



FEDERAL MINISTRY OF HEALTH
DISEASE PREVENTION & CONTROL
DIRECTORATE

LEPROSY ELIMINATION STRATEGY FOR ETHIOPIA 2016-2020



March, 2017
Addis Ababa
Ethiopia

National leprosy strategy
Final leprosy elimination strategy for Ethiopia
From 2016 -2020

Ethiopia
March 2017

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Acknowledgment

The Federal Ministry of Health would like to express its gratitude to the National TB & leprosy control program team members and staffs of development partners who participated in the development of these final leprosy elimination strategies for the implementation leprosy prevention and control program activities in Ethiopia.

Special thanks go to the following experts and professionals for their contributions:

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Abbreviations

CBO	community-based organization
FMoH	Federal Ministry of Health
G2D	grade-2 disability
HAD	health development army
HEW	health extension worker
HMIS	health management information system
IEC	information, education, communication
MB	multi bacillary
MDT	multidrug therapy
SNNPR	Southern Nations, Nationalities and Peoples Region
USD	United States Dollar
HSDP	Health Sector Development Plan
HSTP	Health Sector Transformation Plan
TLCP	TB leprosy control program
CSO	Civil society organization
PPD	Plan Policy directorate

Foreward

Since the introduction of multidrug therapy (MDT) about four decades ago, the leprosy burden in Ethiopia was significantly reduced. Elimination of leprosy as a public health problem was achieved nationally in 1999. Reaching sub regional elimination in jurisdictions with a sizeable population continues to be an important milestone.

The current national leprosy strategy builds on previous seven-year TBL strategic plan. Even more innovative as it gives, in addition to a solid medical component, increased visibility and weight to the human and social aspects affecting leprosy control. Reducing stigma and promoting inclusiveness will reinforce better and earlier diagnosis.

Innovative approaches include focus on children, women and other vulnerable populations, strengthened referral systems, systematic tracing of household contacts and monitoring drug resistance. It provides linkages with broader health and development agendas including universal health coverage and the sustainable development goals.

This strategy was developed over a period of one year through an iterative consultation process involving all stakeholders like technical agencies, nongovernmental organizations, development partners, representative of communities affected by leprosy with national leprosy programmes. As such, the strategy is conceived as an umbrella under which the different partners can develop their strategies and action plans, based on their comparative advantage. The title “final leprosy elimination strategy” embodies the need to build on the momentum created in leprosy control at global and local level so that future generations can reach the ultimate goal of Ethiopia without leprosy

Summary

Introduction: Leprosy has been identified as a public health problem in Ethiopia for the past five decades. Although, the leprosy elimination target of less than 1 case per 10 000 population has been reached at national level since 1999, the new case notification remains the same for the past ten years; the proportions of multi bacillary (MB) cases, childhood leprosy and new cases with grade-2 disabilities (G2D) have remained static.

Rational for strategy: The Global Leprosy Strategy 2016–2020 aims at accelerating action towards a leprosy-free world. It is based on the principles of initiating action, ensuring accountability and promoting inclusivity. The global strategy fits within the WHO aim to provide universal health coverage with its focus on children, women and vulnerable populations. It will also contribute to reaching Sustainable Development Goal 3 reaching health and wellbeing for all by 2030. Based on this our country Ethiopia also adopts the Global situation and the development of a new strategy is very important.

The aim of this strategy will be further reduction of the leprosy burden in Ethiopia and the targets are:

- Decreasing leprosy prevalence rate from 0.4/10,000 to <0.1/10,000
- Reduce proportion of new leprosy cases with disability grade II from 13.6% in 2016 to <1% in 2020
- Increasing Leprosy treatment completion rate from 86.5 % to more than 95%.
- Rate of newly diagnosed leprosy patients with visible deformities from 4.39 in 2016 to <1 per million in 2020

The total budget that required for the implementation of the strategy will be **\$ 3,721,640.16 USD** in the implementation time.

1. Introduction

Leprosy has been identified as a public health problem in Ethiopia for the past five decades. Although, the leprosy elimination target of less than 1 case per 10 000 population has been reached at national level since 1999, the new case notification remains the same for the past ten years; the proportions of multi bacillary (MB) cases, childhood leprosy and new cases with grade-2 disabilities (G2D) have remained static. These all point towards ongoing transmission of the infection within the community. Ethiopia is reporting between 3000-4000 new cases annually over the last decade. It is among the countries reporting high number of new leprosy cases in the world. The prevalence of leprosy is unacceptably high in some areas of the country. Preliminary results of the national leprosy mapping conducted by the Federal Ministry of Health (FMOH) show an annual leprosy case load above the elimination target in about 93 districts/woredas in different regions of the country.

The average number of annual new leprosy cases and/or proportions of G2D and childhood leprosy among the new cases are still high in some regions of the country, especially in 93 high burden woredas/districts; 121 districts/woredas were in the category of medium and 319 district/Woreda low leprosy burden while 226 districts were free from leprosy. Despite the evidence of active transmission in the community, the number of new leprosy cases notified per year has been more or less constant over the past ten years. The treatment completion rate was recorded as 87% in 2016. On the other hand, maintaining quality of leprosy services through integrated systems has been a challenge. The quality of leprosy services at health facilities is often sub-standard; health workers have difficulties in recognizing signs and symptoms of leprosy or in managing cases and complications.

Ensuring an appropriate level of priority in the allocation of external resources in the context of shifting priorities and resources to other challenges is also an issue for leprosy elimination.

2. National response to Leprosy in Ethiopia

Among communicable diseases, leprosy is the leading cause of permanent physical disability. Annually, around 3000-4000 new cases have been reported and registered for treatment in Ethiopia, with no reduction in incidence in the past 20 years. More than 10% of the reported new cases present with disability grade 2. In Ethiopia, an organized leprosy control programme was established within the MOH in 1956. A detailed policy was issued in 1969. In the following decades, leprosy control was strongly supported by the All African Leprosy and Rehabilitation Training Institute (ALERT) and the German Leprosy Relief Association (GLRA). This vertical programme was well funded and has scored notable achievements in reducing the prevalence of the disease, especially after the introduction of Multiple Drug Therapy (MDT) in 1983. However, the annual national case-detection remains constant at about 3000 - 4000 cases. The reduction in the number of patients registered for treatment has lessened the workload of leprosy services.

This has encouraged Ethiopia to consider integration of the vertical leprosy control programme within the general health services. Furthermore, the fundamental changes in the political and administrative set up of the country since 1991 has led to the decision to combine leprosy control with tuberculosis control and integrate the combined programme into the general health services (GHS). The combined programme, under the technical coordination of the central office (CO) of the TLCP, came into effect in 1994. The implementation of the combined TB and Leprosy control programme began in 1997 with the development of a TLCP manual. Since then the integration of leprosy control services into the GHS has been gradually implemented until nationwide integration is achieved in 2001. Thus the TLCP is being implemented within the framework of the HSDP as well as HSTP.

2.1. Epidemiology of Leprosy in Ethiopia

The Prevalence of Leprosy has sharply declined from 19.8 per 10,000 populations in 1983 to 0.4 per 10,000 populations in 2015, following the introduction of Multi Drug Therapy (MDT) since 1983. According to TLCP/MOH data sources, after introduction of MDT a total of 145,935 new cases were detected and 149,592 patients were released from treatment. However, notifications of new leprosy cases have been constant over the last ten years.

2.2. Current Leprosy program implementation status

In the 2015 reporting year, a total of 3970 cases of new leprosy cases were notified to the national program. Among the new cases, 3383 (85.2%) were MB, 389 (9.8%) were children under the age of 15 years and 421 (10.6%) had Grade 2 disability at the time of diagnosis.

3. Rational for strategy

The Global Leprosy Strategy 2016–2020 aims at accelerating action towards a leprosy-free world. It is based on the principles of initiating action, ensuring accountability and promoting inclusivity. The global strategy fits within the WHO aim to provide universal health coverage with its focus on children, women and vulnerable populations. It will also contribute to reaching Sustainable Development Goal 3 reaching health and wellbeing for all by 2030.

Based on this our country Ethiopia also adopts the Global situation and the development of a new strategy is very important.

The current relatively high rate of children (9.8%) with leprosy and high proportion of MB leprosy (85.2%) in 2015 indicates the ongoing transmission of the disease within the community. On the other hand disability grade II among new cases is also consistently high over the years. This suggests that patients are reluctant to go to the nearby health facilities seeking for treatment until the disease interferes with their day-to-day activities. The main reasons for the delay to seek treatment early are due to lack of awareness, traditional beliefs (hereditary / unavoidable, family reputation, curse from God, etc.); fear of stigma; misdiagnosis at HC or private doctors; in completed referrals and poverty (transport problem, etc.). As a result the healthy contacts or neighbours become infected and this increases the pool of infection in the community.

4. Challenges to Fighting Leprosy

1. High detection rates: Although the prevalence of leprosy is falling, the detection of new cases has remained constant at around 3000-4000 cases per year. It was hoped that with the widening coverage of leprosy elimination campaigns, there would ultimately be a decrease. However, that has not happened.
2. Limited leprosy referral centres: Leprosy rehabilitation centres are available through specialized hospitals, for a specified period of time, and not through the general health services on a daily basis. This limits awareness of the early signs of leprosy not only among the general public but also among health care providers.
3. Stigma: The stigma surrounding leprosy creates a tremendous psychological barrier for patients to seek timely treatment.
4. Poor attention to leprosy control programme: High endemic states happen to be poorly governed and lacking trained manpower.
5. Lack of community involvement: There is a problem of compliance as treatment completion rates are found to be no more than 85% to 90%. Lack of the involvement of HEW in case notification is mentioned as a problem.
6. Epidemiology of the disease: There is incomplete understanding of the epidemiology of leprosy, and consequent limitations of indicators used for its surveillance. It is widely accepted and agreed upon by leprologists and epidemiologists that not much can be said with certainty about the incidence of the disease. It is a disease with a long incubation period whose onset is highly difficult to predict. Hence the indicator used for measuring the incidence of leprosy in the community and progress toward the elimination goal is point prevalence. This indicator is dependent on detection and cure rates. There is uncertainty about the degree to which it is a proxy for incidence of leprosy and, therefore, the extent to which it can reflect reduction in transmission. Hence both indicators are required to understand the issue in correct perspective.

5. Gaps

1. Weak leprosy program management at all levels
2. Weak Case finding strategy at health facility and community level
3. Inadequate involvement of HEWs on leprosy prevention and control
4. Low level of community awareness

5. Weak quality of leprosy services with limited knowledge and skills on leprosy case management among health care providers
6. High number of new leprosy cases in pocket areas in some regions
7. Delay of leprosy patients to present themselves at the appropriate health facilities and the stigma and discrimination associated with the disease is still high GIID
8. Interruption/mal distribution of drugs/supplies
9. High child rate among new leprosy cases
10. Shrinking of funds for leprosy control activities
11. Poor implementation and follow up of micro plan
12. Low utilization of IEC materials by health facilities and at community level
13. Low contact tracing activities
14. Incomplete registration on HMIS at health facility level.

6. Vision, goal, targets

6.1 Vision

- To see Ethiopia free from Leprosy at 2020

6.2. Goal

- Further reduction of the leprosy burden from Ethiopia

6.3. Targets

At 2020 Ethiopia will achieve the following targets:

- Decreasing leprosy prevalence rate from 0.4/10,000 to <0.1/10,000
- Reduce proportion of new leprosy cases with disability grade II from 10.6% in 2016 to <1% in 2020
- Increasing leprosy treatment completion rate from 86.5 % to more than 95%.
- Number of children diagnosed with leprosy and visible deformities 0
- Rate of newly diagnosed leprosy patients with visible deformities (GIID) from 4.39 in 2016 to <1 per million by end 2020.

7. Guiding principles

7.1. Responsibility of National Governments and strengthening partnerships

Leprosy control is the primary responsibility of the government. There is a need for different approaches including levels and intensity of collaboration at the national and subnational levels within the same country. A range of government departments and agencies will be responsible for leprosy activities. The Government will act through institutional partnership with international agencies including WHO, and local agencies like Non-governmental organizations (NGO), community based organizations as well as people affected by leprosy. The collaboration should result in support to sustainability of expertise, resource mobilization and institutional development.

7.2. Sustaining expertise in leprosy

In order to sustain expertise, focus on strengthening regional leprosy training centres and centres run by partners and suggests utilizing e-learning where ever available.

7.3. Quality leprosy services

Quality of services means “consistent provision of efficacious, effective and efficient services according to the latest clinical guidelines and standards which meet the patients’ needs and satisfies providers”. It refers to offering effective and safe care that contributes to achievement of universal health coverage and patient well-being or satisfaction.

7.4. Participation of persons affected by leprosy in leprosy services

Persons affected by leprosy are an important resource for leprosy programmes and have a potential role to play in leprosy control. Strategies should focus on building the capacity of affected persons in advocacy skills and recognizing early signs of leprosy as they can refer suspects to the HEW or health facilities as well be instrumental in case-holding and POD. It will be a challenge to organize millions of affected people living outside leprosy colonies and make the organizations to be partners to the programme at global, regional, national and sub-national levels.

7.5. Protection of human rights and reducing social suffering

The primary responsibility for promoting equity, social justice in all fundamental domains of human dealings including access to health care will be encouraged utilizing services of NGOs and private bodies. They will be given equal focus in the leprosy agenda, promoting advocacy for eliminating discrimination.

8. Strategic Pillars and components

8.1. Government ownership, coordination of partnerships for improved accountability

- a. Ensure political commitment and adequate resources for leprosy control
- b. Contribute to Universal Health Care with a special focus on underserved populations, women and children
- c. Promote partnerships with including private sector
- d. Conduct basic and operational research and maximize the evidence base to inform policies, strategies and activities
- e. Strengthen surveillance and health information systems for programme monitoring and evaluation.

8.2. Intensified action to reduce leprosy and its transmission

- a. Promote early case detection with focus on contact management
- b. Elimination of leprosy in all regions, zone and at woreda level
- c. Improve to more than 95% treatment completion rates
- d. Improve disability prevention and care
- e. Strengthen patient and community awareness on leprosy
- f. Strengthen laboratory capacity for early detection at all facilities
- h. Sustain leprosy knowledge among the health workforce.

8.3. Promote inclusivity to reduce discrimination and social suffering

- a. Special focus on women, children, urban and rural poor and other underserved population
- b. Promote societal inclusion through addressing all forms of discrimination
- c. Empower communities through participation in leprosy control and care
- d. Promote coalition building among people affected by leprosy
- e. Support social rehabilitation for leprosy affected people with disabilities
- f. Ensure that fundamental human rights can be enjoyed by all people affected by leprosy
- g. Policy changes to improve quality of life of persons affected by leprosy.

9. Intervention

Intervention to increase detection of leprosy cases according to the epidemiological setting and decrease discrimination.

Gap	Strategy for Intervention	High burden	Moderate burden	Low burden	Areas/hard-to reach
High rate of childhood leprosy	<ul style="list-style-type: none"> incident¹¹ investigation of extended contacts of a child with leprosy minimum training for primary and secondary school teachers on screening 	X	X	x	X
High Disability grade II among new leprosy cases	Screening of contacts from house to house	X	X	x	x
Weak Case finding activities at health facility and community level	<ul style="list-style-type: none"> Active screening of contacts every year communities active screening 	X	X	x	x
Low contact tracing activities	<ul style="list-style-type: none"> School children screening (integrated) communities active screening 	x	X		
Low level of community awareness	Awareness campaigns	X	X		
Limited laboratory service for leprosy	Ensure laboratory/pathology capacity and/or referral of samples centrally	X	X	x	
Low diagnosis capacity of health profession	Ensure refresher training	x	X		
Weak leprosy program management at all levels	<ul style="list-style-type: none"> Sensitization work shop for Woreda, zonal and regional TBL focal person. 	x	X		
Inadequate involvement of HEWs in leprosy prevention and control	Ensure sensitization to involve HEW at all levels	x	X	x	
Limited referral centers	Ensure availability of referral centers to confirm diagnosis and ensure correct patient's classification and staging of GII Disability	x	X		
Weak quality of leprosy services with limited knowledge and skills on leprosy case management among health care providers	Ensure refresher training	x	X	x	
Interruption/ mal distribution of drugs/supplies	Ensure drug quantification and proper distribution	x		x	
Limited leprosy laboratory for diagnosis and early detection of antibiotic resistance	Strengthen laboratory capacity for early detection of antibiotic resistance and As well confirm diagnosis of new cases with diffuse infiltration as they do not have patches and often do not have enlarged nerves in the early onset of the disease	X			
Still high rate of stigma and discrimination	<ul style="list-style-type: none"> Increase community awareness on the way of transmission of the disease. Strengthening leprosy associations Establishing community based rehabilitation and aware CSO 	X	X	X	

10. Monitoring and evaluation

Monitoring, evaluation and programmatic reviews are means to ascertain the nature, quality, extent and significance of the progress towards a public health goal. Monitoring and evaluation is used to generate best evidence on how well the programme is working and translate that evidence into implementation improvements and/or redefining policy recommendations.

Both programme monitoring and evaluation help with:

- Knowing whether the activities are implemented as planned;
- Determining whether the results of the activities are achieved at a reasonable cost;
- Establishing the impact of programme activities in terms of public health benefits;
- Ensuring the development of monitoring skills.

The mechanism of monitoring and evaluation will be through

1. Supervision
2. HMIS reporting
3. Review meeting
4. Survey

Scope of indicators within the monitoring framework

Input	Out put	Outcome	Impact
<ul style="list-style-type: none"> • Finance • Policy, standards, guidelines; • Human resource; • Logistics; • Drugs; • Information (IEC materials, radio and TV SPOT) 	<ul style="list-style-type: none"> • Activities Patient – related (e.g. disability assessment) • Improved human power • Availability of guide line standards and policy 	<ul style="list-style-type: none"> • Increased awareness community • Improved skill of health professionals • Increased new cases detected, • Increased treatment completion) 	<ul style="list-style-type: none"> • zero children diagnosed with leprosy • reduced visible deformities to <1/millionm population • completely reduced stigma and discrimination related to leprosy

11. Implementations Plan for activities

s.n	List of Activities	Year			
		2017	2018	2019	2020
	<ul style="list-style-type: none"> • “incident” investigation of extended contacts of a child with leprosy • minimum training for primary and secondary school teachers on screening 	x	x	x	
	Screening of contacts from house to house	x	x	x	x
	<ul style="list-style-type: none"> • Active screening of contacts every year • communities active screening 	x	x	x	x
	<ul style="list-style-type: none"> • School children screening (integrated) • communities active screening 	x	x	x	x
	Awareness campaigns	x	x	x	
	Ensure laboratory/pathology capacity and/or referral of samples centrally	x	x		
	Ensure refresher training	x	x	x	x
	<ul style="list-style-type: none"> • Sensitization work shop for Woreda, zonal and regional TBL focal person. • Advocacy for higher official on ARM 	x	x	x	x
	Ensure sensitization to involve HEW at all levels	x	x	x	x
	Ensure availability of referral centers to confirm diagnosis and ensure correct patient’s classification and staging	x	x	x	x
	Ensure refresher training	x	x	x	x
	Ensure drug quantification and proper distribution	x	x	x	x
	Strengthen laboratory capacity for early detection of antibiotic resistance	x	x	x	x
	<ul style="list-style-type: none"> • Increase community awareness on the way of transmission of the disease • Strengthening leprosy associations • Establishing community based rehabilitation and aware CSO 	x	x	x	x

Cost break down

Summary of NSP cost by strategic objective (2016 - 2020)						
Activities	Interventions	Assumption	2018 (USD)	2019(USD)	2020(USD)	TOTAL
1.4 Strengthen and Expand Leprosy referral centers	Strengthen existing Leprosy referral centers	Capacity building (87.5USD/trainee*4 in service trainee /Hosp* 5 hosp /yr = 17500USD; Supervision (3596USD/SS/yr for 5 hosp); logistic supply (12174USD /hosp workshop*5 hosp/year=60869USD\$	81,965.22	81,965.22	81,965.22	245,895.65
	Expand Leprosy referral centers	Capacity building for lab, physio therapist, GHW for in-service training (875USD*12trainee*2hosp=21000USD; (Reinnovation (17391.3*2hosp.*2hosp 34782.6USD/construction of two wards) logistic supply (11840.58USD/Hosp.*2Hos for different medical equipment	79,463.77	79,463.77	79,463.77	238,391.30
1.5.Improve community's demand for quality leprosy services	Conduct awareness creation campaigns at high burden Woreda	Leaflet distribution (0.87USD/leaflet*20000=17391USD; Banners (13.04 USD/ Banner*10 Banner*93 woreda=12130/yr; Sensitization of Workshop (13 USD/ participant*3days*48 pa/woreda*93 woreda/year=174096 USD	203,617.00	203,617.00	203,617.00	610,851.00
	Prepare leprosy specific messages using different channels	10000 USD/ message*2 message= 20000USD like Radio message; Television message;	20,000.00	20,000.00	20,000.00	60,000.00

Cost break down(continued)

Summary of NSP cost by strategic objective (2016 - 2020)						
Activities	Interventions	Assumption	2018 (USD)	2019(USD)	2020(USD)	TOTAL
	Disseminate leprosy spot messages 3 times a week for 52 weeks	200USD /spot*3spot /week/52w	31,200.00	31,200.00	31,200.00	93,600.00
	Prepare and distribute leprosy patient information kits (Booklets)	1 booklet/4.5USD*10000	0	45,000.00	0	45,000.00
	Leaflet on leprosy for general public	0.87 USD/Leaflet*20000leaflets/yr	17,400.00	17,400.00	17,400.00	52,200.00
	Advocacy at higher official to give attention for leprosy service	using all opportunity	0	0	0	0
1.6.Improve Leprosy Case finding and management	Develop, print and distribute packages of leprosy programmatic materials and provider support tools	110USD/HF*1500HF/year	165,000.00	0	165,000.00	330,000.00
	Strengthen routine house hold contact screening for all index leprosy cases	3000 estimated cases/1 year *13.04 USD/house examination	39,130.00	39,130.00	39,130.00	117,390.00
	“incident” investigation of extended contacts of a child with leprosy	359 estimated child case /1 year*13.05 USD /contact examination	4,667.00	4,667.00	4,667.00	14,001.00
	Conduct school children screening for leprosy in hot spot areas	2 HealthWorker /school*10 estimated sch/ woreda*93 woreda*13USD*3days	72,540.00	72,540.00	72,540.00	217,620.00

Cost break down(continued)

Summary of NSP cost by strategic objective (2016 - 2020)						
Activities	Interventions	Assumption	2018 (USD)	2019(USD)	2020(USD)	TOTAL
	Conduct Communities screening camping in specific area (hot spot areas)	2 (1GHW +1HEW) /kebele * 25 keble * 13 USD * 7days *5selected woreda/yr)+(stationary 123USD *25kebel) *5 selected woreda	38,125.00	38,125.00	38,125.00	114,375.00
	Improve awareness of school community on leprosy though using school mini-media in high burden areas	2 students /school *10 school *31 woreda /yr *13USD/student * 2day=16120+(stationary Booklet 4.5USD/Booklet*5 booklet/school*10school *31 woreda= 6975USD\$ +3poster/school*4.5USD/poster*10school*31 woreda=4185 +100 leaflet/school*0.87 USD/leaflet*10 school*31 woreda= 26970	54,250.00	54,250.00	54,250.00	162,750.00
	Orientation for primary school teachers on screening	1 teacher/school*10school*31 woreda*13USD/day *2days =8060+stationary (booklet 1/participant *10 teacher/woreda *31 woreda=1395 +stationary 2.2USD/part*10teachers /woreda*31 woredas = 682USD	10,137.00	10,137.00	10,137.00	30,411.00
	Actively involve HEWs and HDA in the identification and referral of leprosy suspect cases	Per diem 13USD/trainee*1317 participant *4days =17121 + stationary 2.2USD/p*1317=2897.40+ refreshment 3.5 USD /p*1317 =4609.5 .transport cost 4.5USD*1317=5926.5.,facilitator fee 33 USD*4 facilitator*13session *4days=6864	37418.4	37418.4	37418.4	112255.2
	To improve index of suspects health professionals will screen all dermatology cases for leprosy To improve index of suspects health professionals will screen all dermatology cases for leprosy	the same trainee with GHW training	0	0	0	0

Cost break down(continued)

Summary of NSP cost by strategic objective (2016 - 2020)						
Activities	Interventions	Assumption	2018 (USD)	2019(USD)	2020(USD)	TOTAL
	Interconnect leprosy referral center with district HF with telemedicine for consolation	1 telemedicine with cost 30435*4 hosp (experience of ALERT)	0	121739	0	121739
	Revise leprosy training materials	1 experts with cost 109 USD / day *10 experts * 5 days	5,450.00	0	0	5,450.00
	Conduct basic leprosy training for general health worker	train 1 GHW with cost of 51 USD/day *12 days *200 trainees	122,400.00	122,400.00	122,400.00	367,200.00
1.7. Improve human resource development on leprosy	Training lab profession on skin AFB	train 1 trainee with cost 51USD * 7days * 20 trainees	7,140.00	7,140.00	7,140.00	21,420.00
	Expend leprosy training in leprosy referral centre	Capacity building (875USD/1 trainee*4 trainee/hosp.*3hosp.=10500 + ; Supervision 719.2USD/SS/Hosp.*3hosp= 2157.6; logistic supply like LCD and table 1245.15/ Hosp *3=3735.4	16,393.00	16,393.00	16,393.00	49,179.00
	Identify and establish sub referral center at each leprosy high burden woreda (one health facility at leprosy hot spot area)	Capacity building (train package 875*20 trainee=17500; Supervision 719.2USD/SS*20=14384; logistic supply (+ in kind like shoes, Vaseline)	31,884.00	31,884.00	31,884.00	95,652.00
	Provide in-service training for health workers from referral and sub referral health facilities.	train package 875*20trainee + in kind	17,500.00	17,500.00	17,500.00	52,500.00

Cost break down(continued)

Summary of NSP cost by strategic objective (2016 - 2020)		2018 (USD)	2019(USD)	2020(USD)	TOTAL	
Activities	Interventions	Assumption				
1.8. Improve financial and resource mobilization	Budget allocation by regional and central government	Inform region to allocate budget according to their micro plan				
	Encourage involvement of partners (internal and external)	Negotiate different partner to involve in leprosy prevention and control				
1.9. Improve Leprosy data flow through HMIS implementation of HMIS at all levels	Prepare print and distribute leprosy household contact register 100 sheet	41,739.00	41,739.00	41,739.00	125,217.00	
	Include contact screening indicator in HMIS.	request was made for PPD				
	Monitor the status leprosyburden by district through HMIS data analysis yearly	analysis will be at central level				
Establish active surveillance system for leprosy in hot-spot areas	Research on leprosy (utilize research conducted by AHRI)	need communication AHRI no need of budget				
	Establish active surveillance system for leprosy in hot-spot areas	Merge with contact screening				
Conduct leprosy review meetings in hot-spot zones		7997	7997	7997	23991	

Cost break down(continued)

Summary of NSP cost by strategic objective (2016 - 2020)						
Activities	Interventions	Assumption	2018 (USD)	2019(USD)	2020(USD)	TOTAL
1.10.Strengthen Leprosy pharmaceuticals distribution system	Conduct annual leprosy pharmaceuticals and supplies quantification	conducted at office level				
	Procure adequate supply of anti-leprosy drugs.	support from WHO				
1.11.Improve physical and socio-economic rehabilitation , and stigma reduction interventions for persons affected by leprosy	Procure adequate prednisolone for leprosy patients	14USD/1tin of 1000tab* 706tin for 1167 patients /yr	9,884.00	9,884.00	9,884.00	29,652.00
	Procurement and supply of leprosy physical rehabilitation services (Canvas shoes)	9.5 USD per 1shoe* 10000 Pt	95,000.00	95,000.00	95,000.00	285,000.00
M and E	Print and distribute all package of recording and reporting materials for leprosy at unit cost of 7.1 USD	one package for each health facilities with high case load (7.1 USD/1 package of recording * 3000HF= 21300		21,300.00		21,300.00
ACSM	Produce and disseminate video material demonstrating leprosy case finding and management for health facilities in high burden areas	4.5USD /one copy with high case load HF *3000 health facilities		13,500.00		13,500.00
	Commemorate the World Leprosy Day	1 time per year with 21700 USD				
		Total	1,232,000.39	1,263,089.39	1,226,550.39	3,721,640.16

Reference

1. Revised national strategic plan tuberculosis, TB/HIV, DR-TB, and LEPROSY prevention and control 2006-2013 EC (2013/14 – 2020)
2. Global leprosy strategy 2016–2020: accelerating towards a leprosy-free world – 2016 operational manual.
3. National leprosy HMIS report
4. Document prepared by the action programme for the elimination of leprosy, world health organization, Geneva
5. Weekly epidemiological record Global leprosy update, 2015 WHO ,Geneva
6. Ethiopia Leprosy Mapping report, March 2015, Addis Ababa, Ethiopia

