UNITED REPUBLIC OF TANZANIA



MINISTRY OF HEALTH AND SOCIAL WELFARE



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¹WHO. Global Tuberculosis Report, 2013.WHO, Geneva.

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LIST OF ABBREVIATIONS

ACSM	Advocacy, Communication and Social Mobilization	
AFB	Acid Fast Bacilli	
AIDS	Acquired Immuno-Deficiency Syndrome	
APHFTA	Association of the Private Health Facilities in Tanzania	
ART	Anti-Retroviral Therapy	
CBR	Community Based Rehabilitation	
CCHP	Comprehensive Council Health Plan	
CDC	Centre for Diseases Prevention and Control	
CHIF	Community Health Insurance Fund	
CHMT	Council Health Management Team	
COMBI	Communication for Behavioural Impact	
СРТ	Cotrimoxazole Preventive Therapy	
CSSC	Christian Social Services Commission	
CTBC	Community Based Tuberculosis Care	
CTRL	Central Tuberculosis Reference Laboratory	
DAS	District Administrative Secretary	
D-by- D	Decentralization by Devolution	
DED	District Executive Director	
DMO	District Medical Officer	
DOT	Directly Observed Treatment	
DOTS	Directly Observed Treatment, Short course	
DRS	Drug Resistance Survey	
DST	Drug Susceptibility Testing	
DTLC	District Tuberculosis and Leprosy Co-ordinator	
EAC	East African Community	
ECSA	East, Central, and Southern African	
ELR	Electronic Leprosy Register	
EQA	External Quality Assurance of AFB microscopy, culture	
ETR	Electronic TB Register	
FBO	Faith Based Organization	
GDP	Gross Domestic Product	
GFATM	Global Fund Against AIDS, Tuberculosis and Malaria	
GLC	Green Light Committee	
GLRA	German Leprosy and Tuberculosis Relief Association	
GNI	Gross National Income	
HIV	Human Immunodeficiency Virus	
HSSP	Health Sector Strategic Plan	

HSR	Health Sector Reforms
IMR	Infant Mortality Rate
IDU	Intravenous Drug users
IPT	Isoniazid Preventive Therapy
ISTC	International Standard of Tuberculosis Care
IUATLD	International Union Against Tuberculosis and Lung Diseases
KCMC	Kilimanjaro Christian Medical Centre
KNCV	Royal Netherlands Tuberculosis Association
LED	Light Emitting Diode
LGAs	Local Government Authorities
MAREMA	Manyara Regional Mining Association
MDGs	Millennium Development Goals
MDR	Multi- Drug Resistance
MDT	Multi Drug Therapy
MMAM	Primary Health Services Development Programme (PHSDP)
MoHSW	Ministry of Health and Social Welfare
MSD	Medical Stores Department
MTEF	Medium Term Expenditure Framework
NACP	National AIDS Control Programme
NACOPHA	National Council for People Living with HIV and AIDS
NGO	Non-Governmental Organisation
NMSF	National Multisectoral Strategic Framework
NIMR	National Institute for Medical Research
NSFD	Novartis Foundation for Sustainable Development
NSGRP	National Strategy for Growth and Poverty Reduction (MKUKUTA)
NTLP	National Tuberculosis and Leprosy Programme
PAL	People Affected by Leprosy
PASADA	Pastoral Activities and Services for people with AIDS
PATH	Programme for Appropriate Technology in Health
PDR	Prevalence/ Detection Ratio
PHCSDP	Primary Health Care Service Development Programme
PITC	Provider Initiated Testing and Counseling
PLHIV	People Living with HIV
PMORALG	Prime Minister's Office, Regional Administration and Local Government
POD	Prevention of Disability
PSU	Pharmaceutical Supplies Unit
RAS	Regional Administrative Secretary
RH	Reproductive Health

RHMT	Regional Health Management Team		
RMO	Regional Medical Officer		
RTLC	Regional Tuberculosis and Leprosy Coordinator		
SADC	Southern Africa Development Cooperation		
SOP	Standard Operating Procedure		
SPRS	Septic, Preventive, Reconstructive Surgery		
TACAIDS	Tanzania Commission for AIDS		
ТВ	Tuberculosis		
TDR	Tropical Disease Research		
TFDA	Tanzania Food and Drug Authority		
TIKA	Tiba kwa Kadi		
TLA	Tanzania Leprosy Association		
TLCU	Tuberculosis and Leprosy Central Unit		
UCSF	University of California San Francisco		
UFMR	Under Five Mortality Rate		
USAID	United States Agency for international Development		
WHO	World Health Organization		
X-DR	Extremely Drug resistance		

FOREWORD

The National Strategic plan V (2015-2020) for Tuberculosis and Leprosy addresses the future priorities and challenges in the context of the changing environment. It is hinged on the National; Vision 2025, Strategy for Growth and Reduction of Poverty (NSGRP), National Multisectoral Strategic Framework III for HIV and AIDS (NMSF) 2013-2017, Health Policy and Health Strategic Plan III, but also to Global Plan Post 2015 Stop TB Strategy, Regional and National initiatives. The plan is informed by the external program review report, the epidemiological and impact analysis, recent prevalence TB survey and program progress reports.

The purpose of the Strategic plan is to promote dialogue and consensus building around key interventions for the coming five years. It also serves as a resource mobilization tool for funding priority interventions. The plan is a platform around which Development Partners, Key Players and Stakeholders will implement TB/Leprosy activities in a coordinated and harmonized manner. Finally the National Strategic Plan V development process established a baseline against which the progress and impact of TB and Leprosy activities will be monitored and evaluated in order to take appropriate actions. The plan has four main plans linked together i.e. core plan, operation Framework, budget plan and M&E plan. The plan has the following objectives:

- 1. To increase case detection by 29% by 2020 by strengthening routine case notifications and addressing vulnerable groups of the elderly, prisoners, miners and diabetics.
- 2. To increase the percentage of childhood TB cases notified in the country from 10.6% to 15% by 2020 by integrating TB services into RCH, CTC and active case finding.
- 3. To increase MDR TB cases detected and enrolled for treatment from 17% of the estimated total cases among those notified to 84% by 2020 by scaling up new diagnostic technologies and decentralizing MDR TB services.
- 4. To expand TB/HIV collaborative activities by ensuring that all TB patients are tested for HIV and those who test HIV positive are put on ART promptly and managed accordingly.
- 5. To establish the magnitude of TB and increase case notification rate within the mining sector by 2020.
- 6. To reduce new Leprosy cases with disability grade 2 from 0.7 to 0.3 per 100,000 population by 2020 by enhancing early case finding and treatment of leprosy patients.
- 7. To support implementation of good quality, accessible and equitable TB and leprosy services in the country by 2020 through health and community systems strengthening and good programme management.
- 8. To institute an efficient and integrated M&E system that ensures all indicators listed are tracked and reported timely.
- 9. To increase collaboration between the program and research/academic institutions on operational research.

I would like to reiterate the commitment of the Tanzania Government in the fight against these two diseases and call upon the entire health sector, our international collaborators and population at large to participate in the implementation so that the objectives of this strategic plan are achieved.

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Dr Donan W Mmbando Permanent Secretary October, 2015

ACKNOWLEDGMENT

Assembling this National Strategic Plan (2015-2020) for TB and Leprosy was a participatory process and involved efforts of many people and individuals. The process involved consultations, document review, technical working groups and workshops. I would like first and foremost to acknowledge our Development Partners who financed and made this development process possible. I also want to extend my acknowledgments to the Consultants who provided guidance, facilitated the review process, developed initial drafts, worked on prioritization of key interventions and facilitated the writing workshops. I am also grateful for the commitment, and hard work by all participants who attended the review, strategic planning and stakeholders' workshops organized by the by the Ministry of Health and Social Welfare through National TB and Leprosy Program Central Unit. I would like to specifically thank the Director of Preventive Services and staff of NTLP who worked hard to ensure that the plan was out in a timely manner. It is not a common practice to have a final draft of strategic (core) plan, operation framework, Monitoring and Evaluation Plan and a Work Plan prepared within two months. Last but not least I want to thank the Permanent Secretary who in one or the other provided approvals of various requests to make the process achievable in a timely manner.

Prof. Muhammad Bakari Kambi **Chief Medical Officer October, 2015**

EXECUTIVE SUMMARY

The National Strategic plan V (2015-2020) for Tuberculosis (TB) and Leprosy control was prepared in a participatory manner to address the future challenges and priorities in prevention, care and treatment of the TB, TB-HIV and Leprosy.

The main sources of information used locally were: the external program review findings of the strategic plan IV, the epidemiological and impact analysis and annual program reports. Other sources included, 'The global strategy and targets for TB prevention, care and control after 2015' and 'TB Strategic Investment Framework (2014)' documents prepared by WHO Global TB Program, Stop TB Partnership Secretariat and the Global Fund Secretariat.

The strategic plan V serves as a resource mobilization tool, sets future direction and defines a baseline to monitor progress towards targets and impact of key priority interventions. This five year plan has four components all linked together, i.e. core, operation, M&E and Budget plan. The background section in the core plan serves all of the components.

The core plan is the 'traditional Strategic Plan' with five year priorities, future challenges, objectives, targets, strategic (priority) interventions and indicators. The Operational plan provides description of the strategic interventions, outputs (short term measurable results), priority actions and activities. These act as a link between strategy and implementation to achieve the objectives. The M&E Plan is for tracking program progress and impact using impact, outcome and coverage/output indicators. The Work plan proposes the details required in order to achieve the interventions and easy costing, while the Budget Plan is for required financial resources to finance the program interventions.

The targets set are ambitious in the areas of improving TB case detection by equipping district and referral hospitals with new diagnostic tools and engaging the private sector, the mining sector and Non-Governmental Organizations to identify, treat and report on TB and Leprosy cases. The community including TB patients and former TB patients, Civil Society Organizations and Community Based Organizations will be empowered to identify and refer TB suspects for early diagnosis and treatment.

Another important target is to maintain high treatment success rates above the global TB treatment targets while reducing the burden of the disease. Through decentralization, the strategy is to scale up diagnosis and treatment of drug resistant Tuberculosis in the country by enrolling more patients with drug resistance and managed in an ambulatory setting close to their homes. Collaborative TB/HIV activities will be accelerated by increasing the uptake of antiretroviral therapy for all HIV-positive TB patients. Integration of Childhood TB services into all other MNCH/eMTCT services, and identification of children with TB will be scaled up.

The strategy for Leprosy disease is to enhance early case finding and treatment, while decentralizing the services with a focus on 22 Leprosy endemic districts and preventing disability grade 2. All these will be supported by strengthening health system and program management with sufficient financial resources and removing barriers to service.

Vision: Tanzania free of tuberculosis and leprosy with zero deaths, disease and suffering due to tuberculosis and leprosy.

Mission: Provision of high-quality TB and leprosy interventions with a focus on universal access, equity, gender, and those most at risk through effective and sustainable collaboration with partners and stakeholders at all levels.

Goal: To reduce the tuberculosis epidemic and burden and Leprosy disabilities in Tanzania by 2020

Objectives:

The NSP V Objectives fall under six core modules i.e. (1) TB care and prevention (2) Childhood TB, (3) MDR TB, (4) Collaborative TB/HIV, (5) TB in Mining Sector (6) Leprosy. The seventh objective is for the Supportive Systems module which includes; (i) Community systems strengthening, (ii) Public Private Mix, (iii) Health Systems Strengthening and (iv) Program management. M&E and Operational Research are objectives 8 and 9. The objectives are listed below;

- 1. To increase case detection by 29% by 2020 by strengthening routine case notifications and addressing vulnerable groups such as elderly, prisoners, miners and diabetics.
- 2. To increase the percentage of childhood TB cases notified in the country from 10.6% to 15% by 2020 by integrating TB services into RCH, CTC and active case finding.
- 3. To increase MDR TB cases detected and enrolled for treatment from 17% of the estimated total cases among those notified to 84% by 2020 by scaling up new diagnostic technologies and decentralizing MDR TB services
- 4. To expand TB/HIV collaborative activities by ensuring that all TB patients are tested for HIV and those who test HIV positive are put on ART promptly and managed
- 5. To establish the magnitude of TB and increase case notification rate within the mining sector by 2020
- 6. To reduce new Leprosy cases with disability grade 2 from 0.7 to 0.3 per 100,000 population by 2020 by enhancing early case finding and treatment of leprosy patients
- 7. To support implementation of good quality, accessible and equitable TB and leprosy services in the country by 2020 through health and community systems strengthening and good programme management;
- 8. To institute an efficient and integrated M&E system that ensures all indicators listed are tracked and reported timely.
- 9. To increase collaboration between the program and research/academic institutions on operational research

Roles and responsibilities of all key stakeholders are listed as annex 2 with a purpose of emphasizing that this is the National Strategic plan. Another purpose is to promote ownership and participation in the implementation of the strategy.

The budget required to implement this strategy is TZS 556,917,342,055 equivalent USD 329,829,637 for five years.

SECTION 1: INTRODUCTION

1.1 PURPOSE OF THE NATIONAL STRATEGIC PLAN

The National Strategic plan (NSP) V (2015-2020) for Tuberculosis (TB) and Leprosy addresses the current and future challenges in the context of a changing political, economic, social and technological (PEST) environment as outlined in the national Vision 2025, National Strategy for Growth and Reduction of Poverty (NSGRP), National Health Policy, National Health Strategic Plan, The Global Plan to Control TB: 2011 – 2015 and the Post 2015 Global TB Control Strategy as well as other Regional and National health Initiatives including National Multisectoral Strategic Framework for HIV and AIDS III 2013-2017 and Health Sector Strategic Plan (HSSP III)

Informed by the external program review report, the epidemiological and impact analysis and other program progress reports, the development of the Strategic plan will promote a dialogue and consensus building around TB/Leprosy key priority interventions for the coming five years.

The National Strategic Plan is a basis for costing and funding support from Development Partners (DPs). It also provides a platform around which Development Partners, Key Players and Stakeholders will implement TB/Leprosy activities in a coordinated and harmonized manner. The plan will serve as a resource mobilization tool during the development of the "concept note" which is the basis for applications as per the Global Fund against AIDS, Tuberculosis and Malaria (GFATM) New Funding Mechanism model. Finally the National Strategic Plan V development process establishes a baseline indicators and targets against which the progress and impact of TB and Leprosy activities will be monitored and evaluated and taking appropriate actions in this plan period (2015-2020), as well as in other subsequent plans.

1.2 KEY COMPONENTS OF THE NSP FOR TB AND LEPROSY

This National Plan has four plans all connected and linked together. The Background section serves all components. The practice has been that the Core plan is 'the Strategic plan'. Another component is the Operation plan which details how to implement the Core plan with a focus on year one implementation. Monitoring and Evaluation Plan is included for tracking program progress and measure achievements and assess the changes the program had produced over the period of implementation as well as to provide corrective action during the plan period . The Technical workplan proposes the capacity building requirements in order to achieve the interventions. The Budget plan draws from the details of work plan activities which are the foundation for costing.

1.3 PROCESS OF ASSEMBLING THE STRATEGIC PLAN

The process of assembling 'the plan' basically started with conducting the external program review in 2014, epidemiological and impact analysis in 2014 and running the first national TB prevalence survey in 2012. The purpose was to establish the burden and trends of TB and Leprosy diseases in the country. The program management developed Terms of reference, did internal and external consultations, searched and contracted external/internal facilitators (Consultants) of the process. The facilitators conducted a brief review of relevant reports, before developing the inception report to guide the process. The road map was included in the inception report with key steps.

The decision was made to make the development of 'the plan' as participatory as possible despite the constraint of time and other resources so as to promote involvement and ownership of the plan. Participatory key steps included; performance review and reflection workshop for four days with a purpose of reviewing the program past performance by revisiting findings and recommendations while learning from facilitating and limiting factors for achievements. 50 participants included the NTLP coordinators at central and regional level,, Partners such as those from Management Science for Health (MSH), Program for Appropriate Technology for Health (PATH), National Institute for Medical Research (NIMRI), CTRL, Kibong'oto Hospital. The output of the workshop was to generate preliminary issues/gaps. Another step was a three day workshop which translated the gaps into priority areas. The participants who attended the performance workshop with exception of few who did not make it otherwise were the same. Comparing the achievements, gaps and priority areas, draft objectives and strategies were developed. The output of this workshop was to identify the key components of the strategic plan. Facilitators had the opportunity to work on these preliminary ideas ready for a two day meeting of managers with NTLP. The output was 'unstructured draft zero' which was used by the facilitator to develop draft 1 which was circulated to stakeholders including external consultant and experts.

A Stakeholders' workshop was the third major step where about 90 members from; Ministries of Health and Social Welfare, Finance and Community development. Others were from; Research Institutions (NIMRI), Muhimbili University College, National AIDS Control Program, Tanzania Commission for AIDS, Medical Services Department. Also representatives of People affected by TB and Leprosy associations such as National Council for People living with HIV and AIDS (NACOPHA) participated. Members from Mining and Pastoral Associations, Tanzania National Coordinating Mechanism attended as well. Regional and District Medical Officers and TB/Leprosy Coordinators from various councils attended the workshop. Other participants were from Government Institutions such as those from Prisons. Development partners from Global Fund, German Leprosy and Tuberculosis Relief Association (GLRA) WHO, USAID and others from Implementing partners and the private health facilities involved in providing TB, Leprosy services participated as well. The agenda was to discuss draft plan 1 (Core, Operation, M&E and Work plan). The output of the workshop was revision of objectives, strategic interventions, priority actions and targets. Another output was revised stakeholders' expectations, roles and responsibilities for achieving the objectives of the National Strategic Plan V (2015-2020). The fifth step was for the technical teams to finalise the priority actions and develop detailed activities ready for costing and prioritising them for the budget plan. Finally the draft for five year National Strategic Plan for TB/Leprosy was disseminated to relevant players and policy makers for comments and suggestions.

2.1 DEMOGRAPHIC, GEOGRAPHIC AND SOCIO-ECONOMIC FEATURES 2.1.1 Demography and boundaries

The United Republic of Tanzania (URT) is the largest country in East Africa, occupying an area of 945,087 sq. km. It lies between the latitudes 1°S and 12°S and longitudes 30°E and 40°E. The country shares borders with eight neighbouring countries, namely: Kenya and Uganda to the north; Rwanda, Burundi and Democratic Republic of Congo to the west; and Zambia, Malawi and Mozambique to the South. *See annex 1 Map of Tanzania*. Tanzania has an estimated population of 44,928,923 inhabitants² with 51% of the population being females. Over 74% of the population live in rural areas. The number of households is about 9,109,150 and the average of household size is 4.8 inhabitants. The annual population growth rate is estimated at 2.7%.

2.1.2 Administrative structure

Tanzania mainland has 25 regions and 166 districts/councils while Zanzibar has 5 regions and 10 districts. Each district is divided into 4 - 5 divisions, which in turn are composed of 3-4 wards (mainland) or Shehias (Zanzibar). Every 5-7 villages form a ward.

Indicator	2000	2012
Estimated Population	34,021,000	44,928,923 (M-21,869,990) (F- 23,058,933)
Population density (people per km ²)	39	51
Population composition	N/A	Males 49% Female 51%
Population growth per year	3.1%	2.7%
Children under five years of age	16.7%	16.2%
Children between 5 and 15 years of age	28.1%	27.7%
Total Fertility Rate	5.8 (1996)	5.4 (2010)
Life expectancy	Male 52 years:- Female 58 years	Male 58 yrs.; Female 61 yrs. (2013 projection)

Table 3: Main demographic indicators, 2000 and 2012

Source Demographic Household Survey, 2007 and 2000,

²Based on National Population Census 2012

2.1.3 Socioeconomic features

Tanzania is classified by the United Nations (UN) as one of the least developed countries in the world. The Gross National Income (GNI) per person was US\$570 in 2012³ which indicates that Tanzania is a low-income country. About 28% of Tanzanians live below the poverty line. The prevalence of poverty in rural areas is 39% compared to 18% in Dar es Salaam which is the country's major commercial city. Primary school enrolment is dropping rapidly to below the sub-Saharan average from a peak in 2010 at near 100%. Gross Domestic Product growth rate was 6.9% in 2012 and is forecast to be over 7% during the next four years. Agriculture is still the major source of income for the majority of the population in Tanzania although the productivity has remained low.

2.2 OVERVIEW OF THE HEALTH SITUATION

The past ten years have seen a decline in Under Five Mortality Rate (UFMR) and Infant Mortality Rate (IMR) as shown in Table 2. However, more than 50% of women aged 19 years are pregnant or already mothers partly because they lack education. In 2010, nearly 20% of women and 10% of men had received no formal education at all. Three quarters of the children less than five years of age are anaemic or malnourished and thus at risk for getting TB. The health care delivery system in the country is well established with more than 6,214 health facilities. The major providers of health services are the government with 69% of all health facilities including District Designated Hospitals (DDH).

The HIV prevalence has fallen to 5.1% (Urban 7.2% and 4.3% in rural)⁴ in 2012 among people aged 15-49 years, from 5.8% in 2007. The number of people living with HIV (PLHIV) has remained the same as a result of population growth. Over 8% of children under the age of 18 have lost their mothers, their fathers, or both.⁵ In some districts, more than 15% of children have been orphaned, with obvious consequences for vulnerability to diseases of poverty such as TB and leprosy. Tuberculosis accounts for about 8% of the burden of diseases and 6% of all deaths in the country for people aged 5 years and above, primarily due to HIV/TB co-infection.

Indicator	2004/5	2010	2012	MDG Target 2015
Infant mortality rate per 1000 live births	68	51	38	38
Maternal mortality rate per 100,000 live births	578	454	410	133
Malaria prevalence in children under 5	18% (2008)		10%	
HIV prevalence (adults aged 15-49 y)	9.4% (2000)	5.7%	5.1%	<5.5%

Table 4: Health and disease indicators Image: Comparison of the second seco

(Source: Tanzania Demographic Health Surveys and WHO Country Office Annual Report 2012 and Tanzania Country Report on the MD Goal 2010 and World Health Statistics 2014

³World Bank.<u>http://data.worldbank.org/country/tanzania</u>. Accessed 9th March, 2014.

⁴Tanzania HIV/AIDS and Malaria Indicator Survey 2011-12 and 2007-8

⁵The 2010 Tanzania Demographic and Health Survey.

A mid-term review of Health Sector Strategic Plan III conducted in September 2013 revealed that significant progress had been made in improving infrastructure and in some key indicators, but increasing staffing was held up by inefficiencies within the health system and duplication between Ministry of Health and Social Welfare (MOHSW) and the Prime Minister's Office-Regional Administrative Local Government (PMO-RALG). The specific disease control programmes, like the National TB Leprosy Program (NTLP), were "performing better" than the general health system, however, sustainable improvements in TB control increasingly rely on the general health system.

2.3 GENERAL HEALTH AND WEALTH INDICATORS

The Tanzania economy is growing at steady rate of 6-7% annually according to general wealth and health indicators. However, data from The World Bank shows that 88% of Tanzania's population is still living on US\$ 2 per day or less. Likewise, life expectancy is increasing sharply after the successful introduction of Anti-Retroviral Therapy (ART) in 2004. Child mortality (under 5 years) is decreasing rapidly since 2000 where the under 5 mortality has been cut by 60%. The number of children per woman has also decreased from 5.7 to 5.3 in 2000 and 2012 respectively.

2.4 HEALTH FINANCING

While the government expenditure on health increased to the targeted 15% of total government expenditure in 2008/9, it fell back to 11% by 2012.⁶ Health expenditure per capita rose as a result of external funding in 2010 and 2011 to \$37, which was a significant increase on the 2009 level (\$28).⁷ But when corrected for inflation it was flat for 2009-2012. The WHO recommended level for Tanzania is \$54.

Tanzania instituted both a National Health Insurance Fund (NHIF) for those in formal employment and a Community Health Insurance Fund (CHIF), with an urban version known as TibakwaKadi (TIKA). By 2013, about 13% of the population was covered⁸. The goal of increasing complementary funding to 10% of health financing has not been achieved, and probably will not be achieved in the near future.⁹ User fees are still demanded at health facilities. While TB treatment was free, the user fee generally had to be paid in order to achieve access to a diagnostic procedure including TB. Household survey data suggests that up to 11% of those eligible for exemptions do not receive them which is a barrier to access services¹⁰.

2.5 THE NATIONAL TB PROGRAM IN THE COUNTRY

The Ministry of Health and Social Welfare (MOHSW) launched the National Tuberculosis and Leprosy Programme (NTLP) in July 1977. The Programme is charged with preventing and controlling Tuberculosis and Leprosy in the country until they are no longer major public health problems. To achieve this, the Ministry collaborates with internal and external partners who provide technical and financial support. These partners include Non-Governmental Organisations (NGO), Faith Based Organisations (FBO), faith-based hospitals and External Development Partners. However, there is neither a formal Stop TB Partnership nor is there an inter-agency coordinating committee as recommended by the 2009 TB program review.

⁶MOHSW. Mid-term analytical review of the performance of the health Sector Strategic Plan III, September 2013.

⁷World Bank. <u>http://data.worldbank.org/indicator/SH.XPD.PCAP</u> accessed 10 March 2014 ⁸External Program Review of NTLP strategic plan IV 9 External Program Review of NTLP strategic plan IV

The NTLP is within the Unit of Epidemiology and Disease Control in the Department of Preventive Services of the MOHSW. The Tuberculosis and Leprosy Central Unit (TLCU) situated in the MOHSW co-ordinates all activities pertaining to TB, TB-HIV and Leprosy control in the country. The Central TB Reference Laboratory (CTRL) is part of the central unit.

2.6 TB EPIDEMIOLOGICAL BURDEN AND TRENDS 2.6.1 TB Mortality in Tanzania

Tanzania ranks 6th among the highest TB burden countries in Africa and is among the 22 high burden countries globally. The estimated population mortality rate has been decreasing since the 1990s and is stable since 2011 at 12/100,000 population. TB-related mortality of HIV -infected TB cases specifically is 12/100,000.¹¹ TB cases mortality rates are higher among males than females in the age range 40-54 years and increased in adults aged 65 years and above. The notified TB mortality in Tanzania using the new WHO 2013 definition was 5.8% in 2012 for all categories of TB. This is a decrease from 11.6% in 2003. However, case mortality varies by region and is highest in Zanzibar at 10.1%. Dar es Salaam contributes the highest number of TB cases in the country and has done well in reducing TB case mortality from 10.0% to 5.4% between 2003 and 2012. The number of deaths from TB in the NTLP statistics is likely an underestimate since patients may die before diagnosis, or may have died during treatment but were misclassified as lost to follow-up.¹²

2.6.2 TB Prevalence

The first nationwide TB prevalence survey was conducted in 2012. Preliminary results show that the prevalence of bacteriologically confirmed TB was higher than the point prevalence estimated by WHO (295/100,000) for all ages but within the 95% confidence interval. The results remained preliminary up to the development of this strategic plan, it is hoped that the assessment of smear results on the basis of re-examination of smears by GeneXpert could provide the TB prevalence. The draft WHO TB global report indicates that the prevalence is 172/100,000 and the TB incidence with HIV is 164/100,000 including HIV positive cases.

2.6.3 Trends in TB notification

Notified new and relapse TB cases were 64053 in 2013. The notification of TB cases per 100,000 population increased in the late nineties due to HIV, up 159/100,000 in 2008 then dropped steadily during the last decade to 140/100,000 in 2011 and increased slightly to 142/100,000 in 2013, although the notification of smear positive TB cases did not drop as sharply as all TB cases.¹³ Although the notification of TB cases per population is decreasing, the total number of TB cases in 2012 remained essentially the same as in 2003. Both in 2003 as well as ten years later, 25,000 smear positive TB cases were notified, with 65,732 TB cases overall in 2013 and only 1,000 fewer cases notified in 2012. The estimated case detection rate rose from 2011 to 79% in 2013 ¹⁴. The preliminary prevalence survey indicates that a large proportion of TB cases are undiagnosed, and the decline in notification rates may be the result of stagnation in increased capacity of TB diagnosis in the country. The regional trends indicate large differences in case notification within the country; a signal that there

¹⁰Prof <u>Anne Mills</u>, Et al Equity in financing and use of health care in Ghana, South Africa, and Tanzania ¹¹World Health Organisation Global TB report 2014.

¹²TB epidemiological and impact analyses Draft report February 2014

¹³ Id

¹⁴(WHO Global TB report 2014).

is probably still substantial under diagnosis and underreporting in some regions.¹⁵ The contributions are in brackets for the Dar-es-Salaam (21.8%), Mwanza (9.8%) and Shinyanga (6.5%), Mbeya (5.6%), Morogoro (4.9%), Mara (4.8%), Arusha and Tanga each contributing (4.7%), Kilimanjaro (3.8%) and Iringa (3.5%). All other regions (29.4%)

At the regional level, the increase in TB case notification in the last year is noted in regions with GeneXpert implementation, supporting the prevalence survey finding that there is still a large proportion of cases under-diagnosed. The conclusion of this analysis is that, while a significant gap remains between incident and notified cases, the reduction in notifications in recent years probably mirrors a genuine fall in incidence. New case finding approaches and laboratory techniques can increase case notifications.

2.6.4 MDR-TB

According to the National Drug Resistance Survey (2006/7), MDR-TB is estimated to occur in 1.1% in new TB cases and 3.1% in those previously treated. So far, 286 MDR TB patients have been cumulatively enrolled on treatment from November, 2009 to June, 2014 with 31% of these patients being HIV co-infected¹⁶. The programme has observed an increased enrollment of MDR TB patients from 15 (2009), 24 (2010), 32 (2011), 45 (2012), 96 (2013) to 74 (first two quarters of 2014). Major drivers of MDR-TB include; poor patient followup of drug sensitive TB, supervision of the program, and poor adherence to treatment by patients. Treatment outcomes of the three cohorts show that; in 2009 successfully treated 11 (73%), Mortality 3 (20%), 2010: successfully treated 18 (78%), Mortality 3 (13%) and 2011: successfully treated 24(75%), Mortality 4(12.5%).On-going expansion of Xpert coverage in the country has resulted in increased scope and numbers of enrolled MDR TB from 15 cases per year in 2009 to 95 MDR TB cases in 2013 as shown in the graph below.





2.6.5 Collaborative TB-HIV activities

The progress of integration of HIV and TB services in health service delivery has been good. Since 2006, there has been increasing coverage of HIV testing among TB patients and active screening for TB among HIV patients has been observed. The national HIV testing andCounseling (HTC) coverage at reporting TB clinics in year 2013 sets at 83%. However, a

¹⁵TB epidemiological and impact analyses Draft report February 2014

¹⁶(NTLP annual report, 2013).

large variation between regions in proportion of TB cases tested for HIV is observed, where for example only 69% of TB cases in Shinyanga were tested for HIV, compared to 98% of TB cases in Pemba in year 2013. Although the general prevalence of HIV among TB cases is 37%, there is large variation among regions ranging from a low in Pemba Island of 14% to a high in Mbeya region with over 60% of TB cases in 2013 being infected with HIV. This finding might be affected by the variation in the HTC coverage, unfortunately the survey reports (THMIS 2011-2012) on HTC coverage is for those who test and receive results, which is 42% in Mbeya and 36% in Pemba for 15-49 years age group. As for PLHIV with TB infection, there is a regional variation, the estimate for national average is 37.5%, for instance Mbeya region has over 60% of TB cases in 2013 being infected with HIV. See figure2 belo

Figure 2



HIV-TB coinfection by region 2012

2.6.6 Childhood TB

The diagnosis and management of TB in children with HIV has posed a significant challenge due to a number of factors, such as nonspecific clinical presentation, limited access to culture and molecular diagnostic facilities. To address the challenge the MOHSW in collaboration with other partners established the Centre of Excellence (COE) at Mwananyamala hospital in Dar-es-Salaam with the objective of improving care and treatment of TB/HIV co infected children.

Efforts for active TB case finding is essential in clinical settings where children with HIV receive care have been going on. The proportion of paediatric TB among new TB cases between 2008 (5,143) (8.7%) and 2012 (8.6%- 5,283) was almost constant and then started to increase in 2013 to 6,658 which is (10.6%), possibly with the introduction of Xpert¹⁷ See figure 1.

¹⁷Draft NTLP annual report 2013



Source: NTLP progress report

2.7 LEPROSY TREND

At the national level, the Leprosy prevalence rate has remained below 1 case per 10 000 population since 2006. In 2012 it was 0.46 cases per 10 000 population. However, 19 districts in the country have a prevalence rate above the threshold of 1 case per 10,000 population. The number of Leprosy cases has been decreasing every year, e.g. from 4200 in 2008 to 2005 in 2013.¹⁸ The proportion of children among new patients decreased from 7% to 5% for the past 3 years. As far as Grade 2 disabilities is concerned, there are still high disability rates among newly diagnosed leprosy patients (10-12%). There has not been much variation for the last five years. The aim was to lower the grade 2 disability to less than 8% by 2015¹⁹.

Conclusion on TB/Leprosy interventions implementation

It is concluded here that most of the progress of the TB programme can be attributed to the home-based Directly Observed Therapy, Short course (DOTS) strategy. TB and leprosy strategies for the period 2009–2013" generally were implemented according to plan.

2.8 EXTERNAL FINANCIAL SUPPORT TO TB CONTROL

Within the structure of the MOHSW, the NTLP has succeeded in raising up to \$17 million annually for TB control in the last 5 years, with the US Government and the Global Fund which are now the main external funding agencies.²⁰

¹⁸Draft Program annual progress report 2013

¹⁹Draft Program annual progress report 2013

²⁰External Program Review 2014

Table 3. External support for TB Control, excluding government support through general health services, 2009 to 2013

Financial Year (July to June)	NTLP Received amount (USD millions)	NTLP plus other sources (USD millions)
2009/10	8.5	15.7
2010/11	12.8	12.3
2011/12	10.8	17.7
2012/13	11.6	17.4
2013/14	10.8	18.7

(Source, NTLP and implementing partners)

However, the challenge is the high donor dependency at national level and budgetary constraints at regional and district levels which seriously threaten sustainability of the current supervisory and coordination activities of the NTLP. With dwindling support from Germany Leprosy Relief Association (GLRA), and other current donors almost entirely focused on TB, Leprosy control is especially vulnerable to resource gaps. The unfunded portion is indicated in the figure below.

Figure 4. Tanzania's funding for TB control as reported by the NTLP to WHO, 2013²¹



Source: External TB and Leprosy program review meetings

²¹WHO.Global Tuberculosis Report, 2013.WHO, Geneva.

3.1 INTRODUCTION

The NTLP 4th Strategic Plan covering the period (2009/2010-2015/2016) which is in its fifth year of implementation was developed to action the recommendations from a review report, achievements and lessons learnt of NTLP Strategic Plan III. The 4th strategic plan has seven objectives; each with outcome indicators, strategies, targets and activities. The following were the objectives:

- i. To pursue high quality DOTS expansion and enhancement with special focus on gender, children and marginalized populations
- ii. To reduce the burden of TB/HIV and drug resistant TB with special emphasis on vulnerable populations
- iii. To contribute to health system strengthening based on primary health care
- iv. To engage all care providers in TB, leprosy and TB/HIV control in both public and private sectors by 2015
- v. To empower TB, leprosy patients and communities to participate in TB, TB/HIV and leprosy control activities.
- vi. To enable and promote operational research on TB and Leprosy
- vii. To provide and sustain comprehensive quality leprosy services to prevent grade 2 disabilities in people affected by leprosy

The NTLP in collaboration with various stakeholders conducted a number of interventions related to DOTS expansion, recruited staff, provided quality assured first line TB drugs, laboratory supplies and equipment, initiated treatment for MDR-TB patients at Kibong'oto National MDR TB Hospital, and scaled up collaborative TB-HIV activities. Health care providers were trained and patients and communities were empowered to take an active role in TB prevention and care through advocacy, communication and social mobilization activities. The program also collaborated with external and internal partners to conduct relevant operational research. Elimination of Leprosy in those districts with high prevalence through campaigns was addressed through campaigns and strengthening prevention of disabilities among people affected by Leprosy.

Activities for staff capacity building included training courses and conference. To understand the situation of the program several activities were undertaken, including: evaluation of TB surveillance, external review, TB prevalence survey and epidemiological and impact analysis. As a result of the interventions, TB case detection has increased to 79% in 2012; the TB treatment success rate is consistently above the WHO standard of 85%; and the treatment failure rate of 0.2% and level of MDR-TB are low.²²

Collaboration with the National AIDS Control Programme has led to significant increases in the proportion of TB patients receiving an HIV test, reaching 82% in 2012; and in the number of HIV-infected patients referred for TB treatment. Evidence suggests that Tanzania has made significant progress in achieving the Millennium Development Goal (MDG) number 6 of reversing the incidence of TB.

²² NTLP program External review report-April 2014

Tanzania attained the Leprosy elimination goal of less than 1 case per 10,000 inhabitants in 2006, and since then the prevalence has continued to decline in most of the districts. On average the Prevalence of Leprosy per 10,000 populations is 0.6. The number of registered leprosy cases at the end of each year (prevalence) and the number of annual new cases (detection) have been declining consistently over the years. A summary of key achievements was obtained by reviewing the program progress reports and analyses conducted during the strategic planning workshops. Facilitating factors for achievements were discussed and a list of all achievements was generated and graded as high, medium and low in term of importance. All achievements were then grouped under each technical area. Below is a list of major achievements.

3.2 TB CARE AND PREVENTION

Major achievements: TB case (all forms) detection rate increased from 75% (2008) to 79% (2012); the target was 80% by 2015 with age-sex distribution of 59.4% male and 40.6% female (1:1.4). The majority of notified TB cases belong to the age group of 15-44 years, the same age group most affected by HIV and AIDS. TB treatment success rate for all categories of TB was 85% (2012) however; there are regional variations from 71% in Singida to 98% in Lindi. Nationally the death rate fell from 5% (2008) to the targeted 4% in 2015. The retreatment cases notified in 2012 were 4.3% of all cases notified, which was a decline from 5.8% compared to 2011 with treatment success rate of 82%.²³ The increased in detection rate was partly attributable to the availability of basic infrastructure across the country for finding TB cases, such as an increased number of AFB microscopy centres (from 720 [2008] to 945 [2012], and increased number of public laboratories with the capacity to perform TB culture (from one to five laboratories) and the introduction of new TB diagnostic tools (2 liquid cultures, 5 HAIN and 51 Xpert MTB/Rif machines). First line medicines for treating tuberculosis are available in most health facilities and stores at all levels, secured and no out of stocks of drugs and supplies.

3.3 CHILDHOOD TB

Major achievements: Over the last 5 years, about 5,000 cases of childhood TB were notified annually accounting for 8-10.6% of all TB cases in the country, but less than 2% of smear positive cases. Data aggregated from 6 of 11 regions where health workers were trained on childhood TB showed a steady increase in notification from 8.6% to 11.3% between 2012 and 2013. NTLP has taken advantage of Xpert MTB/Rif rollout to improve case detection by including children in the algorithms. HIV infected children receive comprehensive HIV care, while IPT is provided to HIV positive children with no active TB and children under five years of age who are close contacts of smear positive TB cases.

3.4. MDR-TB (DRUG RESISTANT TB)

Major achievements: By the end of 2013, the National Centre of Excellence (CoE) for MDR-TB management in the country established at Kibong'oto hospital in Kilimanjaro region had admitted 210 MDR-TB cases. The hospital performs culture and molecular diagnostic testing (Hain Test and GeneXpert MTB/Rif) since 2013. Since 2009 to the first two quarters of 2014, the program had enrolled 286 MDR TB patients. On average 48% of the patients

with MDR-TB were co-infected with HIV and 9% of these were children less than 15 years. Most of the cases were already diagnosed from source districts before reaching the MDR-

²³NTLP Annual report 2012, pg12

TB Hospital. According to the annual TB report of 2012, the majority of MDR TB cases diagnosed and started on treatment were from Dar es salaam (62%) followed by Tanga (9%), Mwanza (9%) and Mtwara (4%). The location of the CTRL and a suboptimal sputum specimen referral system may result in more MDR TB cases detected from Dar es Salaam. The average treatment success rate to date is 75% (which is one of the highest in the African Region) and mortality is 20% in cohorts which have completed treatment so far.²⁴ Most deaths occur among those not co-infected with HIV during the first two months of treatment most likely due to delays in referrals. To date, no XDR-TB cases have been diagnosed in Tanzania.

3.5 COLLABORATIVE TB/HIV ACTIVITIES

Key achievements: TB/HIV coordinating committees have been formed in 23 regions and 133 Districts in Tanzania mainland to oversee collaborative TB-HIV services. In 2012, 82% of all notified TB cases was tested for HIV, among them 39% tested HIV positive and 96% and 54% of the latter were initiated on Cotrimoxazole Preventive Therapy and ART respectively.²⁵ TB screening occurs routinely in greater than 95% of People Living with HIV at Care and Treatment Clinics (CTC). In addition, Isoniazid Preventive Therapy (IPT) for PLHIV has being implemented in phases in 20 CTC in the period 2010 to 2014 and has recently been scaled up to 104 CTC countrywide²⁶.

3.6 TB IN THE MINING SECTOR

Major achievements: The magnitude of TB in mines until now is not known and there is no data and information on the size of the mining population in the mines scattered in many regions of the Country. According to Manyara Regional Mining Association (MAREMA), in Simanjiro district in Manyara region, 60-70% of TB patients originate from the mining area. A mass screening campaign yielded 31 smear-positive TB patients among 750 screened (4%).²⁷ This prompted NTLP to start TB-related activities in the mines. Tanzania is one of the signatories of Southern Africa Development Cooperation (SADC) Ministers of Health declaration on TB in the mining sector launched in August 2012.

On 25th March, 2014 SADC countries in collaboration with WHO/AFRO and the World Bank launched a framework on the harmonized management of TB in the mining sector. The framework has been adapted into the country context and a three years strategic plan has been developed and will be submitted for fund mobilization.

3.7 LEPROSY CONTROL

Major achievements: Tanzania has maintained the global target of Leprosy elimination at national level of less than 1/10,000 population during the current strategic plan. Treatment success rates of leprosy patients have been maintained at over 90% for both Multibacillary (MB) Paucibacillary (PB. In 2012 the prevalence rate was 0.46 cases per 100,000 populations where the number of new cases was 2528 in 2012, giving a detection rate of 5.61 new cases per 100,000 population. The proportion of children detected among the new cases has been declining from 10% to 5.2%. However, 11.9% of newly diagnosed cases had disability grade two.²⁸

²⁴TB epidemiological and impact analyses Draft report February 2014

²⁵TB epidemiological and impact analyses Draft report February 2014

²⁶National AIDS Control Program Report 2013

²⁷MAREMA report 2013.

²⁸Annual report NTLP 2012

3.8 COMMUNITY TB CARE AND SOCIAL MOBILIZATION

Major achievements: Community mobilization activities on TB have empowered TB patients to participate in TB and TB-HIV control activities. Currently, there are 400 CBOs (ex TB patients groups) and one NGO reporting TB case notification. The data received in 2012 indicates that 35% of presumptive TB cases and 14% of notified TB cases were referred by Community Health Workers in 2012. Furthermore, over 75% of patients are choosing home-based TB treatment support which has reduced congestion at TB clinics and transport costs for TB treatment. Treatment success among these patients is 89%, the same as those observed at the facility. Through the ENGAGE TB approach, NGOs active in community care are encouraged to address TB control activities.

3.9. PUBLIC-PRIVATE MIX

Major achievements: Public Private Partnership has been well established for many years in Tanzania, mostly because of general service provision by Faith Based Organisations and Private health facilities. The number of TB cases notified from the private sector has increased from 3,490 in 2011 to 3,651 in 2012 (6% of national notifications) particularly in two regions i.e. Kilimanjaro and Manyara where mapping was done; Private health facilities contributed 39% to the TB case notification 5071 In 2013 national guideline for TB control at workplace was developed and printed and in use. In year 2013 a national guideline for TB control at workplace was developed and printed and in use.

NTLP through Global Fund Round 6 support has refurbished 69 private and 44 public health facilities to support delivery of TB services in seven regions.

3.10 HEALTH SYSTEM STRENGTHENING

Major achievements

- i. Out of a total number of 136 staff recruited by NTLP, 112 are TB/HIV officers based at the council level; and 21 new officers were recruited to strengthen the TLCU. This has contributed to good program performance.
- ii. Renovation of the isolation ward and laboratory for MDR-TB patients at Kibong'oto hospital was undertaken.
- iii. First line medicines for treating tuberculosis are available in most health facilities and stores at all levels and are secured.

3.11 PROGRAM MANAGEMENT

Major achievements: Through proposal and collaboration with Development Partners the program was able to mobilise USD17ml annually for key program activities. The NTLP developed a strategic plan that was in line with the Health Sector Strategic Plan (HSSP) III, where TB is positioned. At the operational level supervision supported major achievements such as high treatment success rate and low failure rate. Home based patient-centered treatment supervision (PCT) has been shown to be as effective as health facility directly observed treatment (DOT).²⁹ Patients supervised by home based DOT have proven to be reliable in taking their medication.³⁰

²⁹Egwaga S, Mkopi Am Range N et al. Patient centered tuberculosis treatment delivery under programmatic conditions in Tanzania: a cohort study. 2009. BMC Medicine; 7:80. Doi:10.1186/1741-7015-7-80

³⁰Mkopi A, Range N, Lwilla F et al. Adherence to tuberculosis therapy among patients receiving home-based directly observed treatment: evidence from Tanzania. 2012. PLOS One 7(12): e51828. Doi: 10.1371/journal. pone.0051828

3.12 MONITORING AND EVALUATION

Major Achievements:

- i. Establishment of the M&E unit at national level to coordinate TB and Leprosy monitoring activities in line with strategic planning 2009/2010 2015/2016.
- ii. Standardized recording and reporting tools are consistently used throughout the network of facilities engaging with the NTLP and have been updated to comply with new WHO guidelines on TB case definitions.

3.13 OPERATION RESEARCH

Major achievements

One of the objectives of the ending strategic plan was to conduct Operational Research through capacity building and research findings' dissemination. NTLP conducted research in collaboration with other partners. The major achievements were:

- i. NTLP in collaboration with Academic and Research Institutions were able to conduct about 15 research projects from 2009 to 2013.
- ii. The first National TB Prevalence survey was conducted from 2011 to 2012 to determine the true TB burden in the country.
- iii. Dissemination of the research findings has been presented in different workshops, conferences and some have been published.

3.12 SWOT ANALYSIS

During the performance review workshop, brief external and internal analysis was conducted to identify strengths to build on, weakness to reduce, opportunities to take advantage, and threats to guard against. Table 1 and 2 provides the summaries

	STRENGTHS	HOW TO USE THE STRENGTHS
a		This will allow the program interventions to be well aligned and positioned in the National Health Sector Plans
b	The Programme prepared a Strategic Plan that is in line with the HSSP III and Post 2015 global TB plan	Enables program activities NTLP to strategize its interventions in line with national and global guidelines
С	The NTLP has qualified and committed staff at all levels of health system	Enables efficient and effective implementation of program activities according to strategic plan
d	There is strong collaboration between NTLP and implementing/ development partners supporting TB and Leprosy control services	This will enhance leveraging efforts and resources to implement program interventions
e	The program has a well-established national TB Reference Laboratory capable of conducting 1 st and 2 nd Drug Susceptibility Test.	Enables appropriate management of TB diagnostic services in the country

Table 4: Building on the strengths

	STRENGTHS	HOW TO USE THE STRENGTHS
f	The program has well established TB surveillance system including electronic base TB reg.(ETR.net)	This will ensure generation of reliable TB and leprosy surveillance data
g	The NTLP has conducive working environment including transport facilities, computers and internet services	

Source: NTLP Performance review workshop-April 2014

Despite the above strengths the last plan was challenged by failure to maintain supervision and coordination at the operational level, for instance the annual program meetings were not held for some time, the operational plan will address that weakness, taking into consideration that effective supervision and coordination at the operational level greatly contributed to the positive results such as high treatment success rate and low failure rate.

	OPPORTUNITY	UTILIZATION
a.	Donor community is still interested in providing financial resources and technical assistance to NTLP, for instance the USG, GFATM, Germany Leprosy RA	The 'goodwill' from donors will support the NTLP to develop technical proposal for fund mobilization.
b.	Government commitment and political will to provide infrastructure and human resource base is strong. This is reflected in establishing The National and Community Health Insurance	mobilization and sustainability plan and solicit resources to support activities not
с.	The NTLP has been recognized by international community as a model programme since 1980s	
d.	Presence of administrative and technical support from National, Regional and District in the exiting government system	This advantage will speed up the integration of TB & Leprosy Programme activities into Comprehensive Council Health Plan
е.	Presence of private sector such as mining industries, private health services providers, and Civil Society Organization willing to participate in TB control activities.	The Government will engage private sector and Civil Society Organisation in TB & Leprosy control activities
f.	Availability of new technology endorsed by WHO such as Gene Xpert, Hain Test, MGIT,	This new technology will be adopted and scale up country wide so as increase TB case detection

Table 5: Taking advantage of Opportunities during implementation

	OPPORTUNITY	UTILIZATION
g.	Availability of country administration structure and artists	The key implementers will engage and mobilize artists to raise community awareness in TB & Leprosy control. While using the administrative structure to reach remote local setting.
C		

Source: NTLP Performance review workshop-April 2014

The areas for growth are addressed as part of activities to be undertaken for the next five year under priority actions while the threats have been addressed by developing specific strategic interventions, assumptions risk analysis and mitigation strategy.

3.13 STAKEHOLDERS' ANALYSIS

3.13.1 Development and other partners

- i. Stakeholders expect to be involved in design, planning and implementation, monitoring and evaluation of the Strategic Plan
- ii. Stakeholders expect adherence to existing Memorandum of Understanding with MoHSW and alignment to the National TB strategic plan priorities.
- iii. Strong harmonized coordination mechanism among stakeholders with ownership and leadership of MoHSW
- iv. Results; value for money and mutual accountability
- v. Leading role of the government and having a sustainability plan
- vi. Adapt international guidelines and updates whenever necessary for TB and leprosy control interventions
- vii. Timely implementation of activities and generation of technical and financial reports

3.13.2 Clients (Beneficiaries)

- i. They expect quality, accessible, affordable (free) TB and leprosy prevention, care and control services which are provided in a safe environment
- ii. They expect to be informed about their disease and its prevention, management and care
- iii. They should understand that TB and Leprosy are communicable diseases of public health importance and that they should adhere to treatment and prevention so as to cut the transmission cycle

3.13.3 What NTLP expect from stakeholders

- i. Need for financial and technical support that addresses country's and programme priorities rather than donors needs
- ii. Development Partners, stakeholders and MoHSW to jointly monitor the implementation of the National Strategic Plan.
- iii. Timely disbursement of funding commitments
- iv. Adherence to Memorandum of Understanding with MoHSW and the Programme
- v. High quality Technical Assistance from partners

SECTION 4: VISION, MISSION AND PRINCIPLES

4.1 GUIDANCE OF THE STRATEGIC PLAN

This National Strategic Plan for TB and Leprosy control (2015-2020) is guided by the Global Strategy and Targets for Tuberculosis prevention, care and control after 2015 which was approved by the 67th World Health Assembly on 19th May 2014. On Leprosy control, the plan is guided by the WHO Operational guidelines (Updated) on Enhanced Global Strategy for Further Reducing the Disease Burden due to Leprosy (2011-2015).

At the country level, the strategic plan is guided by the Third Health Sector Strategic Plan July 2008 - June 2015 (HSSP III) and the mid-term review results. It is closely linked with Health Sector HIV and AIDS Strategic III (HSHSP III) for TB/HIV interventions. In turn the HSHSP III is linked and guided by the National Multisectoral Strategic framework III 2013-2017 (NMSF III). The HIV and TB/Leprosy programs at the regional and district levels fall under the same Medical Officers. The plan contributes towards achieving the aims of the National Vision 2025, National Strategy for Growth and Reduction of Poverty (NSGRP III or MKUKUTA III) and the Five year Development Plan (FYDP) 2011/12-2015/16.

The strategic plan provides the context for developing annual (operational plans) and budgets for TB and Leprosy prevention, care and control which is included in the Medium Term Expenditure Framework (MTEF) of the Ministry of Health and Social Welfare and the Prime Minister's Office Regional Administration and Local Government (PMORALG), Regional Health Plans (RHP) of all regions and Comprehensive Council Health Plans (CCHP) of all Local Government Authorities (LGAs) in Tanzania. The strategic plan therefore guides the actions of all public, faith-based and private organisations, individuals and the community in the control of TB and leprosy in the country. The NSP will serve as a source document during the development of the Concept Note a per Global Fund New Funding Mechanism.

4.2 VISION, MISSION AND GOALS

4.2.1 Vision

Tanzania free of Tuberculosis and Leprosy - zero deaths, disease and suffering due to tuberculosis and leprosy.

4.2.2 Mission

Provision of high-quality TB and Leprosy interventions with a focus on universal access, equity, gender, and those most at risk through effective and sustainable collaboration with partners and stakeholders at all levels.

4.2.3 Goal

To reduce the tuberculosis epidemic and burden and Leprosy disabilities in Tanzania by 2020

4.2.4 Impact Indicators

- i. 2 0% reduction in tuberculosis incidence rate
- ii. 35% reduction in number tuberculosis deaths

4.3 **PRINCIPLES**

The following key principles will guide the new strategic plan

4.3.1 Stewardship and leadership

- i. TB has been dropping in the list of MoHSW priorities for about 15 years, it is now time that the Government (public) takes lead in stewardship, where TB/Leprosy control will be elevated to higher levels of the development agenda within the MoHSW. The purpose is to coordinate action on multiple fronts and provide oversight to achieve universal access to early detection and proper treatment of all patients with Tuberculosis and Leprosy. The Ministry's guidance is important in supporting research to develop and apply new technologies, tools and approaches to enable eventual Tuberculosis elimination. Partners are expected to provide technical support through normative guidance, policy advice and monitoring and evaluation and funding to implement this strategy.
- ii. Government commitment is needed in order to minimize or eliminate direct medical costs, such as fees for consultations, hospitalization, tests and medicines as well direct non-medical costs such as those for transport and any loss of income while under care. Appropriate social protection schemes are needed to cover or compensate for direct non-medical costs and income losses.
- iii. The resources set aside from domestic and external Tax payers and partners are entrusted to Health care workers, Managers and Administrators, are not for personal use but for services to those intended clients i.e. people who need them. Resources must therefore be used efficiently and effectively to obtain value for money. Systems and procedures are in place to ensure that this happens.

4.3.2 Accountability

The implementation of the Strategic plan V will not be possible without strong, accountable and effective leadership at all levels of the healthcare delivery system. The strategy uses existing structures to ensure accountability to government, funding partners and the communities served in terms of resource utilisation, service provision and health outcomes achieved at all levels of the health sector. This will ensure that all actors are doing the right thing the right way.

4.3.3 Engaging others

Civil society organisations: A strong coalition with Civil Society Organizations and communities will be established through the Stop TB Partnership and Leprosy Coordinating Committees. This will enable them to engage more actively in planning and design, service delivery, and monitoring, as well as in information, education, support to patients and their families, research, and advocacy. This coalition will assist people in both demanding and high-quality TB and leprosy services.

Private Health Service Providers: Promoting Partnership with private health services is essential so as to increase access to those who need services. The private sector plays a major role in providing health services including communicable diseases prevention, care and control. The new strategy will intensify partnership between public facilities system and the private health service providers so that they can increase their role in TB and Leprosy program. Synergies that exist between them will be encouraged as mutual trust and respect grow between them and complement each other and avoid duplication of efforts.

Profit organisations: In this strategy there is a focus on the Mining sector as an important component. The strategy promotes the role of resource mobilization (Corporate Social responsibility) from the mining companies to fund TB prevention, care and control interventions in the mines and surrounding communities.

4.3.4 Global and Cross border collaboration

- i. The National Strategic Plan V has taken into consideration the Global guidance in particular Global TB strategy Post 2015. Prioritization of some interventions is undertaken based on local context, needs and capacities. These are based on TB and Leprosy disease epidemiology mapping of people at a greater risk, understanding of socioeconomic contexts of vulnerable populations, and a grasp of health system context including underserved areas in each district. The implementation of this plan will consider different levels of regional performance.
- ii. Tackling TB effectively requires close collaboration among countries starting with the East African Community and SADC countries followed by global coordination and support by World Health Organization to enable adherence to the International Health Regulations (2005) and ensure health security. Migration within and between countries will be addressed through cross-border collaboration.

4.3.5 Human rights and ethics

The strategic plan V addresses human rights and ethics. The strategy is built on a rightsbased approach that ensures protection of human rights and promotion of rights-enhancing policies and interventions. The strategy also addresses relevant ethical values including the conflict between the public interest in preventing TB and Leprosy transmission and patients' rights to demand a supportive care environment or refuse treatment; the stigmatization attached to the disease and the discrimination against those affected; the lengthy treatment and the challenges of adherence to treatment; ensuring patient-centred service provision and balancing the risk of infection to health care workers.

4.3.6 Access and equity

Universal health coverage ensuring that TB patients access quality health services without suffering financial hardships will be addressed. For Leprosy, particular attention will be given to ensuring that Leprosy patients have easy access to diagnosis and free treatment with multidrug therapy within an integrated set-up in a health facility. There will be an effective referral network to manage Leprosy-related complications. Barriers that prevent new cases from accessing the services will be removed. A greater emphasis will be on the assessment of disability at diagnosis, during treatment and end of treatment so that those at particular risk can be recognized and managed appropriately as an integral part of Leprosy case management. Both medical and socioeconomic rehabilitation of people affected by Leprosy will be implemented in collaboration with other partners.

4.3.7 Sustainability

- i. Ultimately it is the empowerment of the community and the society to play vital role in prevention of the TB and Leprosy diseases in their environment which plays a key role in sustainability. The strategy has taken a principle of engaging affected persons and communities in facilitating implementation of the strategy with special attention to Key Affected Populations. Home Based Care continues to be of value in reducing congestion in hospital facilities.
- ii. The strategy prioritises sustainability of interventions and results with a focus on approaches for financing TB and Leprosy services, management of financial, material and human resources, community ownership, organizational development, service availability, coverage, and accountability to ensure the efficiency, efficacy and effectiveness of TB and Leprosy interventions.

SECTION 5: OBJECTIVES AND STRATEGIC INTERVENTIONS

5.1 INTRODUCING OBJECTIVES FOR MODULES

The fifth National Strategic Plan for Tuberculosis and Leprosy Control (2015-2020) has nine objectives with their targets. To achieve them a number of key strategic interventions are proposed for each objective. These objectives fall under the modules listed below.

- i. TB care and prevention
- ii. Childhood TB
- iii. MDR-TB
- iv. Collaborative TB-HIV
- v. TB in Mining Sector
- vi. Leprosy Control.
- vii. Supportive Systems covering (i) Community Systems Strengthening (ii) Public Private Partnership, (iii) Health System Strengthening (iv) and Program management. (v) Removing barriers
- viii. Monitoring and Evaluation
- ix. Operational research

Major gaps presented below were a result of reviewing challenges faced, limiting factors for the achievements, lessons learnt and SWOT analysis, program review report and epidemiological impact assessment. A list of all gaps and analysis was generated and graded as high, medium and low. Gaps, priorities and future challenges form the background to the objective, while the narrative describes what the objective is all about. The phrasing of the objective includes part of the how (intervention). Strategic Interventions are listed only and detailed in the Operation plan.

5.2 OBJECTIVES

TB CARE AND PREVENTION

The program reports indicate that the TB case (all forms) detection rate increased from 75% (2008) to 79% (2012); the target was 80% by 2015 with age-sex distribution of 59.4% male and 40.6% female (1:1.4). The majority of notified TB cases belong to the age group of 15-44 years, the same age group most affected by HIV and AIDS. However, with the PST survey (preliminary the case detection rate ranges from 45-54%, indicating that many cases are missed.

5.2.1.1 Expanding the use of proven measures for increasing case detection

Key gaps

Tanzania for many years has had high treatment success rates among smear positive cases. The major technical recommendation of the 2014 Review was therefore to increase case notifications (p9). The logic is that notification rates have fallen over the decade to 2014, and are well short of incidence. Incidence itself has also probably fallen, but the gap with notifications is significant. Case detection for 2013 was reported to be 79%, however, following the PST preliminary results the case detection ranges from 45-54%. Furthermore, the NTLP has tried several measures at district level, many of which have significantly increased case notifications: groups of ex-TB patients, sputum fixers, use of standard operating procedures

(SOP) for boosting case finding, referrals from private pharmacies, etc. One example: TB case notifications of smear positive and all forms of TB cases increased significantly in two pilot districts where SOPs were introduced; all forms of TB in Meru rose by 37% from 237 to 325 cases while in Arusha the increase was 66% (from 190 to 315)³¹.

Future challenges and priorities

These results confirm the gap between notifications and incidence suggests that the undiagnosed cases are relatively accessible. In addition, there is a range of possible measures to choose from to increase notifications, none of which has been used in more than two districts. It is therefore a priority to expand the use of these measures, choosing the most appropriate one for each setting taking into account each district local situation.

5.2.1.2 Improving the poorer performing regions

Key gaps

The prevalence survey revealed higher rates of TB in rural, compared to urban, areas. Analysis of regional case notification rates reveals large inter-regional variation. While some of this variation is due to real epidemiological differences between populations, some must be due to variations in programme performance at regional level. Below the median for case notification rates are Kigoma, Rukwa, Tabora, Kagera, Singida, Dodoma, Ruvuma, Shinyanga, Mbeya, Iringa (recently divided into Iringa and Njombe) and Morogoro. Iringa particularly has seen a fall in notification rate from 161/100,000 to 137/100,000 between 2011 and 2013. Eight regions have treatment success rates below the WHO recommended 85%, namely, Singida, Tanga, Morogoro, Rukwa, Iringa, Manyara, Tabora, Shinyanga, which should help to focus additional support. Iringa, Morogoro, Rukwa, Shinyanga, Singida, and Tabora are in both lists.

Future challenges and priorities

Specific interventions will be needed for isolated rural populations in these lower performing regions. These data suggest that the measures to increase case detection, mentioned in (a). above, will be rolled out in these poorer performing regions. Results will be evaluated after two years to determine which measures to prioritize for wider expansion.

5.2.1.3 Age and gender focus

Key gaps

A comparison of age specific notification rates strongly suggests that the elderly (over 45 years of age) are under-diagnosed. While most countries clearly show a rise in notification rates with age, case notification rates in Tanzania fall above the age of 44 years (2014 Epi analysis, p25). The prevalence survey also shows (notwithstanding its shortcomings) a significantly higher prevalence among the over 55s. On the other hand, notification data have shown a consistent male: female ratio of around 1.8 since 1995 (WHO Report 2013, p178). This is consistent with other countries in the region and appears to be an epidemiological difference rather than a problem of access to services for women³². Neither the prevalence survey nor active case finding efforts have diagnosed more females than expected from the notification data.

³¹Kinyanjui Samuel. G. 2013. *Technical assistance in documenting experiences, best practices and lessons learned from rolling out of SOPs for TB case detection in Arusha, Zanzibar and Pemba, September 2013.* Submitted to PATH by the TBIQC Program: Management Sciences for Health ³²Holmes CB¹, Hausler H, Nunn P.A review of sex differences in the epidemiology of tuberculosis. Int J Tuberc Lung Dis. **1998 Feb**; 2(2):96-104.

Future challenges and priorities

Taken together this suggests that the elderly are a key affected population that is underdiagnosed and deserves priority attention. To start with, the reasons for the low notification rate in this group need to be assessed.

5.2.1.4 Key vulnerable groups

Key gaps

PLHIV and children are obvious vulnerable groups and are addressed below in 2 and 3. The elderly and people living in isolated rural populations are addressed above. Other groups include prisoners, miners and diabetics.

Future challenges and priorities

- (a) Pharmaccess International is supporting TB control among prisoners and TB notifications in prisons are only slightly higher than notified incidence in the general population. In general, the TB care for prisoners seems better than in many other countries, possibly because prisoners are treated outside the prison facility. Again unusually, TB cases in prisons were more often HIV negative than in the general population. Intensified and quality assured TB screening among high risk populations reduced transmission not only within prison settings but also in the community at large [Nsajigwa et al 2013]. The priority for prisoners is to continue current level of operations.
- (b) Recent research around Mwanza found that TB prevalence among diabetes patients was 1.3% (Mtwangambate G 2012). 16% of TB patients had diabetes (Faurholt-Jepsen 2012). Diabetes was associated with a five-fold increased risk on mortality (Faurholt-Jepsen 2013). The priority need in this group is to understand the nature and extent of the problem across the country.

5.2.1.5. Laboratory performance

Key gaps

Although, from 2009 to 2012, the number of diagnostic centres increased by 9%³³, this represented only 47% of all health facilities. However, it is not clear what the optimal number would be of diagnostic centres. Indeed, between 2003 and 2011, diagnostic centres increased steadily in number while case detection rates fell slowly. However, the number of TB diagnostic centres that were not functioning adequately was 30% (2014 Review, p 29) because of lack of training or refresher training of the staff. Nearly 50% of the TB diagnostic centers in the country are not quality assured for smear microscopy.

The laboratory system was unable to provide crucial performance data that would normally be expected from the central TB Laboratory and its network (2014 Epi review pp34 & 35). The system could not identify bacteriologically confirmed cases in the Prevalence Survey, and several additional concerns were expressed in the 2014 Review (p33). The key gap identified was the deficiency of human resources, where they are essential to address the significant gaps (p 33) including very low levels of drug susceptibility testing for diagnosis of MDR-TB (p38). Nevertheless, a network of GeneXpert machines has been rolled in the last 2 years, but is dependent upon external resources.

Future challenges and priorities

Ensuring that all TB diagnostic centres are functioning adequately through training and refresher training of staff and increasing motivation through capacity building is a priority.

³³Data provided by D Kamara, Acting Programme Manager, Feb 2014.

Water supplies and refurbishment may also be required in a few centres. The most important of the recommendations of the 2014 Review (p 10) need to be implemented:

- i. An increase in number and capacity of human resources in the laboratory system,
- ii. Expansion of the space given to TB laboratories at all levels,
- iii. Pursuit of the World Bank support earmarked to build a new public health laboratory;
- iv. Development of a comprehensive GeneXpert roll out plan, including a pilot study in a limited number of districts to evaluate GeneXpert as the front-line diagnostic test; appointing one or more GeneXpert coordinators with skills in trouble shooting, on site supervision and maintenance of machines; monitoring of the implementation of GeneXpert and ensuring adherence to an algorithm to maximize case detection among key populations such as PLHIV, children, and MDR suspects;
- v. Expand the use new TB diagnostic technologies including molecular technologies
- vi. Finalization and implementation of the current National TB Laboratory Strategic Plan.

Objective 1

To increase TB case detection by 29% by 2020 by strengthening routine case notifications and addressing vulnerable groups such as elderly, prisoners, miners diabetics

Targets

- i. TB case (all forms) detection rate increased from 56% to 72% by 2020
- ii. The treatment success rate for all categories of TB increased and maintained at 90% by 2020
- Facilities with TB diagnostic services that are quality assured increased from 50% to 95% by 2020.

Strategic Interventions

- 1.1 Focused dissemination of proven case finding measures to increase routine case detection
- 1.2 Finding and treating TB in key affected populations (elderly, prisoners, diabetics, miners and Intravenous Drug Users (IDU))
- 1.3 Strengthening the laboratory system
- 1.4 Strengthen the 50% of underperforming diagnostic centres
- 1.5 Expanding use of Chest X-ray and digital imaging in diagnosis of tuberculosis

5.2.2 CHILDHOOD TB

Key gaps:

Over the last 5 years, about 5,000 cases of childhood TB were notified annually accounting for 8-10 percent of all TB cases (2014 Review, p48). It is difficult to estimate the "correct" proportion of childhood cases, but experts believe it should be around 15-20% in countries with a population distribution such as Tanzania's³⁴. The low percentage contribution is attributed to inadequate linkage between adult TB and childhood TB services in health care settings. Another gap is low uptake of IPT among child contacts of smear positive TB cases and HIV positive children.

³⁴<u>Helen E Jenkins</u>, <u>Arielle W Tolman</u>, <u>Courtney M Yuen</u> et al. Incidence of multidrug-resistant tuberculosis disease in children: systematic review and global estimates. The Lancet, Volume 383, Issue 9928, Pages 1572 - 1579, 3 May 2014 doi:10.1016/S0140-6736(14)60195-1
Priorities and future challenges

The priority is to expand services to manage TB among children i.e. increase the number of children with TB detected, diagnosed, notified and treated annually. Between 2012 and 2013 there was an increase of about 1,400 (25%) in childhood TB cases as a result of specific measures in one third of districts such as training of health facility staff to identify possible cases of TB and perform the correct diagnostic tests, conduct better contact tracing and to use the new diagnostic test, Xpert MTB/RIF.

Another priority is to integrate TB care within Reproductive and Child health services. Increasing care providers' skills to manage childhood TB will also receive attention in the NSP Vnext plan. Caring for children with TB, and child contacts of adult TB pose difficult tasks because not all children seek health care services and even ANC attendance for mothers is not satisfactory, e.g. only 50% of deliveries are institutional deliveries.³⁵ Low community awareness of childhood TB and lack of provision of comprehensive care at the community level are limiting factors. The summary data suggests that children are an under-diagnosed group in Tanzania and should be prioritised for case finding, initially using the measures shown to work already in a large part of the country.

Objective 2

To increase the percentage of childhood TB cases notified in the country from 10.6% to 15% by 2020 by integrating TB services into RCH, CTC and active case finding.

Narrative Description

With proper recording and reporting, it is estimated that childhood TB will contribute 15-20% of all TB cases notified in the country, through the use of new technologies and training and involving other service providers. Another area will be integration of Childhood TB into other services by actively screening children for TB and facilitating referral of presumptive TB cases to the health facility is the focus.

Targets

- i. Proportion of Childhood TB cases to all TB cases notified increased from 10.6% to the national target of 15% by 2020
- ii. Childhood TB and TB-HIV services integrated in 75% of facilities providing maternal and newborn child health care by 2020

Strategic interventions

- 2.1 Establish the magnitude of Childhood TB in Tanzania
- 2.2 Strengthen childhood TB management including contact tracing in health facilities
- 2.3 Strengthen childhood TB and TB-HIV services in Reproductive and Child health care (RCH) including PMTCT services in the country
- 2.4 Detect and manage TB and TB-HIV in vulnerable children in orphanages, children in the streets and schools

³⁵Tanzania eMTCT plan (2012-2015),

5.2.3 MDR TB

Major Gaps

- i. Only 102 (17%) of the estimated WHO target of 616 MDR-TB cases were detected and 95 cases enrolled for treatment in 2013. Although MDR-TB case detection is increasing over time, it remains low.
- ii. About 90% of previously treated TB (re-treatment) cases did not receive culture and Drug Susceptibility Testing
- iii. There is an inadequate tracking system for detected MDR-TB patients not initiated on treatment
- iv. Treatment is centralised at a single hospital and needs to be de-centralised to become accessible to the bulk of patients (2014 Review p.38).

Priorities and future challenges

In reality the MDR-TB problem in Tanzania is small; probably the result of tight basic TB control over 30 years, but each case represents the possibility of transmission, and is very expensive to treat. Further increases in the MDR-TB burden in Tanzania would be a major problem. For ethical reasons also, cases of MDR-TB should be identified and treated. Therefore, MDR-TB becomes a priority and will be addressed by expansion of testing the high-risk groups, namely those previously treated, failure cases, MDR-TB contacts. Testing should initially be by Xpert MTB/RIF with DST confirmation. Treatment should be available for all those diagnosed. Decentralization of care should be pursued as recommended by the 2014 review to at least regional referral hospitals. Long term treatment in hospitalized settings is associated with higher cost than ambulatory services. Such patients are weak to work and seek for income so it is required to improve quality of life by accessing quality and comprehensive palliative care, while addressing the issue of social protection, stigma and discrimination facing patients.

Objective 3

To increase MDR TB cases detected and enrolled for treatment from 17% of the estimated total cases among those notified to 84% by 2020 by scaling up new diagnostic technologies and decentralizing MDR TB services

Narrative Description

The objective aims at prevention of MDR-TB and reducing the burden of MDR-TB as well as its management. Apart from the management of MDR-TB at National Kibong'oto Centre of Excellence to reduce mortality, the focus will also be to decentralize services to the district health facilities while strengthening infection control measures. A follow up DRS is planned to ascertain the current burden of MDR-TB on possible trends of MDR-TB notification.

Targets

- i. Increase number of facilities initiating MDR-TB treatment from 1 to 25 Hospital facilities to cover all regions by 2020.
- ii. The treatment success rate of MDR TB is maintained at 75% or higher by 2020.
- The number of the retreatment patients with Drug Sensitivity Test increased from 10% to 100% and 25% of new cases by 2020

Strategic Interventions

3.1 Roll-out and expand new TB diagnostic technologies for testing of presumptive MDR-TB cases.

- 3.2 Strengthen specimen referral and feedback system between diagnostic centres and TB culture laboratories
- 3.3 Strengthen tracking system for detected DR-TB cases and contacts
- 3.4 Decentralize MDR- TB management services for early initiation of treatment and care
- 3.5. Maintain Kibong'oto Infectious Disease Hospital as a centre of excellence for DR-TB services

5.2.4. COLLABORATIVE TB/HIV ACTIVITIES

Major Gaps Identified: HIV is a major driver of the TB epidemic. HIV prevalence is falling so its impact on TB is reducing, but this is a slow process, and still, in 2013, HIV positive TB patients were 37% of all notifications (down from 52% in 2005). Low uptake of ART among TB patients co-infected with HIV persists although it improved from 54% to 73% from 2012 to 2013, largely due to the development of new guidelines, training, provision of ART in TB clinics ("one-stop shops") and supportive supervision. The universal target is 100% according to WHO. There is slow scale up of Isoniazid Preventive Therapy among PLHIV in CTC where only 20 out of 1200 sites are currently implementing the services since 2011 and while over 457,000 HIV clients were screened for TB, only 166 received IPT in 2013 when around 80% of all PLHIV should be on it³⁶. HIV testing among TB patients has reached 83% instead of the national target of 100%. The health facilities were not designed and built in compliance with TB infection control measures.

HIV is unequally distributed with three regions at \geq 9% of the adult population (Njombe (14.8%), Iringa (9.1%), Mbeya (9%)) going down to 1.5% (Manyara). HIV prevalence is only weakly associated with higher TB notifications (2014 Epi analysis p. 30) but a stronger association may come out if case notifications were improved. Similarly, the national prevalence of HIV among TB cases is 39% and large variation among regions ranging from 7% in Pemba to 60% in Mbeya.

Priorities and future challenges

These results support the continuation of HIV/TB collaborative activities with a focus of trying to improve those that need to be provided by the general health services and HIV services, namely IPT, infection control and intensified case finding (ICF) - the 3Is. To make ICF efficient it should start among the HIV population that accesses health services. On the TB side, ensuring that all TB patients both susceptible and drug-resistant are tested for HIV and those who test HIV positive are put on ART promptly and managed well is a priority. In addition, the variation of HIV levels suggests that the NTLP should focus on those regions with high HIV and low performance ratings. DTHOs, for example, could be relocated to concentrate on these regions, and/or to work more on the 3Is. Central level coordination between the NTLP and NACP, and between CBOs working on AIDS and TB (2014 Review p36) should also be systematically addressed. The lack of joint supervision, training, job-aids and new tools; insufficient "one-stop shops" (2014 Review p36-37) and separate M&E systems with divergent results (WHO TB Report 2013 p 73) should all be rectified as priorities by both NTLP and NACP.

Objective 4

To expand TB/HIV collaborative activities by ensuring that all TB including drug-resistant patients are tested for HIV and those who test HIV positive are put on ART promptly and managed

³⁶WHO.Guidelines for intensified tuberculosis case-finding and isoniazid preventive therapy for people living with HIV in resource constrained settings. Geneva, World Health Organization, 2010.

Narrative description

TBHIV collaborative activities are well described³⁷. At the district level the TB/HIV officers, focusing on the highest HIV burden districts, will coordinate the activities, ensure PLHIV patients are screened for TB, and TB patients are tested for HIV and receive appropriate services, and collaborate with partners involved in collaborative activities while providing supportive supervision to HCW.

Targets

- i. The proportion of TB cases tested for HIV increased from 83% to 100% by 2020
- ii. TB screening among PLHIV increased from 95% to 100% by 2020
- iii. Uptake of ARV among TB/HIV co-infected patients increased from 73% to 100% by 2020

Strategic interventions

- 4.1 Strengthening collaboration between TB and other programmes (HIV, MNCH, PMTCT, diabetes)
- 4.2 Strengthening TB services among PLHIV, families and communities
- 4.3 Strengthening HIV service provision among TB patients, families and communities

5.2.5. TB IN MINING SECTOR

Major gaps:

Recently the number of mines in Tanzania has increased. Data are still scarce. The total number of miners is unknown. Small scale miners are still largely disorganized and lack service contracts that take into consideration health, safety, and environmental concerns associated with the mining industry. However, in Manyara region, Simanjiro district, 60-70% of TB patients are originating from the mining area. A mass screening campaign yielded 31 smear-positive TB patients among 750 screened (4%) [MAREMA report 2013]. Miners are a very mobile population so the country will adopt SADC and EAC regional policies and protocols to address cross border referral linkages on TB treatment to ensure that there is continuum of care. Strategies to promote awareness on TB among mine workers and communities will be undertaken. To ensure maximum involvement of all key players in the mining sector, coordination teams at national, regional and district levels with be established to oversee implementation of TB in mining strategic interventions. The priority need in this group is to understand the extent and nature of TB in the mining industry, including camps and surrounding communities and the degree of involvement of existing TB control services.

Priorities and future challenges

TB control in the mining sector is a recent area for the program, although its approaches are similar to TB interventions in other work places and high risk-groups. The priority is to conduct a situation analysis so as to understand the prevalence and existing TB care and control activities. This would be followed by systematic screening for Tuberculosis among selected high-risk groups both in camps and surrounding communities before introducing TB care and prevention interventions. While the interventions will focus on the mine camps, the interactions between miners and neighbors require that surrounding communities are included in the care and control activities. While it is an opportunity for regional collaboration, there may be a challenge of coordination.

³⁷WHO. WHO Policy on collaborative TB/HIV activities: guidelines for national programmes and other stakeholders. WHO, Geneva, 2012

Objective 5

To establish the magnitude of TB and increase case notification rate within the mining sector by 2020

Targets

- i. Harmonized National policy on TB in mining sector in place by 2016
- ii. Estimates of the prevalence of TB in mines and surrounding communities in place by 2016
- iii. Coordination mechanism of TB in mining sector in place 2015

Strategic Interventions

- 5.1 Establish the magnitude of TB and control measures in the mining sector
- 5.2 Implement TB screening and active case finding among mine workers, their families and surrounding communities.
- 5.3 Establish a system for cross border referral and linkages on TB treatment and care in regional bodies (EAC and SADC)
- 5.4 Promote health seeking behavior among miners, their families and surrounding communities
- 5.5 Establish a sustainable coordination system of multi-sector approach to address issues of TB in mining sector.

5.2.6 LEPROSY CONTROL

Major gaps:

- i. The number of districts where Leprosy elimination target has not been reached increased from 15 in 2008 to 19 in 2012, only 7 elimination campaigns were done out of 25 campaigns planned.
- ii. Disability grade 2 of newly diagnosed Leprosy patients increased from 12% in 2008 to 14% in 2013 as a result of delays in seeking health services and diagnostic delay by health workers.
- iii. Lack of skills in diagnosis and treatment of Leprosy and programmatic management of leprosy by health staff. There was no training of health staff was done. Only three of the targeted 90 doctors were trained on Leprosy surgery
- iv. In some districts there is no active involvement of persons affected by Leprosy (PALs) in leprosy control activities including self-care
- v. Limited resources allocated to Leprosy by government and partners partly due to an overwhelming priority to TB and TB/HIV activities

Priority and future challenge

Given the gaps identified in section 3 the focus is to conduct elimination campaigns in the districts where the prevalence is still high, while addressing the disability grade 2 in all districts. Capacity for care providers skills in diagnosis and treatment of Leprosy need to be built and sustained. National level coordination for Leprosy control activities is another priority. The major challenge ahead is resource mobilization and increasing the interest of partners on financing Leprosy control activities.

Objective 6

To reduce new Leprosy cases with disability grade 2 from 0.7 to 0.3 per 100,000 population by 2020 by enhancing early case finding and treatment of leprosy patients.

Narrative description

Disabilities related to Leprosy disease are caused by delays in seeking health care services. This is due to community and health care workers' low knowledge, stigmatization arising from myths and beliefs attached to Leprosy disease. The objective aims to increase community awareness, provide adequate treatment to new cases with main emphasis on endemic districts. As part of community involvement CBR approach will be undertaken in order to improve the quality of life of persons with disabilities related to Leprosy. The objective also intends to prevent further worsening of disabilities through various interventions. The program through DLTCs will ensure Leprosy activities are included in CCHP including supportive supervision.

Targets

- i. Leprosy eliminated in 19 high endemic districts by 2019
- Disability grade 2 among newly diagnosed Leprosy patients decreased from 11.9% to 7% by 2020³⁸.

Strategic interventions

- 6.1. Enhance early case finding and proper treatment of leprosy patients
- 6.2. Strengthen coordination of leprosy services in NTLP
- 6.3. Strengthen prevention of disability due to Leprosy

5.2.7 SUPPORTIVE SYSTEMS

Objective 7

To support implementation of good quality, accessible and equitable TB and leprosy services in the country by 2020 through health and community systems strengthening and good programme management.

Narrative Description

Successful implementation of TB and Leprosy control services depends on an efficient health system and effective management of TB and Leprosy medicines. The program has identified the following as part of support systems; community systems strengthening; removing barriers, public private partnership; health systems strengthening and program management. As regards to the CSS, the CSOs and communities' participation and utilization of TB, TB-HIV and leprosy services will be promoted countrywide. Since CSS with engagement of NGOs and volunteers, together with reduction of barriers and PPM, constitute the main strategies for finding the estimated 21% of un-notified patientsIn order to facilitate the implementation of the services the program objectives institutional capacity of the NTLP will be built up to establish baseline data and information on human rights issues in regard to program interventions. Human and legal rights of TB and leprosy patients will be advocated to reduce barriers through TB control interventions that enable equal access to services. Coordination, supportive supervision and mentoring, building staff capacity and training health care workers all will be achieved by this objective.

5.2.7.1 COMMUNITY SYSTEM STRENGTHENING

Key gaps:

Delays in diagnosis are due to patients' delays or health system delays. Some patients resort to local remedies while some are diagnosed in the laboratory but not put on treatment due to sub-optimal or interrupted services. The 2014 Review found that identification and training

³⁸Annual report NTLP 2012

of sputum fixers, ex-TB patients, drug dispensers, and traditional healers all worked to increase case finding. These interventions are addressed above. In addition, development NGOs, CSOs, and CBOs working with HIV were insufficiently addressing TB (pp 47&48).

Community health workers who help to reach patients with limited access to TB services do not have adequate incentives and enablers to perform their duties. Low community awareness on TB and Leprosy, stigma and discrimination to the TB and Leprosy patients remains a challenge.

Priority and future challenge

The priority is to scale up case detection strategies nationally and involve communities including CSOs while building institutional capacity of Community Based Organisations to be involved in TB care and prevention and Leprosy control interventions. The future challenge remains to be low community awareness, lack of formal recognition and supervision of community TB health care workers, stigma and discrimination. The ENGAGE TB project was recently started to address this issue and looks promising.

Targets

- i. Contribution of TB patients notified by community health workers increased from 14% to 25% by 2019
- ii. Number of districts reporting community contribution on TB care increased from 62 to 169 in the country
- iii. Contribution of Leprosy patients notified by community health workers increased from 0% to 15% by 2019
- iv. Number of districts with high burden of leprosy implementing community based Leprosy care increased from 6 to 19 in the country by 2020.

Strategic intervention (Supporting strategies)

- 7.1 Promote CSOs and community involvement and participation in TB, TB-HIV and Leprosy prevention, care and treatment
- 7.2 Using ACSM approaches in promoting the utilization of TB, TB-HIV and Leprosy control services

5.2.7.2 PUBLIC-PRIVATE MIX

Key Gaps: Only 10% of registered private health facilities officially provide the full range of TB services (2014 Review, p.44). Not all TB cases diagnosed and put on treatment in the private sector are notified to the NTLP system while others may diagnose but not treat. There are delays in start of treatment especially in drug shops, pharmacies and traditional healers.

Priorities and future challenges

The future priority is to promote more active involvement of the faith based and private health facilities in TB/Leprosy control services, building networks and partnerships with service providers. The challenge is inadequate skills and competences for building partnerships with religious institutions, faith based and for profit private facilities other key players. Introducing International Standard for Tuberculosis Care in both public and private health institutions is also a challenge.

Targets

- i. Proportion of TB cases notified from the private sector increased from 6% to 21% by 2020
- ii. Proportion of registered private health facilities providing the full range of TB services increased from 10% to 25% by 2020.

Strategic Intervention

7.3 Engaging public and private sectors in TB and Leprosy control

5.2.7.3 HEALTH SYSTEM STRENGTHENING

Major gaps

Human resources

- i. There is no human resource development plan linked with incentives and retention scheme and enablers.
- ii. Only 13 out of 112 TB/HIV officers recruited under partners' support have been absorbed into the government payroll system
- iii. No Leprosy focal person at Central unit to coordinate Leprosy control activities in the country.

Procurement and supplies

- i. Delays in procurement, clearing and distribution of TB & Leprosy medicines, supplies and laboratory reagents by MSD.
- ii. Use of push system in the medicine and supplies distribution channel leading to overstocking and expiry of medicines
- iii. Irregular and interrupted supply of TB/leprosy medicines
- iv. There is under reporting of Adverse Drug Reactions of cases for TB and leprosy medicines

Service delivery:

- i. Inadequate space in health facilities to provide quality TB and Leprosy services.
- ii. Weak information sharing system between the different programmatic levels

Priority and future challenge

The priority is to have appropriate human resource capacity, in terms of number, skills mix, competences and proper compensation. This requires an appropriate human resource development plan and structure to implement this strategy is another priority. Another priority is to have efficient procurement and supply management system for drugs and reagents, supplies, and health commodities. While these are priorities there is a challenge of having a systematic process of assessing performance of a health system and its services including service providers' attitude abiding to code of conduct professional ethics. Another future challenge lies in having adequate financial resources and professional competences in the market

Targets

- i. 75% Human resource with appropriate skills are available to implement TB NSP V at all service delivery levels by 2020
- ii. 100% of reporting units providing TB and Leprosy services reporting no stock out of TB and Leprosy commodities on the last day of the quarter by 2019

Strategic intervention

- 7.4. Strengthen the health system for improving the delivery of TB and Leprosy services
- 7.5. Ensure uninterrupted supply and effective management of quality TB and leprosy medicines

5.2.7.4 PROGRAM MANAGEMENT

Key Gaps:

The current supervisory and coordination system of the NTLP has not been properly maintained, and activities have not been regularly implemented due to budget constraints. There are also delays in disbursement of funds at different levels, causing delays in the implementation of annual planned interventions. HSSR Technical Working Group on communicable diseases and non-communicable diseases is meeting infrequently and does not always address TB or leprosy control issues. Many of the goals were over-ambitious, e.g. routine surveillance for MDR-TB, decentralization of MDR-TB care.

Future priority and challenges

The next five year priority is to build institutional capacity of Central Unit so as to play an effective coordination, supervisory and monitoring role. Attaining political commitment at all levels of the government for stewardship to keep TB elimination high on the development agenda and advocating for more partners' interest in Leprosy financing is another priority. Another priority is to raise more domestic resources including councils to contribute towards TB and Leprosy plans in the CCHP (target is under CSS). In collaboration with partners develop resource mobilization and sustainability plan to sustain TB and leprosy control activities. Another priority is to collaborate with relevant ministries and sectors to alleviate the burden of income loss for patients, food security and enforce mandatory notification of TB cases. Establish an Inter-Agency Coordinating Committee for TB control to provide guidance and support to the NTLP Manager; continue its work to boost the management and organizational capacity of the NTLP through the collaboration with MSH. The future challenge is economic shortfall that may retard availability of adequate resources to implement and sustain the strategic plan.

Targets

- i. Proportion of funds raised from government and partners increase from 32% to 100% of strategic budget by 2018.
- ii. Increase funds to support implementation of the current strategic plan from 32% to 100% by 2018

Strategic intervention

7.6. Build the Institutional capacity of NTLP to mobilize funds, coordinate and manage TB and Leprosy Control services

5.2.7.5 REMOVING BARRIERS

Future priority and challenge

Geographic and financial access barriers to health services are a major challenge for early TB diagnosis and treatment. For all presumptive and definitive TB cases diagnosis should be free of charge for all tests and not just for those which are TB specific. During this strategic period the focus will be to minimize financial barriers to TB diagnosis and care to an extent that patients do not suffer from financial hardships resulting from out of pocket expenditure.

Another priority on removing barriers is to ensure that social protection measures such as stigmatization and social isolation will be addressed. Advocating for legislation to protect people with TB as well as health care workers from discrimination while safeguarding their legal rights to TB care and prevention is another priority. Actions to reduce burden beyond medical cost such as transport and nutritional packages will be supported.

The patient's charter will be developed and understood by all relevant key players. This will facilitate the understanding of patient's rights and obligations. Stigma may lead someone with TB to hide symptoms, avoid or delay seeking care as a result delaying diagnosis or default from treatment. Activities that promote awareness about TB at health care settings and in communities by will be implemented to increase their understanding of the magnitude and impact of stigma in TB care and control in the country.

Targets

i. Social and financial consequences and main drivers of cost for TB affected households determined and addressed

Strategies Interventions

- 7.7 Establish baseline data and information on Social and financial consequences and main drivers for TB and Leprosy patients
- 7.8 Reduce human rights barriers through TB and Leprosy control interventions that promote equal access to services

5.2.8. MONITORING AND EVALUATION

Key Gaps:

Despite the above major achievements there are gaps that need focus during the next strategic plan. There gaps are:

- i. There is inadequate knowledge and skills among health care workers on the use of new recording and reporting tools and inadequate Human Resource for M&E at TLCU.
- ii. Quality of surveillance data is suboptimal at regional and district levels (incompleteness, inaccuracy and delay in submission of reports).
- iii. Inadequate use of surveillance system to understand the burden (incidence, prevalence and mortality) of TB disease
- iv. Underuse of ETR.net (updated ETR.net, duplication of data entry in both paper forms for the same patient, inadequate computer skills among health workers).
- v. Inadequate follow up of strategic plan implementation and delay of producing and dissemination of program annual reports.
- vi. Case notifications and treatment outcomes are not adequately analysed for patient management, monitoring and decision making at central, regional, district and facility levels.
- vii. There is inadequate data linkage between Tuberculosis and Leprosy Central Unit (TLCU) and TRL.
- viii. Current M&E tools do not capture HIV test results and ART uptake for patients notified during the previous quarter.
- ix. Leprosy electronic registering and reporting has not started
- x. Minimum integration exists between NTLP data systems and DHIS2
- xi. There is no register for presumptive TB
- xii. No integration of supportive supervision for M&E, between NACP and NTLP

Priorities and future challenges

Despite the achievements, the TB surveillance system is still suboptimal in terms of data quality and utilization of the electronic recording and reporting system ETR.net. The result is inadequate data linkage between TB and Leprosy Central Unit (TLCU) and CTRL. Furthermore, case notifications and treatment outcomes are not adequately analysed for patient management, monitoring and decision making at national, regional, district and health facility levels. Moreover NTLP has inadequate human resources for M&E at TLCU to support its functions. Therefore the main priority is to strengthen the M&E unit within NTLP with an adequate number of staff that are competent to implement an effective M&E system.

The ETR.Net, that was adapted some years ago, needs to be rolled out nationwide and used to collect and report relevant TB data. An electronic system for Leprosy to map out areas with high Leprosy prevalence is also required.

Objective 8

To institute an efficient and integrated M&E system that ensures all indicators listed are tracked and reported timely.

Narrative description

Objective 8 intends to build an M&E system that will be used to collect, compile and analyse data for decision making and better patient management. The system will use current technology to update the electronic system that captures disease related data. Health care workers will be trained on using both electronic and paper tools to collect and analyse data. During implementation of the National Strategic Plan 2015-2020, all districts will have moved to the electronic system for recording and reporting. Information on activities conducted at each level will be monitored and reported in quarterly and annual report.

In this strategic intervention the program is also expected to undertake a drug resistance survey to help estimate the burden of TB. The last Drug Resistance Survey (DRS) has taken place in 2007, and it is unclear what is the trend in proportion of TB cases with MDR. Since surveillance of MDR is insufficient in the current system, a repeat DRS is needed regularly. With expansion of Xpert test this may be less urgent in future.

The NTLP will also collaborate with other institutions and community programs to capture information on TB incidence and mortality in the population/communities. Ministry of Health will engage with the Registration, Insolvency and Trusteeship Agency (RITA) to strengthen the quality and coverage of reporting of causes of death through the national vital registration system, ensuring inclusion of accurate cause of death coding for TB. Specifically, work to expand RITA's electronic pilot for birth registration to include death registrations.

Targets

- i. Transition from paper based to electronic register completed in all districts by 2020
- ii. By 2020, all districts submit complete reports within 45 days after the end of previous quarter
- iii. TB mortality in Tanzania estimated in 2020

Strategic Interventions

- 8.1 Establish an electronic case-based recording and reporting system for TB and Leprosy
- 8.2 Improve the TB surveillance system's ability to accurately measure the burden of TB

- 8.3 Build capacity in M&E and Health Information System at national and sub-national levels
- 8.4 Provide input for the vital statistics department to be able to estimate TB mortality

5.2.9. OPERATIONAL RESEARCH

- i. Key Gaps:Despite those achievements there were gaps which are;
- ii. Lack of structured TB research agenda to guide and facilitate systematic and critical TB and Leprosy research.
- iii. Most relevant researches have been done on TB but not put into policy and practice to improve management of patients.
- iv. There is minimal linkage between NTLP and academic and research institutions that conduct operational research on TB.
- v. No operational research capacity building initiatives targeted to program staff to plan and conduct their own operational research.

Priority and future challenges

One of the objectives in the NSP 2010-2015 was to conduct Operational Research and build research capacity. NTLP conducted several research projects in collaboration with partners.

In the new planning period (2015-2020), NTLP will promote OR in collaboration with other (academic) institutions. In order to give OR a more prominent place within NTLP, a research department will be set up, and staff recruited.

NTLP's focus for OR will be on those topics that will assist the programme in identifying problems and constraints, designing solutions and interventions, and evaluating their impact. Therefore, NTLP aims to develop a research agenda. The results of research projects should provide input for policy making, and be disseminated nationally and internationally.

Special attention will be given to research capacity at Kibong'oto Hospital to address MDR-TB.

Objective 9

To increase collaboration between the program and research/academic institutions on operational research

Narrative description

Operational research (OR) is an accepted way to find evidence that can be useful in improving decision-making and efficiency. Under this objective, the program focus is on building its capacity to conduct operational research in collaboration with academic and research institutions, and to use findings to solve the programs challenges at regional and district levels. The program will also collaborate with other research and academic institutions to train staff on research skills, and to expose them to a research environment.

The implementation of this strategic intervention will be guided by WHO and other technical agencies.

Targets

i. NTLP is coordinating operational research

Strategic intervention

i. Promote and coordinate OR on TB and Leprosy with other institutions

6.1 KEY STAKEHOLDERS

The implementation of National TB and Leprosy Programme Strategic Plan requires involvement of many partners and stakeholders. Below is a list of key stakeholders whose support and involvement is critical to achieve the results of this Strategic Plan:

6.1.1 Development partners

(DPs) include bilateral organizations, multilateral organisations and private foundations. Development Partners are also organised into Development Partners Group for Health (DPG-Health) and for HIV and AIDS (DPG-AIDS). The complete list of DPs supporting the health sector is in the reports of the Annual Public Expenditure Review (PER) Health. Timely financial support by the DPs is essential for the successful implementation of this plan

6.1.2 Implementing partners

These are mainly International and Local Non-Government Organization (NGOs) and Faith Based Organisations (FBOs) and Civil Society Organisations. These include: German TB and Leprosy Relief Association (GLRA), International Union Against TB and Lung Disease (IUATLD), PATH, ICAP, Management Sciences for Health (MSH) and Christian Relief Services (CRS), AIDS Relief, EGPAF, CSSC, Beila, Pastoral Services for People with AIDS (PASADA), PharmAccess and others.

6.1.3 Hospitals

From both the public and private sectors which are also involved in implementation including Muhimbili National Hospital, Lugalo Military Hospital, Bugando Medical Centre, Kilimanjaro Christian Medical Centre (KCMC), The Aga Khan hospital, Hindu Mandal Hospital, IMTU hospital, Mount Ukombozi hospital, TMJ hospital, Hubert Kairuki Memorial hospital, Oyster Bay hospital and others.

6.1.4 Research Institutions

These include but not limited to: National Institute Medical Research (NIMR) Ifakara Health Institute (IFI), Muhimbili University of Health Alliance Sciences (MUHAS), Kilimanjaro Christian Medical Centre (KCMC).

6.1.5 Higher Learning Institutions of Health

These are Muhimbili University of Health Alliance Sciences (MUHAS), Weill Bugando University College of Health Sciences; Tumaini University School of Medicine; Catholic University of Health and Allied Sciences (CUHAS) in Mwanza Hubert Kairuki Memorial University and others.

6.1.6 Other stakeholders

Include; Medical Stores Department (MSD), Tanzania Food and Drug Authority (TFDA), Private Health laboratories Board (PHLB), National Health Quality Assurance Laboratory and Training Centre (HQALTC),

6.1.7 Prime Minister Office

Regional Administration and Local Government (PMO-RALG)

6.1.8 Regional and Council Health Management Teams

Regional and Council Health Management Teams (RHMTs and CHMTs) and their respective health management teams in Hospitals, Health Centres and Dispensaries, both public and private.

6.1.9 Community

Covering families, Community Based and Ex-TB groups and PLHIV Organisations.

6.1.10 Civil Society Organisation and Community Based Organizations:

These are Mapambano ya Kifua Kikuu na UkimwiTemeke MKUTA, Association of Miners and other EX-TB groups, community leaders as well as individuals

Please take note that the Stakeholders' roles and responsibilities appear in Annex 2 and the analysis was done on section 3.

6.2 GOVERNANCE AND LEADERSHIP STRUCTURES

Governance structures to oversee the implementation (stewardship) of the current strategic plan are at three levels; namely National, Regional and Local government authority

6.2.1 MOHSW Ministry of Health and Social Welfare

The MoHSW is mandated with formulation of health and social welfare policies and monitoring and evaluating their implementation to ensure that all Tanzanians access quality health and social welfare services. With regard to TB and leprosy, the MoHSW through its political commitments, leads the health sector response supported by other sectors and partners. The ministry houses the NTLP under the Epidemiology and Disease Prevention Unit of the Department of Preventive Services. The Ministry provides overall guidance on all matters pertaining to TB and leprosy prevention, care and control in the country. NTLP is responsible for providing technical leadership and coordination, managing resources for implementing TB and leprosy prevention, care and control and crosscutting health system interventions. To achieve this, the MOHSW is collaborating with internal and international partners which provide technical and financial support to the program. The governance structures under the MOHSW are elaborated below.

6.2.2 MoHSW Senior Management Team (SMT)

The senior management team of the MOHSW is chaired by the Permanent Secretary (PS). Other members are the Chief Medical Officer (CMO), all directors of Ministerial departments and directors of Agencies and Units under the MOHSW. SMT is responsible for providing oversight and management guidance to all health programmes and activities. All plans (including NTLP strategic plan) and budgets are approved by the SMT.

6.2.3 SWAp Technical Committee (TC-SWAp)

The MOHSW has established a dialogue structure to guide the Sector Wide Approach (SWAP) and implementation of the Health Sector Strategic Plans. This provides an opportunity for involving all key stakeholders including development partners and civil society to participate in guiding implementation of reforms and health sector interventions. At the top of the dialogue structure is the Joint Annual Health Sector review which brings together all key stakeholders once a year to review progress made in the health sector and approves priorities for the next year. This is also an important tool for resource mobilisation and accountability. In between the JAHSR, there is the SWAP committee and Basket Funding

Committee that bring together the Ministry leadership with all partners who have signed SWAP agreement or basket Funding agreement with the GOT. The JAHSR and SWAP committees have delegated the role of providing governance support to the SMT of MOHSW to the TC-SWAP. The TC-SWAP is under the chairmanship of the PS-MOHSW.

6.2.4 The Prime Minister's Office

The Prime Minister's Office plays a role in the national response to TB and leprosy. It hosts the Tanzania Commission for HIV and AIDS (TACAIDS) and the Tanzania National Coordinating Mechanism (TNCM) for the Global Fund for AIDS, Tuberculosis and Malaria (GFATM). The PMO provides oversight, guidance and financial support to TACAIDS and the TNCM.

6.2.5 The Tanzania Commission for HIV and AIDS

The Tanzania Commission for HIV and AIDS was established by the Act of Parliament No. 22 of 2001. The Commission, which is under the Prime Minister's Office, is mandated to coordinate the national response to HIV and AIDS. This responsibility also mandates the Commission to develop and review as well as coordinate the implementation of the National HIV and AIDS Policy and translated it into National Multisectoral HIV and AIDS Framework that guides all Stakeholders including Ministry of Health and Social Welfare in the National Response.

6.2.6 The Tanzania National Coordinating Mechanism (TNCM)

The TNCM is a governance mechanism established under the Directive of GFATM and mandated to provide oversight to Global Fund resources mobilized through proposal writing, grants implementation and reporting. TNCM Secretariat supports TNCM to function effectively and is led by TNCM Secretary who reports to Permanent Secretary, Prime Minister's Office. The Secretariat and the Secretary are housed at TACAIDS. A significant amount of GF grants support HIV and AIDS, Malaria and TB programmes implemented mainly by the Health Sector and other partners.

6.3 MANAGEMENT OF THE STRATEGIC PLAN

6.3.1 TB and Leprosy Coordination Unit (TICU)

- i. At the national level, all programme activities are coordinated by the programme manager supported by a deputy programme manager, coordinators, technical officers and supportive staff. The programme manager coordinates all activities pertaining to TB and Leprosy care and control in the country.
- ii. TLCU is responsible for developing policy guidelines, planning, monitoring, evaluation, mobilizing both human and financial resources and its management at the national level. It also oversees proper use of allocated resources at the regional and district levels. TLCU coordinates training of health care providers at all levels, quality assurance, and operational research. The TLCU advises RHMTs and other partners on all matters pertaining to the control of TB, TB/HIV, and leprosy in the regions. The TLCU is also responsible for mentoring of RTLCs, DTLCs, and TB/HIV Officers and other staff during supervision visits and program meetings.

Coordination of core modules i.e., TB Prevention Care and Control, Childhood TB, MDR TB, Collaborative TB/HIV, TB in the Mining sector and Leprosy is required. Public-private partnership and Community systems strengthening also require coordination with specific person each. Strategic Information Department needs to group; M& E, Health Information

and Operation Research. TB diagnosis under the Central Tuberculosis Reference Laboratory (CTRL) is a specialized department with its management but reporting to the Program Manager. The current proposed Organo-structure will need revision to cater for the new strategy and human development plan. The implementation appears in the Operations plan.

6.3.2 Regional level

At the regional level, the RHMT reports to the regional secretariat under the Regional Commissioner. The RHMT is responsible for coordinating all TB, TB/HIV, and leprosy activities in the region including supervision to districts. The RHMT also provides funding its of budget to support implementation of TB and leprosy control activities. The technical focal person is the RTLC who is administratively answerable to the Regional Medical Officer. TLCU is guides the RTLC on technical issues. The RTLC advises RHMTs and CHMTs on all matters pertaining to TB and leprosy

6.3.3 Local government

The CHMT is responsible for TB, TB-HIV and leprosy control activities at the council and community levels. The DTLC works closely with the TB/HIV Officer to provide technical support to the CHMT and both are answerable to the District Medical Officer (DMO). They also identify TB, TB/HIV, and leprosy care and control activities to be included in the Comprehensive Council Health Plan (CCHP) and conduct supportive supervision to health care workers who manage TB, TB/HIV, and leprosy patients. The DTLC also oversees the implementation of community-based TB care and ACSM activities and prepares quarterly financial and technical reports submitted to the DMO and RTLC. Activities for TB, TB/HIV, and leprosy care and control are integrated into the basic health services, supported and facilitated by the MOHSW through training, supportive supervision, and provision of drugs, laboratory equipment, and reagents. The new position of the Council Social Welfare Officer (SWO) will support the DTLC to ensure that TB and leprosy services are provided free of charge and to support POD activities for leprosy patients.

6.3.4 Health facility and community levels

Health care workers at the health facility level are responsible for providing and sustaining the quality of TB, TB/HIV, and leprosy services. They are also responsible for overseeing all ACSM and community based TB, TB/HIV, and leprosy activities. At the community level, TB, TB/HIV, and leprosy care and control activities are implemented in order to bring closer these services to increase early case finding, increase adherence to treatment and reduce TB stigma and discrimination. All community health workers, including social support groups for TB, TB/HIV, and leprosy care and control are working with the guidance and support from health care workers. Patients and communities are empowered to participate in TB, TB/HIV, and leprosy care and control.

6.4. FINANCING OF THE STRATEGY

Financing of the National Strategic plan will come from;

- Government, (MOHSW-Health Financing Strategy and Local Government Contribution)
- Development partners (including Global Fund and PEPFAR, GLRA and others)
- Public Private partnership (PPP) including mining sector, private health facilities
- Community self-financing

- i. Government funding will be realized through the MTEF of MOHSW, PMORALG and CCHP of the local government authorities. The source of the funding is from government taxes, World Bank Credits and Development partners through Budget support. The Ministry of Finance releases budget guidelines towards the end of each calendar year with budget ceilings for each sector. These guidelines depend on Government priorities (central and sectoral). The Five year development plan highlights the priorities in the health sector and in TB and Leprosy control.
- ii. Some Development Partners fund the health sector through basket funding. While funds contributed to the Health Basket fund (HBF) are not earmarked, in most cases only a few would be allocated to TB and Leprosy control since it is seen to have separate funding mechanisms. Health Basket funds are, however, available to support health systems that also benefit TB and Leprosy interventions like Diagnostic services, RCHS, M&E and human resources for health. NTLP will engage with sections, units and programmes funded by Basket funds to ensure that health systems interventions that support TB and Leprosy control are fully covered.
- iii. Global Fund and PEPFAR are major global initiatives that finance TB control interventions. Some of the PEPFAR funds are channeled directly to support programme activities. However, most of the PEPFAR funds are channeled through Implementing Partners (international and local). USAID through it new funding mechanism intends to fund directly the Government.
- iv. The funding from the Global Fund for AIDS, TB and Malaria (GFATM) is coordinated by the Tanzania National Coordinating Mechanism (TNCM). A funding new mechanism is now being introduced requiring presentation of a 'Concept note', current Strategic plan and the Annual operational plan. These documents will therefore be used for resource mobilisation from the both Global Fund and PEPFAR.
- v. Bilateral funding from partners such as GLRA has been one of reliable sources to support implementation of Leprosy control services and strengthening monitoring and supervision and provision of transport. GLRA has started reducing direct support to NTLP. Hence, the programme will need to identify new sources especially for Leprosy control.
- vi. Other sources of funding will be self-generated revenues from local government councils and community initiatives. This will be the role of the CHMTs and RHMTs to identify these opportunities and tap into them.
- vii. The government has approved the Public Private Partnership strategy to mobilize additional resources from the private sector to complement public funding. In the operationalization of this strategic plan, efforts will be made to tap resources from the private sector (corporate, businesses and individuals) to support implementation of the planned activities.
- viii. Finally, the Tanzania Government is in the final stages of establishing the AIDS Trust Fund (ATF). The sources of funds will be annual government allocation, contribution from development partners (domestic and external) and investment. The ATF will be managed through a board of trustees and secretariat. Priorities will be according to NMSF III. Funds will be available for all sectors. NTLP will advocate for inclusion into this funding mechanism for TB/HIV activities. The costing of interventions and total resource to fund this strategic plan is developed under Budget Plan.

6.5 RISK FACTORS

The success of this Strategic plan is contingent upon other factors and assumptions made during the SWOT analysis. Also to make the objectives achievable and realistic depends on these factors. Availability of financial and technical support both external and domestic is crucial. The presence of adequate number and qualified staff with relevant competence is a prerequisite for the success of this plan. Availability of TB/Leprosy drugs and other laboratory supplies is key in diagnosing and treatment. Community participation and health system to provide incentive to Community health workers are important pieces to the success of this plan. Below is a summary of risks and mitigation measures.

S/N	RISK	PROPOSED MITIGATION MEASURE		
1.	NTLP is donor dependent for most its interventions. Reduction in donor funds will limit the procurement of TB and Leprosy Drugs and other commodities.	 i. MOHSW and PMORALG to increase allocation of funds for TB and Leprosy control from domestic sources. ii. Advocate for support from the private sector for TB and Leprosy funding 		
2.	Shortage of health workers in the country compromises TB and Leprosy quality services delivery	MOHSW and PMORALG should ensure availability of HCWs at all level		
3.	Competing priorities in setting financial resources by the Councils for TB and Leprosy diseases	Each Council to include TB and Leprosy control activities in the Comprehensive Council Health plans (CCHP)		
4.	Performance of Community health workers remains good	The Program and MOHSW to advocate and lobby for the formal health system to include community health workers		
5.	Political instability	Advocate for peace in the country		
6.	Erratic supplies especially of TB/ Leprosy medicines, diagnostics reagent and laboratory commodities due to weak supply chain management	Ensure capacity of all those involved in supply chain is built		
7.	Paying more attention to the emerging sporadic issues rather than priority actions in the NSP	Mainstream effective and efficient M&E systems at the implementation arrangements at various levels of implementation		

Table 6: Ri	sk analysis	and mitigation	measures
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6.6 OPERATIONAL AND ANNUAL WORK PLAN

Implementation of the Strategic (core) plan is through implementing the Operational plan. The Plan details short term measurable results (outputs), priority actions and activities. The activities are in turn detailed with multiyear targets and time frame to create a practical Work-plan. On annual basis individual Units (or regions) prepare Departmental (regional) or Council Operating plans from the National Operating Plans. Individual staff or Health facility teams will develop Quarterly Operating plans. At the end of each year, performance is reviewed before preparing the following the next year. Monitoring of the plan appears under M and Evaluation Plan.

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ANNEX 1: MAP OF TANZANIA: Case notification rates of all forms of TB by 2013



ANNEX 2: STAKEHOLDERS' ROLES AND RESPONSIBILITIES

Below are roles and responsibilities of key stakeholders.

- 1. Ministry of Health and Social Welfare
- i. Coordinate partners and supervise implementers of the NTLP Strategic Plan V (2015-2019).
- ii. Advocate and mobilize the necessary resources (human and finance) for the plan
- iii. Provide overall technical leadership guidance, advice, Monitoring and Evaluation on the implementation of the strategic plan
- iv. Ensure availability of essential medicines and supplies through efficient procurement, storage and distribution systems to all service delivery facilities.
- v. Facilitate effective recruitment, deployment and development of skilled health workers at health facilities in collaboration with PMO-RALG, the President's office-Public services management (PO-PSM) and Ministry of Finance.
- vi. Ensure availability of harmonized and integrated Health Management Information system (HMIS).
- vii. Ensure adherence to laws, guidelines, standards and regulations by all stakeholders.
- viii. Promote and oversee relevant operational research on TB and leprosy care, treatment and prevention.

2. Tanzania Commission for AIDS (TACAIDS)

- i. Formulate national policy guidelines for the response to the HIV and AIDS epidemic and the management of its consequences in mainland Tanzania
- ii. Mobilize, disburse and monitor resources and ensure their equitable distribution.
- iii. Provide oversight to multisectoral HIV and AIDS response in the Country
- iv. Promote research, information sharing and documentation on HIV and AIDS
- v. Promote high level advocacy and education on HIV and AIDS prevention and control
- vi. Develop a strategic framework for planning National HIV and AIDS Response within the overall national strategy (NMSF).

3. Research and academic Institutions

- i. Research and academic institutions have role of planning and conducting researches, disseminating findings to key stakeholders in the country as part of improving TB and leprosy prevention, care and treatment
- ii. Coordinate process of translating research findings into policy and practice in collaboration with NTLP and department of planning and budget of MOHSW
- iii. Support MOHSW/NTLP to develop tools and methodologies for scaling up proven interventions and best practice.
- iv. To keep records of all relevant researches done on TB and leprosy in collaboration with NTLP
- v. To participate in planning and conducting mid and end-term programme evaluation in collaboration with NTLP and other stakeholders

4. Medical Store Department (MSD)

- i. Work closely with NTLP, RHMTs and CHMTs to ensure uninterrupted supply of TB and leprosy medicines, TB laboratory regents and supplies at all levels of health facilities
- ii. Monitor and evaluate TB and leprosy commodities throughout the supply chain system.

iii. Ensure availability of updated stock status information for all TB and leprosy commodities.

5. Tanzania Food and Drug Authority (TFDA)

- i. Registration of TB and leprosy medicines, laboratory equipment, reagents and supplies, foods and cosmetics
- ii. Ensuring quality of Tb and leprosy medicines and supplies through quality assurance
- iii. Enforcement of laws and regulations for TB and leprosy medicines, laboratory reagents, supplies and food
- iv. Conducting post marketing surveillance
- v. Conducting public information sharing/awareness on safety of TB and leprosy medicines, laboratory equipment, reagents and supplies, foods and cosmetics
- vi. Setting standards for TB and leprosy medicines, equipment, reagents and supplies in collaboration with other partners and other stakeholders

6. Private Health laboratories Board (PHLB)

- i. Assuring the Quality of health laboratory products and supplies.
- ii. Coordinating evaluation and validation of health laboratory products and supplies.
- iii. Approving and registering health laboratory products and supplies after evaluation

7. National Health Laboratory Quality Assurance and Training Centre (NHLQATC)

- i. Accreditation of laboratories
- ii. Monitor quality of laboratory services involved in TB diagnosis
- iii. Prepare and distribute laboratory proficiency testing materials
- iv. Training on quality management
- 8. Prime Minister's Office Regional Administration and Local Government (PMO-RALG)
- i. Facilitate effective recruitment and deployment of skilled health workers at health facilities in collaboration with MOHSW and Presidents Office-Public Services Management.
- ii. Collaborate with various stakeholders at all levels for planning and implementation of TB and leprosy HIV Prevention, Care and Treatment Services.
- iii. Design and develop planning guidelines (MTEF, Opportunities and Obstacles to Development)

9. Regional Health Management Teams (RHMT)

- i. Provide technical support to CHMTs for incorporation into CCHP and implementation of TB and leprosy interventions at the district/council level.
- ii. Build capacity of Council Health Management Teams (CHMTs), DTLCs, and other health care providers on the diagnosis, treatment, and prevention of TB and leprosy.
- iii. Coordinate, supervise, monitor and evaluate TB and leprosy control services of the NTLP and partners in the region
- iv. Ensure availability and adherence to national guidelines and standards for TB and leprosy control services
- v. Supervise and facilitate prevention of disability and rehabilitation activities for leprosy patients, and liaises with specialized services for referral where necessary.
- vi. Coordinate referral of sputum specimen for molecular diagnosis, culture, and sensitivity testing.

- vii. Coordinate laboratory and quality assurance of TB diagnosis in health facilities
- viii. Support CHMTs to compile, analyse, interpret, disseminate and utilise data of TB and leprosy control services for planning.
- ix. Receive, compile, analyse, use and disseminate data of TB and leprosy control services from the councils and send to the National Level.
- x. Collaborate with partners and stakeholders to mobilize and coordinate resources for implementation of TB and leprosy control services in the region.

10. Council Health Management Teams (CHMT)

- i. Plan and incorporate TB and leprosy strategic plan (2015-19) control activities into the Comprehensive Council Health Plans (CCHP).
- ii. Implement, Monitor, Supervise and Evaluate TB and leprosy control services activities at council level.
- iii. Ensure availability and adherence to national guidelines and standards for TB and leprosy control services
- iv. Ensure uninterrupted availability of commodities and maintenance of equipment TB and leprosy control services
- v. Ensure appropriate use of TB and leprosy drugs in the district
- vi. Provide technical support to health facilities including voluntary agencies and private health facilities on appropriate diagnosis, care, treatment and prevention of TB and leprosy diseases
- vii. Develop capacity of service providers for quality TB and leprosy control services.
- viii. Coordinate and collaborate with stakeholders for planning and implementation of TB and leprosy control services in the council.
- ix. Ensure mechanism for community involvement and participation in TB and leprosy control is in place.
- x. Strengthen HMIS by compiling, disseminating and using TB and leprosy control services' data for quality improvement.

11. Health facilities (Hospitals, Health Centers and Dispensaries)

- i. Provide health information and education on TB and leprosy control to suspects and patients.
- ii. Provide TB and leprosy control services according to the national guidelines (TB Manual, TB/HIV, Childhood TB, MDR-TB, TB in Mining, TB in Workplace etc.)
- iii. Collect, compile, analysis, use and disseminate data on TB and leprosy control and send to high level.
- iv. Ensure timely availability of essential TB and leprosy commodities
- v. Contribute to prevention, health, dignity, services for people with TB and leprosy diseases
- vi. Ensure mechanism for referral and linkage with Community Based TB, TB/HIV and Leprosy Services.
- vii. Coordinate, supervise and mentor Community Based TB and leprosy control services.

12. Community

- i. Implement the community based component of the TB/leprosy Strategic Plan
- ii. Support community resource mobilization and allocation for implementation of the TB and leprosy strategic plan
- iii. Plan and implement community based and patient centred DOTS, MDT and POD activities

- iv. Promote and support ex-TB patient groups in TB and leprosy control services
- v. Engage of more NGOs, CSOs, FBOs in TB and Leprosy

13. Development Partners

- i. Coordinate Development Partners for Health and ensure representation at the national TB and leprosy coordination committee of the Strategic Plan.
- ii. Provide direct and indirect budget support to the prioritized areas in the TB and leprosy Strategic Plan
- iii. Use existing government systems to track resources and monitor aid effectiveness

14. Implementing Partners

- i. Support regions and districts to identify needs and gaps for strengthening expansion and improving quality of TB and leprosy control services.
- ii. Support districts and regions to translate the National TB and leprosy strategic plan (2015-19) into their respective health plans.
- iii. Work with districts to ensure that TB and leprosy control services are prioritized and their funding allocations are reflected in the CCHP.
- iv. Develop innovations that can be tested and shared with MoHSW, RHMTs and CHMTs to improve implementation of the strategic plan, uptake and outcomes of services.
- v. Support the MoHSW to build capacity of CHMT and RHMT, NGO and FBOs to effectively plan, manage, implement and monitor implementation of the strategic plan.
- vi. Provide technical assistance to RHMTs and CHMTs in supervision, training and mentoring.
- vii. Collaborate with RHMTs and CHMTs to ensure availability of TB and leprosy commodities in health facilities.
- viii. Support MoHSW, RHMTS and CHMTS to strengthen specimen transportation system for diagnosis of TB and MDR-TB and prompt feedback to improve patient care
- ix. Support MoHSW, RHMTs and CHMTs to compile, analyse, interpret and disseminate data on TB and leprosy control services
- x. Strengthen a multidisciplinary team at facility level in collaboration with CHMTs and RHMT.
- xi. Support MoHSW, RHMTs and CHMTS conduct appropriate operational research in TB and leprosy control services

15. Mining companies

- i. Comply with labor law including providing contracts to employees
- ii. Ensure conducive working environment to reduce risk of TB transmission and infection control
- iii. Provide occupational health and safety education to employee
- iv. Adhere to occupational health and safety regulations and standards
- v. Adhere to national guidelines on TB control at workplace
- vi. Allocate funds to preventive programs of TB in mining sector
- vii. Provide corporate social responsibilities to the communities