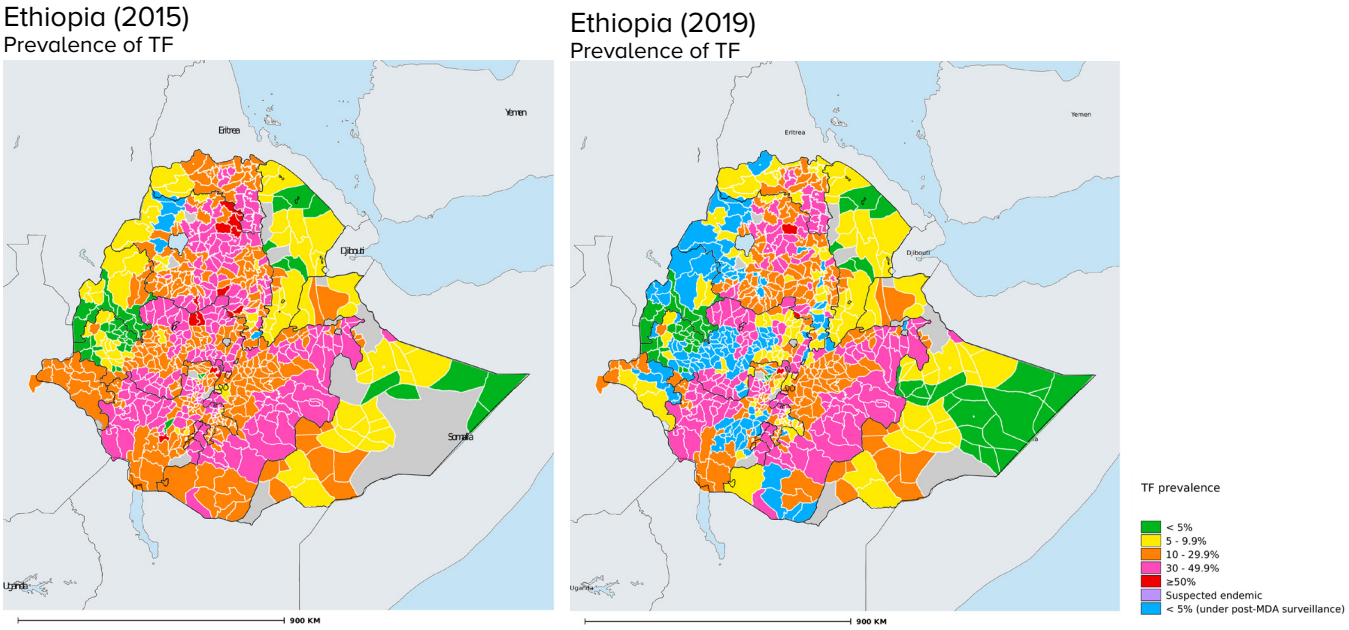
Progress in trachoma elimination: The average prevalence of trachoma decreased from 26.6% in 2015 to 13.3% in 2020, and the prevalence of TT among people aged ≥ 15 years decreased from 4% to 0.85% (Figure 6). During the period 2015–2020, 202 *woredas* stopped MDA for trachoma after achieving the WHO elimination threshold of a prevalence of follicular trachoma < 5% in children aged 1–9 years. Likewise, 115 *woredas* achieved the TT elimination threshold of a prevalence of TT "unknown to the health system" of < 1 case per 1000 total population. In 2019, for the first time, Ethiopia achieved 100% geographical coverage of trachoma control by delivering MDA to all endemic *woredas*. During the period 2015–2020, 628 484 TT cases were managed surgically.

Figure 6. **Prevalence of trachomatous trichiasis in Ethiopia, 2015 and 2019**



Despite these major achievements, trachoma was not eliminated as a public health problem by 2020, as all the targets and goals were not attained. Over 72 million people live in 798 *woredas* where the prevalence of follicular trachoma in children aged 1–9 years was ≥ 5% as of December 2020 (Figure 7). Thus, many people still require implementation of the A, F and E components of the surgery, antibiotic, facial cleanliness and environmental improvement (SAFE) strategy. During the same period, there were still an estimated 716 *woredas* (number increased due to re-districting in some regions) in which the prevalence of trichiasis unknown to the health system of ≥ 0.2% among people ≥ 15-years. Moreover, over 342 800 people with trichiasis are still at risk of blindness, which warrants scaling-up of TT surgery and clearing new incidence cases and the remaining TT backlog in all endemic *woredas* to bring the number to the trachoma elimination threshold. These remaining milestones are anticipated to be addressed under the third NTD Strategic Plan.

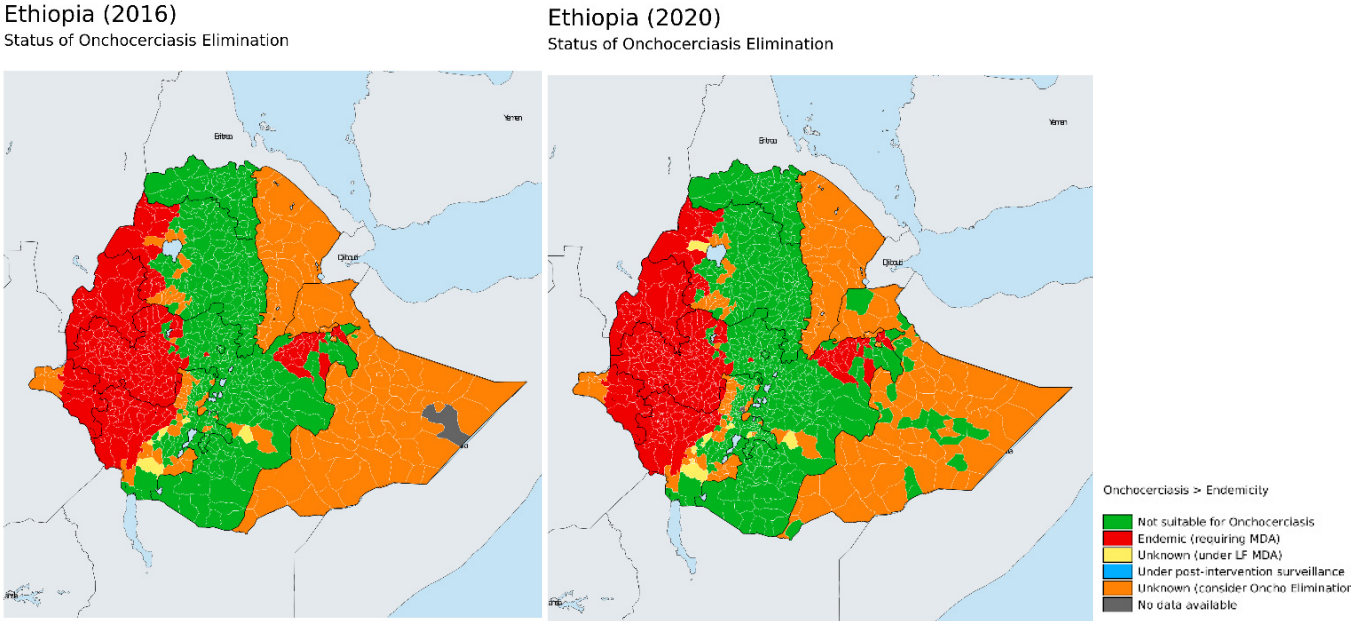
Figure 7. **Prevalence of active trachoma in Ethiopia, 2015 and 2019**



Onchocerciasis (river blindness)

Epidemiology and disease burden: In Ethiopia, over 25 million people are at risk of onchocerciasis in 239 *woredas*. Parts of four regional states (Amhara, Oromia, SNNP and Gambella) and all *woredas* in Benishangul-Gumuz are known to be endemic for onchocerciasis (Figure 8).

Figure 8. **Endemicity of onchocerciasis in Ethiopia, 2016 and 2020**



Status of programme implementation: Implementation of the national onchocerciasis control programme started in 2001 with an annual treatment scheme. Since 2012, the country has been providing biannual MDA. Eastward mapping of *woredas*, previously considered to be unsuitable for onchocerciasis transmission, was completed in March 2020, except in 17 *woredas*. The mapping exercise was conducted in 650 *woredas*, of which 54 were found to be endemic for onchocerciasis requiring MDA, for a total of 239 endemic *woredas* nationally. Of these, seven *woredas* do not currently have financial support for MDA. Recent monitoring indicates that the programme has interrupted transmission in six *woredas* in the Metema sub-focus and entered in to post-treatment surveys. In these *woredas*, MDA was conducted four times in seven *kebeles* where focal transmission was recorded.

The evaluation of the second NTD Strategic Plan indicated a significant reduction in the prevalence of onchocerciasis from baseline in most parts of the Oromia, SNNP and Amhara regions. The report showed that the reduction in the prevalence in Gambella and Benishangul Gumuz regions was not as expected, which might be due to the high prevalence at baseline, the presence of many rivers and breeding points, insecurity, missed MDAs and insufficient MDA coverage.

Schistosomiasis

Epidemiology and disease burden: Schistosomiasis and STH were mapped in 2013–2020. The intestinal form of schistosomiasis (caused by *Schistosoma mansoni)* is widely distributed, while the urogenital form (caused by *S. haematobium*) is restricted primarily to foci in the Rift Valley region. Reinfection is common because of the parasite's transmission dynamics and human behaviour. Integrated control, targeting the life cycle, is the only approach for sustainability and future elimination. As per the Joint Reporting Form 2020, the population at risk for schistosomiasis was estimated to be 53.3 million in 480 *woredas* (Figure 9). Although most endemic areas are covered by preventive therapy, the prevalence of *S. mansoni* infection is still a public health problem that requires the provision of WASH services, reduced contact with water and possible snail control to prevent reinfection. The Geshiyaro project, which is being implemented in SNNP region (Wolayita zone), could be a showcase for breaking transmission. The endemic *woredas* are categorized as shown in Table 5.

Figure 9. **Endemicity of schistosomiasis in Ethiopia, 2016 and 2020**

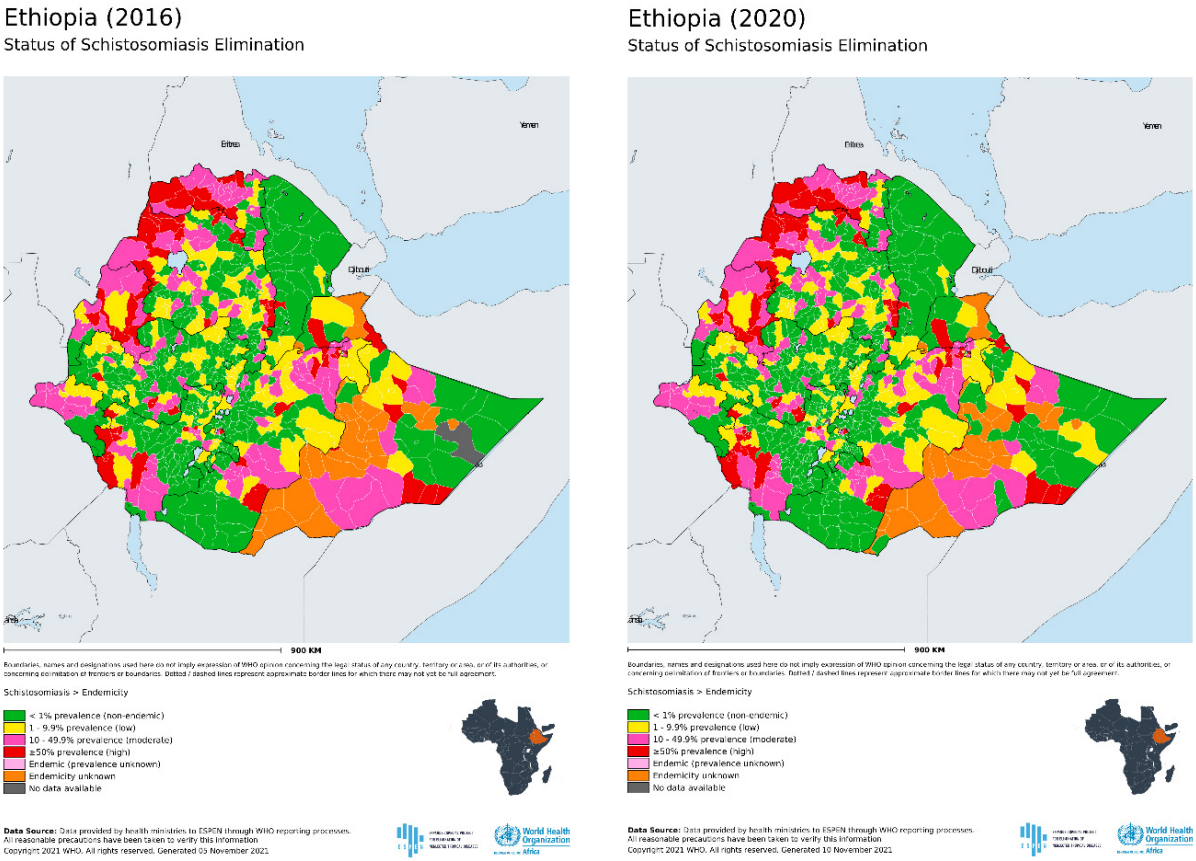


Table 5. **Infection categories of schistosomiasis by age, Joint Reporting Form, 2020**

Endemicity	Pre-school age	School age	Adults	Total	No. of Woredas
Uninfected	6 355 787	13 790 945	27 045 312	47 192 044	462
Low (< 10%)	3 363 849	7 222 065	14 213 167	24 799 081	229
Moderate (10–50%)	2 703 643	7 222 065	11 418 577	19 910 033	173
High (> 50%)	1 163 326	2 497 450	4 920 986	8 581 762	78
Unknown	33 738	714 416	1 409 419	2 457 573	30

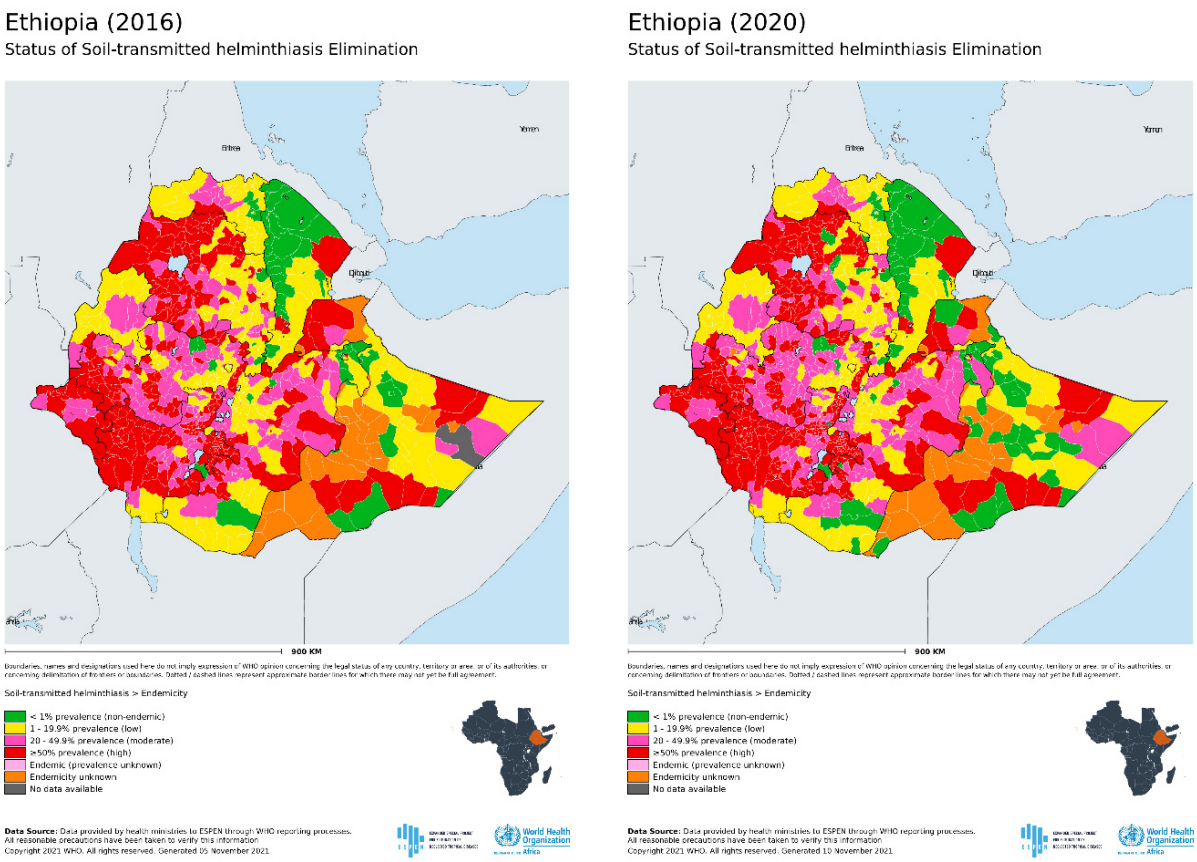
Source: Joint Report Form (JRF) 2020 (unpublished source)

Status of programme implementation: The target of the schistosomiasis programme in Ethiopia was to control the disease so that it will be no longer a major public health problem. During the 5 years of the programme, more than 27 million children were treated according to the WHO scheme. A sentinel site survey indicated that the prevalence of heavy infection with *S. mansoni* had decreased by 65% from baseline. The programme is currently re-mapping the country to inform the next 5-year programme.

Soil-transmitted helminths

Epidemiology and disease burden: STH infections are distributed widely throughout the country. The JRF in 2020 reported that the estimated number of people living in STH-endemic areas is 96.7 million, comprising 12.9 million pre-school-aged children, 27.7 million school-aged children and 56.18 million adults. The number of individuals living in areas that qualify for STH treatment (the current protocol does not foresee MDA in areas with a low prevalence of infection) is 68.1 million, of whom 9.3 million are pre-school children, 19.8 million school-age children and 39 million adults, according to STH baseline mapping conducted in 2013–2015. The endemicity of STH in 2016 and 2020 is shown in Figure 10.

Figure 10. **Endemicity of soil-transmitted helminths in Ethiopia, 2016 and 2020**



Coordinated wide-scale mapping of both schistosomiasis and STH demonstrated that 598 *woredas* required treatment against STH; 337 *woredas* were highly endemic (≥ 50% prevalence), 261 woredas were moderately endemic (20–49% prevalence), 243 *woredas* showed low endemicity (< 20% prevalence), and no STH infection was detected in 107 *woredas*.

Status of programme implementation: School-age children living in highly endemic *woredas* have been receiving PC with mebendazole twice every year, while children in *woredas* with moderate endemicity have been treated yearly, and those in low-endemicity or non-endemic *woredas* have not received preventive treatment. The number of *woredas* receiving PC has increased continuously over the years,

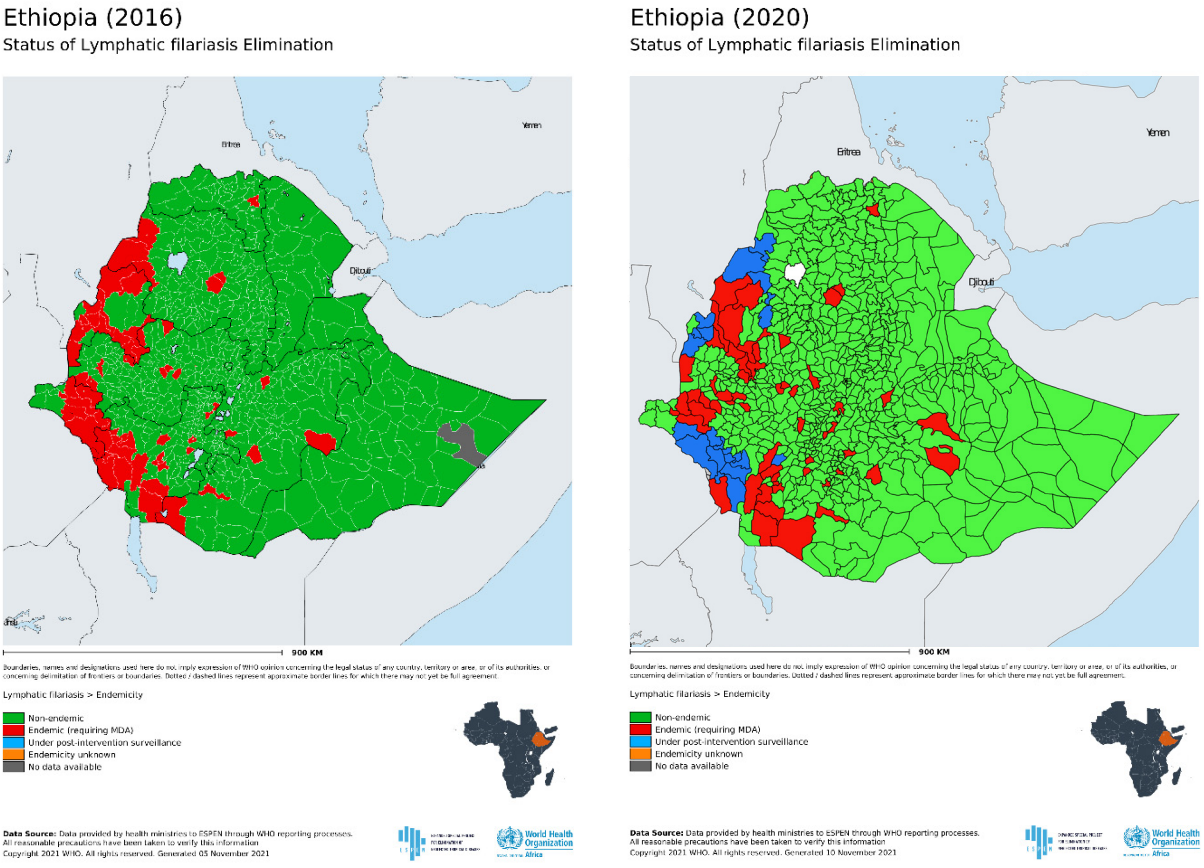
from 249 in 2014 to 536 in 2018, and the cumulative number of treatments delivered for STH was 92.7 million during the second NTD Strategic Plan period. Sentinel site surveys over the past 4 years show a small overall decrease in the prevalence and intensity of STH infections, with regional variations.

Currently, the national programme is conducting nationwide re-mapping to inform the next 5-year programme targets and strategies.

Lymphatic filariasis

Epidemiology and disease burden: National mapping, which was finalized in 2013, identified 70 *woredas* endemic for LF, with 6.4 million people at risk of infection (Figure 11). Currently, as *woredas* have been split into new administrative units, the total number of endemic woredas for LF is 88.

Figure 11. **Endemicity of lymphatic filariasis in Ethiopia, 2016 and 2020**



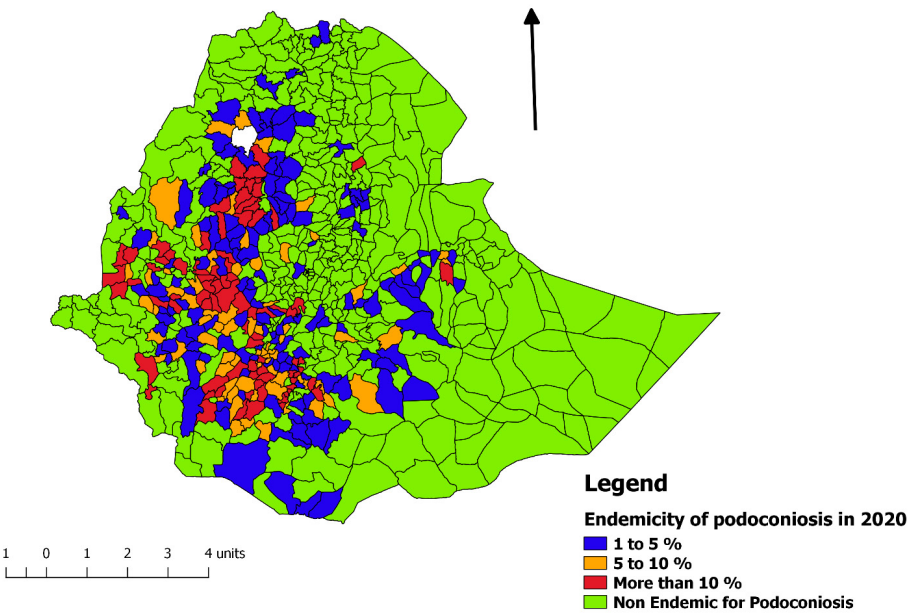
Status of programme implementation: Geographical coverage with MDA reached 100% in 2016. In the past few years, 13 *woredas* (3 in Amhara, 6 in SNNP and 4 in Benishangul-Gumuz) have stopped MDA after successfully delivery for a consecutive ≥ 5 years. Transmission assessment surveys (TAS) were performed in 51 *woredas* in 2017 and 2018, of which 31 *woredas* passed TAS1. To comply with global LF elimination goals, the MoH developed guidelines for integrated lymphoedema morbidity management and disability prevention and an action plan for the elimination of LF and podoconiosis. The burden of LF lymphoedema and hydrocoele was assessed in 52 (73%) of the *woredas* in 2019. In

all *woredas*, including those that did not assess their burden, capacity-building was conducted and patient management services were initiated and strengthened.

Podoconiosis

Epidemiology and disease burden: Up to 1.5 million individuals are affected by podoconiosis and about 35 million people are at risk in 345 *woredas* **(23,24)**. The national average prevalence of podoconiosis is 4.0%, with the highest prevalence in SNNP region (8.3%), followed by Oromia (4.0%) and Amhara (3.9%) regions (Figure 12).

Figure 12. **Endemicity of podoconiosis in Ethiopia, 2020**



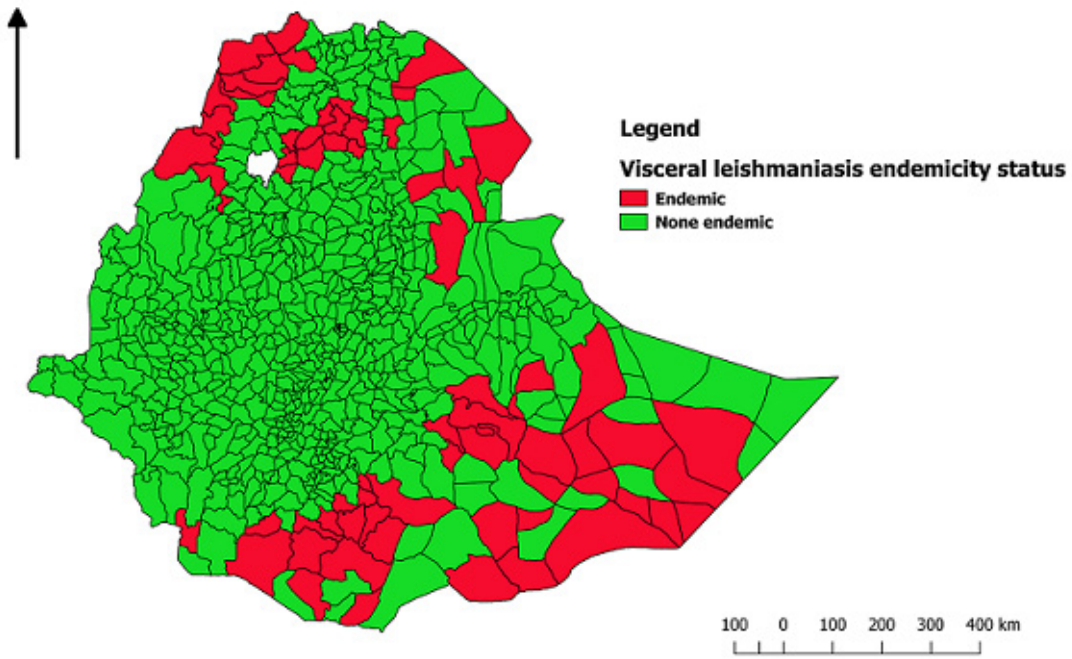
Status of programme implementation: Morbidity management and disability prevention services were provided in 150 of the 345 targeted *woredas* (44% performance) under the second Strategic Plan, and 67 588 cases of lymphoedema were managed. This was considered inadequate performance to attain the objective of "ensuring 70% regular shoe wearing and proper foot hygiene practice in all endemic areas by 2020".

Leishmaniasis

Epidemiology and disease burden: Ethiopia conducted national leishmaniasis mapping in 2014, which showed that the two forms of leishmaniasis - visceral (VL) and cutaneous (CL) - are widely distributed in most parts of the country. The population at risk for VL and CL is estimated to be over 2.9 million and 30 million, respectively.

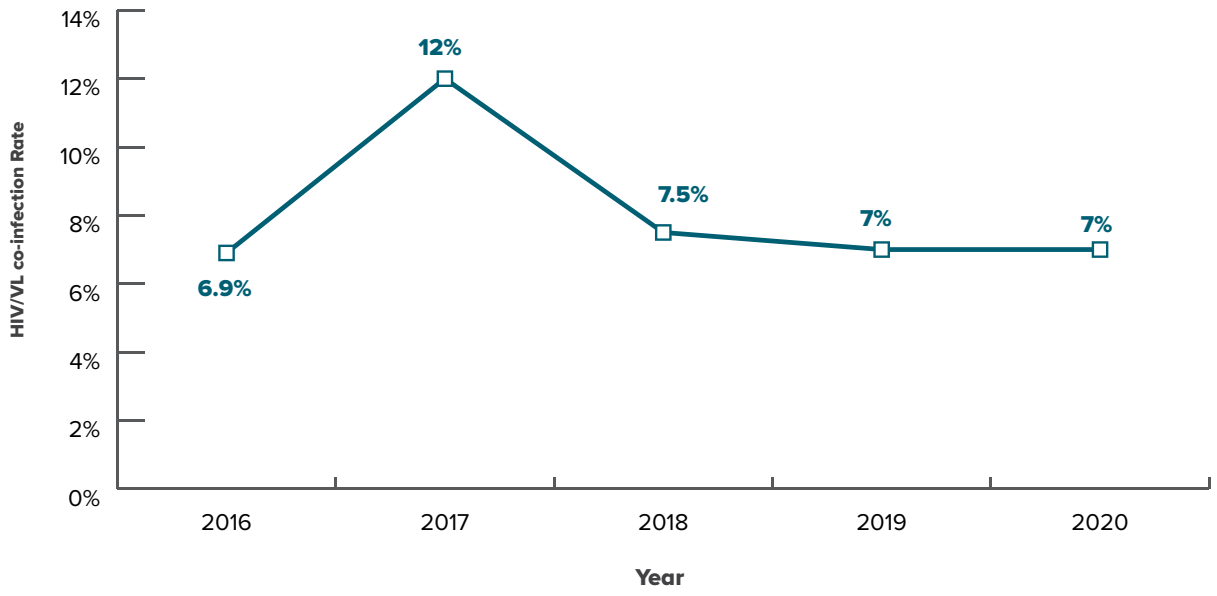
Visceral leishmaniasis: VL is one of the most important public health problems in six regions of the country, Afar, Amhara, Oromia, SNNP, Somali and Tigray (Figure 13). Estimates of annual incidence range from 2500 to 4000 cases, with 3.2 million people at risk in 40 *woredas*. The reported annual VL case load in the past 5 years is, however, lower than expected (see Figure 16, below), which may be due to insufficient active case finding and inadequate access to VL diagnostic and treatment services. VL is now being reported in the Awash and Tekeze basins as new foci in the country.

Figure 13. **Endemicity of visceral leishmaniasis in Ethiopia, 2020**



Ethiopia is a high-burden country for HIV–VL co-infection, although the co-infection rate has decreased to ≤ 7.5% in the past 3 consecutive years (Figure 14).

Figure 14. **Trend in HIV–visceral leishmaniasis co-infection rate, 2016–2020**



Cutaneous leishmaniasis

CL is known to be endemic in various parts of the country, but the burden and distribution of the disease are not well established. A study in 2014 to assess the risk factors, based on soil type, altitude, rainfall, slope and temperature, found that the highlands of the country, namely, Amhara, Tigray, Oromia and SNNP, are at high risk of CL. Of 170 *woredas* suspected to be endemic, 80 have been confirmed (Figure 15). The population at risk of CL is estimated to be close to 29 million, and the annual incidence is estimated to be 20 000–30 000 cases. The annual number of CL patients reported to have been treated in the past 5 years is, however, < 10% of the expected number (Figure 16), which is probably due to lack of evidence on effective treatment for CL and inadequate therapeutic supplies.

Figure 15. **Risk map of cutaneous leishmaniasis, Ethiopia, 2014**

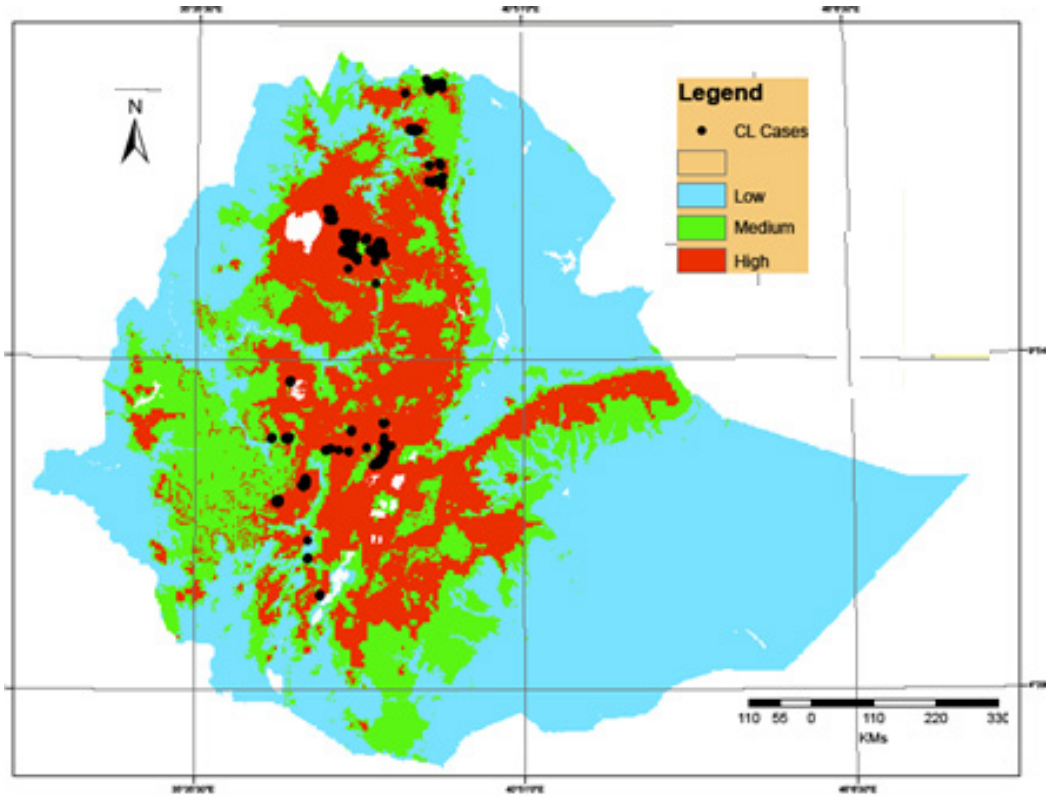
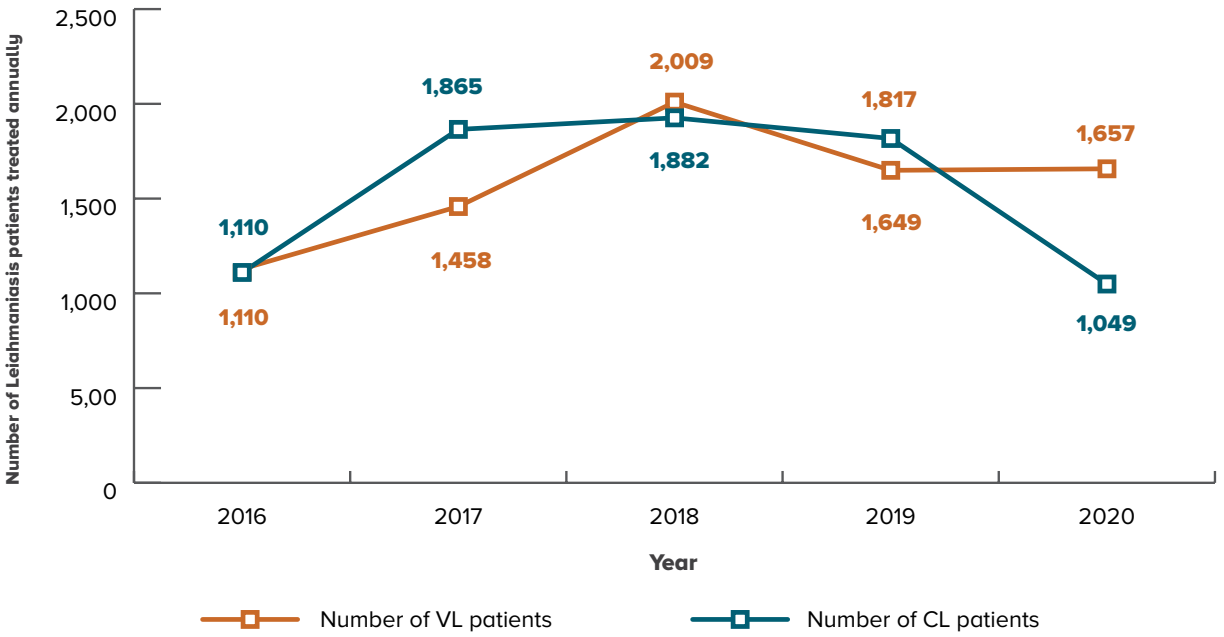


Figure 16. **Trends in the burdens of visceral and cutaneous leishmaniasis reported from treatment centres, 2016–2020**



Status of programme implementation: Currently, 29 treatment sites for VL and 14 for CL are operational in regions known to be endemic. The control strategies and activities to address human host, parasite and sand fly vectors are designed to reduce morbidity and mortality from the diseases and prevent epidemics and spread of the diseases to new foci. Passive case detection and prompt management based on standard case definition have been used, followed by laboratory confirmation of cases to identify and treat VL patients. The programme provides CM for both VL and CL, accompanied by extension and capacity-building for diagnosis and treatment. In 2016, VL treatment services were provided in 18 health facilities and CL treatment service in 8. They are currently available in 29 and 14 health facilities, respectively.

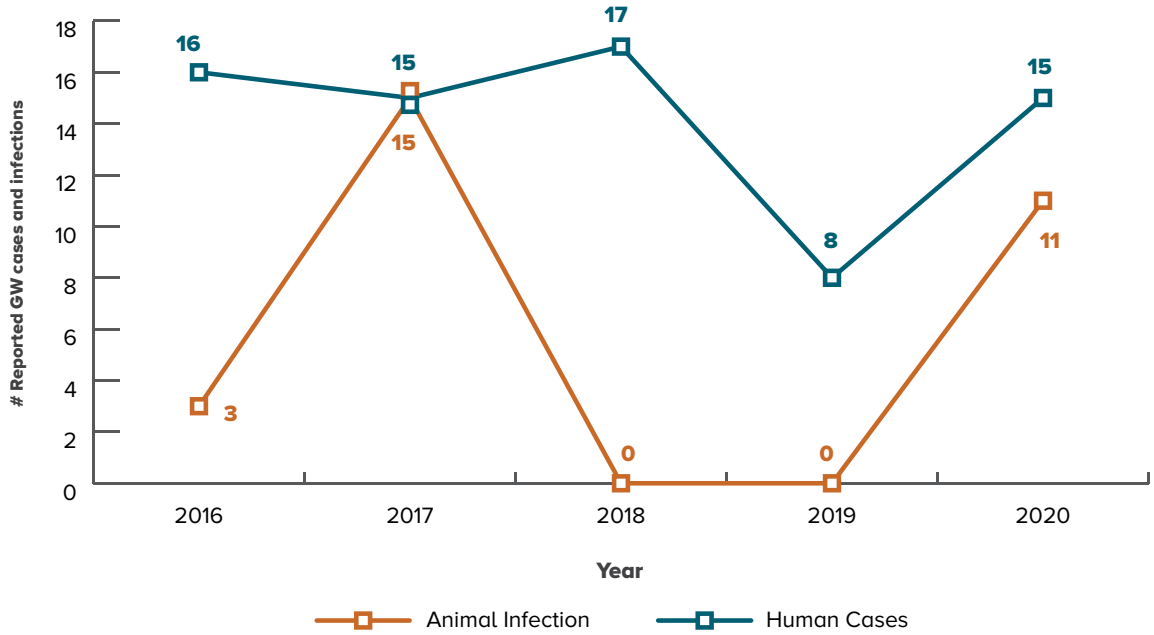
Treatment of VL cases during the previous Strategic Plan significantly improved their outcomes. For example, the case fatality rate has been < 3% in the past 5 years, achieved through regular training of health-care workers (doctors, nurses and laboratory professionals) and improving access to VL diagnostic and treatment services. The recommended first-line treatment is sodium stibogluconate and paromomycin combination therapy. The combination was available in only four VL treatment centres at the beginning of 2016 but is currently used in all 29 VL treatment centres, as recommended by WHO.

There is lack of evidence on the most effective treatment for CL in Ethiopia. The widely used treatment modality is sodium stibogluconate, which has a cure rate of < 50%. Some facilities are using cryotherapy with sodium stibogluconate, which provides 70% clinical cure.

Guinea-worm disease (GWD, dracunculiasis)

Epidemiology and disease burden: Indigenous transmission of GWD was interrupted from Nyangatom *woreda* in SNNP region in 2001; however, low-level transmission continued in two *woredas* in Gambella region, namely Gog and Abobo, where 29 human cases and 71 animal infections have been detected in the past 5 years (Figure 17).

Figure 17. **Human cases and animal infections with Guinea-worm disease, 2016–2020**



Status of programme implementation: The Ethiopian Dracunculiasis Eradication Programme created awareness about GWD through training, sensitization and distribution of information, education and communication materials in both endemic and GWD-free areas of the country; it also provided a cash reward for notification of cases. Reward awareness has improved but is not yet at the necessary level. Evaluation of the second NTD Strategic Plan showed that active case detection in the two remaining endemic *woredas* was 100% effective during 2016–2020. The main challenges of the programme are lack of a safe water supply in endemic localities, cross-border movement and unclear transmission dynamics. Interruption of transmission is also challenged by increased detection of animal infections, including in baboons, in the deep forests of endemic *woredas*, which slows progress. Interventions incorporating and strengthening the One Health approach may be required.

Scabies

Epidemiology and disease burden: Ethiopia has been experiencing scabies outbreaks since 2015. After a house-to-house census to assess the prevalence and burden of scabies, a detailed study was conducted in Amhara region, with screening of 1 125, 770 people; 379 000 confirmed cases were identified, with a mean prevalence of 35.3% (0.2–60.7%) in six to eight scabies-affected *woredas*. Following the report of the outbreak, a validation study was conducted, which confirmed the burden

of the disease. Subsequently, an interim management guideline was developed, and huge resources were mobilized from both the MoH and regional health bureaus. More than 852 000 cases and contacts were managed in Amhara region alone[1]. In 2018, in the same region, 9 057 427 people were screened for scabies, with 875 890 (9.7%) scabies cases detected and 1 871 361 patients and contact individuals treated with ivermectin MDA **(25)**. Tigray and Oromia regions reported outbreaks at the same time, but with no coordinated response **(26)**.

A public health emergency management surveillance report indicated that scabies is no longer a sporadic disease but is a public health concern in Ethiopia, affecting wider geographical areas and crowded population groups, especially in drought-affected *woredas* with poor nutrition.[1] More than one million people are affected with scabies throughout the country, with a prevalence of more than 10% in some *woredas*. Massive public mobilization and public health emergency interventions are therefore necessary.

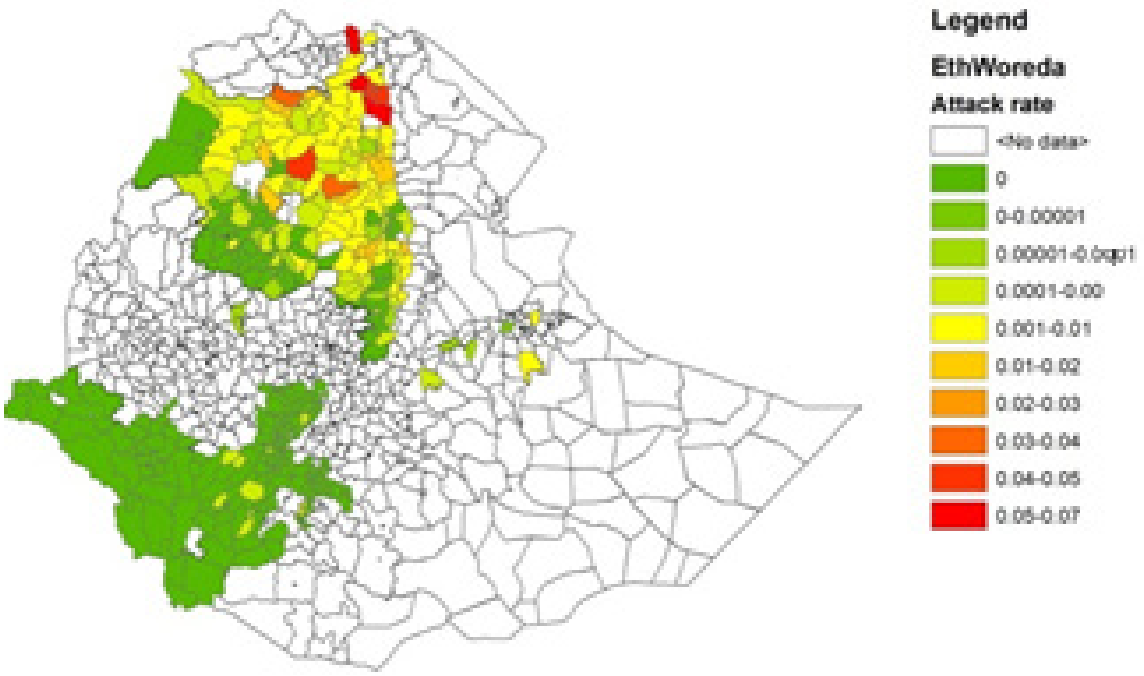
Table 6. **Numbers of cases of scabies reported by region, 2017–2019**

Region	2017	2018	2019
Addis Ababa		12 805	26 112
Afar		0	16
Amhara	17 868	151 947	152 871
Benishangul-Gumuz	1 985	1 478	10 559
Dire Dawa	0	3 457	1 949
Gambella	20	162	86
Harari	0	889	1 247
Oromia	3 548	109 100	125 836
SNNP	4 489	83 965	81 357
Somali	0	2	83
Tigray	597	7 919	11 272
All	**28 507**	**371 724**	**411 388**

In 2016, national surveillance data indicated that the scabies attack rate per *woreda* varied from 0 to 0.062. The highest rate was reported from Hintalo Wejerat *woreda* in southern Tigray (Figure 18).

1 Drought-associated scabies outbreak in Amhara region. Ethiopia (2016). unpublished Regional Health Bureau Public Health Emergency Management Directorate report.

Figure 18. **Scabies incidence in Ethiopia, 2016**



Status of programme implementation: Scabies was not originally included in the second NTD Strategic Plan but was added to the WHO NTD portfolio after epidemics reported from Ethiopia and other countries. Currently, scabies is being addressed by the MoH; a focal person has been assigned to the NTD team, and there is an established public health emergency team to address the scabies epidemic. A scabies prevention and control guideline has been distributed to all regions **(26)**, and, as of mid-2016, the disease was included in the weekly list of reportable diseases. According to WHO recommendations, certain steps must be taken before large-scale activities for scabies prevention and control are begun, such as mapping the prevalence, operational research to define the baseline and the threshold for initiating and stopping MDA and adding scabies as an indication for the use of ivermectin and moxidectin in the WHO Model List of Essential Medicines.

National, comprehensive prevention and control guidelines with clear case definitions and control strategies are still required.

Leprosy

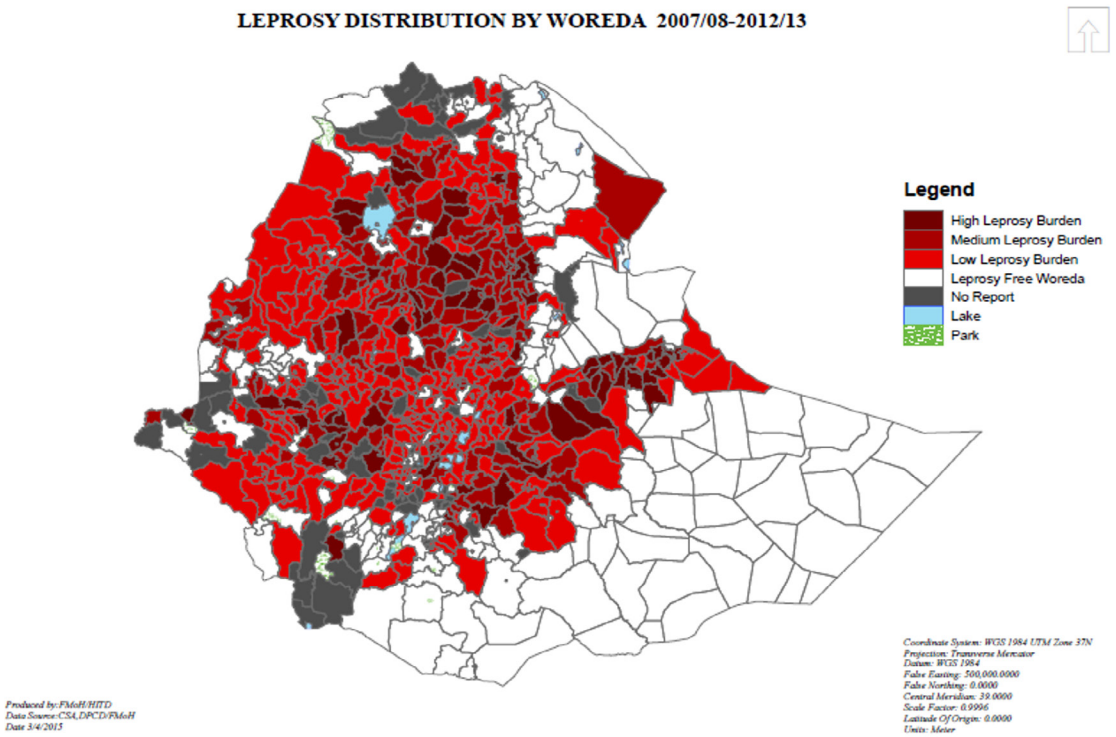
Epidemiology and disease burden: Leprosy is a major public health problem in Ethiopia. The National Leprosy Programme was established as a vertical programme in 1956, and Ethiopia is recognized globally as a pioneer, with long experience in leprosy control. The prevalence of leprosy fell markedly with the introduction of multiple drug therapy in 1983, with a decrease in prevalence from 19.8 per 10 000 population in 1983 to < 1 per 10 000 population in 1999, when Ethiopia met the global leprosy elimination target at national level. Access, early detection, prompt treatment initiation and reduction in stigmatization and discrimination have all improved; however, 3000–5000 cases are still notified annually, with no marked reduction in the past 20 years.

The burden of leprosy varies significantly by region, ranging from 2.4 per 10 000 in Gambella to only 0.1 per 10 000 population in Somali region, and the prevalence is above the elimination target in some areas and communities. More than half of all notified cases are in Oromia, followed by Amhara region. This may be due partly to the presence of specialized leprosy services in these two regions.

National mapping showed an annual case load of > 1 per 10 000 in some *woredas*. Of the 837 *woredas* surveyed, 93 were identified as having a high, 121 a medium and 325 a low leprosy burden (Figure 19). The *woredas* with high and medium burdens contribute > 80% of all national notifications. After an initial decrease in the past 10 years, the grade-2 disability rate among new cases has increased in the past 5 years.

After stabilizing at about 7% in 2013, childhood leprosy has continued to increase. In 2018, children < 15 years constituted 15% of newly notified cases of leprosy. This figure is much higher than those in other countries in the African Region and the 5% global and national targets. The high rate of childhood leprosy and stagnation in the absolute number of notified cases of leprosy indicates ongoing community transmission.

Figure 19. **Distribution of leprosy burden by woreda, 2007/08–2012/13 E.C. (2014/15-2019/2020 G.C.)**



High proportion of relapses and multibacillary leprosy among notified cases is seen in Ethiopia **(27)**. In 2018–2019, 3426 leprosy cases were notified to the national programme, of which 96.2% were newly diagnosed; 68% of the new cases were multibacillary, 15% were in children < 15 years, and 14% had grade 2 disability at the time of diagnosis. The treatment completion rate was 87% among patients with multibacillary and 99% among those with paucibacillary leprosy.

The prevalence of leprosy decreased sharply after introduction of multi-drug therapy in 1983, from 19.8/10 000 to 0.3 in 2016. Notification of new leprosy cases has remained constant in the past 10 years, ranging between 3000 and 5000 cases. Despite encouraging achievements, Ethiopia still has the second-highest disease burden of leprosy in sub-Saharan Africa.

Status of programme implementation: The leprosy programme has a standalone strategic plan but is conducted with the programme for tuberculosis under the MoH. Nationwide, leprosy interventions have been fully integrated into general health services since 2001. A national tuberculosis and leprosy strategic plan for July 2021– June 2026 has been developed **(27)** and can be referred to for more information. The review of the tuberculosis and leprosy programme in 2019 provided detailed findings and the main gaps and limitations in the leprosy elimination programme, which include:

- stagnation in the number of notified cases of leprosy in the past two decades;
- an increasing trend of grade-2 disability among new cases in the past 10 years;
- an increasing trend in the proportion of childhood leprosy since 2013; and
- sub-optimal quality of leprosy services in the integrated health delivery system.

Rabies

Epidemiology and disease burden: About 10 000 human deaths due to rabies per year were reported to WHO in the 1990s; however, the Ethiopian National Rabies Baseline Survey in 2012 **(28)** estimated the annual rate of human rabies deaths to be 1.6/100 000 population, and the most recent estimate was 1.1/100 000 population **(29)**. The rate of human exposure to rabid animals has been reported to be 12/100 000 population **(28)**. Children <15 years are the group at highest risk, with 60% of all fatal human rabies cases.

All the available evidence suggests that domestic dogs are the reservoir for rabies throughout the country, and genetic analysis has confirmed that the virus is a canid type. Although wildlife does not play a significant role in rabies transmission to humans, they are also victims of dog rabies. This has had a significant impact on endangered animals such as the Ethiopian wolf.

NTDs that were not addressed by the NTD programme

NTDs that are reported in Ethiopia but were not included in the national NTD Strategic Plans in the past years are listed in Table 7, with the meager available epidemiological characteristics. See Annex I for more details.

Table 7. **Burden and epidemiology of NTDs not included in the previous NTD Strategic Plans**

NTD	National disease burden	Current activities
Rabies	Annual incidence rate: 12/100,000 population **(29)** > 2700 people die each year **(30)** Case fatality rate: 1.1/100 000 population *(Assefa Dressa 2017)*	Yes
Leprosy	0.3/10 000 population	Yes
Echinococcosis	0.1–5% (study report) in humans, 6–62% in animals **(31)**	No
Taeniasis and cysticercosis	0.32–8.1 (microscopy study); 45.5–70% (interview study, 2005–2015) **(32)**	No
Dengue and chikungunya	4300 cases (2019 outbreak) Afar, Somali	Yes *(National Surveillance and Outbreak Response Plan by EPHI and MoH)*
	54 200 (Afar, Dire Dawa, Somali, SNNP) *(EPHI surveillance and outbreak management report, 2020)*	
Snakebite envenoming	949 cases in 8 regions (health facility review in 2014 (2016 – mid-2021) 4076 cases in Abudrafi and Tigray regions (**(33)**, and MSF report)	No
Mycetoma	20 cases identified in Amhara region (Borumeda Hospital report)	Yes (limited)
FBT	Unknown	No
HAT *(T.b. rhodesiense)*	Unknown	No

1.3 NTD programme

1.3.1 NTD programme performance

The second NTD Strategic Plan was a useful guide for annual planning, implementation, monitoring and evaluation of the NTD programme and has demonstrated the Government's commitment to control and eliminate NTDs. Significant progress has been made in improving the quality of life and livelihoods of people living in NTD-endemic areas.

Although political commitment and strong national and regional leadership have drawn attention to NTDs, inadequate commitment at lower levels of the health system has to some extent prevented the programme from reaching its targets. The Government has allocated a budget for NTDs for human resources, drug and logistics management, the HIMS, morbidity management and disability prevention and health education for behavioural change. The programme has integrated NTD services into the primary health care system, the WASH programme and the One Health approach by establishing technical working groups and coordination platforms. Some NTD programme activities are integrated into the six health-system building blocks.

The programme has developed an integrated refresher training manual, an MDA registration book and a protocol for MDA coverage validation for the five PC NTDs. Training to strengthen capability, programme advocacy, social mobilization, community sensitization and supportive supervision was provided through joint planning and financing. The NTD programme planning and reporting system is partially integrated into the HIMS, and high-level indicators and data elements have been included in the HMIS and DHIS2.

The NTD programme systems for pharmaceutical products and logistics management are fully integrated into the national pharmaceutical and logistics management system, which includes drug storage, distribution and recording and reporting of NTD medicines and logistics.

The continuing risks for NTDs include cross-border outbreaks that affect achievement of elimination and eradication targets. Inclusion of NTDs that are prevalent in some regions of the country is key to the success of NTD programmes. The status of mapping of the NTDs as of December 2020 is shown in Table 8.

Table 8. **Status of mapping of NTDs, December 2020**

	Number of woredas (total, 966)		
Endemic NTD	**Endemic**	**Mapped or known endemicity**	**To be mapped for endemicity**
Trachoma	798	965	1
Onchocerciasis	239	949	17
Schistosomiasis	480	966	0
STH	598	966	0
LF	88	966	0
Podoconiosis	345	966	0
Leishmaniasis	VL, 67; CL=170	VL=67; CL=170	0
GWD	2	966	0
Scabies	Not mapped	Not mapped	Yes
Leprosy	539	539	0
Rabies	Not mapped	Not mapped	Yes
Dengue	Not mapped	Not mapped	Yes
Chikungunya	Not mapped	Not mapped	Yes
Hydatidosis, echinococcosis	Not mapped	Not mapped	Yes
Taeniasis	Not mapped	Not mapped	Yes
FBT	Not mapped	Not mapped	Yes
Snakebite envenoming	Not mapped	Not mapped	Yes
Mycetoma	Not mapped	Not mapped	Yes
HAT	Not mapped	Not mapped	Yes

Sources: JRF 2020 and published research paper

1.3.2 Performance of other programmes and cross-cutting issues related to NTDs

Vector control

Vector control is an important component of the prevention and control of vector-borne NTDs, specifically for transmission control and for containment of disease outbreaks. The causes of most NTDs are transmitted by vectors (insects) or intermediate hosts (such as aquatic snails), and their control can contribute to reducing the burden of PC NTDs. This could play a significant role during the

elimination phase of diseases such as LF and schistosomiasis, and epidemiological and vector surveillance will continue to be important in the post-elimination phase. The key interventions in vector control required during implementation of the Strategic Plan are listed in Table 9.

Table 9. **Vector control methods**

	Mosquitoes						
Method	**LF**	**Dengue**	**Dengue, chikungunya**	**Snails: Schistosomiasis**	**Blackfly: Onchocerciasis**	**Sandfly: Leishmaniasis**	**Water fleas: GWD**
Insecticide-treated Bed Nets	X	X	X			X	
Indoor residual Spraying	X	X	X			X	
Space spraying, larviciding					X		X
Prevention and treatment of breeding sites	X	X	X	X	X		
Traps, release of sterile males							

Source: National Stakeholders Validation Workshop on the 3rd National NTD Strategic Plan, 30 September –1 October 2021, Ministry of Health

One Health

One Health is a collaborative, multi-sectoral, trans-disciplinary approach to addressing the health threats of humans, animals and the environment. In 2016, Ethiopia committed itself to control five prioritized zoonotic diseases within the Global Health Security Agenda with a One Health approach. Of the five prioritized diseases in the Agenda, two are NTDs (rabies and echinococcosis) **(29)**. A study is under way to determine the national burden of rabies and to identify gaps in disease prevention and control. The results are expected to be released in late 2021 and will guide policy formulation and programming. Human resources, disease investigation and regional laboratory capacity are being strengthened. A national One Health steering committee has been established by the ministries of Health, Agriculture, Tourism and the Environment, Forest and Climate Change in order to address One Health-related NTDs (e.g., GWD, rabies, echinococcosis, taeniasis/cysticercosis, FBT, dengue and chikungunya) in a coordinated, multisectoral approach.

Water, sanitation and hygiene

A WASH–NTD coordination platform was established at national, regional and lower levels at the end of 2018. The national platform is led by the MoH and consists of the ministries of Water, Irrigation and Energy, Education, Finance and Economic Development and the United Nations, donors and implementing partners.

Several initiatives were completed under the second NTD Strategic Plan, including a WASH–NTD landscape analysis, identification of priority *woredas*, development of a WASH–NTD framework, preparation of a WASH-NTD toolkit for use in *woredas*, a harmonized message guide, inclusion of key WASH–NTD indicators in the national HMIS and advocacy and human capital development. Evidence-based decisions will be made to:

- improve access to safe, adequate water and sanitation;
- foster WASH–NTD collaboration at all levels (planning, monitoring and evaluation), e.g., a *woreda* collaboration toolkit; and
- conduct social and behavioural change activities to improve hygiene practices, with active community engagement.

School health

The Ministry of Education has developed a national school health and nutrition strategy to ensure sustainable, high-quality health and nutrition in the education sector and to strengthen coordination, linkage and partnership with relevant ministries, communities and other stakeholders. This ensures smooth implementation of deworming in schools, transmission of NTD massages and social mobilization through schoolchildren and teachers and health clubs. Various initiatives are under way in NTD-endemic regions to include NTD prevention and control in school curricula.

NTDs and gender

Gender is strongly linked to the NTD burden, access to services and utilization. Some NTDs affect females more than males. For instance, trachoma surveys consistently show that the rate of trachoma-related blindness is two to four times higher in women than in men. Similarly, lymphoedema due to podoconiosis is more common among females than males, while hydrocoele due to LF affects men exclusively. Because of occupational exposure, males are more affected by VL than females.

Stigmatization because of NTDs is more prevalent and pronounced for females. Attendance of women at NTD services is influenced by education, access to resources, household decision-making power and physical access to health facilities. Gender-disaggregated data are limited for most NTDs. Overall, there is little gender-sensitive programming for the NTDs and no gender mainstreaming frameworks specifically for NTDs, which is a missed opportunity.

To address the gender gaps in the third Strategic Plan, the key activities to be prioritized are: routine collection, analysis, dissemination and use of gender-disaggregated data; gender-sensitive programming based on gender differences in the prevalence of NTDs; gender audit of NTD programmes; study of the socio-economic determinants of NTDs; and addressing barriers to access to NTD services. In a broader context, policies that address gender equity should be enforced.

Equity in NTD programming

As NTDs often affect primarily the poor, equity is a core element of NTD programmes. NTD interventions can change the overall livelihood of a community by increasing people's productivity and reducing stigmatization. NTD interventions are implemented in communities, where programmes are accessible to all children, pastoralists, women, people with disabilities and internally displaced people, with the principle of leaving no one behind. Some populations are difficult to reach, however, because they live in remote areas or conflict zones. To ensure that all groups are served by NTD programmes, priority population should be defined, interventions designed according to mapping results, monitoring improved, the programme implementation strategy made flexible and strengthened intersectoral coordination, prioritizing equity.

Sustainability

The MoH has developed a Sustainability Action Plan for the Control and Elimination of NTDs 2021–2025 **(2)**, which envisages national health system capacity and commitment to maintain the provision of NTD interventions at levels that will sustain progress towards control or elimination of diseases in accordance with national NTD goals. The action plan identified the following limitations:

- weak multisectoral coordination and partnership;
- inadequate generation and use of high-quality data for evidence-based decision-making;
- inadequate ownership and accountability for the NTD programme at all levels;
- lack of a resource gap analysis and poor resource mobilization, resulting in inadequate domestic resources for NTD interventions;
- inequity and social exclusion; and
- lack of awareness and inadequate competence of health workers in provision of NTD services.

To address these challenges, the sustainability plan outlines the following interventions:

- Improve multisectoral coordination (local administration, health, WASH, education, agriculture, construction, finance and economic development, women's, children's and young people's affairs, Government communication).
- Strengthen human resource capacity.
- Strengthen NTD programme ownership at community, subnational and national levels.
- Develop and implement a road map for domestic resource mobilization.
- Strengthen information systems for evidence-based decision-making for NTD programming.

Pharmacovigilance and safety of MDA

The medicines used in PC programmes are generally safe; however, effective recognition and management of adverse events during MDA is an essential component of PC programmes. Adverse events may be due to the medicine itself, operational errors, coincidental events, individual differences and unrecognized conditions. Minimize chocking to zero and serious adverse events are expected during any MDA. When they occur, proper management, effective reporting and investigation and corrective action according to the national pharmacovigilance guidelines are critical.

For MDAs to be safe, the MoH guarantees that the following actions are implemented, as agreed by the high-level technical MDA safety advisory group:

- Establish a national MDA safety technical working group.
- Ensure adherence to the pharmacovigilance guideline.
- Review and update the current MDA training manual in light of safety considerations.
- Develop standard operating procedures (SOPs) for NTD drug supply management with a focus on pharmacovigilance.
- Use electronic health information systems to strengthen reporting of adverse events and serious adverse events.
- Ensure that MDA safety and pharmacovigilance are included in the NTD communication strategy.

Table 10 summarizes the NTD interventions that have been conducted since 2003. See also Annex II for more details.

Table 10. **Summary of interventions conducted by the NTD programme, 2003-2020**

NTD	Year programme started	No. of woredas targeted	No. of woredas covered	Total population at risk in endemic woredas	Total population that stopped MDA or cases managed	No. of woredas that stopped MDA	Strategies used
Trachoma	2003	799	798				
> TF				72 million;	22.6 million	230	MDA, F and E
> TT				TT 342 800	628 484		TT surgery
Onchocerciasis	2001	239	239	> 25 million	1 059 567	6	MDA
Schistosomiasis	2013	480	480	53.15 million	–	0	MDA
STH	2013	841	841	96.7 million	–	0	MDA
LF	2009	88	88	6.8 million	1.7 million	31	MDA
		88	88	5.6 million			Hydrocoele surgery
LF	2009	70	70	-			Lymphoedema management
VL	2006	67	–	3.2 million	NA	NA	Surveillance, case management, vector control, social and behaviour change communication (SBCC)
CL		170	–	29 million	NA	NA	
Podoconiosis	2012	345	345	35 million	NA	NA	Lymphoedema management, rehabilitation, SBCC, psychosocial support
GWD	1994	2	2	300 000	NA	NA	Active surveillance, SBCC, filter distribution, Abate application, dog tethering
Scabies	2017	Case report					MDA, environmental health and sanitation, surveillance, case management, SBCC

Sources: JRF 2020, 2020 programme reports and survey results

Table 11 below shows a summary of the current status of additional NTDs for due consideration in the third national NTD Strategic Plan (see Annex I for additional details).

Table 11. **Additional NTDs for inclusion in the third national NTD strategic plan**

NTD	Disease burden	Current implementation status	Global target
Rabies	2700 people died each year; Case fatality rate, 1.1/100 000	Surveillance Vaccinate exposed people, Expand laboratory network, Mass dog vaccination, Vaccine production for humans and animals	Elimination as a public health problem
Leprosy	0.3/10 000 population	Surveillance, preventive therapy	Elimination-interruption of transmission
Dengue and chikungunya	4300 cases (outbreak 2019) Afar, Somali 54 200 cases (Afar, Dire Dawa, Somali, SNNP, 2019) 23% sero-prevalence (Metema and Humera, 2017) Case fatality rate, 0.5	National surveillance and outbreak response; Pilot vector mapping in 5 regions (Afar, Somali and Dire Dawa, SNNP, Oromia)	Control

1.4 Gaps and priorities identified in analysis of strengths, weaknesses, opportunities and threats

An analysis of strengths, weaknesses, opportunities and threats (SWOT) of the NTD programme and partnership was conducted with responses in key informant interviews to evaluate the second NTD Strategic Plan, further supported by triangulation of the information obtained and desk reviews.

Strengths

- National and regional NTD coordination (e.g., NTD taskforce, technical working groups, expert advisory groups)
- Established federal and regional NTD teams
- Engagement of health extension workers and health development army in NTD programmes, including community mobilization and drug distribution
- Inclusion of NTDs in HSTP II
- Inclusion of key NTD performance indicators in the national HMIS and DHIS2
- Mapping of targeted NTDs
- Progress towards targets in the second national NTD Strategic Plan
- Initiation of post-treatment surveillance
- Established monitoring and evaluation system
- Development of an NTD research network and symposium to increase use of evidence in programming
- Biannual national NTDs review meetings to share experience and knowledge
- Initiation of integrated interventions in the NTD programme

- Inclusion of NTDs in integrated refresher training package for health extension workers
- WASH–NTD framework and woreda tool kit

Weaknesses

- Inadequate regional commitment
- Low water and sanitation coverage
- Inadequate interventions for social and behavioural change
- Insufficient vector control and inadequate number of entomologists for NTD programs
- Delays in delivery of MDA medicines to lower levels
- Insufficient drug inventory and reverse management practices
- Insufficient facility for NTD drug storage at lower levels
- Shortfalls in reporting performance through the national HMIS
- Delays in financial transactions and liquidation
- Limited human resource motivation and retention mechanisms
- Shortfalls in domestic budgeting for NTD programme
- Absence of local public–private partnerships for NTDs
- Inadequate research on NTDs (Baseline surveys could not be completed for some NTDs.)

Opportunities

- Strong political commitment at federal level and in most regions
- Targeting “eliminate NTDs by 2030” in the SDGs
- Launch of the new WHO NTD road map 2021–2030
- National and local WASH platforms
- Established collaboration with international donors and implementing partners
- Strong commitment of NTD stakeholders (drug donation for PC NTDs, strong partnerships with nongovernmental organizations)
- Committed expertise in the technical advisory groups
- Higher education institutions in all regions for training and research
- One Health research initiatives and researchers at higher education and research institutions

Threats

- Sustained COVID-19 pandemic
- Probable extension of global travel bans and movement restrictions due to COVID-19
- Inflation and slow global and local economic recovery
- Foreign aid cuts

- Emerging animal reservoirs for NTDs such as GWD
- Instability and internal displacement of people
- Local and international cross-border issues

1.4.1 Gaps and priorities

The major gaps and priorities for strategic objectives identified in the SWOT analysis that will enable Ethiopia to achieve the 2025 goals to eliminate, control and eradicate the targeted NTDs are as follows.

Gaps

Planning

- Climate change affecting vector populations and disease trends

Coordination

- Weak regional collaboration between NTD programmes and EPSA
- Extensive practice of open defaecation, which requires innovative, multisectoral, sustained behavioural change intervention
- Low coverage of water and sanitation and of integration, such as limited WASH–NTD collaboration at lower levels

Partnership

- Insufficient intersectoral commitment for collaboration and integration
- No solid partnership with One Health actors in generating scientific evidence on the human–animal interface in GWD transmission

Management

- Poor retention of skilled human resources
- Insufficient budget for interventions, especially for CM NTDs entomological interventions
- Not all NTD-related data are included in DHIS2 and the Electronic Community Health Information System (eCHIS)

Implementation of interventions

- Gaps in implementation of collaborative plan with the WASH sector
- Limited resources to complete baseline surveys for some NTDs
- Instability and internal displacement affecting programme implementation

Priorities

Planning

- Climate-sensitive NTD programming

Coordination

- Increase water and sanitation coverage in rural areas.
- Strengthen integration of NTD and SBCC with WASH
- Improve coordination with EPSA and with other health-care programmes at all levels
- Establish a system and promote collaboration with sectors such as water and wildlife conservation

Partnership

- Ensure NTD programme ownership and accountability by stakeholders at all levels
- Apply a One Health approach to zoonotic diseases and NTDs with environmental links, like GWD and newly added NTDs

Management

- Design a mechanism to motivate Government personnel to overcome the high turnover of skilled health workers
- Add key NTD indicators to DHIS2 and eCHIS, and improve use of the reporting system
- Increase domestic resource mobilization for NTDs

Implementation of interventions

- Strengthen WASH–NTD sector collaboration, including joint monitoring and evaluation
- Complete baseline surveys for all NTDs
- Ensure that NTD programmes are adaptable and address the needs of internally displaced people

2

Strategic Agenda: **Purpose and Goals**

Strategic Agenda: **Purpose and Goals**

The third national NTD Strategic Plan envisages attainment of an NTD-free Ethiopia through the concerted effort of the Government in strengthened partnerships with national, regional and international development partners and meaningful participation of the community.

2.1 Vision and mission of the NTD programme

Vision: An NTD-free, healthy, productive and prosperous society.

Mission: To accelerate the control and elimination of NTDs in Ethiopia by implementation of innovative, equitable, integrated, sustainable strategies.

Goal: The main goal of the NTD programme is to reduce the burden of NTDs with innovative, high-quality, cost–effective approaches and strategies for achievement of national programme targets by 2025.

2.2 Specific goals and targets

To realize the vision and mission, the Strategic Plan has strategic goals and targets to guide programmatic investment in the next 5 years.

2.2.1 Strategic goals

Disease-specific goals

Disease targeted for eradication

- Certified free of GWD by 2025

Diseases targeted for elimination (interruption of transmission)

- Elimination of transmission of onchocerciasis by 2030
- Elimination of transmission of schistosomiasis by 2030
- Elimination of transmission of STH by 2030
- Elimination of transmission of leprosy by 2025

Diseases targeted for elimination as a public health problem

- Elimination of LF as a public health problem by 2027
- Elimination of trachoma as a public health problem by 2030
- Elimination of VL as a public health problem by 2030
- Elimination of dog-mediated human rabies as a public health problem by 2030

Diseases targeted for control

- Control of podoconiosis by 2030
- Control of CL by 2030
- Control of scabies transmission by 2025
- Control of dengue fever and chikungunya by 2030

2.2.2 Targets

Table 12. **NTD targets to be attained by 2025**

Indicator	Baseline 2020	Target by 2025	Source of information
Increased integrated treatment coverage index for PC NTDs	65% (first quarter, 2021)	80%	African Leaders Malaria Alliance (ALMA)
Percentage reduction in people requiring interventions against NTDs	75.7M people at risk.	75%	WHO Preventive Chemotherapy (PC) Data Portal
At least one NTD eliminated from Ethiopia (GWD)	0	1	Surveillance report
Percentage reduction in disability-adjusted life years related to NTDs	648 924 DALYs	80%	Institute for Health Metrics and Evaluation (IHME)

Cross-cutting targets

The Strategic Plan contains four cross-cutting themes for the targets (Figure 20). The disease-specific targets for NTDs are listed in Table 13.

Figure 20. **Cross-cutting targets in the third NTD strategic plan**

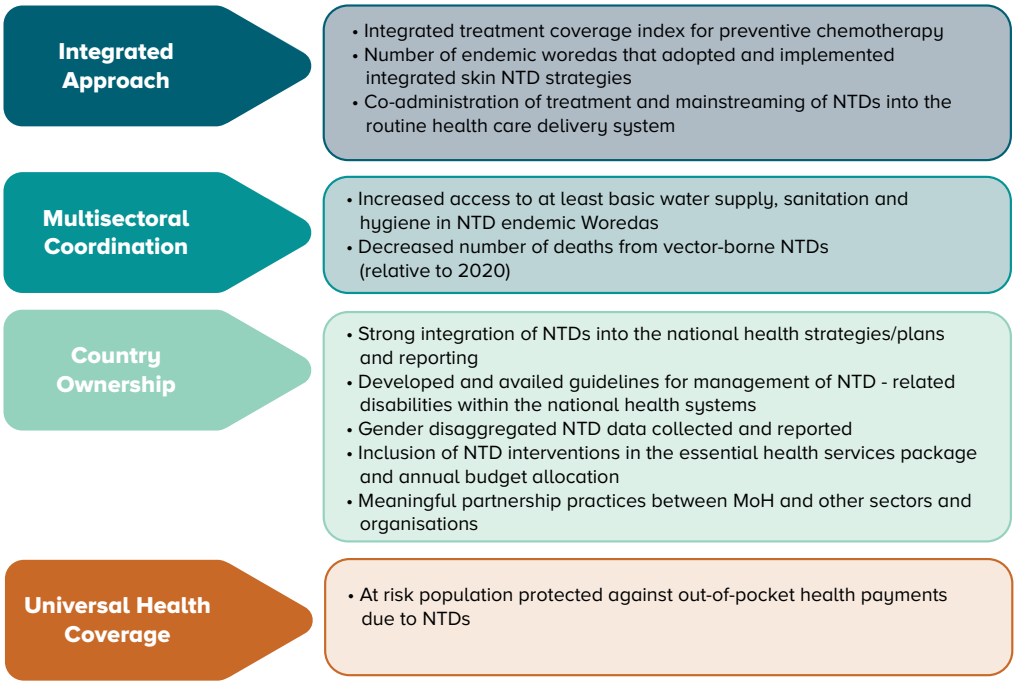


Table 13. **Disease-specific targets to be attained by 2025**

Disease	National target	Objectives	Year	Strategy
Trachoma	Elimination as a public health problem in 75% of endemic *woredas* by 2025	> Provide high-quality TT management to 342,800 individuals with trichiasis > Maintain post-operative trichiasis at < 10% at 3–6 months > Ensure that all 798 endemic *woredas* have access to TT surgery > Achieve ≥ 80% therapeutic coverage with antibiotic MDA in all 567 endemic *woredas* > Ensure MDA safety to zero severe adverse events > Scale up *woreda* WASH–NTD implementation toolkit to 798 endemic *woredas* > Conduct trachoma impact surveys in 567 *woredas* > Achieve elimination threshold for follicular trachoma and TT in 450 *woredas*	2023 2025	> SAFE strategy > Accelerate TT surgical management > Post-operative TT management > Antibiotic MDA > SBCC on facial cleanliness and environment improvement (latrine construction and use) > Diversity, equity and inclusion (e.g., people with disability, women and children) > Advocacy and collaboration with WASH to improve access to a safe water supply, sanitation, no open defaecation and basic hygiene > Trachoma impact surveys > Trachoma surveillance surveys > Operational research > Dossier preparation
Onchocerciasis	Elimination of transmission by 2030	> Onchocerciasis mapping in 17 *woredas* > Eliminate transmission of onchocerciasis in 24 *woredas* > Increase and maintain geographical coverage of MDA at 100% (by 2022) > Conduct post-treatment surveys in 107 *woredas* > Conduct onchocerciasis impact surveys in all endemic *woredas* after 10 rounds of treatment	2025	> Mapping > Bi-annual MDA > MDA four times a year in delineated hotspots > Vector control in isolated areas if feasible > SBCC and social mobilization > Advocacy > Impact assessments and entomological surveys at various levels of transmission
Schistosomiasis	Elimination of transmission by 2025	> Achieve < 2% disease prevalence in implementation units (KatoKatz-KK) > Achieve < 1% prevalence of heavy infection intensity (quantitative polymerase chain reaction - PCR) in all risk groupsheavy infections in all IUon brsure objectives. So	2025	> MDA > Facility-based case diagnosis and treatment > Vector control (snail control in hotspots) > SBCC > WASH (access to safe water supply, basic sanitation, no open defaecation, hygiene)

Disease	National target	Objectives	Year	Strategy
STH	Elimination of transmission by 2025	> Achieve < 2% disease prevalence in implementation units (KK) > Achieve < 1% prevalence of moderate or heavy intensity infection (quantitative PCR) in all risk groups	2023	> Surveys, evidence generation > Development of technical guidelines > MDA > Facility-based case diagnosis and treatment > SBCC > Advocacy > WASH (access to safe water, basic sanitation, no open defaecation and hygiene)
LF	Eliminate as a public health problem by 2027	> Sustain 100% access to hydrocoele surgery and lymphoedema management in all endemic *woredas* > 50 endemic *woredas* conducted and passed TAS2 > 59 endemic *woredas* conducted and passed TAS3	2025	> Annual MDA > Integrated vector control > Hydrocoele surgery > Lymphoedema management > SBCC
VL	Elimination of transmission as public health problem	> Reduce case fatality rate due to primary VL to < 1% > Increase number of VL treatment centres from 29 to 50	2030	> Early case detection through active case surveillance and management > Availing diagnostic kits and drugs > Availing management tools for CL > Health promotion
CL	Control by 2030	> Detect and report 85% of CL cases and treat 95% > Increase number of CL treatment centres from 14 to 30 > Increase number of CL diagnostic facilities from 25 to 170	2030	> Vector (control/ sand fly) control > Operational research
Podoconiosis	Control by 2030	> Sustain 100% access to lymphoedema management in all endemic *woredas* > Reduce the rate of new podoconiosis cases to < 1% > Ensure 100% regular shoe-wearing in endemic *woredas*	2025	> Integrated LF/podoconiosis lymphoedema management > SBCC > Integration with WASH advocacy > Psychosocial support

Disease	National target	Objectives	Year	Strategy
GWD	Elimination of transmission by 2025	> Interrupt indigenous GWD transmission	2022	> Enhance GWD surveillance > Vector control
		> To be certified free of transmission by 2025	2022	> Case containment > Enhance awareness of the GWD cash reward
Scabies	Control transmission	> Incorporate scabies management into the universal health coverage package of care > Implement integrated management of skin NTDs strategy	2025	> Surveillance > Operational research to define baseline and threshold for initiation of and stopping MDA for scabies control > Case diagnosis and treatment > Community screening and mass treatment > SBCC and active community engagement
Leprosy	Interruption of transmission as a public health problem by 2025	> Zero new autochthonous leprosy cases > Reduce leprosy prevalence from 0.3 to 0.1/10,000 population > Reduce the proportion of people with leprosy with grade-2 disability from 14% to < 5% > Diagnose and treat 10 000 people with leprosy > Provide leprosy preventive therapy to 9000 people > Decrease the annual number of new leprosy cases detected by 50% > Decrease rate (per million population) of new cases with grade-2 disability to < 1% > Decrease rate (per million children) of new child cases of leprosy to < 5% > Reduce the number of new leprosy cases with grade-2 disability to < 1/million population	2025	> Strengthen clinical diagnosis capacity > Use quality-assured multiple drug therapy > Prophylaxis, second-line treatment and reaction management > Monitor adverse events > Manage leprosy and its complications, and prevent new disability > Active surveillance, contact-tracing, case management, rehabilitation > Integrated, country-owned road maps for zero leprosy in all endemic *woredas* > Scale-up leprosy prevention with integrated active case detection > Combat stigmatization, and ensure that human rights are respected

Disease	National target	Objectives	Year	Strategy
Rabies	Eliminate human rabies as a public health problem by 2030	> Interrupt transmission of dog-mediated rabies > Reduce human rabies mortality to 0 > Increase access to a high-quality cell-culture animal rabies vaccine for dogs > Increase access to modern cell culture rabies vaccines for human post-exposure prophylaxis > Provide pre-exposure prophylaxis for high-risk groups (laboratory staff, veterinarians, animal handlers) > Ensure effective wound management in all health facilities > Control rabies in domestic dogs (mass vaccination of ≥ 70% of dog population in the country)	2025	> Surveillance and response > Prevention of rabies in humans > Control and elimination of rabies in dogs > Prevention and elimination of rabies in wildlife and livestock > Establish dog population management plan > Increase capacity for laboratory diagnostics > SBCC > Legislation > Multisectoral collaboration and data reporting and sharing
Dengue and chikungunya	Control dengue and chikungunya by 2030	> Map disease burden and mosquito vectors in arboviral disease-prone areas. > Investigate and respond to all reported outbreaks. > Conduct joint surveillance of incidence.	2025	> Case management > Surveillance and outbreak response > Vector control > Integration with malaria elimination and control

2.2.3 Milestones

To ensure that interventions are being implemented for each targeted NTD that is endemic in Ethiopia, several milestones have been set that indicate scaling up and scaling down of interventions (Table 14).

Table 14. **National milestones for targeted NTDs**

Sources for all milestones: Joint Application Package (JAP), Trachoma Elimination Monitoring Form (TEMF), programme documents, surveys and DHIS2.

National milestones for the elimination of trachoma: 2021–2025

Indicator	2020	2021	2022	2023	2024	2025
Completed trachoma mapping in the remaining *woredas* of Afar region	3	1				
Geographical coverage of TT surgery in trachoma-endemic *woredas*	376	798	798	798	798	798
Number of TT cases receiving accelerated TT surgery and management in all endemic *woredas* with remaining TT backlog	20 942	85 700	222 825	34 280		
Number of trachoma-endemic *woredas* that cleared the remaining TT backlog by providing TT surgery and management	36	102	145	39		
Percentage of post-operative trichiasis cases at 6 months among people who had trichiasis correction surgery in the past	NA	< 10%	< 10%	< 10%		
Geographical coverage of antibiotic MDA in all eligible trachoma-endemic *woredas*	204	567	452	328	293	260
Proportion of *woredas* that require antibiotic MDA for trachoma elimination as a public health problem that achieve ≥ 80% therapeutic coverage	202 (99%)	567 (100%)	452 (100%)	328 (100%)	293 (100%)	260 (100%)
Proportion of *woredas* that require facial cleanliness and environmental improvement for trachoma elimination as a public health problem that received these interventions	763	763	798	798	798	798
Number of *woredas* that assessed impact on trachoma of the recommended rounds of antibiotic treatment	189	341	239	60	84	6
Number of *woredas* with a prevalence of TT "unknown to the health system" of < 0.2% in adults aged ≥ 15 years (~1 case per 1000 total population)	36	100	182	71		
Number of formerly trachoma-endemic *woredas* with a prevalence of follicular trachomatous inflammation < 5% in children aged 1–9 years	71	123	129	39	45	4

Indicator	2020	2021	2022	2023	2024	2025
Prevalence of follicular trachomatous inflammation in each formerly endemic *woreda* in children aged 1–9 years of < 5%, sustained for at least 2 years in the absence of antibiotic MDA	47	91	57	34	123	129
Number of *woredas* that have completed a trachoma survey 2 years after achieving the elimination threshold of follicular trachoma of < 5% in children aged 1–9 years (cumulative)	16	82	51	31	111	132
Percentage of households with access to basic water supply in *woredas* endemic for trachoma	41%	44%	46%	60%	70%	80%
Percentage of households with access to improved latrines in *woredas* endemic for trachoma	5%	7%	10%	25%	40%	60%

National milestones for the elimination of onchocerciasis: 2021–2025

Indicator	2020	2021	2022	2023	2024	2025
Number of *woredas* mapped for onchocerciasis	17	0	17			
Number of endemic *woredas* requiring MDA	239	238	214	190[a]	162	147
Number of *woredas* that conducted an impact survey after the recommended number (10) of rounds of MDA		70	142	206	221	243
Number of *woredas* that stopped MDA and started post-treatment surveys[a]	6	16	40	64	92	107
Number of *woredas* that achieved the minimum elimination threshold	0	0	0	6	10	24

[a] 64 woredas to stop MDA by 2023, with scaling down in the same year; similar assumptions for all years

National milestones for the elimination of schistosomiasis: 2021–2025

Indicator	2020	2021	2022	2023	2024	2025
Proportion of schistosomiasis-endemic *kebeles* that provided treatment in schools	NA	NA	NA	75%	100%	100%
Proportion of *kebeles* that reassessed mapping of schistosomiasis to determine areas at > 10% intervention threshold	NA	20%	100%	NA	NA	NA
Percentage of *kebeles* in highly endemic *woredas* that target adults	NA	NA	100%	100%	100%	100%
Proportion of *woredas* that provided consecutive treatments in all endemic *kebeles* for 3–5 years, with a therapeutic coverage > 90% among target groups, as verified by coverage validation	NA	NA	NA	NA	75%	100%

National milestones for the elimination of soil-transmitted helminths: 2021–2025

Indicator	2020	2021	2022	2023	2024	2025
Number of endemic *woredas* that conducted MDA in schools	NA	164	339	NA	NA	NA
Proportion of *woredas* that completed reassessment mapping of STH to determine areas > 20% the intervention threshold	NA	20%	100%	NA	NA	NA
Proportion of *woredas* with expanded community treatment targeting high-risk groups (adults)	NA	NA	30%	100%	100%	100%
Proportion of *woredas* that received four consecutive rounds of treatment with a therapeutic coverage of ≥ 90% among high-risk groups as verified by coverage validation	NA	NA	NA	NA	100%	100%

National milestones for the elimination of lymphatic filariasis: 2021–2025

Indicator	2020	2021	2022	2023	2024	2025
Geographical coverage of LF MDA in all LF-endemic *woredas*	88	94 (100%)				
Number of *woredas* that conducted > 5 rounds of MDA with therapeutic coverage of ≥ 65%	34 (39%	61 (65%)	68 (72%)			
Number (proportion) of *woredas* that conducted TAS1	30 (34%)	34 (36%)	45 (48%)	48 (52%)	5 (53%)	60 (64%)
Number (proportion) of *woredas* that conducted and passed TAS2	10 (11%)	14 (17%)	3 (46%)	43 (46%)	46 (49%)	50 (53%)
Number (proportion) of implementation units that conducted and passed TAS3	0	3 (4%)	6 (7%)	12 (13%)	3 (32%)	59 (63%)
Number (proportion) of implementation units with full coverage of morbidity management services and access to basic care	51 (58%)	51 (54%)	85%	95%	100%	100%
Number (proportion) of implementation units in which 75% of hydrocoele cases benefitted from appropriate surgical correction	51 (58%)	51 (54%)	85%	95%	100%	100%

National milestones for the control of podoconiosis: 2021–2025

Indicator	2020	2021	2022	2023	2024	2025
Number (proportion) of endemic *woredas* that provide lymphoedema morbidity management and disability prevention services	100	150 (43%)	200 (58%)	250 (73%)	300 (87%)	345 (100%)
Percentage of lymphoedema cases managed	10%	20%	40%	60%	80%	100%
Proportion of endemic *woredas* with at least one podoconiosis patients' association	25%	50%	75%	100%	100%	100%
Percentage of individuals with proper, regular foot hygiene practice in endemic *woreda*	50%	70%	80%	90%	95%	100%
Percentage of individuals with proper, regular shoe-wearing in endemic *woreda*	50%	85%	88%	90%	95%	100%

National milestones for the control of leishmaniasis: 2021–2025

Indicator	2020	2021	2022	2023	2024	2025
Number of highly endemic *woredas* with active VL case detection	5	5	10	30	40	40
Number of *woredas* with passive VL case detection	40	40	60	65	67	67
Number of VL diagnostic centres	23	23	28	32	35	45
Number of VL treatment centres	29	30	32	35	40	40
Number of CL diagnostic centres	25	25	75	125	170	170
Number of CL treatment centres	14	16	19	23	25	30
Number of VL treatment centres that provide combination therapy (Meltifosine plus AmBisome) for VL–HIV co-infection	0	9	12	15	20	20
Number of studies of chemical sensitivity in sandflies	0	0	1	0	0	0
Number of clinical trials conducted for CL treatment	0	0	1	0	0	0
Number of *woredas* that implement vector (sandfly) control	0	67	67	67	67	67
Case fatality rate due to primary VL	2.7%	2.5%	2.25%	2.0%	1.75%	< 1.5%

National milestones for the eradication of Guinea-worm disease: 2020–2025

Indicator	2020	2021	2022	2023	2024	2025
Number of endemic *woredas* that have interrupted GWD transmission	0	0	2 (100%)	0	0	0
Number of levels I and II *woredas* that have conducted active surveillance	25 (100%)	25 (100%)	25 (100%)	27 (100%)	27 (100%)	27 (100%)
Number of level-III *woredas* that have maintained passive surveillance/ integrated disease surveillance and response	809 (100%)	809 (100%)	809 (100%)	807 (100%)	807 (100%)	807 (100%)
Community awareness of cash reward in level-I *woredas* (> 80%)	> 80%	> 80%	> 80%	> 90%	> 90%	100%
Community awareness of cash reward in level-II *woredas* (> 80%)	> 76%	> 80%	> 80%	> 80%	> 80%	> 80%
Community awareness of cash reward in level-III *woredas* (> 50%)	> 4	> 10%	> 20%	> 30%	> 40%	> 50%
Percentage of health workers knowledgeable about GWD (100%)	> 40%	> 50%	> 60%	80%	90%	100%

National milestones for the control of scabies: 2021–2025

Indicator	2020	2021	2022	2023	2024	2025
Proportion of *woredas* with known scabies burden	Not mapped	50%	80%	100%	100%	100%
Proportion of endemic *woredas* that have integrated skin NTDs and scabies management in the essential health services package	NA	30%	40%	60%	100%	100%
Proportion of *woredas* with scabies prevalence > 10% that started MDA	0	0	20%	60%	80%	100%
Number of operational research studies conducted on scabies	0	0	1	0	1	

National milestones for the elimination of leprosy: 2021–2025

Indicator	2020	2021	2022	2023	2024	2025
Prevalence of leprosy per 10 000 people	0.3	0.3	0.25	0.25	0.2	0.1
Proportion of grade-2 disability among new leprosy cases	14%	11%	10%	8%	7%	5%
Number of leprosy contacts who received single dose rifampicin preventive therapy		1000	2000	2000	2000	2000
Proportion of children among notified cases of leprosy		12%	11%	9%	7%	5%
Leprosy case detection (number of people)		3000	2600	2500	2000	2000

National milestones for the elimination of rabies: 2021–2025

Indicator	2020	2021	2022	2023	2024	2025
Proportion of people vaccinated after exposure to suspected rabid dog bite			100%	100%	100%	100%
Case fatality rate due to rabies per 100 000 people	1.1	1.08	1.05	1.02	0.9	0.5
Number of regions that integrated wound management for dog bite (5 health facility/year per region)	50	100	150	200	250	300
Number of modern rabies vaccine doses available to health facilities			50 000	60 000	60 000	60 000
Legal framework or policy for dog management				1		
Proportion of dogs vaccinated (70% mass vaccination of all dogs)		10%	20%	35%	50%	70%

National milestones for the control of dengue and chikungunya: 2021–2025

Indicator	2020	2021	2022	2023	2024	2025
Proportion of *woredas* suspected to be endemic that conducted a dengue or chikungunya vector distribution survey	NA		30%	50%	75%	100%
Number of operational research studies conducted on dengue or chikungunya	NA			1	1	
Mapping of dengue and chikungunya	NA		30%	50%	75%	100%
Number of technical guidelines developed for control of dengue and chikungunya	NA		1			
Number of national action plans developed						1
Percentage of patients treated for dengue or chikungunya during outbreaks	NA	100%	100%	100%	100%	100%
Number of advocacy events conducted for control of dengue and chikungunya	NA		1	1	1	
Early preparedness and response system instituted	NA		1			
Case fatality rate (%) due to dengue or chikungunya	NA		0.8	0.5	0.5	0.5

2.3 Guiding principles

The following guiding principles have been identified as core to the coordination framework for achievement of the goals of the NTD programme: Government ownership and leadership, evidence-based, consultative processes, transparency, inclusiveness and community engagement:

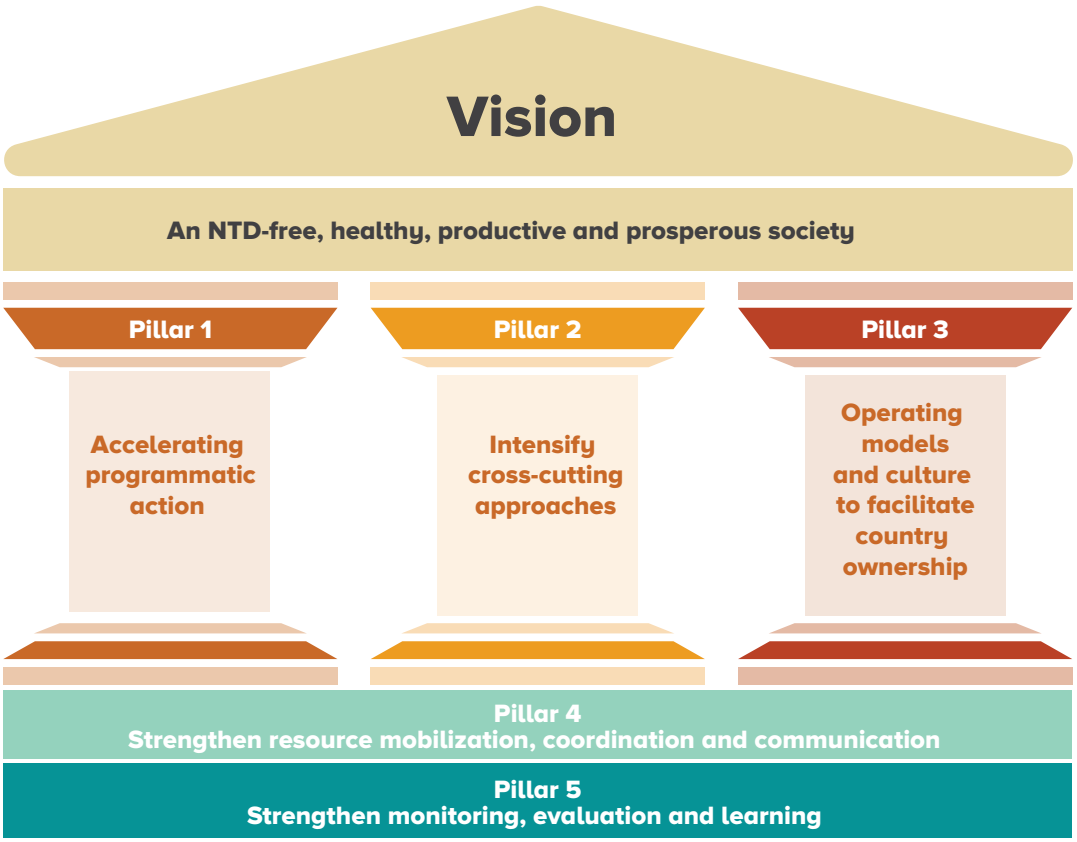
- robust national, regional and local ownership and leadership;
- commitment to the global road map 2021–2030 for NTD goals and targets;
- shared responsibility and accountability;
- community engagement and participation;
- safety: “Do no harm” when delivering health care;
- evidence-based programming and decision-making;
- gender equity, inclusion and non-discrimination;
- health system strengthening and sustainability; and
- integration, multisectoral collaboration and partnership.

2.4 Strategic pillars and objectives

2.4.1 Programme strategic pillars

After extensive deliberation and analyses, five strategic priorities or pillars (Figure 21) were identified for accelerating progress toward the envisaged strategic goals of the NTD programme in Ethiopia. The pillars will support national efforts to achieve the targets.

Figure 21. **Programme strategic pillars**



2.4.2 Strategic directions

The strategic directions guide achievement of the strategic objectives of the NTD programme.

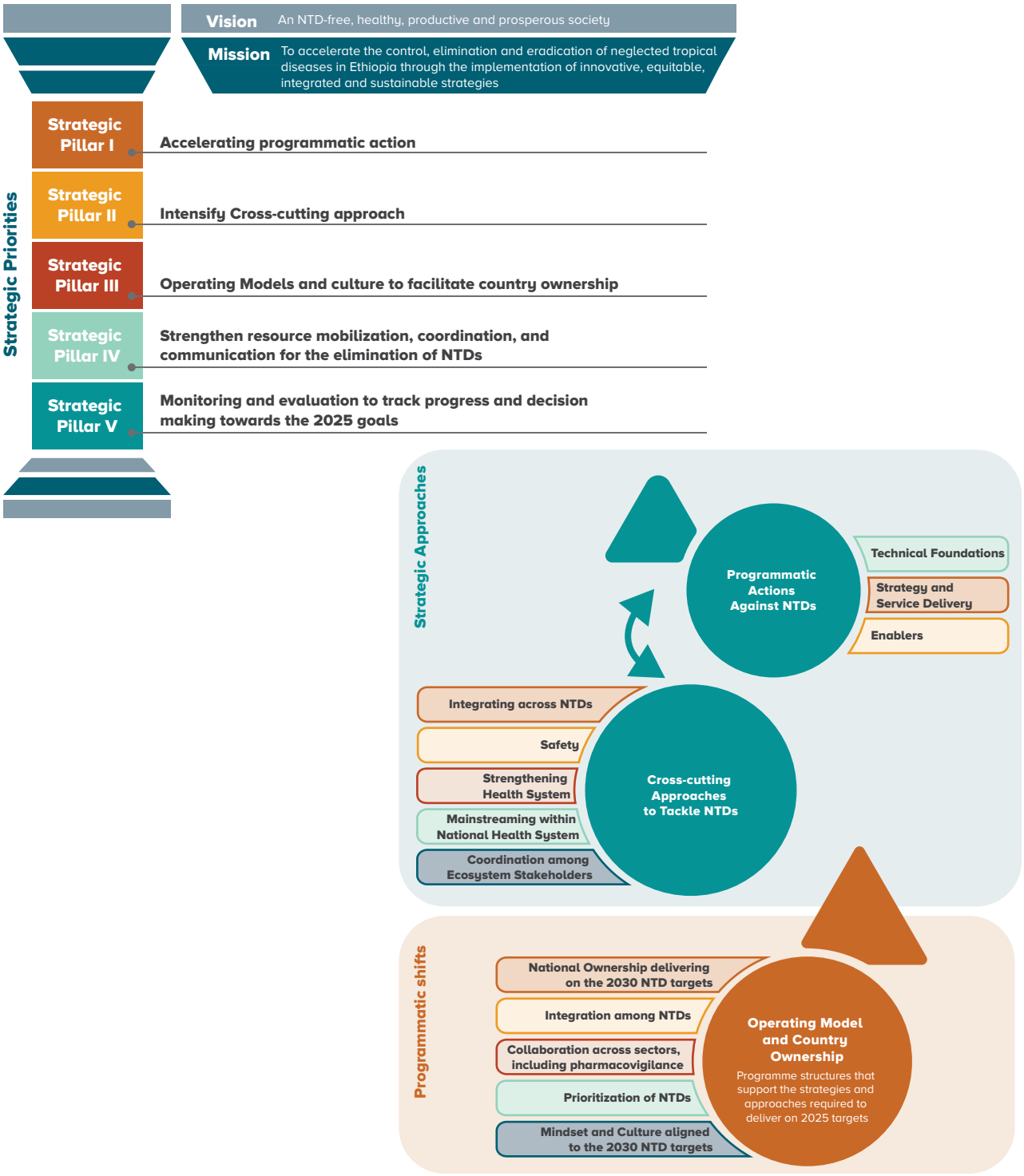
Table 15. **Strategic directions for the control and elimination of NTDs**

Strategic pillar and objectives	Strategic directions
Pillar 1: Accelerate programmatic action.	Scale up or down integrated PC to achieve 100% geographical coverage at the WHO minimum coverage threshold.
	Enable early detection and prompt treatment or case management of NTDs.
	Strengthen vector control and environmental management.
	Conduct operational research, and establish innovative public health practices, including for zoonotic NTDs.
Pillar 2: Intensify cross-cutting approaches.	Integrate NTDs on common delivery platforms to combine work on several diseases.
	Strengthen the NTDs pharmaceutical supply chain management system.
	Strengthen multisectoral coordination and response with a focus on WASH infrastructure and practices.
Pillar 3: Operating models and culture to encourage country ownership.	Strengthen NTD programme structure and leadership at all levels of the health system, including agencies under the MoH.
	Enhance community ownership, engagement and empowerment.
	Develop and institute an NTD programme sustainability framework and relevant guidelines.
Pillar 4: Strengthen resource mobilization, coordination, and communication.	Improve the capacity of the health system to generate domestic resources through health-care financing scheme, and increase Government funding for NTDs.
	Strengthen NTD coordination mechanisms at all levels.
	Improve advocacy and communication at all levels.
Pillar 5: Strengthen monitoring, evaluation and learning.	Institute comprehensive results-based monitoring, evaluation and learning system.
	Support evidence generation through operational and evaluative research.
	Enhance effective digitized NTD data management and dissemination.

2.4.3 Programme strategic agenda logic map

Figure 22 shows a logic map of the strategic agenda for the national NTD programme.

Figure 22. **Programme strategic agenda logic map**



3

Implementing the strategy:

Operational Framework

Implementing the strategy: **Operational Framework**

The operational framework for the national NTD master/strategic plan guide developed by the WHO Regional Office for Africa proposes three fundamental shifts in the approach to NTDs, in line with the 2021–2030 NTD global road map: (i) increase accountability by using impact indicators instead of process indicators, as reflected in the targets and milestones in section 2, and accelerate programme action; (ii) move away from siloed, disease-specific programmes by mainstreaming programmes into national health systems and intensifying cross-cutting approaches centred on the needs of people and communities; and (iii) change the operating models and culture to encourage greater ownership of programmes by countries. The sub-sections below describe the strategic initiatives and planned activities, the plan to intensify coordination and partnerships for programme sustainability and performance and the accountability framework.

3.1 Strategic directions and key activities

The strategic directions with the relevant key initiatives and activities required to realize the envisaged strategic goals and targets are listed in Table 16, which contains over 60 initiatives and activities for the control and elimination of NTDs during the period of the third Strategic Plan. (See also Annex III for additional details.)

Table 16. **Strategic directions and activities/initiatives 2021-2025**

Strategic direction	Activities and initiatives	Timeframe
Pillar 1. **Accelerate programmatic action against NTDs.**		
1. Scale up or down integrated PC to achieve 100% geographical coverage at WHO's disease-specific minimum treatment threshold.	Implement PC for all PC NTDs in all endemic *woredas*.	Annual or biannual
	Increase social mobilization and behaviour change communication.	Routine
2. Enable early detection and prompt treatment of CM NTDs, with morbidity management and disability prevention.	Conduct active case finding for CM NTDs.	Annual
	Increase passive case identification, referral and management.	Routine
	Build local capability for timely detection and response to outbreak-prone NTDs.	2022
	Strengthen diagnostic and therapeutic capacity.	Continuous
	Develop and implement guidelines for integrated skin NTD management.	2022
3. Strengthen vector control and environmental management for NTD control and elimination.	Identify and map hotspots for vector control.	2022
	Strengthen integrated vector control within existing vector-borne disease control programmes.	2022
4. Conduct operational research, and establish innovative public health practices, including for zoonotic NTDs.	Revitalize operational research advisory group.	2022
	Identify potential research collaborators (e.g., universities and institutes).	2021
	Increase operational and implementation research on NTD interventions to address identified programme gaps.	2022 onwards
	Ensure use of research-based evidence for NTD programme formulation and management.	Continuous

Strategic direction	Activities and initiatives	Timeframe
Pillar 2: **Intensify cross-cutting approaches.**		
1. Integrate NTDs on common delivery platforms to combine work on several activities.	Strengthen integrate MDA strategy for the five PC NTDs (trachoma, onchocerciasis, LF, STH and schistosomiasis).	2021–2025
	Incorporate NTD prevention, control and management in pre-service training of mid-level health-care providers.	
	Scale up integrated SBCC interventions for NTDs.	
	Integrate continuous professional development on NTDs (e.g., refresher training of health extension workers).	
	Develop and implement guideline on integrated skin NTD management.	
2. Strengthen NTD pharmaceutical supply chain management system and pharmacovigilance.	Strengthen a timely, effective NTD logistics supply chain management system (quantification, request, stock monitoring and reporting of commodities).	2021–2025
	Ensure MDA safety, integrate reporting and investigation of adverse drug events into the national pharmacovigilance system.	
	Ensure zero severe adverse events in all MDA campaigns.	
	Include reports of severe adverse events into eCHIS.	
	Update and use SOPs for supply chain management of NTD pharmaceuticals.	
	Institute post-marketing surveillance of NTD drugs and vaccines.	
3. Strengthen multisectoral coordination and response, with focus on WASH infrastructure and practices.	Ensure inclusion of NTDs in the national One Health platform.	2021–2025
	Strengthen multisectoral WASH–NTD coordination at all levels.	
	Strengthen cross-border collaboration.	
	Ensure implementation of coordinated vector control.	
Pillar 3: **Operating models and culture to encourage country ownership.**		
1. Strengthen NTD programme structure and leadership at all levels of the health system.	Ensure an NTD staffing structure with earmarked budget at all levels of the health system.	2021–2025
	Deployment of NTDs programme staff at each level as per the approved structure.	
2. Enhance community engagement, empowerment and ownership of NTD programme.	Support and strengthen alliance for health, and improve NTD service.	2021–2025
	Engage community leaders in NTD activities.	
	Develop SBCC toolkit to empower community leaders.	
	Introduce and extend self-care initiatives.	
	Cultivate and incubate community led innovations for NTDs.	
3. Develop and put in place NTD programme sustainability framework.	Finalize and put in place NTD programme sustainability framework.	2022
	Assess and strategize for political and administrative commitment.	2022
	Produce and disseminate a policy brief.	Continuous

Strategic direction	Activities and initiatives	Timeframe
Pillar 4: **Strengthen resource mobilization, coordination and communication for the control, elimination and eradication of NTDs.**		
1. Improve the capacity of the health system to generate domestic resources through health-care financing scheme, and increase Government funding for NTDs.	Strengthen regular estimation of NTD resources, analysis of expenditure and funding gaps by involving relevant Government sectors.	2021–2025
	Align NTD public budget allocation and financial management with health budgeting practices and health financing objectives.	
	Promote mandatory community health insurance to ensure equitable access to health-care for communities affected by NTDs.	
	Ensure domestic resource mobilization from Government and local private sectors in a feasible resource mobilization strategy.	
	Include in and align NTD Strategic Plan and budget with national planning and budgeting, and ensure Government budget allocation for NTD programmes.	
	Strengthen capacity for accountability by providing up-to-date reports on use of finance and other resources in NTD programmes.	
2. Strengthen NTD coordination at all levels.	Create and/or strengthen multisectoral collaboration platforms to coordinate and enhance co-investment (e.g., WASH–NTD activities).	2021–2025
	Ensure meaningful engagement of high-level Government officials in NTD control, elimination and eradication.	
	Identify and work with high-profile individuals and groups (e.g., public figures and religious leaders) at national and local levels to ensure public engagement and participation in NTD financing and programmes.	
	Strengthen coordination between NTD case team and other departments within the MoH to integrate and sustain shared goals (e.g., strengthen coordination of interventions for vector-borne NTDs with vector control for malaria).	
3. Improve advocacy and NTD programme communication at all levels.	Design and use efficient NTD communication strategy for NTD stakeholders and actors, including health care providers and communities.	2021–2025
	Ensure a communication platform between the NTD community and policy-makers, funders, researchers, and academia on relevant current NTD issues.	
Pillar 5: **Strengthen monitoring, evaluation and learning.**		
1. Institute a comprehensive, results-based monitoring, evaluation and learning system.	Improve integrated monitoring, supervision and programme performance review mechanisms and platforms.	Continuous
	Prepare NTD programme monitoring and evaluation framework.	2022
	Conduct mapping, impact and transmission assessment surveys for NTDs.	Continuous
	Establish and strengthen knowledge management at all levels.	From 2023
	Ensure NTD data quality and use.	Continuous
	Prepare dossiers for *woredas* that have achieved elimination thresholds for target NTDs.	Continuous

Strategic direction	Activities and initiatives	Timeframe
2. Support evidence generation through operational and evaluation research.	Conduct operational research.	Continuous
	Conduct rapid investigations on disease-specific failures.	Continuous
3. Enhance effective digitized NTD data management and dissemination.	Integrate NTD programme into eCHIS.	2022
	Enhance integration of NTDs into DHIS2 system.	2022
	Integrate mapping and impact surveys into NTD DHIS-2 system.	2022

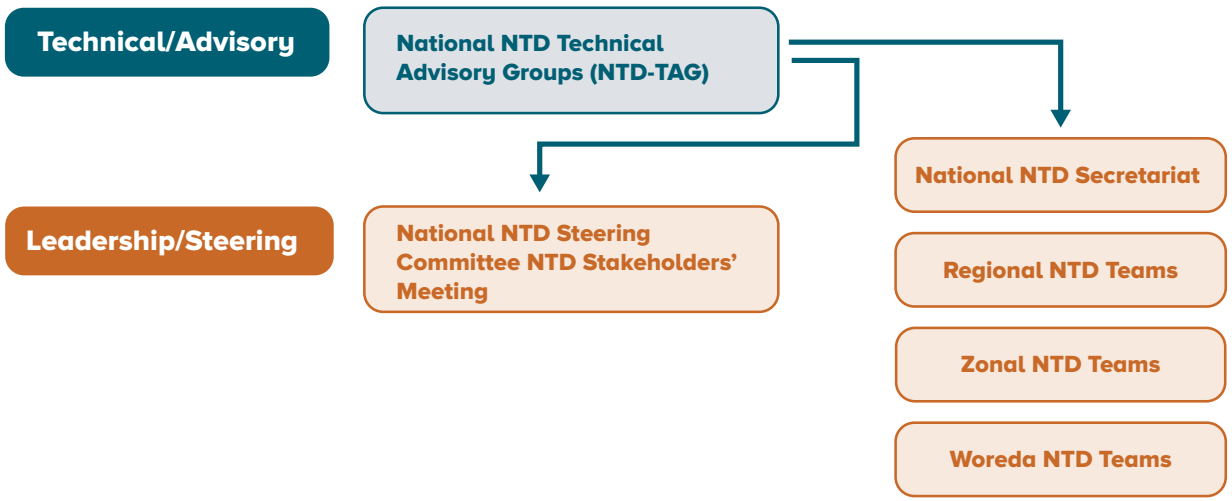
3.2 Towards programme sustainability: intensifying coordination and partnerships

The sustainability of a programme **(2)** is operationally defined as:

> *'the health system's capacity and commitment to maintain the provision of NTD interventions at levels that will continue progression toward control or elimination/eradication of diseases in accordance with national NTD goals'.*

The mechanisms for coordinating the national NTD programme are outlined in Figure 23.

Figure 23. **NTD programme coordination mechanism**



The MoH will use membership and terms of reference (Table 17) to coordinate implementation of the NTD Strategic Plan in the next 5 years. This will require serious leadership from the MoH, the participation of professionals and the support of WHO, other development partners, academic and research institutions and the private sector.

Table 17. **Programme coordination**

Entity		Terms of reference
National NTD Task Force		
Meeting frequency:	Biannual	National NTD stakeholders
Chair:	MoH	
Host:	MoH	
Membership:	MoH, Ministry of Education; Ministry of Water, Irrigation and Energy; Ministry of Women, Children and Youth; federal health agencies, regional health bureaus, implementing partners, funding and donor agencies, United Nations agencies, private sector	
National Trachoma Task Force		
Meeting frequency:	Quarterly	National Trachoma Task Force
Chair:	MoH	
Host:	MoH	
Membership:	Amref, Christian Blind Mission, Children's Investment Fund Foundation, Crown Agents/ Ascend, Ophthalmological Society of Ethiopia, Fred Hollows Foundation, Grarbet Tehadsso, International Trachoma Initiative, Light for the World, Menschen fur Menschen, Orbis International, Research Triangle Institute, Sightsavers, The Carter Center, The END Fund, US Agency for International Development, WHO, World Vision	
Ethiopia Trachoma Advisory Group		
Meeting frequency:	Annual	Ethiopia Trachoma Advisory Group
Chair:	Selected from among members by the MoH and partners	
Host:	MoH	
Membership:	Individual national and international experts	
Technical Advisory Group for Schistosomiasis and Soil-transmitted Helminths		
Meeting frequency:	Annual	Technical Advisory Group for Schistosomiasis and Soil-Transmitted Helminths
Chair:	NTD Programme Coordinator	
Host:	MoH	
Membership:	Individual national and international experts	

Entity		Terms of reference
Ethiopia Onchocerciasis Elimination Expert Advisory Committee		
Meeting frequency:	Annual	Ethiopia Onchocerciasis Elimination Expert Advisory Committee
Chair:	Elected by members of the Committee	
Host:	MoH	
Membership:	MoH, Regional Health Bureaus, Ethiopian Mapping Agency, The Carter Center, Light for the World, Research Triangle Institute, PENTD, international experts	
Cross-border Collaboration between Ethiopia, Sudan and South Sudan to Eliminate Onchocerciasis and Lymphatic Filariasis		
Meeting frequency:	Annual	Cross-border Collaboration between Ethiopia, Sudan and South Sudan to Eliminate Onchocerciasis and Lymphatic Filariasis
Chair:	Host country	
Host:	Member countries by rotation	
Membership:	Ministries of Health of Ethiopia, Sudan and South Sudan	
Regional NTD–WASH Task Force		
Meeting frequency:	Quarterly	Regional NTD–WASH Task Force
Chair:	Head of Regional Health Bureau	
Host:	Regional Health Bureau	
Membership:	Regional Health Bureaus; Bureaus of Finance and Economic Development; Bureau of Health, Water, Irrigation and Energy, Education, Finance and Economic Development; implementing partners and others	
Zonal WASH–NTD Task Force (ongoing)		
Meeting frequency:	Quarterly	Zonal WASH–NTD Task Force
Chair:	Zonal administrator or representative	
Host:	Zonal administration, zonal health department	
Membership:	Zonal departments of health; education; water, irrigation and energy; implementing partners and others	
Woreda WASH–NTD Task Force (ongoing)		
Meeting frequency:	Quarterly	*Woreda* WASH–NTD Task Force
Chair:	*Woreda* administrator or representative	
Host:	*Woreda* Administration	
Membership:	*Woreda* offices of health, water, irrigation and energy, education, implementing partners and others	

3.3 Assumptions, risks and mitigation

Risks are anticipated during implementation of the Third NTD Strategic Plan that might impede achievement of results. These were identified in consultation with partners and a SWOT analysis. Table 18 shows the identified risks, their likely occurrence, their impact and possible mitigation strategies.

Table 18. **Risk criteria and assessment**

Potential risk	Before risk mitigation			Risk mitigation	After risk mitigation		
	Likelihood[a]	Impact[b]	Score[c]		Likelihood[a]	Impact[b]	Score[c]
Effect of COVID-19 on the NTD programme	5	5	25	The MoH and partners will identify strategies to deliver NTD interventions while initiating the necessary public health measures to prevent COVID-19, including social distancing, personal preventive equipment and door-to-door delivery of MDA. Risk and mitigation will be assessed to determine the safety of delivering NTD interventions in the context of COVID-19. With partners and technical working groups, the MoH will develop SOPs on safe delivery of NTD interventions.	4	4	16
Population displacement, internal migration and instability in neighbouring countries	4	4	16	The MoH will work with neighbouring countries, civil society organizations, agencies and implementing partners to prevent cross-border NTDs. It will establish NTD service delivery points at centres for internally displaced people and refugees to ensure timely delivery of interventions.	2	3	6
Reduced NTD financial resources, abrupt reduction of donor funding, unpredictable future donor funding	4	5	20	An NTD sustainability framework will be implemented, with a focus on innovative domestic resource mobilization, inclusion of NTDs in the health insurance benefits packages and working with local private philanthropies.	3	3	9

Potential risk	Before risk mitigation			Risk mitigation	After risk mitigation		
	Likelihood[a]	Impact[b]	Score[c]		Likelihood[a]	Impact[b]	Score[c]
Inadequate budget allocation by the Government for the NTD programme	5	4	20	Continued data-driven, evidence-based advocacy to members of parliament, line ministries such as Finance, Education and Agriculture and the Planning Commission. Develop case for investment in NTDs.	3	3	9
Little multisectoral collaboration	3	4	12	The MoH will work with line ministries to address the root causes of NTDs. The MoH will maximize involvement and ownership of the NTD programme by line ministries by ensuring their membership in the NTD Task Force and national, regional and *woreda* technical working groups	2	3	6
Little government ownership of the NTD programme (donor dependence)	3	4	12	Organize advocacy sessions on NTDs for regional and zonal leaders. Develop policy briefs on the impact of NTDs and the return on investment, and estimate the long-term benefits of addressing NTDs on the country's economy.	2	2	4

c[5], certain; 4, likely; 3, possible; 2, unlikely; 1, rare

b[5], severe; 4, major; 3, moderate; 2, minor; 1, insignificant

c Likelihood x impact:

19-25	Severe	13-18	Major	7-12	Moderate	1-6	Minor

3.4 Performance and accountability framework

Table 19 lists the strategic objectives, performance indicators, targets and dates. See annex IV for details of the indicators framework.

Table 19. **Performance indicators for the strategic pillars**

Strategic priority	Key activities and initiatives	Indicator	Baseline	Mid-term target 2023	Target 2025
Pillar 1. **Accelerate programmatic action against NTDs.**					
1. Scale up or down integrated PC to achieve 100% geographical coverage at WHO's disease-specific minimum treatment coverage threshold.	Implement PC for all PC NTDs in all endemic *woredas*.	Geographical coverage of each PC NTD	TBD	100%	100%
		Integrated treatment coverage index for PC NTDs and transmission control	75%	80%	80%
	Enhance social mobilization and SBCC.	Proportion of community leaders involved in NTD interventions	NA	80%	90%
2. Ensure early detection and prompt treatment of CM NTDs.	Conduct active case-finding of the CM NTDs.	Proportion of CM NTD cases reached through active case finding and treated	NA	80%	100%
	Strengthen diagnostic and therapeutic capacity.	Proportion of health facilities with diagnostic and therapeutic capacity for morbidity management and disability prevention	NA	80%	100%
	Increase active and passive case identification, referral and management.	Proportion of referred CM NTD cases that received treatment	NA	80%	100%
	Develop and implement integrated skin NTD management guideline.	Number of integrated skin NTD guideline developed	NA	1	
		Proportion of *woredas* that adopt and implement integrated skin NTD guidelines	NA	50%	All
3. Strengthen vector control and environmental management.	Identify and map hotspots for vector control.	Number of assessments made to identify hot spot areas for vector control NTDs	NA	1	3
	Strengthen integration of NTD vector control with vector-borne disease control programme.	Number of meetings conducted with various stakeholders	NA	3	5

Strategic priority	Key activities and initiatives	Indicator	Baseline	Mid-term target 2023	Target 2025
4. Conduct operational research and establish innovative public health practices, including for zoonotic NTDs.[2]	Strengthen case reporting and data generation from all health facilities.	Proportion of designated/ sample hospitals that reported NTDs cases	NA	100%	100%
	Enhance operational research on NTDs to address programme gaps.	Number of operational research studies conducted	NA	4	8
	Ensure readiness and flexibility to incorporate innovative public health practices.	Innovative public health practices adopted	NA	All	All
Pillar 2. **Intensify cross-cutting approaches.**					
1. Integrating NTDs on common delivery platforms to combine work on several activities.	Strengthen integrated MDA strategy for the 5 PC NTDs (trachoma, onchocerciasis, LF, STH and schistosomiasis).	Proportion of NTD co-endemic *woredas* that implemented an integrated MDA programme	All	All	All
	Incorporate NTD prevention, control and management in pre-service training of mid-level health-care providers.	Number of pre-service training programmes (public health, nursing, environmental health) that incorporated NTD in their syllabus	NA	2	3
	Scale up integrated SBCC interventions for NTDs.	Number of *woredas* that implemented integrated SBCC		All	All
	Integrate continuous professional development scheme on NTDs for NTD officers at various levels (e.g., integrated refresher training for health extension workers, health officers, nurses).	Number of continuous professional development programmes on NTDs	NA	2	2

2 These include NTDs with no established endemicity status in the country – hydatidosis/echinococcosis, taeniasis, foodborne trematodiasis, snakebite envenoming, mycetoma and human African trypanosomiasis).

Strategic priority	Key activities and initiatives	Indicator	Baseline	Mid-term target 2023	Target 2025
2. Strengthen NTD pharmaceutical supply chain management system.	Ensure timely, effective NTD logistics supply chain management system.	Proportion of *woredas* that received the required package of NTD logistics timely	NA	80%	100%
		Proportion of *woredas* that implement reverse logistics effectively	NA	90%	100%
	Ensure MDA safety. Integrate adverse drug event reporting and investigation into the national pharmacovigilance system.	MDA safety guidelines developed and disseminated	NA	1	1
		No reported severe adverse events in any MDA implementation *woreda*	NA	0	0
		Incorporated reports of severe adverse events into eCHIS	NA	1	1
	Update and introduce SOP for management of NTD pharmaceuticals supply chain.	Number of SOP instituted for NTD pharmaceutical supply chain management	NA	1	1
	Institute post-marketing surveillance of NTD drugs and vaccines.	Number of disease-specific and/or integrated surveys conducted	NA	1	1
3. Strengthen multisectoral coordination and response with focus on WASH infrastructure and practices.	Ensure inclusion of NTDs in the national One Health platform.	Participation of NTD team in the national One Health platform	NA	3	5
	Strengthen multisectoral WASH–NTD coordination at all levels.	Proportion of endemic *woredas* that implemented WASH–NTD coordination toolkit	NA	100%	100%
		Proportion of regions that implemented WASH–NTD collaborative action plan (e.g., joint advocacy, monitoring and evaluation)	NA	80%	100%
	Strengthen cross-border collaboration.	Number of cross-border collaboration meetings conducted with countries as per need	NA	2	3
	Ensure implementation of coordinated vector control.	Number of vector-borne NTDs for which vector control intervention is implemented	NA	All	All

Strategic priority	Key activities and initiatives	Indicator	Baseline	Mid-term target 2023	Target 2025
Pillar 3: **Operating models and culture to encourage country ownership.**					
1. Strengthen NTD programme structure and leadership at all levels of the health system, including agencies under MoH.	Assure NTD staffing structure, with earmarked budget at all levels of the health system.	Proportion of NTD positions with staff and budget in place at different levels (MoH, RHB, ZHD, WoHO respectively)	NA	Federal, regional and zonal levels	Federal, regional and zonal, woreda levels
	Deploy NTD programme staff at each level as per the approved structure.	Proportion of NTD positions filled as per the approved structure	NA	100%	100%
2. Enhance community engagement, empowerment and ownership of NTD programme.	Engage community leaders in NTD activities.	Number of community leaders who participated in NTD activities	NA	At least three per *kebele*	At least three per *kebele*
	Develop SBCC toolkit to empower community leaders.	Number of SBCC toolkit developed and disseminated	NA	1	1
	Introduce and extend self-care initiatives.	Self-care initiative guidelines developed	NA	1	1
	Cultivate and incubate community-led innovations for NTDs.	Number of best community lessons captured	NA	4	8
3. Develop and institute NTD programme sustainability framework and relevant guidelines.	Assess and strategize for political and administrative commitment.	Need assessment conducted	NA	1	1
	Produce and disseminate policy brief.	NTD sustainability framework developed and used	NA	1	1
	Finalize and introduce NTD sustainability action plan.	Number of regions that used the sustainability action plan	NA	4	9

Strategic priority	Key activities and initiatives	Indicator	Baseline	Mid-term target 2023	Target 2025
Pillar 4: **Strengthen resource mobilization, coordination and communication for the control, elimination and eradication of NTDs.**					
1. Improve capacity of the health system to generate domestic resources through health-care financing scheme, and increase Government funding for NTDs.	Strengthen regular analysis and estimation of NTD resource needs, funding gaps and programme expenditure by involving relevant Government sectors.	Number of financial analysis produced and disseminated	NA	6	10
	Align NTD public financial management with health budgeting practices and health financing objectives.	NTD public financing strategy developed and instituted	NA	1	1
	Promote mandatory community health insurance to ensure equitable access to health care for communities affected by NTDs.	Proportion of people using community health insurance scheme	NA	25%	50%
	Ensure mobilization of internal resources from Government and local private sector through a feasible resource mobilization strategy.	Proportion of government and local private sector financial contributions for NTD programme	NA	25%	50%
	Include in and align NTD Strategic Plan and budget with national planning and budgeting, and ensure a Government budget allocation for NTD programmes.	Number of annual NTD work plan and budget aligned with the HSTP woreda-based health sector annual core plan	NA	3	5
	Strengthen capacity for clear accountability by providing up-to-date reports on use of finance and other resources in NTD programmes.	Proportion of financial reports shared with partners	NA	100%	100%

Strategic priority	Key activities and initiatives	Indicator	Baseline	Mid-term target 2023	Target 2025
2. Strengthen NTD coordination at all levels.	Create and/or strengthen multisectoral collaboration platforms to coordinate and enhance co-investment (e.g., WASH–NTD activities).	Proportion of *woredas* that have applied tools for merging WASH and NTD data	NA	50%	100%
	Ensure meaningful engagement of high-level Government officials in NTD control, elimination and eradication activities.	Proportion of Government leaders involved in NTD activities	NA	70%	90%
	Identify and work with high-profile individuals and groups (e.g., public figures and religious leaders) at national and local levels to ensure public engagement and participation in NTD financing and programmes.	Proportion of community leaders involved in campaigns	NA	70%	90%
	Strengthen coordination between NTD case team and other MoH directorates/ program teams for integrating and sustaining shared goals (e.g., strengthen coordination of interventions for vector-borne NTDs with vector control for malaria).	Numbers of health campaigns/ activities coordinated and implemented	NA	NA	NA
3. Increase advocacy and NTD programme communication at all levels.	Design and use efficient NTD advocacy and communication strategy among NTD stakeholders and actors.	Number of advocacy and communication strategy framework developed and applied	NA	1	1
		Proportion of community leaders aware of scheduled NTD campaigns and activities	NA	60%	90%
	Establish and strengthen knowledge management at all levels.	Number of knowledge management framework developed and applied	NA	1	1
	Ensure a communication platform for the NTD community and policy-makers, funders, researchers, academia and the public on relevant and NTD	Communication platform formed for MoH, NTD Team and other stakeholders	NA	1	1

Strategic priority	Key activities and initiatives	Indicator	Baseline	Mid-term target 2023	Target 2025
Pillar 5: **Strengthen monitoring, evaluation and learning.**					
1. Institute comprehensive, results-based monitoring, evaluation and learning system.	Strengthen integrated monitoring, supervision and programme performance review mechanisms and platforms.	Number of workshops on monitoring and evaluation of NTD programme	NA	8	16
	Conduct data quality and use assessments.	Number of data quality assessments and conducted	NA	2	4
	Conduct and communicate relevant critical data analysis on prioritized NTD indicators.	Number of data analysis reports disseminated on NTD indicators	1	4	8
	Conduct mid-term and end-term reviews of the performance of the NTD Strategic Plan.	Number of strategic planning review meetings conducted	NA	1	2
	Conduct impact and surveillance surveys for NTDs, as appropriate.	Number of impact assessments, surveys and mapping projects conducted	NA	All *woredas*	All *woredas*
	Continuously update the dossier for elimination of target NTDs.	Up-to-date dossiers developed for trachoma, LF and onchocerciasis elimination	NA	Trachoma, onchocerciasis, LF	Trachoma, onchocerciasis, LF
2. Support evidence generation in operational and evaluative research.	Identify priority research questions, and support operational and evaluative research on NTDs.	Number of NTD evaluative research and rapid investigations conducted	NA	4	8
	Conduct rapid investigations of disease specific activities (DSA) failure of NTDs as necessary.	Number of DSA failure conducted	NA	4	8
3. Ensure effective digitized NTD data management and dissemination.	Support NTD DHIS2 development and use.	Number of NTD DHIS2 data use and reporting trainings	NA	20	50
	Integrate mapping and impact surveys into NTD DHIS-2.	Mapping and impact surveys integrated into NTD DHIS2	NA	1000%	100%

Programme ownership

- **Country ownership** at national and subnational levels. The NTD programme should be owned at both national and subnational levels, as reflected in clear programme deliverables, such as a regional NTD plan and *woreda*-based planning. NTD work should be coordinated at all levels by federal, regional and *woreda* NTD taskforces. The MoH, regional health bureaus, zonal health departments and *woreda* health offices should own the programme and be responsible for organizing and leading planning of the programme.
- **Domestic financing**. The NTD Strategic Plan includes performance indicators and commitments for domestic resource allocation for NTD activities. The amounts allocated to implementation by the national, regional and *woreda* governments should be determined
- **Clear stakeholder roles** in NTD work. The roles and responsibilities of stakeholders in implementation of the NTD Strategic Plan are indicated in Table 20.

Table 20. **Roles and responsibilities of NTD stakeholders**

Stakeholder	Roles and responsibilities	Stakeholders
MoH	Lead, coordinate	
MoH agencies	Generate evidence, manage pharmaceutical logistics, regulation, capacity-building and training	EPHI, Ethiopian Food and Drug Administration, EPSA, Armauer Hansen Research Institute
Regional health bureaus	Implementation	
Woreda health offices	Implementation	
Line ministries (sectors)	Collaboration in NTD activities	Ministries of Agriculture, Water, Irrigation and Energy, Education, Peace, Investment Commission, Administration for Refugee and Returnee Affairs
Implementing partners	Provide technical and financial support	Nongovernmental organizations, United Nations agencies
Donors	Financial and logistics support	
Academic and research institutions	Evidence generation	EPHI, Armauer Hansen Research Institute, universities
Civil society organizations	Capacity-building, technical support	Ophthalmological Society of Ethiopia, Surgical Society of Ethiopia
Private sector	Resource mobilization, morbidity management and disability prevention	Pharmaceutical companies, Banks, Insurance companies, etc.

- **Organizational structure and mentality** to achieve the global targets for 2030. Ensure a lean, empowered organizational structure to operationalize the third NTD Strategic Plan. Structures should accommodate the implementation strategies in the Strategic Plan and the WHO road map for neglected tropical diseases 2021–2030.

4

Budgeting For Impact:

Estimates and Justifications

Budgeting For Impact: **Estimates and Justifications**

The five years total cost for the 3rd national NTD Strategic Plan is estimated at USD 353.16 million. Out of the total cost, the highest proportion 77% (USD 273.36 million) is costed for Strategic Pillar 1 activities. Table 1 shows the summary of estimated cost by pilar and implementation year.

Table 21. **Budgeting of activities**

	Estimated Cost (USD)					5-Year Estimated	
Strategic Pillar	**2021**	**2022**	**2023**	**2024**	**2025**	**Cost (USD)**	**Percent**
Pillar 1. Accelerate programmatic action against NTDs	52,725,878	58,597,995	56,365,369	53,606,373	52,072,713	273,368,328	77.4%
Pillar 2: Intensify cross-cutting approaches	11,063,851	12,674,812	11,360,457	11,336,272	10,594,433	57,029,825	16.2%
Pillar 3: Operating models and culture to facilitate country ownership	20,951	1,924,194	6,703,477	1,710,978	1,716,524	12,076,123	3.4%
Pillar 4: Strengthen resource mobilization, coordination, and communication for the control, and elimination of NTDs	-	1,624,677	2,469,827	1,494,869	1,629,342	7,218,716	2.0%
Pillar 5: Strengthen monitoring, evaluation and learning	313,357	1,037,969	769,388	609,359	734,671	3,464,744	1.0%
Total Cost (USD)	**64,126,058**	**75,861,670**	**77,670,541**	**68,759,875**	**66,749,708**	**353,157,736**	**100%**

PS. The cost of drugs for NTD treatments is not included in the above cost estimation as such drugs are availed in-kind through the global NTD medicine donation programme.

REFERENCES

1. Second Edition of National Neglected Tropical Diseases Strategic Plan, 2015/16–2019/20 (2008–2012 EFY). Addis Ababa: Federal Ministry of Health; 2016.
2. Health Sector Transformation Plan II (HSTP II) 2020/21-2024/25 (2013-2017 EFY), Ministry of Health-Ethiopia, February 2021.
3. Federal Ministry of Health, Envisioning Ethiopia's path towards universal health coverage through strengthening primary health care. Draft-2. 2015, Federal Ministry of Health: Addis Ababa.
4. Ethiopia Sustainability Action Plan for NTD Control, Elimination and Eradication 2021-2025, Ministry of Health, Ethiopia Addis Ababa, 2021
5. Ending the neglect to attain the Sustainable Development Goals. A road map for neglected tropical diseases 2021–2030. Geneva: World Health Organization; 2020.
6. ESPEN Strategic Framework 2021-2025, WHO for Africa Region.
7. London Declaration on. 2020; https://www.who.int/neglected_diseases/London_meeting_follow_up/en/.
8. Bradley, M. et al. (2021) 'Medicine donation programmes supporting the global drive to end the burden of neglected tropical diseases', Transactions of the Royal Society of Tropical Medicine and Hygiene, 115(2), pp. 136–144. doi: 10.1093/trstmh/traa167.
9. Accelerating work to overcome the global impact of neglected tropical diseases: A road map for implementation. Geneva: World Health Organization; 2012.
10. Casulli A. New global targets for NTDs in the WHO roadmap 2021–2030. PLoS Negl Trop Dis.2021;15(5):e0009373 (https://doi.org/10.1371/ journal.pntd.0009373).
11. Accra Urgent Call to Action on NTDs, 2012.
12. Regional strategic plan for neglected tropical diseases in the African Region 2014–2020. Brazzaville: World Health Organization Regional Office for Africa; 2013.
13. WHA66:21. Neglected tropical diseases. Sixty-sixth World Health Assembly, Geneva, 2013.
14. The Addis Ababa neglected tropical diseases commitment, 2014.
15. Ethiopian Health Sector Transformation Plan.2015/16 - 2019/20. Federal Democratic Republic of Ethiopia Minsitry of Health. 2015;20 May:50.
16. Ethiopian Mini Demographic and Health Survey 2019.
17. Central Statistical Agency, Population Projections for Ethiopia 2007-2037.
18. Poverty headcount ratio at national poverty lines (% of population) – Ethiopia; World Bank. 2020. https://data.worldbank.org/indicator/SI.POV.NAHC?locations=ET.
19. Federal Democratic Republic of Ethiopia - Growth and Transformation Plan II (GTP II) (2015/16-2019/20).
20. A Roadmap for Optimizing the Ethiopian Health Extension Program 2020 – 2035, 1st Edition, Addis Ababa, Ethiopia, June 2020.

21. Ethiopia Master Health Facilities Report, Ministry of Health of Ethiopia, 2019.
22. World Health Organization. The Abuja Declaration : Ten Years On. Heal (San Fr. 2001; September 2000:1–4. http://www.who.int/healthsystems/publications/Abuja10.pdf.
23. Deribe K, Cano J, Newport MJ, Golding N, Pullan RN, Sime H et al. Mapping and modelling the geographical distribution and environmental limits of podoconiosis in Ethiopia. PLoS Negl TropDis. 2015;9(7):e0003946.
24. Deribe K, Cano J, Giorgi E, Pigott DM, Golding N, Pullan RL, Noor AM et al. Estimating the number of cases of podoconiosis in Ethiopia using geostatistical methods. Wellcome Open Res. 2017;2(78).
25. Enbiale W, Baynie TB, Ayalew A, Gebrehiwot T, Getanew T, Ayal A et al. "Stopping the itch": mass drug administration for scabies outbreak control covered for over nine million people in Ethiopia. J Infect Dev Countries. 2020;14(6.1):28S-35S.
26. Interim guideline for multi-sectoral scabies outbreak emergency response, November 2015. Addis Ababa: Ministry of Health; 2015.
27. Tuberculosis and leprosy national strategic plan (July 2021–June 2026). Addis Ababa: Ministry of Health; 2020.
28. Ethiopian National Rabies Baseline Survey. 2012.
29. Pieracci EG, Hall AJ, Gharpure R, Haile A, Walelign E, Deressa A et al. Prioritizing zoonotic diseases in Ethiopia using a one health approach. One Health. 2016;2:131–5 (DOI: 10.1016/j.onehlt.2016.09.001).
30. Centre for Disease Control and Prevention (CDC) (2017). World Rabies Day. https://www.cdc.gov/worldrabiesday/ethiopia.html
31. Bulto Giro B., Yacob Hailu Tolossa, Getachew Tilahun and Hagos Ashenafi. Study on prevalence of hydatidosis and cyst characterization in camels (Camelus dromedarius) slaughtered at Akaki abattoir, Ethiopia. J. Vet. Med. Anim. Health. 2013: Pp 330-333.
32. Veronique Dermauw, Pierre Dorny, Uffe Christian Braae, et al., Epidemiology of Taenia saginata taeniosis/ cysticercosis: a systematic review of the distribution in southern and eastern Africa. BMC;2018: Pp.2-10
33. Abebe Mengesha Aga, Birhanu Hurisa , Bethlehem Niwayesillassie, et al. Epidemiological Survey of Snake Bite in Ethiopia. Epidemiology: Open access. 2014; Pp.1-5.

ANNEXES

Annexes

Annex I. Additional NTDs for inclusion in the third national NTD Strategic Plan

NTD	Disease burden	Baseline data	Current implementation status	Status of reporting	National target	Cross-border collaboration	Collaboration opportunities	Global target	Currently responsible sector
Rabies	2700 people died each year ; fatality rate, 1.1/100 000	Yes (report on dog bites and deaths)	Surveillance Vaccinate exposed people; Expand laboratory network; Mass dog vaccination; Vaccine production for humans and animals	Public health emergency management; immediately reportable disease	Elimination	Yes	National One Health steering committee, universities and integrated services across sectors	Elimination as public health problem	EPHI, MoH, Ministry of Agriculture, Ministry of Transport, Ministry of Environment, Forest and Climate Change
Leprosy	0.3/10 000 population	Yes	Surveillance; Preventive therapy	Reported under the programme	Elimination as a public health problem	Yes	Tuberculosis–leprosy programme, Ethiopian Dermatological and Venerology Society	Elimination (interruption of transmission)	Armauer Hansen Research Institute/ AHRI, MoH
Dengue and chikungunya	4300 cases (outbreak 2019) Afar, Somali 54 200 cases (Afar, Dire Dawa, Somali, SNNP, 2019) 23% sero-prevalence (Metema and Humera, 2017) Case fatality rate, 0.5	None	National surveillance and outbreak response; National arboviral disease surveillance and response; Pilot vector mapping in 5 regions (Afar, Somali and Dire Dawa, SNNP, Oromia)	Yes (Public Health Emergency Management/ PHEM system)	NA	Yes	One Health, universities, professional associations	Control	EPHI, MoH

Annex II. **Interventions conducted in NTD programmes 2003-2020**

NTD	Year programme started	Number of woredas targeted	No. of woredas covered	Total population at risk in endemic woredas	Total population that stopped MDA or cases managed	No. of woredas that stopped MDA	Strategies used	Partners
Trachoma	2003	799	798	72 million	22.6 million	230	MDA, F and E components of SAFE strategy	The Carter Center, International Trachoma Initiative, Orbis International, Light for the World, Fred Hollows Foundation, Grarbet Tehadiso Mahber, Research Triangle Institute, Menschen für Menschen, The END Fund, Amref Health Africa, World Vision International, Children's Investment Fund Foundation, Christian Blind Mission, Sight Savers International, WHO, US Agency for International Development
				TT 342 800	628 484		TT surgery	
Onchocerciasis	2001	239	239	> 25 million	1 059 567	6	MDA	WHO, The Carter Center, Light for the World, Research Triangle Institute, The END Development
Schistosomiasis	2013	480	480	53.15 million	–	0	MDA	Schistosomiasis Control Initiative, The END Fund, Children's Investment Fund Foundation, Deworm the World Initiative, Department for International Development, WHO, World Vision International
STH	2013	841	841	96.7 million	–	0	MDA	Schistosomiasis Control Initiative, The END Fund, Children's Investment Fund Foundation, Deworm the World Initiative, Department for International Development, WHO, World Vision International
LF	2009	88	88	6.8 million	1.7 million	31	MDA	The Carter Center, Filarial Programme Support Unit, Research Triangle Institute, Light for the World, Addis Ababa University, WHO, US Agency for International Development
		88	88	5.6 million			Hydrocoele surgery	Filarial Programme Support Unit, Research Triangle Institute, Surgical Society of Ethiopia

NTD	Year programme started	Number of woredas targeted	No. of woredas covered	Total population at risk in endemic woredas	Total population that stopped MDA or cases managed	No. of woredas that stopped MDA	Strategies used	Partners
LF	2009	70	70	-			Lymphoedema management, hydrocele surgery	Filarial Programme Support Unit, Research Triangle Institute, Surgical Society of Ethiopia, National Podoconiosis Action Network, Addis Ababa University, Center for Innovative Drug Development and Therapeutic Trials for Africa
VL	2006	67	–	3.2 million	NA	NA	Surveillance, case detection and management, vector control, social and behaviour change communication (SBCC)	WHO, Médecins Sans Frontières, Drugs for Neglected Diseases Initiative, Addis Ababa University, Armauer Hansen Research Institute, University of Gondar, Ethiopian Public Health Institute
CL		170	–	29 million	NA	NA		
Podoconiosis	2012	345	345	35 million	NA	NA	Lymphoedema management, Rehabilitation, custom-made shoe provision, SBCC, psychosocial support	Filarial Programme Support Unit, National Podoconiosis Action Network, Big Lottery Fund, WHO, International Orthodox Christian Charities, IZUMI Foundation, Brighton and Sussex Medical School/GH Raisoni University, Foot Work, Ethiopiaid UK

NTD	Year programme started	Number of woredas targeted	No. of woredas covered	Total population at risk in endemic woredas	Total population that stopped MDA or cases managed	No. of woredas that stopped MDA	Strategies used	Partners
GWD	1994	2	2	300,000	NA	NA	Active surveillance, SBCC, filter distribution, Abate application, dog tethering	The Carter Center, WHO, UNICEF
Scabies	2017	Case report					MDA, environmental health and sanitation, surveillance, case management, SBCC	Addis Ababa University, Center for Innovative Drug Development and Therapeutic Trials for Africa

Sources: JRF 2020, 2020 programme reports and survey results

Annex III. **Strategic pillars for accelerating programmatic progression**

Strategic direction	Activities and initiatives	Timeframe	Resources required
Pillar 1. **Accelerate programmatic action against NTDs.**			
1. Scale up or down integrated PC to achieve 100% geographical coverage at WHO's disease-specific minimum treatment threshold.	Implement PC for all PC NTDs in all endemic *woredas*.	Annual or biannual	Medicines, human resources. technical protocols and guidelines, finance, information and communications technology
	Increase social mobilization and behaviour change communication.	Routine	
2. Enable early detection and prompt treatment of CM NTDs, with morbidity management and disability prevention.	Conduct active case finding for CM NTDs.	Annual	Medicines, medical supplies. diagnostic kits, human resources, technical protocols and guidelines, finance
	Increase passive case identification, referral and management.	Routine	
	Build local capability for timely detection and response to outbreak-prone NTDs.	2022	
	Strengthen diagnostic and therapeutic capacity.	Continuous	
	Develop and implement guidelines for integrated skin NTD management.	2022	
3. Strengthen vector control and environmental management for NTD control and elimination.	Identify and map hotspots for vector control.	2022	Human resources, finance, information and communication technology
	Strengthen integrated vector control within existing vector-borne disease control programmes.	2022	Human resources, finance, technical protocols and guidelines, information and communication technology
4. Conduct operational research, and establish innovative public health practices, including for zoonotic NTDs.	Revitalize operational research advisory group.	2022	Skilled human resources, finance
	Identify potential research collaborators (e.g., universities and institutes).	2021	
	Increase operational and implementation research on NTD interventions to address identified programme gaps.	2022 onwards	
	Ensure use of research-based evidence for NTD programme formulation and management.	Continuous	

Strategic direction	Activities and initiatives	Timeframe	Resources required
Pillar 2: **Intensify cross-cutting approaches.**			
1. Integrate NTDs on common delivery platforms to combine work on several activities.	Strengthen integrate MDA strategy for the five PC NTDs (trachoma, onchocerciasis, LF, STH and schistosomiasis).	2021–2025	Finance, human resources and logistics
	Incorporate NTD prevention, control and management in pre-service training of mid-level health-care providers.		
	Scale up integrated SBCC interventions for NTDs.		
	Integrate continuous professional development on NTDs (e.g., refresher training of health extension workers).		
	Develop and implement guideline on integrated skin NTD management.		
2. Strengthen NTD pharmaceutical supply chain management system and pharmacovigilance.	Strengthen a timely, effective NTD logistics supply chain management system (quantification, request, stock monitoring and reporting of commodities).	2021–2025	Finance, human resources
	Ensure MDA safety, integrate reporting and investigation of adverse drug events into the national pharmacovigilance system.		
	Ensure zero severe adverse events in all MDA campaigns.		
	Include reports of severe adverse events into eCHIS.		
	Update and use SOPs for supply chain management of NTD pharmaceuticals.		
	Institute post-marketing surveillance of NTD drugs and vaccines.		
3. Strengthen multisectoral coordination and response, with focus on WASH infrastructure and practices.	Ensure inclusion of NTDs in the national One Health platform.	2021–2025	Finance, human resources
	Strengthen multisectoral WASH–NTD coordination at all levels.		
	Strengthen cross-border collaboration.		
	Ensure implementation of coordinated vector control.		

Strategic direction	Activities and initiatives	Timeframe	Resources required
Pillar 3: **Operating models and culture to encourage country ownership.**			
1. Strengthen NTD programme structure and leadership at all levels of the health system.	Ensure an NTD staffing structure with earmarked budget at all levels of the health system.	2021–2025	Finance, human resources
	Deployment of NTDs programme staff at each level as per the approved structure		
2. Enhance community engagement, empowerment and ownership of NTD programme.	Support and strengthen alliance for health, and improve NTD service.	2021–2025	Finance, human resources
	Engage community leaders in NTD activities.		
	Develop SBCC toolkit to empower community leaders.		
	Introduce and extend self-care initiatives.		
	Cultivate and incubate community led innovations for NTDs		
3. Develop and put in place NTD programme sustainability framework.	Finalize and put in place NTD programme sustainability framework.	2021	Finance, human resources
	Assess and strategize for political and administrative commitment.	2022	
	Produce and disseminate a policy brief.	Continuous	
Pillar 4: **Strengthen resource mobilization, coordination and communication for the control, elimination and eradication of NTDs.**			
1. Improve the capacity of the health system to generate domestic resources through health-care financing scheme, and increase Government funding for NTDs.	Strengthen regular estimation of NTD resources, analysis of expenditure and funding gaps by involving relevant Government sectors.	2021–2025	Finance, human resources
	Align NTD public budget allocation and financial management with health budgeting practices and health financing objectives.		
	Promote mandatory community health insurance to ensure equitable access to health-care for communities affected by NTDs.		
	Ensure domestic resource mobilization from Government and local private sectors in a feasible resource mobilization strategy.		

Strategic direction	Activities and initiatives	Timeframe	Resources required
1. Improve the capacity of the health system to generate domestic resources through health-care financing scheme, and increase Government funding for NTDs.	Include in and align NTD Strategic Plan and budget with national planning and budgeting, and ensure Government budget allocation for NTD programmes.	2021–2025	Finance, human resources
	Strengthen capacity for accountability by providing up-to-date reports on use of finance and other resources in NTD programmes.		
2. Strengthen NTD coordination at all levels.	Create and/or strengthen multisectoral collaboration platforms to coordinate and enhance co-investment (e.g., WASH–NTD activities).	2021–2025	Finance, human resources
	Ensure meaningful engagement of high-level Government officials in NTD control, elimination and eradication.		
	Identify and work with high-profile individuals and groups (e.g., public figures and religious leaders) as NTD Goodwill Ambassadors at national and local levels to ensure public engagement and participation in NTD financing and programmes.		
	Strengthen coordination between NTD case team and other departments within the MoH to integrate and sustain shared goals (e.g., strengthen coordination of interventions for vector-borne NTDs with vector control for malaria).		
3. Improve advocacy and NTD programme communication at all levels.	Design and use efficient NTD communication strategy for NTD stakeholders and actors, including health care providers and communities.	2021–2025	Finance, human resources, information and communication technology
	Ensure a communication platform between the NTD community and policy-makers, funders, researchers, and academia on relevant current NTD issues.		

Strategic direction	Activities and initiatives	Timeframe	Resources required
Pillar 5: **Strengthen monitoring, evaluation and learning.**			
1. Institute a comprehensive, results-based monitoring, evaluation and learning system.	Improve integrated monitoring, supervision and programme performance review mechanisms and platforms.	Continuous	Finance, human resources
	Prepare NTD programme monitoring and evaluation framework.	2022	Consultant, finance
	Conduct mapping, impact and transmission assessment surveys for NTDs.	Continuous	Finance, human resources
	Establish and strengthen knowledge management at all levels.	From 2023	Consultant, software, finance
	Ensure NTD data quality and use.	Continuous	Human resources, finance
	Prepare dossiers for *woredas* that have achieved elimination thresholds for target NTDs.	Continuous	Finance, human resources
2. Support evidence generation through operational and evaluation research.	Conduct operational research.	Continuous	Finance
	Conduct rapid investigations on disease-specific failures.	Continuous	Finance
3. Enhance effective digitized NTD data management and dissemination.	Integrate NTD programme into eCHIS.	2022	Finance, human resources, technology
	Enhance integration of NTDs into DHIS2 system.	2022	Human resources
	Integrate mapping and impact surveys into NTD DHIS-2 system.	2022	Finance, human resources

Annex IV. **Performance monitoring and evaluation framework for the strategic pillars**

Strategic priority	Key activities and initiatives	Indicator	Type of indicator	Level of data collection	Data source	Frequency of data collection and analysis	Baseline	Mid-term target 2023	Target 2025
Pillar 1. **Accelerate programmatic action against NTDs.**									
1. Scale up or down integrated PC to achieve 100% geographical coverage at WHO's disease-specific minimum treatment coverage threshold.	Implement PC for all PC NTDs in all endemic woredas.	Geographical coverage of each PC NTD	Outcome	National	DHIS-2 and survey reports	Quarterly	TBD	100%	100%
		Integrated treatment coverage index for PC NTDs and transmission control	Outcome	National	DHIS-2 and MDA reports	Quarterly	75%	80%	80%
	Enhance social mobilization and SBCC.	Proportion of community leaders involved in NTD interventions	Outcome	Community	Key performance indicator	Annual	NA	80%	90%
2. Ensure early detection and prompt treatment of CM NTDs.	Conduct active case-finding of the CM NTDs.	Proportion of CM NTD cases reached through active case finding and treated	Output	Community	Programme reports	Quarterly	NA	80%	100%
	Strengthen diagnostic and therapeutic capacity.	Proportion of health facilities with diagnostic and therapeutic capacity for morbidity management and disability prevention	Output	National	Programme reports	Monthly	NA	80%	100%
	Increase active and passive case identification, referral and management.	Proportion of referred CM NTD cases that received treatment	Output	Community	Programme reports	Quarterly	NA	80%	100%
	Develop and implement integrated skin NTD management guideline.	Number of integrated skin NTD guideline developed	Output	National	document	Once	NA	1	1
		Proportion of woredas that adopt and implement integrated skin NTD guidelines	Output	National	Programme report	Annual	NA	50%	All

Strategic priority	Key activities and initiatives	Indicator	Type of indicator	Level of data collection	Data source	Frequency of data collection and analysis	Baseline	Mid-term target 2023	Target 2025
3. Strengthen vector control and environmental management.	Identify and map hotspots for vector control.	Number of assessments made to identify hot spot areas for vector control NTDs	Output	National	Assessment report	Annual	NA	1	3
	Strengthen integration of NTD vector control with vector-borne disease control programme.	Number of meetings conducted with various stakeholders	Output	National	Meeting minutes/notes	Annual	NA	3	5
4. Conduct operational research and establish innovative public health practices, including for zoonotic NTDs.	Strengthen case reporting and data generation from all health facilities	Proportion of designated/sample hospitals that reported NTDs cases	Output	Hospital	DHIS2	Continuous	NA	100%	100%
	Enhance operational research on NTDs to address programme gaps.	Number of operational research studies conducted	Output	National	Publications	Annual	NA	4	8
	Ensure readiness and flexibility to incorporate innovative public health practices.	Innovative public health practices adopted	Output	National	Programme reports	Annual	NA	All	All

Strategic priority	Key activities and initiatives	Indicator	Type of indicator	Level of data collection	Data source	Frequency of data collection and analysis	Baseline	Mid-term target 2023	Target 2025
Pillar 2. **Intensify cross-cutting approaches.**									
1. Integrating NTDs on common delivery platforms to combine work on several activities.	Strengthen integrated MDA strategy for the 5 PC NTDs (trachoma, onchocerciasis, LF, STH and schistosomiasis).	Proportion of NTD co-endemic woredas that implemented an integrated MDA programme	Output	National	Programme reports and surveys	Annual	All	All	All
	Incorporate NTD prevention, control and management in pre-service training of mid-level health-care providers.	Number of pre-service training programmes (public health, nursing, environmental health) that incorporated NTD in their syllabus	Output	National	Document review	Annual	NA	2	3
	Scale up integrated SBCC interventions for NTDs.	Number of woredas that implemented integrated SBCC	Output	National	Programme report	Quarterly		All	All
	Integrate continuous professional development scheme on NTDs for NTD officers at various levels (e.g., integrated refresher training for health extension workers, health officers, nurses).	Number of continuous professional development programmes on NTDs	Output	National and regional	Programme reports	Annual	NA	2	2

Strategic priority	Key activities and initiatives	Indicator	Type of indicator	Level of data collection	Data source	Frequency of data collection and analysis	Baseline	Mid-term target 2023	Target 2025
2. Strengthen NTD pharmaceutical supply chain management system.	Ensure timely, effective NTD logistics supply chain management system.	Proportion of woredas that received the required package of NTD logistics timely	Output	National	Programme reports	Quarterly	NA	80%	100%
		Proportion of woredas that implement reverse logistics effectively	Output	National	Programme reports	Quarterly	NA	90%	100%
	Ensure MDA safety. Integrate adverse drug event reporting and investigation into the national pharmacovigilance system.	MDA safety guidelines developed and disseminated	Output	National	Programme reports	Once	NA	1	1
		Number reported severe adverse events in any MDA implementation woreda	Output	National	Severe adverse events report	Quarterly	NA	0	0
		Incorporated reports of severe adverse events into eCHIS	Output	National	eCHIS	Once	NA	1	1
	Update and introduce SOP for management of NTD pharmaceuticals supply chain.	Number of SOP instituted for NTD pharmaceutical supply chain management	Output	National	Survey	Once	NA	1	1
	Institute post-marketing surveillance of NTD drugs and vaccines	Number of disease-specific and/or integrated surveys conducted	Output	National	Scientific publication and reports	Once	NA	1	1

Strategic priority	Key activities and initiatives	Indicator	Type of indicator	Level of data collection	Data source	Frequency of data collection and analysis	Baseline	Mid-term target 2023	Target 2025
3. Strengthen multisectoral coordination and response with focus on WASH infrastructure and practices.	Ensure inclusion of NTDs in the national One Health platform.	Participation of NTD team in the national One Health platform	Output	National	report	Annual	NA	3	5
	Strengthen multisectoral WASH–NTD coordination at all levels.	Proportion of endemic woredas that implemented WASH–NTD coordination toolkit	Output	National	Programme reports	Continuous	NA	100%	100%
		Proportion of regions that implemented WASH–NTD collaborative action plan (e.g., joint advocacy, monitoring and evaluation)	Output	National	Programme reports	Continuous	NA	80%	100%
	Strengthen cross-border collaboration.	Number of cross-border collaboration meetings conducted with countries as per need	Output	National	Programme report	Quarterly	NA	2	3
	Ensure implementation of coordinated vector control.	Number of vector-borne NTDs for which vector control intervention is implemented	Output	All levels	Programme reports	Continuous	NA	All	All

Strategic priority	Key activities and initiatives	Indicator	Type of indicator	Level of data collection	Data source	Frequency of data collection and analysis	Baseline	Mid-term target 2023	Target 2025
Pillar 3: **Operating models and culture to encourage country ownership.**									
1. Strengthen NTD programme structure and leadership at all levels of the health system, including agencies under MoH.	Assure NTD staffing structure, with earmarked budget at all levels of the health system.	Proportion of NTD positions with staff and budget in place at different levels (MoH, RHB, ZHD, WoHO respectively)	Output	All levels	Human resources system	Annual	NA	Federal, regional and zonal level	Federal, regional and zonal, woreda levels
	Deploy NTD programme staff at each level as per the approved structure.	Proportion of NTD positions filled as per the approved structure	Output	All levels	Human resources system	Annual	NA	100%	100%
2. Enhance community engagement, empowerment and ownership of NTD programme.	Engage community leaders in NTD activities.	Number of community leaders who participated in NTD activities	Output	Woreda	Programme reports	Annual or biannual	NA	At least three per kebele	At least three per kebele
	Develop SBCC toolkit to empower community leaders.	Number of SBCC toolkit developed and disseminated	Output	Community	Programme reports	Annual	NA	1	1
	Introduce and extend self-care initiatives.	Self-care initiative guidelines developed	Output	National	Document	Once	NA	1	1
	Cultivate and incubate community-led innovations for NTDs.	Number of best community lessons captured	Output	Community	Case studies	Annual	NA	4	8
3. Develop and institute NTD programme sustainability framework and relevant guidelines.	Assess and strategize for political and administrative commitment.	Need assessment conducted	Output	All levels	KIIs, FGD and document review	Once	NA	1	1
	Produce and disseminate policy brief.	NTD sustainability framework developed and used	Output	National	Document review	Once	NA	1	1
	Finalize and introduce NTD sustainability action plan.	Number of regions that used the sustainability action plan	Outcome	National	Regional action plans	Annual or biannual	NA	4	9

Strategic priority	Key activities and initiatives	Indicator	Type of indicator	Level of data collection	Data source	Frequency of data collection and analysis	Baseline	Mid-term target 2023	Target 2025
Pillar 4: **Strengthen resource mobilization, coordination and communication for the control, elimination and eradication of NTDs.**									
1. Improve capacity of the health system to generate domestic resources through health-care financing scheme, and increase Government funding for NTDs.	Strengthen regular analysis and estimation of NTD resource needs, funding gaps and programme expenditure by involving relevant Government sectors.	Number of financial analysis produced and disseminated	Output	National	Financial analysis report	Biannual	NA	6	10
	Align NTD public financial management with health budgeting practices and health financing objectives.	NTD public financing strategy developed and instituted	Output	National	Document	Once	NA	1	1
	Promote mandatory community health insurance to ensure equitable access to health care for communities affected by NTDs.	Proportion of people using community health insurance scheme	Output	Community	Training report	Continuous	NA	25%	50%
	Ensure mobilization of internal resources from Government and local private sector through a feasible resource mobilization strategy.	Proportion of government and local private sector financial contributions for NTD programme	Outcome	National	Ethiopian fiscal year planning document	Annual	NA	25%	50%
	Include in and align NTD Strategic Plan and budget with national planning and budgeting, and ensure a Government budget allocation for NTD programmes.	Number of annual NTD work plan and budget aligned with the HSTP woreda-based health sector annual core plan	Output	National	MoH annual core plan document	Annual	NA	3	5

Strategic priority	Key activities and initiatives	Indicator	Type of indicator	Level of data collection	Data source	Frequency of data collection and analysis	Baseline	Mid-term target 2023	Target 2025
	Strengthen capacity for clear accountability by providing up-to-date reports on use of finance and other resources in NTD programmes.	Proportion of financial reports shared with partners	Output	All levels	Financial reports	Continuous	NA	100%	100%
2. Strengthen NTD coordination at all levels.	Create and/or strengthen multisectoral collaboration platforms to coordinate and enhance co-investment (e.g., WASH–NTD activities)	Proportion of woredas that have applied tools for merging WASH and NTD data	Output	All levels	Activity reports	Continuous	NA	50%	100%
	Ensure meaningful engagement of high-level Government officials in NTD control, elimination and eradication activities.	Proportion of Government leaders involved in NTD activities	Output	Regional, woreda	NTD activity report	Annual or biannual	NA	70%	90%
	Identify and work with high-profile individuals and groups (e.g., public figures and religious leaders) at national and local levels to ensure public engagement and participation in NTD financing and programmes.	Proportion of community leaders involved in campaigns	Output	Community	Campaign report	Annual or biannual	NA	70%	90%

Strategic priority	Key activities and initiatives	Indicator	Type of indicator	Level of data collection	Data source	Frequency of data collection and analysis	Baseline	Mid-term target 2023	Target 2025
	Strengthen coordination between NTD case team and other MoH directorates/ program teams for integrating and sustaining shared goals (e.g., strengthen coordination of interventions for vector-borne NTDs with vector control for malaria)	Numbers of health campaigns/activities coordinated and implemented	Output	National and regional	Performance reports/ DHIS2	Continuous	NA	NA	NA
3. Increase advocacy and NTD programme communication at all levels.	Design and use efficient NTD advocacy and communication strategy among NTD stakeholders and actors.	Number of advocacy and communication strategy framework developed and applied	Output	All levels	Reports of meetings	Continuous	NA	1	1
		Proportion of community leaders aware of scheduled NTD campaigns and activities	Output	Woreda	Reports of meetings	Continuous	NA	60%	90%
	Establish and strengthen knowledge management at all levels.	Number of knowledge management framework developed and applied	Output	National	Reports and meeting minutes	Continuous	NA	1	1
	Ensure a communication platform for the NTD community and policy-makers, funders, researchers, academia and the public on relevant and NTD issues.	Communication platform formed for MoH, NTD Team and other stakeholders	Output	National	Reports and meeting minutes	Continuous	NA	1	1

Strategic priority	Key activities and initiatives	Indicator	Type of indicator	Level of data collection	Data source	Frequency of data collection and analysis	Baseline	Mid-term target 2023	Target 2025
Pillar 5: **Strengthen monitoring, evaluation and learning.**									
1. Institute comprehensive, results-based monitoring, evaluation and learning system.	Strengthen integrated monitoring, supervision and programme performance review mechanisms and platforms.	Number of workshops on monitoring and evaluation of NTD programme	Output	National and regional	Training reports	4 per year	NA	8	16
	Conduct data quality and use assessments.	Number of data quality assessments and conducted	Outcome	Regional, woreda	HMIS, DHIS2, service delivery registers	Annual	NA	2	4
	Conduct and communicate relevant critical data analysis on prioritized NTD indicators.	Number of data analysis reports disseminated on NTD indicators	Outcome	National, regional	NTD, DHIS2 and vertical administration reports	Biannual	1	4	8
	Conduct mid-term and end-term reviews of the performance of the NTD Strategic Plan.	Number of strategic planning review meetings conducted	Output	National	Meeting minutes	Biannual	NA	1	2
	Conduct impact and surveillance surveys for NTDs, as appropriate.	Number of impact assessments, surveys and mapping projects conducted	Outcome	Community	Survey reports	Continuous	NA	All woredas	All woredas
	Continuously update the dossier for elimination of target NTDs.	Up-to-date dossiers developed for trachoma, LF and onchocerciasis elimination	Process	National	DHIS2, reports, surveys and research	Continuous	NA	Trachoma, onchocerciasis, LF	Trachoma, onchocerciasis, LF

Strategic priority	Key activities and initiatives	Indicator	Type of indicator	Level of data collection	Data source	Frequency of data collection and analysis	Baseline	Mid-term target 2023	Target 2025
2. Support evidence generation in operational and evaluative research.	Identify priority research questions, and support operational and evaluative research on NTDs.	Number of NTD evaluative research and rapid investigations conducted	Outcome	National	Study reports	2 per year	NA	4	8
	Conduct rapid investigations of disease specific activities (DSA) failure of NTDs as necessary.	Number of DSA failure conducted	Outcome	Regions, woredas, facilities, communities	DHIS2, surveys, focus group discussions, key informant interviews	2 per year	NA	4	8
3. Ensure effective digitized NTD data management and dissemination.	Support NTD DHIS2 development and use.	Number of NTD DHIS2 data use and reporting trainings	Output	Zonal, woreda	Training report	10 per year	NA	20	50
	Integrate mapping and impact surveys into NTD DHIS-2.	Mapping and impact surveys integrated into NTD DHIS2	Output	Dataset	Surveys, mapping, coverage survey, reports	Continuous	NA	1000%	100%

Note